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THE MARKETING OF SMALL PROFESSIONAL SERVICE ENTERPRISES:

PHYSICIANS SERVICES IN PUERTO RICO

Volume II of II

By

José M. Romaguera

DURHAM UNIVERSITY BUSINESS SCHOOL

Thesis submitted to the University of Durham
in fulfillment of the requirements for
the degree of
Doctor of Philosophy
2001

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26 MAR 2002

APPENDIX 1

QUESTIONARIE FOR SURVEY (TRANSLATED INTO ENGLISH)

Research work conducted under the support of the University of Puerto Rico needs of your help in answering this questionnaire as best as you can. Thank you for contributing your valuable opinion and expertise on the various aspects included in this questionnaire.

CLASSIFICATION DATA

1. Sex

_____M _____F

2. Type of medical practice where you spend most of your time

_____private practice - solo practitioner
_____group practice
_____public hospital/facility
_____private hospital/facility (other than group practice)
_____other (please specify)_______________________________

3. Approximately how many employees ((excluding yourself) are in that location ____

4. How many of those ae physicians (excluding yourself) _____

5. Town where you perform most of your medical practice_________

6. Specialty within your profession (if any)

First: ___________________________________
Second: ___________________________________
Third: ___________________________________

7. How long have you beerpractising in your profession?

_____0-5 years
_____6-10 years
_____11-15 years
_____16-20 years
_____21-25 years
_____over 25 years

ATTITUDINAL DATA

Listed below are a number of statements. Please indicate your agreement, disagreement or neutral response for each of the statements. Please circle the appropriate number to indicate whether you:

(1) Strongly disagree
(2) Disagree
(3) Neither agree nor disagree
(4) Agree
(5) Agree strongly

Circle only one answer for each statement. There are no right or wrong answers. Just give us your opinion.

Part A - Opinions toward marketing in general

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
8. Marketing is not for professionals.	1	2	3	4	5
9. Marketing is necessary for service firms.	1	2	3	4	5
10. Formal marketing is not needed for small firms.	1	2	3	4	5
11. Marketing is mostly advertising and promotion.	1	2	3	4	5
12. It is difficult to agree with modern marketing practices.	1	2	3	4	5
13. A good marketer is mostly oriented towards understanding his/her customers needs.	1	2	3	4	5

Part B - Role of Marketing in the medical profession

14. It is proper for physicians to market their practice.	1	2	3	4	5
15. Medical providers have a clear vision about the concept of service.	1	2	3	4	5
16. Generally speaking, medical professionals who use marketing techniques probably provide inferior patient care.	1	2	3	4	5
17. Marketing by medical professionals will help them to be more responsive to the client's needs and wants.	1	2	3	4	5
18. Marketing by medical professionals will lower the status of the profession.	1	2	3	4	5
19. For better or worse, marketing will play an important role in future development in the medical profession.	1	2	3	4	5
20. In the future, medical professionals will benefit by understanding more about marketing.	1	2	3	4	5

	Strongly disagree	Disagree	Neithar agree nor disagree	Agree	Strongly agree
21. Medical students should be exposed to marketing in order to better prepare them to establish their practice or career.	1	2	3	4	5
22. Physicians should perform marketing functions, formally or informally, for their practice.	1	2	3	4	5
23. The medical staff members should perform marketing functions, formally or informally, for their practice.	1	2	3	4	5

Part C - General Issues Economic aspects

24. Marketing usually increases the price of the product or service offered.	1	2	3	4	5
25. The marketing of fees would adversely affect the public image of physicians.	1	2	3	4	5
26. Marketing my professional services as a physician would be beneficial to me personally.	1	2	3	4	5

Competition

27. Restrictions on marketing limit competition by refusing to allow physicians to market their services and engage in competitive pricing.	1	2	3	4	5
28. It is very difficult to market competence and quality of service in my profession.	1	2	3	4	5
29. The majority of physicians that continue to be employed by the public health system are not very competent.	1	2	3	4	5
30. Working "part-time" with the government health system adds prestige to the physician	. 1	2	3	4	5

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
Consumer Issues					
31. The marketing of medical services would tend to intensify client dissatisfaction after services have been rendered.	1	2	3	4	5
32. The marketing of medical services would confuse rather than enlighten potential patients.	1	2	3	4	5
33. The marketing of medical service would assist potential clients in knowing which physicians are competent to handle particular medical problems.	1	2	3	4	5
34. Marketing techniques in general, are a valuable instrument to communicate to patients.	1	2	3	4	5
Quality					
35. The quality of medical services improves when marketing techniques are permitted.	1	2	3	4	5
36. To compete effectively, physicians should manage service quality more efficiently.	1	2	3	4	5
37. Those that obtain medical services provided by the government receive the same quality of service as that provided by private medical service providers.	1	2	3	4	5
38. The introduction of the health service card helps low income patients obtain better quality in health services.	1	2	3	4	5
39. The health reform helps low income patients obtain better quality in health services.	1	2	3	4	5
40. Government should establish norms and regulations for the physicians to assure quality of health services to the people.	1	2	3	4	5

	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
41. The health reform has had a positive impact in my practice.	1	2	3	4	5
42. When the health reform is completed physicians will have to do more than what is currently required.	1	2	3	4	5

"Philosophic issues"

43. A good physician is mostly oriented towards understanding his/her patient's needs.	1	2	3	4	5
44. The physician-patient relationship is personal and unique, and should not be established as a result of pressures exerted by marketing techniques.	1	2	3	4	5
45. There are significant differences between the physician-patient relationship in the private sector as compared to that in the public sector.	1	2	3	4	5
46. Existing information sources (i.e. yellow pages, medical lists, etc.) provide in adequate information to guide potential patient's select a physician.	1	2	3	4	5
47. When other colleagues refer patients to me it is mostly because of how well I am known to my colleagues on a personal basis.	1	2	3	4	5
48. When referring patients to other colleagues I take mostly into consideration how well I know my colleagues on a personal basis.	1	2	3	4	5

Practice of Marketing

49. Do you perform marketing for your medical practice

None at all	1
Less than colleagues in my area	2
About the same as colleagues in my area	3
More than colleagues in my area	4

50. Please describe type of marketing practice (in order of importance for your practice) and who is responsible for it

	Type of Practice	Responsible
1.	______________________	1.________
	______________________	
2.	______________________	2.________
	______________________	
3.	______________________	3.________
	______________________	

51. Please list any other type of marketing actions you would consider performing for your medical practice in the near future.

1. ______________________
2. ______________________
3. ______________________

Other

52. Please make any additional comment you feel is appropriate.

____
____
____
____

Thank you for your help in this research.

If you would like on full summary of the findings, please provide your name and address.

Name____

Address ____

____

If are interested in more information about this research or would like to provide any suggestion about it, you may do so at my address:

Prof. José M. Romaguera, Dean
College of Business Administration
University of Puerto Rico atMayagüez
P.O. Box 5000
Mayagüez, Puerto Rico, 00681

APPENDIX 2
QUESTIONARIE FOR SURVEY(SPANISH)

Un trabajo de investigación llevado a cabo con el apoyo de la Universidad de Puerto Rico requiere cierta información que usted nos puede suministrar al llenar este cuestionario. Agradecemos su cooperación, su tiempo, su valiosa opinión y experiencia.

INFORMACION PARA EFECTOS DE CLASIFICACION

1. Sexo

   _____M _____F

2. Tipo de práctica médica a la cual usted dedica la mayor parte de su tiempo.

   _____práctica privada - usted solo
   _____práctica grupal
   _____hospital o institución pública
   _____hospital o institución privada (otra que no sea práctica grupal)
   _____otra (por favor, especifique)

3. Aproximadamente cuántos empleados trabajan en dicha localidad (excluyéndose usted)

   ____

4. De ese número, cuántos son médicos (excluyéndose usted)_____

5. Pueblo o ciudad donde usted lleva a cabo la mayor parte de su práctica médica ________

6. Indique la especialidad, si tiene alguna, dentro de su profesión

   No tengo especialidad: ________________
   Primera: ____________________________
   Segunda: ____________________________
   Tercera: ____________________________

7. ¿Cuántos años lleva en la práctica de su profesión?

   _____0-5 años
   _____6-10 años
   _____11-15 años
   _____16-20 años
   _____21-25 años
   _____más de 25 años

INFORMACION ACERCA DE ACTITUDES

A continuación aparece una serie de aseveraciones. Por favor, indique si usted está de acuerdo, en desacuerdo o neutral respecto a cada una de las aseveraciones. Por favor, haga un circulo al número correspondiente para indicar si usted está:

(1) Muy en desacuerdo
(2) En desacuerdo
(3) Ni de acuerdo, ni en desacuerdo
(4) De acuerdo
(5) Muy de acuerdo

Marque una sola contestación respecto a cada aseveración. No hay contestaciones correctas o erróneas. Solamente, dénos su opinión.

Parte A - Opiniones respecto al mercadeo en general

	Muy en desacuerdo	En desacuerdo,	ni de acuerdo ni en desacuerdo	De acuerdo	Muy de acuerdo
8. El mercadeo no es para los profesionales.	1	2	3	4	5
9. El mercadeo es necesario para las firmas de servicio.	1	2	3	4	5
10. El mercadeo formal no es necesario para las firmas pequeñas.	1	2	3	4	5
11. El mercadeo es mayormente publicidad y promoción.	1	2	3	4	5
12. Es difícil estar de acuerdo con las prácticas modernas de mercadeo.	1	2	3	4	5
13. Un buen especialista en mercadeo está orientado mayormente a comprender las necesidades de su cliente	1	2	3	4	5

Parte B - La función del mercadeo en la profesión médica

14. Es apropiado que los médicos mercadeen su práctica.	1	2	3	4	5
15. Los proveedores médicos tienen una visión clara del concepto del servicio.	1	2	3	4	5
16. En términos generales, los médicos que emplean técnicas de mercadeo probablemente dan un cuidado inferior a los pacientes.	1	2	3	4	5

	Muy en desacuerdo	En desacuerdo	Ni de acuerdo ni en desacuerdo	De acuerdo	Muy de acuerdo
17. El que los médicos empleen mercadeo les ayuda a responder mejor a lasnecesidades y deseos de los pacientes.	1	2	3	4	5
18. El mercadeo llevado a cabo por los médicos bajará el "status" de su profesión.	1	2	3	4	5
19. Para bien o para mal, el mercadeo jugará un papel importante en el futuro desarrollo de la profesión.	1	2	3	4	5
20. En el futuro, los profesionales médicos se beneficiarán al entender más sobre el mercadeo.	1	2	3	4	5
21. Los estudiantes de medicina deben entender de mercadeo para que se preparen mejor al establecer su práctica o su carrera.	1	2	3	4	5
22. Los médicos deben llevar a cabo las funciones del mercadeo para su práctica, ya sea de manera formal o informal.	1	2	3	4	5
23. El personal de apoyo debe llevar a cabo las funciones del mercadeo para su práctica, ya sea de manera formal o informal.	1	2	3	4	5

Parte C - Asuntos Generales

Aspectos Económicos

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo, ni en desacuerdo	De acuerdo	Muy de acuerdo
24. Usualmente el mercadear aumenta el precio del producto o del servicio ofrecido.	1	2	3	4	5
25. El mercadear los honorarios afectaría adversamente la imagen de los médicos.	1	2	3	4	5
26. El mercadear mis servicios profesionales como médico, me beneficiaría personalmente.	1	2	3	4	5

Competencia

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo, ni en desacuerdo	De acuerdo	Muy de acuerdo
27. Las restricciones en el mercadeo limitan la competencia al no permitir a los médicos el mercadear sus servicios y realizarlos basándose en la competencia de precios.	1	2	3	4	5
28. En mi profesión es muy difícil mercadear el "ser competente" y la "calidad del servicio."	1	2	3	4	5
29. La mayoría de los médicos que permanecen en el servicio gubernamental no son muy competentes.	1	2	3	4	5
30. Trabajar "part-time" en el gobierno añade prestigio a un médico.	1	2	3	4	5

Asuntos relacionados con el consumidor

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo, ni en desacuerdo	De acuerdo	Muy de acuerdo
31. El mercadear servicios médicos tiende a intensificar la insatisfacción del cliente después que se le han prestado los servicios.	1	2	3	4	5

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo, ni en desacuerdo	De acuerdo	Muy de acuerdo
32. El mercadeo de los servicios médicos confundiría en lugar de instruir al paciente potencial.	1	2	3	4	5
33. El mercadeo de servicios médicos sería una ayuda para que los clientes potenciales supieran qué médicos son competentes para tratar problemas médicos particulares.	1	2	3	4	5
34. Las técnicas de mercadeo, en general, son un valioso instrumento para comunicarse con los pacientes.	1	2	3	4	5
Calidad					
35. La calidad de los servicios médicos mejora cuando se permite el uso de las técnicas de mercadeo.,	1	2	3	4	5
36. Para poder competir efectivamente, los médicos deben manejar la calidad de los servicios más eficientemente.	1	2	3	4	5
37. La personas que reciben servicios médicos gubernamentales y servicios médicos privados están recibiendo la misma calidad de servicio.	1	2	3	4	5
38. El gobierno al establecer la tarjeta de salud contribuye a que los pacientes de bajos recursos económicos puedan obtener una mejor calidad en los servicios de salud.	1	2	3	4	5
39. La reforma de salud contribuye a mejorar la calidad de los servicios de salud.	1	2	3	4	5

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo, ni en desacuerdo	De acuerdo	Muy de acuerdo
40. El gobierno debe establecer normas y reglas para asegurar la calidad en los servicios de salud a la población.	1	2	3	4	5
41. La reforma de salud ha tenido un impacto positivo en mi práctica.	1	2	3	4	5
42. Cuando se complete la reforma de salud, los médicos tendrán que hacer más de lo que se requiere actualmente.	1	2	3	4	5

"Issues Filosóficos"

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo, ni en desacuerdo	De acuerdo	Muy de acuerdo
43. Un buen médico está mayormente orientado para entender las necesidades de sus pacientes.	1	2	3	4	5
44. La relación entre el paciente y el médico es personal y única, y no debe establecerse como resultado de las presiones ejercidas por las técnicas de mercadeo.	1	2	3	4	5
45. Hay una diferencia significativa entre la relación médico-paciente en el sector privado comparada con la misma relación en el sector público.	1	2	3	4	5
46. Las fuentes de información existentes (ej. páginas amarillas, listas de médicos, etc.) proveen información inadecuada para guiar a un posible paciente a seleccionara un médico.	1	2	3	4	5
47. Cuando otros colegas me refieren pacientes, lo hacen mayormente por lo bien que me conocen en el aspecto personal.	1	2	3	4	5

	Muy en desacuerdo	En desacuerdo	Ni en acuerdo ni en desacuerdo	De acuerdo	Muy de acuerdo
48. Cuando les refiero pacientes a mis colegas, tomo mayormente en consideración lo bien que conozco a mis colegas en el aspecto personal.	1	2	3	4	5

Práctica de Mercadeo

49. Lleva usted a cabo la práctica del mercadeo en su práctica médica

En absoluto	1
Menos que otros colegas en mi área	2
Más o menos igual que otros colegas en mi área	3
Más que otros colegas en mi área	4

50. Por favor, describa el tipo de práctica de mercadeo (en orden de importancia para su práctica), y quién tiene la responsabilidad de la misma.

Tipo de práctica	Persona responsable
1. ______________________________ ______________________________	1.
2. ______________________________ ______________________________	2.
3. ______________________________ ______________________________	3.

51. Por favor, indique cualquier otra práctica de mercadeo que usted consideraría llevar a cabo dentro de su práctica médica en un futuro cercano.

1. ______________________________
2. ______________________________
3. ______________________________

Otros

52. Por favor, indique cualquier otro comentario que usted estime apropiado.

____
____
____

Gracias por su ayuda en este trabajo de investigación.

Si usted tiene interés en un resumen de los hallazgos de esta investigación, indique su nombre y dirección:

Nombre____

Dirección____

____

Si usted tiene interés en más información acerca de esta investigación o quiere sugerir cualquier idea sobre la misma, puede hacerlo a mi dirección:

Prof. José M. Romaguera, Decano
Colegio de Administración de Empresas
Recinto Universitario de Mayagüez
Apartado 5000
Mayagüez, Puerto Rico 00681

APPENDIX 3

SAMPLE OF TYPICAL PHYSICIAN ADVERTISEMENTS IN PUERTO RICO

La Perla del Sur - del 26 de febrero al 4 de marzo de 1997 — 75

DIRECTORIO MEDICO

DR. PRAXEDES E. ALVAREZ SANTIAGO
con un amplio local en la
AVE. FAGOT K8 - PONCE
(Frente Walgreens de Plaza Fagot)
MEDICINA INTERNA Y PRIMARIA
ELECTROCARDIOGRAMAS
ENFERMEDADES DEL CORAZON
PULMONES
TERAPIA RESPIRATORIA
SISTEMA DIGESTIVO
RIÑONES
INFECCIONES
ARTRITIS Y DIABETES
HORARIO:
Aceptamos MEDICARE y la mayoría de los planes médicos.
Visitamos todos los Hospitales de Ponce.
Tel. 840-1750 • SIN CITA PREVIA •

Dra. Ana M. Soto Muñiz
MEDICINA FAMILIAR
TEL. 840-3970
Aceptamos Medicare y la mayoría de los planes médicos y ahora MEDCASH
Horario
Lunes a Viernes 9:00 AM - 5:00 PM
Sábado 9:00 AM - 1:00 PM

Dr. Nelson Vélez Martínez
OBSTETRA - GINECOLOGO - COLPOSCOPIA
Maternidad, Enfermedades de la mujer
Yauco, P. R.
Martes, Jueves
8:00 AM - 5:00 PM
Edificio Parra
Suite 609
Ponce P. R.
CITA PREVIA
EMERGENCIAS: 259-8585
UNIDAD 5272
A 1-800-981-8124

Angel L. Romero, MD
CIRUJANO GENERAL
Notifica a colegas y pacientes el traslado de sus oficinas a: Lorraine Medical Building
Suite 205 - Villa Flores I-12
Ponce, P. R. • Tel. 844-5061

DENTISTA PEDIATRICO
Niños, Adolescentes e Impedidos
PONCE
PONCE
Dra. Anabel Vega Negrón, D.M.D.

Dr. Gregorio E. Toro Soto
Internista • Cardiólogo
HOSPITAL DR. PILA
• ECOCARDIOGRAFIA
• STRESS TEST
• HOLTER

Dr. Osvaldo J. Santiago
Cirugía Periferovascular
Especialista en Sistema Circulatorio
Estudios vasculares no invasivos
Cond. El Señorial
Calle Salud #10
Suite C-3
Ponce, Puerto Rico
Horario: Lunes a viernes de 9:00 a 5:00 PM
Cita Previa
Tels. 259-7077 • 259-7044
Beeper 259-8585 Unidad 388-1259

DR. LIONEL LUGO RODRIGUEZ
OTORRINOLARINGOLOGO
(Especialista en oído, nariz y garganta)
Tel. 854-0717

Dr. Luis A. Irizarry Pérez
Especialista en Medicina de Familia
VISITAS AL HOGAR O DOMICILIO
Llamar al 840-5555 • 840-5416

DENSITOMETRIA OSEA
Dr. Julio A. Morales
Edificio Parra Suite 404, Anexo Hospital Damas
Ponce By Pass
Lunes a Viernes 8:00 A.M. a 4:00 P.M.
Por cita previa, llamar al
841-8332 • 841-0548
Los esperamos, tendrá pronta atención

Dr. Gerardo Alayón-Ante
Dra. Helvetia Rosario Padua
CARDIOLOGIA
PONCE
JAYUYA
VILLALBA
ACEPTAMOS LA MAYORIA DE LOS PLANES MEDICOS

Drs. Grillo Alverio & Iturrino
Cirujanos Dentistas
848-8886
PEÑUELAS, GUAYANILLA, JUANA DIAZ, YAUCO, STA. ISABEL, VILLALBA Y COAMO
Aceptamos toda tarjeta Reforma Salud

Evelyn Rivera Ocasio M.D.
Fisiatra
Medicina Física y Rehabilitación
Medicina Deportiva
Estudios EMG/ NCV
Santa María Medical Building
Suite 108
Ponce P.R. 00731
Tel. 843-6282
Por cita previa

DR. R. BENCOSME COMPRES
Notifica el traslado de su oficina a Calle Cristina #65
Horario: 9-12 AM - L-V
2-7 PM - L-V • 9-12 AM - S
Tel. 842-7474
Beeper 1-800-981-1320 • Unidad 395-4978

Dr. Luis Hernández
Medicina General
Urb. El Madrigal
Calle 7 P-2
L-MI-J-V 3:00 - 7:00 PM
Sab. 8:00 - 12:00 MD
841-4626

SERVICIO MEDICO NOCTURNO
Medicina de Familia
Dr. Víctor M. Rodríguez Venegas
Hacemos visitas a domicilio
TEL. 841-4246

DRA. MARIA E. FERNANDEZ TAMAYO
Diplomate of the American College of Obstetrics and Gynecology
Tel. 844-6163
Tel. 840-7382

Dra. Catalina Quesada de Ayala
Psicóloga Clínica
LIC.719
Psicoterapia Individual, Familiar, de Parejas y de Aflicción, Hipnoterapia
Consulta por cita previa
Calle Torres Núm 55
Ponce, Puerto Rico 00731

Source: La Perla del Sur (regional weekly newspaper of Southern Puerto Rico) 26th of February to the 4th of March 1997, p. 75.

APPENDIX 4

"AIDE MEMOIRE" FOR INTERVIEWS

"Aide memoire" for semi-structured indepth interviews.

(DETAILS OF PRACTICE)

TYPE OF SPECIALTY, YEARS ESTABLISHED, SIZE (NUMBER OF EMPLOYEES).

(UNDERSTANDING OF MARKETING)

EXPLORE THEIR UNDERSTANDING OF MARKETING: WHAT DO THEY UNDERSTAND MARKETING TO BE, WHAT MARKETING ACTIVITIES HAVE YOU UNDERTAKEN THROUGHTOUT THE LIFE CYCLE OF THE PRACTICE? HOW DO THEY DO IT? WHY DO THEY DO IT? WHO HAS RESPONSABILITY FOR IT IN THEIR PRACTICE.

(REGARDING ATTRACTING POTENTIAL PATIENTS)

HOW DO PATIENTS LEARN ABOUT YOUR PRACTICE?

WHAT ACTIONS HAVE YOU UNDERTAKEN THROUGHOUT THE CYLCLE OF THE OF THE PRACTICE SO THAT POTENTIAL PATIENTS LEARN ABOUT YOUR PRACTICE?

(REGARDING RETAINNING PATIENTS)

WHY DO PATIENTS CONTINUE TO VISIT YOUR PRACTICE?

WHAT ACTIONS HAVE YOU UNDERTAKEN THROUGOUT THE LIFE CYCLE OF THE PRACTICE SO THAT YOUR PATIENTS CONTINUE TO VISIT YOUR PRACTICE?

(MOTIVES FOR USING ACTIONS UNDERTAKEN)

WHY DO YOU UNDERTAKE SUCH ACTIONS?

WHAT MOTIVATES YOU TO DO SUCH ACTIVITIES VIS-A-VIS OTHER POSSIBLE ALTERNATIVES?

HAVE YOU CONSIDERED DOING __________, __________, ______________?

WHY HAVE YOU NOT DONE OTHER ACTIVITIES TO ATTRACT AND RETAIN PATIENTS?

(DECISION MAKING PROCESS)

HOW IS THE DECISION TO UNDERTAKE (OR NOT TO CARRY OUT) A PARTICULAR ACTIVITY DONE? WHY?

WHO(M) DECIDES? WHY?

WHAT IS THE MAIN CRITERIA FOR THE DECISION? WHY?

HOW OFTEN IS THIS TYPE OF DECISION DONE? WHY?

(IMPLEMENTATION PROCESS)

ONCE A DECISION IS DONE, HOW IS IT CARRIED OUT?

WHY IS IT CARRIED OUT IN THAT MANNER?

WHO(M) CARRIES IT OUT? WHY?

(EVALUATION PROCESS)

HOW DO YOU KNOW IF THE ACTIVITY(IES) UNDERTAKEN ARE PRODUCING THE EXPECTED RESULTS?

WHAT TYPE OF MONITORING SYSTEM IS IN PLACE TO MEASURE THE RESULTS OF YOUR ACTIONS? WHY?

WHO IS RESPONSIBLE FOR EVALUATING RESULTS? WHY?

(OTHER ASPECTS)

WHAT IS THE PROCESS YOU USE FOR REFERING PATIENTS TO OTHER HEALTH PROFESSIONALS? WHY?

WHAT IS THE PROCESS BY WHICH OTHER PHYSICIANS REFER PATIENTS TO YOU?

PROBE RE: "RELATIONSHIP MARKETING"

IS THE HEALTH REFORM CURRENTLY UNDERWAY HAVING AN IMPACT ON YOUR PRIVATE PRACTICE?

WHAT IMPACT? WHY IS THAT SO?

WHAT IMPACT DO YOU ENVISION HEALTH REFORM WILL HAVE IN THE ACTIVITIES YOU UNDERTAKE TO ATTARACT AND RETAIN PATIENTS IN THE FUTURE? WHY?

ANY ADDITIONAL COMMENTS YOU WOULD LIKE TO MAKE REGARDING ANY OF THE ASPECTS OF YOUR PRACTICE THAT WE HAVE DISCUSSED OR THAT YOU UNDERSTAND WE SHOULD HAVE TALKED ABOUT?
THANK YOU FOR YOUR VALUABLE ASSISTANCE.

APPENDIX 5

NOTE ON THE HEALTH SECURITY ACT

The Health Security Act was presented by President Bill Clinton to the United States Congress in September, 1993. The principles that underline the Health Reform proposals are: security, simplicity, savings, quality, choice and responsibility (The White House Domestic Policy Council, 1993, p. 17). These can be summarized as follows:

- **Security** - Ina Magaziner, President Clinton's senior adviser, defines security as the fundamental thrust of Clinton's health plan. That is, creating for all Americans the security of knowing that they always will have adequate protection against the threat of illness, while controlling the runaway costs that threaten both the national economy, and the health care system (White 1993b, p. 9). The health plans will be required to charge everyone the same price for the same comprehensive benefits. The Health Reform will provide coverage without reducing the lifetime limits and preserving and strengthening Medicare (the government's current health benefit package for the elderly), adding new coverage for prescription drugs.
- **Simplicity** - refers to reducing the paperwork by giving everyone a health security card and requiring all health plans to adopt a standard claim form. The plan also limits insurance company red tape by creating an uniform, comprehensive benefits package, standardizing billing and coding, and eliminating the so called "fine print" (that is the many detailed exemptions that has the effect of complicating understanding of the package and the paperwork involved).
- **Savings** - an interesting aspect of the Clinton plan is the concept of what it calls "managed competition" whereby health insurance buyers would band

together in large "alliances" to bargain with a competing network of doctors, hospitals and health care providers for the best service at the best price. The theory is that such bargaining will encourage lower costs and greater efficiency (Goodgame, 1993, p. 55). In addition, the plan reduces administrative costs by cutting paperwork and simplifying the system and places limits on how much premiums can rise. The Health Reform also criminalizes health care fraud.

- **Quality** - American consumers will benefit from greater access to information which in turn will further improve quality. They will exercise not only the right to choose doctors, other health providers and health plans, but also the right to make informed choices based on meaningful information about how health plans, health professionals and hospitals perform. Making that information available, is a way to force the health plans to compete in quality and price. The Health Reform Act gives the opportunity to invest in research initiatives (new ways to make prevention work, innovations in health care delivery, new drugs, etc.) to improve the quality of health care.
- **Choice** - means preserving the right to choose one's doctors and increasing the choice of health plans. The Health Reform Act states flexibility in choosing various health-care plans. The plans are categorized in three ways:

    1. <u>Fee-for-service</u> - where consumers visit any doctor they choose, and their health insurer pays the bill. It is the most expensive f all alternatives.
    2. <u>Preferred Provider Organization (PPOs)</u> - these require that employees under this type of health plan go to specific doctors and hospitals that are part of the health plan. It is less expensive than the fee-for-service option.

3. Health-Maintenance Organization (HMOs) - provides health care or a fixed price. It is the cheapest option.

The choice of plan will be made by each individual not by his/her employer. Every American will be able to switch plans every year if they are not satisfied with their care or service. Unless an employer chooses to pay for the entire premium, an employee will contribute 20% of the cost. The share of premiums will be deducted from his/her paycheck. In addition, individuals will pay limited co-payments or deductibles to their health plans as part of their coverage. People who are either self-employed or unemployed, but still can afford to contribute, will send in a monthly check for insurance.

- **Responsibility** - President Clinton said in his address to the Joint Session of Congress on September 22, 1993, "we need to restore a sense that we are all in this together and that we all have a responsibility to be a part of the solution". That means, making everyone responsible for health-care. Everybody (employers and employees) must contribute to pay something for health care coverage, even if the contribution is small. In addition, the Health Reform Act, asks drug companies to take responsibility for keeping prices down. In order to discourage frivolous medical malpractice lawsuits, the Health-Security Act requires patients and doctor to try to settle disputes before they end up in court. Also it limits lawyers' fees.

The Clinton plan will enforce the limits of health care spending using the concept of global budgets. A global budget is an estimate of what it should cost, in any given year, to provide the standard health-insurance package to all Americans. The formula for the global budgets would be set by Congress and enforced by a National Health Board. The Health Board will compute the "target" budgets for each state based on the number of residents, and for each regional health alliance based

on the number of enrolled consumers. The health alliances will assume the financial role played by private-health insurance companies (Morganthau, 1993) that is, they would collect premiums from employees and consumers and use them to pay the provider networks for the health care they deliver.

The global budgets have some advantages. First, these budgets would benefit hospitals since they would be able to work within a known budget for the coming year. Second, established budgets will give the federal government control over spending to ensure that costs do not increase faster than inflation (Young and Sharma, 1993).

According to Morganthau (1993, p. 32) the approach to health-care reform by President Clinton "... would dramatically affect 630,000 American doctors and 3 million other health professionals, and it would radically restructure an industry that is bigger, in dollar value, than the entire Italian economy".

One way it is going to affect them is by increasing in competition which has been built into the plan as a way of attempting to control costs. This goal of increasing competition is designed into the plan and this is specifically explained in page 3 of the Health Security Preliminary Plan Summary, U. S. Government Printing Office: 1993 0-359-252: QL3 under the heading **Controlling Costs** which states:

> *"The Health Security plan cuts the projected growth in health care costs by increasing competition in health care, reducing administrative costs and imposing budget discipline. Health plans compete to provide affordable, quality care:*
>
> - *Uniform, comprehensive health benefits and reliable information about the price and performance of health plans encourage informed choices.*

• Consumers may choose to pay less for lower-cost health plans or more for higher-cost plans, creating incentives for cost-conscious decisions.

• Payments to health plans are fixed, providing incentives to spend resources wisely. Payments are adjusted based on the risk characteristics of each health plan's participants.

If savings attained through competition and reductions in administrative burden fail to contain costs, limits on the rate of growth of insurance premiums provide an emergency brake --or backstop-- to ensure that premiums remain in line with inflation".

Another aspect of the Health Security Act that underlines the principle of Competion (to reduce or maintain costs under control) is that of choice. At least three choices will be offered to every American and they will be the one making a selection, not his/her employer. There will also be choice to change plans every year if they are not satisfied with the service that is being provided. Once a plan option is exercised, the consumer may have choices of selecting physicians outside the selected plan and paying according to the particular cost-sharing method. This is contained in "Health Security-Preliminary Plan Summary" (U.S. Government Printing Office: 19930 - 359-352: QL3, page 10) under the heading cost-sharing.

The coverage of the Health Security Plan, as presented to U. S. Congress, would have gone into effect state by state. The structure of the new system divides the responsibilities among the federal government, the states and the alliances as shown in table 1 below.

The Health Security Act President Clinton proposed was not successful in the Congress of the United States. The focus of health care reform, nevertheless, resulted in improvements in health care policy including the Health Insurance Reform Act, the Family and Medical Leave Act, and improvements to both Medicare and Medicaid programmes (Hair, 1996). President Clinton also

established a consumer "bill of rights" for Americans enrolled in federal government health-care programs via executive order (Sobieraj, 1998).

Table:1

Structure of Proposed Health System

Federal Government: Sets the basic framework for the system
• Defines guaranteed benefits package • Determines caps on growth in insurance premiums • Reforms insurance system • Establishes quality standards
States: Implement health care reform within federal framework
• Establish alliance(s) • Certify health plans • Monitor quality and availability of care • Implement insurance reform
Alliances: Serve as purchasing agent for employers and consumers
• Solicit competitive bids from health plans • Distribute consumer information materials • Collect premiums and pay health plans

Source: Health Security Preliminary Plan Summary, U. S. Government Printing Office: 1993 0-359-252: QL3 p. 18.

REFERENCES

Goodgame, D. (1993) Ready to Operate. Time. September 20, pp. 54-58.

Health Security Preliminary Plan Summary. U. S. Government Printing Office: 1993
0-359-252: QL3.

Hair, L.P. (1996) Clinton, health care, and the crystal ball. Journal of Health Care Marketing. Vol.16, No.4, winter pp.6-13.

Morganthau, T. (1993) The Clinton Solution. Newsweek. September 20, pp. 30-35.

Sobieraj, S. (1998) Clinton establishes a consumer "bill of rights" in health care. The San Juan Star, February 21, p. 20

Schoene-Roura, P. (1996) Who the health cares? San Juan Magazine, Vol. V, No. 5, September/October, pp. 48-56.

The White House Domestic Policy Council (1993) Health Security-The President Report to the American People. Touchstone Book, published by Simon and Schuster.

White, S. W. (1993a) Health Care Reform. National Forum, The Phi Kappa Phi Journal. Summer Volume LXXIII No. 3, page 2 and 5.

White, S. W. (1993b) Health Care Reform. An Interview with Ira Magaziner. National Forum, The Phi Kappa Phi Journal. Summer Volume LXXIII No. 3, pages 9 and 21.

Young, Q. D. and N. Sharma (1993) The Case for a Single-Payer System. National Forum, The Phi Kappa Phi Journal. Summer Volume LXXIII No. 3, pp. 6-8.

APPENDIX 6

Universal Health Coverage: A New York Times News Service Editorial, September 21, 2000

The national debate over health policy shifts focus as the nature of problems shifts. In the mid-1990s, the focus was on the soaring cost of health insurance. Toward the end of the '90s, attention shifted to alleged excesses of managed care plans. But one problem never fades away. That is the shameful fact that the United States is the only industrialized power that is does not provide some form of universal health coverage for its people. Some 45 million its Americans still lack health insurance, and despite a decade of prosperity, the number is growing.

The issue is not just that the uninsured live in constant fear of financial catastrophe. They also suffer medically from the lack of ongoing basic treatment. Studies show the uninsured are more likely to require hospitalization for problems like diabetes.

There is no more important use of the $4.5 trillion surplus expected over the next 10 years than to do what other wealthy countries have proved is affordable.

The straightforward way to reduce the number of uninsured Americans is to provide them refundable tax credits to help pay for their health coverage. Tax credits lower a family's tax bill dollar-for-dollar to offset the cost of insurance premiums.

Bush proposes a tax credit of up to $2,000, costing about $60 billion over 10 years. He would also spend $8 million to build community health centers. But the tax credit is too skimpy to draw many uninsured families to policies that could cost them thousands of dollars a year more than the Bush credit would cover.

Gore's platform calls for spending about $140 billion over 10 years to raise coverage among the spending uninsured. He proposes a refundable tax credit for individuals equal to 25 percent of the cost of their coverage. For a $2,000 premium, that would amount to a credit of only about $500.

Gore fears that tax credits large enough to attract the uninsured would encourage employers to drop coverage for workers. So he would also make more low-income children eligible for the Children's Health Insurance Program, an existing state-run program, and open that program to the parents of eligible children. The Gore plan would permit children from families that earn too much to qualify for the program to buy coverage at an unsubsidized premium. But state programs have been slow to soak up many uninsured children, so Gore's proposal though overall a more effective approach than Bush's, offers little prospect of making a giant step toward universal coverage.

Though it is unconscionable that the richest country in the world refuses to cover the insurance needs of all its residents, neither candidate proposes to do much about the problem anytime soon. If this moment of economic prosperity and looming budget surpluses is the wrong one for an aggressive move toward universal health insurance, when will it be right?

Reference: Universal Health Coverage: A New York Times News Service Editorial, September 21, 2000, as published by The San Juan Star p.27.

APPENDIX 7

PROFILE OF PHYSICIANS IN PUERTO RICO

There is a legal requirement for all health professionals (including physicians) to obtain a license and renew it periodically in order to be able to practice their profession in Puerto Rico. The record of these licenses and their renewals provides the basis for the statistics of all licensed health professionals in the Island.

The most recent statistical report available at the time the research was designed covers July 1989 to June 1992 and includes the socio-demographic characteristics as well as an educational and occupational profile of all physicians registered and active in their area of specialization. The registry includes 7,389 physicians, of which 84.84 percent, or 6,269 physicians were listed as active in Puerto Rico (6.86% were active outside Puerto Rico and 8.30% were reported inactive). Of these 6,269 physicians (all those registered and active in Puerto Rico) 46% (2,884) work in the private sector and of these 1,601 have solo practice. This leaves us a total universe of 1,601 physicians registered and active in the private sector-solo practice in Puerto Rico.

Other characteristic of all registered physicians include:

- Age: The largest number by age groups of active physicians is between 30-34 years of age (1,328 physicians); followed by 35-39 years of age (1,213). Median age is 40.
- Place of Birth: The majority of the registered physicians were born in Puerto Rico (5,776 or 78.17%).

- Gender: The majority of active physicians listing some specialty are males (3,539 or 78.98%); with 21.02 percent being females.
- Education: Registered physicians include 35.59% (2,630) graduated from Puerto Rico; 24.31% (1,796) graduated from the Dominican Republic; 22.93% (1,694) graduated from Spain; 5.75% (425) graduated from the United States; and 11.42% (844) graduated from other countries.

Source: Health Department of Puerto Rico - Administration of Health Services and Facilities (Office of Health Statistics), San Juan, Puerto Rico. "Boletín Informativo", Year VIII, Series B-1, Number 23, September, 1993.

APPENDIX 8

DISTRIBUTION OF ACTIVE PHYSICIANS IN PUERTO RICO
by Place of Work and Sector of Work
Puerto Rico, 1989-1992

REGION/SECTOR OF WORK	TOTAL		SECTOR OF WORK									
	Num.	%	Public Sector Num.	%	Individual Private Practice Num.	%	Group Private Practice Num.	%	Other Private Sector Num.	%	Volunteer Work Num.	%
TOTAL	6,269	100.00	3,377	53.87	1,601	25.54	681	10.86	602	9.60	8	0.13
Aguadilla Subregion	204	100.00	113	55.39	70	34.31	13	6.37	8	3.92	0	0.00
Arecibo Region	482	100.00	244	50.62	139	28.84	52	10.79	46	9.54	1	0.21
Arecibo Area	269	100.00	150	55.76	67	24.91	28	10.41	23	8.55	1	0.37
Manatí Area	213	100.00	94	44.13	72	33.80	24	11.27	23	10.80	0	0.00
Bayamón Region	841	100.00	399	47.44	234	27.82	106	12.60	101	12.01	1	0.12
Barranquitas Area	83	100.00	49	59.40	26	31.33	7	8.43	1	1.20	0	0.00
Bayamón Area	692	100.00	314	45.38	190	27.46	93	13.44	94	13.58	1	0.14
Cataño Area	66	100.00	36	54.55	18	27.27	6	9.09	6	9.09	0	0.00
Caguas Region	744	100.00	382	51.34	188	25.27	97	13.04	77	10.35	0	0.00
Caguas Area	418	100.00	245	58.61	102	24.40	41	9.81	30	7.18	0	0.00
Cayey Area	129	100.00	49	37.98	33	25.58	26	20.16	21	16.28	0	0.00
Humacao Area	197	100.00	88	44.67	53	26.90	30	15.23	26	13.20	0	0.00
Fajardo Subregion	125	100.00	78	62.40	27	21.60	9	7.20	11	8.80	0	0.00
Mayagüez Region	506	100.00	280	55.34	133	26.28	41	8.10	52	10.28	0	0.00
Mayagüez Area	410	100.00	245	59.76	95	23.17	35	8.54	35	8.54	0	0.00
San Germán Area	96	100.00	35	36.46	38	39.58	6	6.25	17	17.71	0	0.00

DISTRIBUTION OF ACTIVE PHYSICIANS IN PUETO RICO
by Place of Work and Sector of Work
Puerto Rico, 1989-1992

Continued

REGION/SECTOR OF WORK	TOTAL		SECTOR OF WORK									
	Num. %		Public Sector Num. %		Individual Private Practice Num. %		Group Private Practice Num. %		Other Private Sector Num. %		Volunteer Work Num. %	
Metropolitan Region	2,631	100.00	1,459	55.45	657	24.97	273	10.38	237	9.01	5	0.19
Carolina Area	230	100.00	128	55.65	65	28.26	18	7.83	19	8.26	0	0.00
San Juan Area	2,401	100.00	1,331	55.44	592	24.66	255	10.62	218	9.08	5	0.21
Ponce Region	733	100.00	419	57.16	153	20.87	90	12.28	70	9.55	1	0.14
Guayama Area	103	100.00	67	65.05	23	22.33	8	7.77	4	3.88	1	0.97
Ponce Area	566	100.00	308	54.42	116	20.49	77	13.60	65	11.48	0	0.00
Yauco Area	64	100.00	44	68.75	14	21.88	5	7.81	1	1.56	0	0.00
Unspecified	3	100.00	3	100.00	0	0.00	0	0.00	0	0.00	0	0.00

REFERENCE

Health Department of Puerto Rico (1993). "Boletín Informativo" Year VIII, Series B-1, Number 23, Table 15 page 22, September. Administration of Health Services and Facilities (Office of Health Statistics) San Juan, Puerto Rico.

APPENDIX 9

Two Sample T Test for the Means of 41 Statements within the Gender Variable

Group 1 = male physicians
Group 2 = female physicians

Two Sample T Test for the Means of Statement 1 (item 8) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	2.291139	1.2925	0.1454
2	26	2.307692	1.0107	0.1982

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.060	103	0.9527
Not Equal	-0.067	54.13	0.9466

Two Sample T Test for the Means of Statement 2 (item 9) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	78	3.987179	0.89	0.1008
2	24	4	1.1034	0.2252

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.058	100	0.9537
Not Equal	-0.052	32.74	0.9589

Two Sample T Test for the Means of Statement 3 (item 10) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	75	2.12	0.9438	0.109
2	25	2.12	0.9274	0.1855

Hypothesis Test

Null hypothesis:	Mean 1 - Mean 2 = 0
Alternative:	Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.000	98	1.0000
Not Equal	0.000	41.82	1.0000

Two Sample T Test for the Means of Statement 4 (item 11) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	75	3.133333	1.1893	0.1373
2	26	3.5	1.2083	0.237

Hypothesis Test

Null hypothesis:	Mean 1 - Mean 2 = 0
Alternative:	Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-1.349	99	0.1803
Not Equal	-1.339	42.97	0.1877

Two Sample T Test for the Means of Statement 5 (item 12) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	77	2.896104	1.1307	0.1289
2	26	2.807692	1.059	0.2077

Hypothesis Test

Null hypothesis:	Mean 1 - Mean 2 = 0
Alternative:	Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.350	101	0.7270
Not Equal	0.362	45.72	0.7192

Two Sample T Test for the Means of Statement 6 (item 13) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	77	3.857143	1.1438	0.1303
2	26	4.076923	1.0554	0.207

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.863	101	0.3901
Not Equal	-0.899	46.36	0.3736

Two Sample T Test for the Means of Statement 7 (item 14) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	3.291139	1.2825	0.1443
2	26	3.5	1.0677	0.2094

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.749	103	0.4557
Not Equal	-0.821	50.72	0.4153

Two Sample T Test for the Means of Statement 8 (item 15) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	2.873418	1.2128	0.1365
2	26	2.846154	1.0077	0.1976

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.103	103	0.9179
Not Equal	0.114	50.82	0.9101

Two Sample T Test for the Means of Statement 9 (item 16) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	2.670886	1.1953	0.1345
2	26	2.307692	0.884	0.1734

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	1.424	103	0.1573
Not Equal	1.655	57.47	0.1033

Two Sample T Test for the Means of Statement 10 (item 17) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	78	3.102564	1.1908	0.1348
2	26	3.653846	0.8918	0.1749

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-2.164	102	0.0328
Not Equal	-2.496	57.00	0.0155

Two Sample T Test for the Means of Statement 11 (item 18) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	2.481013	1.1193	0.1259
2	26	2.5	1.1402	0.2236

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.075	103	0.9406
Not Equal	-0.074	42.02	0.9414

Two Sample T Test for the Means of Statement 12 (item 19) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	78	3.653846	0.978	0.1107
2	26	4.192308	0.567	0.1112

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-2.657	102	0.0092
Not Equal	-3.431	75.17	0.0010

Two Sample T Test for the Means of Statement 13 (item 20) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	78	3.846154	0.9269	0.105
2	26	4	0.8485	0.1664

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.748	102	0.4562
Not Equal	-0.782	46.46	0.4382

Two Sample T Test for the Means of Statement 14 (item 21) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	78	3.833333	0.9989	0.1131
2	26	4	1.1314	0.2219

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.713	102	0.4778
Not Equal	-0.669	38.83	0.5073

Two Sample T Test for the Means of Statement 15 (item 22) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	3.417722	1.1164	0.1256
2	26	3.653846	0.9774	0.1917

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.963	103	0.3377
Not Equal	-1.030	48.23	0.3080

Two Sample T Test for the Means of Statement 16 (item 23) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	79	3.493671	1.1533	0.1298
2	26	3.884615	0.7114	0.1395

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-1.627	103	0.1069
Not Equal	-2.052	70.13	0.0439

Two Sample T Test for the Means of Statement 17 (item 24) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	77	3.285714	1.1222	0.1279
2	25	3.12	1.0536	0.2107

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.651	100	0.5167
Not Equal	0.672	43.09	0.5050

Two Sample T Test for the Means of Statement 18 (item 25) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	76	3.434211	1.1586	0.1329
2	25	3	1.1902	0.238

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	1.615	99	0.1096
Not Equal	1.593	40.05	0.1191

Two Sample T Test for the Means of Statement 19 (item 26) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	78	3.269231	1.1585	0.1312
2	25	3.48	1.005	0.201

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.816	101	0.4164
Not Equal	-0.878	46.19	0.3844

Two Sample T Test for the Means of Statement 20 (item 27) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	76	3.197368	1.0711	0.1229
2	25	3	1.1547	0.2309

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.784	99	0.4349
Not Equal	0.755	38.52	0.4551

Two Sample T Test for the Means of Statement 21 (item 28) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	74	3.459459	1.1958	0.139
2	25	3.44	1.121	0.2242

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.071	97	0.9432
Not Equal	0.074	43.87	0.9415

Two Sample T Test for the Means of Statement 22 (item 29) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	77	2.155844	1.2361	0.1409
2	24	1.833333	1.0901	0.2225

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	1.146	99	0.2546
Not Equal	1.225	43.04	0.2274

Two Sample T Test for the Means of Statement 23 (item 30) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	77	2.818182	1.0849	0.1236
2	23	2.521739	1.1627	0.2424

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	1.131	98	0.2607
Not Equal	1.089	34.26	0.2836

Two Sample T Test for the Means of Statement 24 (item 31) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	75	2.813333	1.0226	0.1181
2	25	2.64	1.036	0.2072

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.732	98	0.4662
Not Equal	0.727	40.73	0.4715

Two Sample T Test for the Means of Statement 25 (item 32) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	74	2.837838	1.1471	0.1333
2	25	2.76	1.3	0.26

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.284	97	0.7774
Not Equal	0.266	37.43	0.7914

Two Sample T Test for the Means of Statement 26 (item 33) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	76	2.934211	1.2684	0.1455
2	25	3.64	1.1136	0.2227

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-2.483	99	0.0147
Not Equal	-2.653	46.17	0.0109

Two Sample T Test for the Means of Statement 27 (item 34) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	75	3.146667	1.1589	0.1338
2	25	3.68	1.1075	0.2215

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-2.014	98	0.0467
Not Equal	-2.061	42.86	0.0454

Two Sample T Test for the Means of Statement 28 (item 35) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	76	2.736842	1.1589	0.1329
2	25	3.04	1.241	0.2482

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-1.115	99	0.2676
Not Equal	-1.077	38.73	0.2883

Two Sample T Test for the Means of Statement 29 (item 36) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	4.285714	0.7049	0.0843
2	25	3.92	1.1518	0.2304

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	1.861	93	0.0658
Not Equal	1.491	30.66	0.1462

Two Sample T Test for the Means of Statement 30 (item 37) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	2.242857	0.9393	0.1123
2	25	2.68	1.0693	0.2139

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-1.925	93	0.0572
Not Equal	-1.810	38.05	0.0782

Two Sample T Test for the Means of Statement 31 (item 38) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	2.557143	1.2699	0.1518
2	25	2.2	1.3844	0.2769

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	1.179	93	0.2415
Not Equal	1.131	39.35	0.2649

Two Sample T Test for the Means of Statement 32 (item 39) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	69	2.391304	1.1532	0.1388
2	25	2.32	1.3454	0.2691

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.253	92	0.8007
Not Equal	0.236	37.54	0.8151

Two Sample T Test for the Means of Statement 33 (item 40) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	69	3.898551	1.352	0.1628
2	25	4.28	0.8907	0.1781

Hypothesis Test

Null hypothesis:	Mean 1 - Mean 2 = 0
Alternative:	Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-1.309	92	0.1937
Not Equal	-1.581	64.84	0.1188

Two Sample T Test for the Means of Statement 34 (item 41) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	69	2.405797	1.1024	0.1327
2	24	2.458333	1.0206	0.2083

Hypothesis Test

Null hypothesis:	Mean 1 - Mean 2 = 0
Alternative:	Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.205	91	0.8382
Not Equal	-0.213	43.06	0.8326

Two Sample T Test for the Means of Statement 35 (item 42) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	3.257143	1.1757	0.1405
2	25	3.32	1.314	0.2628

Hypothesis Test

Null hypothesis:	Mean 1 - Mean 2 = 0
Alternative:	Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.222	93	0.8245
Not Equal	-0.211	38.59	0.8341

Two Sample T Test for the Means of Statement 36 (item 43) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	4.371429	0.7454	0.0891
2	25	4.28	0.9363	0.1873

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.491	93	0.6245
Not Equal	0.441	35.46	0.6620

Two Sample T Test for the Means of Statement 37 (item 44) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	69	4.347826	0.9522	0.1146
2	25	4.44	0.6506	0.1301

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.447	92	0.6560
Not Equal	-0.532	62.43	0.5969

Two Sample T Test for the Means of Statement 38 (item 45) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	3.757143	1.2091	0.1445
2	25	3.6	1.1902	0.238

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.560	93	0.5768
Not Equal	0.564	42.92	0.5755

Two Sample T Test for the Means of Statement 39 (item 46) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	3.642857	1.1676	0.1396
2	25	3.76	1.2342	0.2468

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.424	93	0.6724
Not Equal	-0.413	40.36	0.6817

Two Sample T Test for the Means of Statement 40 (item 47) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	3.114286	1.2104	0.1447
2	25	3	1.2583	0.2517

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	0.401	93	0.6893
Not Equal	0.394	40.93	0.6958

Two Sample T Test for the Means of Statement 41 (item 48) within GENDER

Sample Statistics

Group	N	Mean	Std. Dev.	Std. Error
1	70	2.8	1.2921	0.1544
2	25	2.84	1.2477	0.2495

Hypothesis Test

Null hypothesis: Mean 1 - Mean 2 = 0
Alternative: Mean 1 - Mean 2 ^= 0

If Variances Are	t statistic	Df	Pr > t
Equal	-0.134	93	0.8937
Not Equal	-0.136	43.68	0.8922

APPENDIX 10

Analysis of Variance: "years in the profession" versus each of the 41 statements

YP = years in the profession

1= 0 to 5 years
2= 6 to 10 years
3= 11 to 15 years
4= 16 to 20 years
5= 21 to 25 years
6= more than 25 years

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P21 STATEMENT 1, ITEM 8

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	11.41688312	2.28337662	1.57	0.1769
Error	99	144.43073593	1.45889632		
Corrected Total	104	155.84761905			

R-Square	C.V.	Root MSE	P21 Mean
0.073257	52.62407	1.2078478	2.29523810

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	11.41688312	2.28337662	1.57	0.1769

Analysis of Variance Procedure

Level of YP	N	-------------P21------------- Mean	SD
1	11	1.72727273	0.78624539
2	12	2.16666667	1.19341628
3	21	2.23809524	1.13599128
4	22	2.31818182	1.17052547
5	14	2.00000000	0.96076892
6	25	2.80000000	1.52752523

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P21
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	25	1551.50000	1325.0	127.138484	62.0600000
5	14	664.50000	742.0	101.472123	47.4642857
3	21	1107.50000	1113.0	119.401923	52.7380952
1	11	444.50000	583.0	91.416018	40.4090909
2	12	607.00000	636.0	94.971682	50.5833333
4	22	1190.00000	1166.0	121.482136	54.0909091

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.0937 DF = 5 Prob > CHISQ = 0.4045

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 102 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P22 STATEMENT 2, ITEM 9

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	2.57049911	0.51409982	0.57	0.7220
Error	96	86.41969697	0.90020518		
Corrected Total	101	88.99019608			

R-Square	C.V.	Root MSE	P22 Mean
0.028885	23.77807	0.9487914	3.99019608

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	2.57049911	0.51409982	0.57	0.7220

Analysis of Variance Procedure

Level of YP	N	P22 Mean	P22 SD
1	11	3.81818182	1.07871978

2	12	3.75000000	0.96530730
3	20	4.20000000	0.76777190
4	21	3.85714286	0.96362411
5	14	4.07142857	1.20666646
6	24	4.08333333	0.82970223

N P A R I W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P22
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	24	1275.50000	1236.00000	117.021838	53.1458333
5	14	808.50000	721.00000	94.933468	57.7500000
3	20	1130.00000	1030.00000	109.530714	56.5000000
1	11	521.00000	566.50000	85.571872	47.3636364
2	12	527.00000	618.00000	88.884467	43.9166667
4	21	991.00000	1081.50000	111.549121	47.1904762

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.1899 DF = 5 Prob > CHISQ = 0.6707

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P23 STATEMENT 3, ITEM 10

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	3.68359307	0.73671861	0.84	0.5277
Error	94	82.87640693	0.88166390		
Corrected Total	99	86.56000000			

R-Square	C.V.	Root MSE	P23 Mean
0.042555	44.29102	0.9389696	2.12000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	3.68359307	0.73671861	0.84	0.5277

Analysis of Variance Procedure

Level of		-------------P23-------------	
YP	N	Mean	SD
1	11	1.72727273	0.90453403
2	12	2.25000000	0.86602540
3	20	2.30000000	0.92338052
4	21	2.04761905	0.58959227
5	14	1.92857143	1.14113882
6	22	2.27272727	1.12045136

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P23
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1183.00000	1111.00000	111.930931	53.7727273
5	14	598.00000	707.00000	93.757219	42.7142857
3	20	1124.00000	1010.00000	108.081526	56.2000000
1	11	414.50000	555.50000	84.544006	37.6818182
2	12	669.00000	606.00000	87.805846	55.7500000
4	21	1061.50000	1060.50000	110.056239	50.5476190

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.3037 DF = 5 Prob > CHISQ = 0.3800

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P24 STATEMENT 4, ITEM 11

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	9.43986542	1.88797308	1.34	0.2561
Error	95	134.32251082	1.41392117		
Corrected Total	100	143.76237624			

R-Square	C.V.	Root MSE	P24 Mean
0.065663	36.83972	1.1890841	3.22772277

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	9.43986542	1.88797308	1.34	0.2561

Analysis of Variance Procedure

Level of		------------P24------------	
YP	N	Mean	SD
1	11	3.63636364	1.20604538
2	11	2.63636364	1.28629136
3	21	3.33333333	1.15470054
4	22	3.40909091	1.14055504
5	14	3.42857143	1.22249969
6	22	2.90909091	1.19160120

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P24
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	951.00000	1122.0	116.207831	43.2272727
5	14	784.50000	714.0	97.282373	56.0357143
3	21	1119.50000	1071.0	114.252352	53.3095238
1	11	672.50000	561.0	87.705758	61.1363636
2	11	411.50000	561.0	87.705758	37.4090909
4	22	1212.00000	1122.0	116.207831	55.0909091

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 6.7872 DF = 5 Prob > CHISQ = 0.2370

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 103 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P25 STATEMENT 5, ITEM 12

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.34571869	1.06914374	0.86	0.5082
Error	97	120.01350461	1.23725262		
Corrected Total	102	125.35922330			

R-Square	C.V.	Root MSE	P25 Mean
0.042643	38.70568	1.1123185	2.87378641

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.34571869	1.06914374	0.86	0.5082

Analysis of Variance Procedure

Level of YP	N	-------------P25------------- Mean	SD
1	11	2.90909091	0.94387981
2	12	2.91666667	0.79296146
3	21	2.57142857	1.02817453
4	22	3.09090909	1.06498786
5	14	3.21428571	1.12171376
6	23	2.69565217	1.39592858

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P25
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1075.00000	1196.0	121.902771	46.7391304
5	14	858.50000	728.0	100.314494	61.3214286
3	21	935.00000	1092.0	117.929169	44.5238095
1	11	576.50000	572.0	90.405515	52.4090909
2	12	643.50000	624.0	93.910896	53.6250000
4	22	1267.50000	1144.0	119.966093	57.6136364

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.5123 DF = 5 Prob > CHISQ = 0.4782

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 103 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P26 STATEMENT 6, ITEM 13

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	7.16597319	1.43319464	1.15	0.3403
Error	97	121.04761905	1.24791360		
Corrected Total	102	128.21359223			

R-Square	C.V.	Root MSE	P26 Mean
0.055891	28.55120	1.1171005	3.91262136

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	7.16597319	1.43319464	1.15	0.3403

Analysis of Variance Procedure

Level of YP	N	-------------P26------------- Mean	SD
1	11	3.45454545	1.43969694
2	12	3.66666667	1.23091491
3	21	4.33333333	0.73029674
4	22	3.81818182	1.33225064
5	14	3.85714286	1.16732059
6	23	4.00000000	0.90453403

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P26
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1199.50000	1196.0	119.789380	52.1521739
5	14	702.00000	728.0	98.575372	50.1428571
3	21	1293.00000	1092.0	115.884667	61.5714286
1	11	472.50000	572.0	88.838182	42.9545455
2	12	553.00000	624.0	92.282792	46.0833333
4	22	1136.00000	1144.0	117.886278	51.6363636

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.1029 DF = 5 Prob > CHISQ = 0.5347

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P27 STATEMENT 7, ITEM 14

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.53696970	1.10739394	0.72	0.6094
Error	99	152.12017316	1.53656741		
Corrected Total	104	157.65714286			

R-Square	C.V.	Root MSE	P27 Mean
0.035120	37.08156	1.2395835	3.34285714

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.53696970	1.10739394	0.72	0.6094

Analysis of Variance Procedure

Level of YP	N	-------------P27------------- Mean	SD
1	11	3.27272727	1.34839972
2	12	3.66666667	0.77849894
3	21	3.57142857	1.32557265
4	22	3.45454545	1.10096377
5	14	3.14285714	1.23145585
6	25	3.04000000	1.39880902

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P27
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	25	1170.50000	1325.0	127.525046	46.8200000
5	14	667.00000	742.0	101.780646	47.6428571
3	21	1242.50000	1113.0	119.764962	59.1666667
1	11	569.50000	583.0	91.693967	51.7727273
2	12	705.50000	636.0	95.260441	58.7916667
4	22	1210.00000	1166.0	121.851499	55.0000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.1182 DF = 5 Prob > CHISQ = 0.6818

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P28 STATEMENT 8, ITEM 15

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.19303030	1.03860606	0.76	0.5794
Error	99	134.94030303	1.36303336		
Corrected Total	104	140.13333333			

R-Square	C.V.	Root MSE	P28 Mean
0.037058	40.72640	1.1674902	2.86666667

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.19303030	1.03860606	0.76	0.5794

Analysis of Variance Procedure

Level of YP	N	P28 Mean	P28 SD
1	11	2.63636364	1.62927759
2	12	3.08333333	1.08362467
3	21	2.85714286	1.23635409
4	22	3.09090909	1.15094540
5	14	3.07142857	0.99724896
6	25	2.56000000	1.00332780

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P28
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	25	1135.00000	1325.0	128.083935	45.4000000
5	14	814.00000	742.0	102.226709	58.1428571
3	21	1116.50000	1113.0	120.289842	53.1666667
1	11	513.50000	583.0	92.095823	46.6818182
2	12	699.00000	636.0	95.677928	58.2500000
4	22	1287.00000	1166.0	122.385524	58.5000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.7737 DF = 5 Prob > CHISQ = 0.5824

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P29 STATEMENT 9, ITEM 16

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.90805195	1.18161039	0.92	0.4737
Error	99	127.65385281	1.28943286		
Corrected Total	104	133.56190476			

R-Square	C.V.	Root MSE	P29 Mean
0.044235	43.99663	1.1355319	2.58095238

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.90805195	1.18161039	0.92	0.4737

Analysis of Variance Procedure

Level of		-------------P29-------------	
YP	N	Mean	SD
1	11	2.09090909	1.04446594
2	12	2.66666667	0.88762536
3	21	2.52380952	1.16700675
4	22	2.50000000	1.14434427
5	14	2.50000000	1.16023870
6	25	2.92000000	1.22202019

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P29
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score

6	25	1545.50000	1325.0	128.452326	61.8200000
5	14	709.00000	742.0	102.520730	50.6428571
3	21	1086.00000	1113.0	120.635816	51.7142857
1	11	446.50000	583.0	92.360706	40.5909091
2	12	676.50000	636.0	95.953114	56.3750000
4	22	1101.50000	1166.0	122.737525	50.0681818

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.7064 DF = 5 Prob > CHISQ = 0.4527

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P30 STATEMENT 10, ITEM 17

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	14.08237596	2.81647519	2.28	0.0522
Error	98	120.90800866	1.23375519		
Corrected Total	103	134.99038462			

R-Square	C.V.	Root MSE	P30 Mean
0.104321	34.27819	1.1107453	3.24038462

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	14.08237596	2.81647519	2.28	0.0522

Analysis of Variance Procedure

Level of		-------------P30-------------	
YP	N	Mean	SD
1	11	3.27272727	1.10371274
2	12	3.08333333	0.99620492
3	21	3.76190476	1.04425868
4	22	3.50000000	1.01183473
5	14	3.00000000	1.35873244
6	24	2.75000000	1.15155849

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P30
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	24	961.50000	1260.00000	125.190579	40.0625000
5	14	660.00000	735.00000	101.415960	47.1428571
3	21	1374.50000	1102.50000	119.280576	65.4523810
1	11	584.50000	577.50000	91.381620	53.1363636
2	12	570.50000	630.00000	94.930457	47.5416667
4	22	1309.00000	1155.00000	121.349866	59.5000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 10.619 DF = 5 Prob > CHISQ = 0.0595

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P31 STATEMENT 11, ITEM 18

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6.18554113	1.23710823	0.99	0.4295
Error	99	124.04303030	1.25295990		
Corrected Total	104	130.22857143			

R-Square	C.V.	Root MSE	P31 Mean
0.047498	45.03160	1.1193569	2.48571429

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	6.18554113	1.23710823	0.99	0.4295

Analysis of Variance Procedure

Level of YP	N	-------------P31------------- Mean	SD
1	11	2.18181818	1.07871978
2	12	2.00000000	0.73854895

3	21	2.61904762	1.28359614
4	22	2.50000000	1.05785047
5	14	2.85714286	1.35062053
6	25	2.52000000	1.04562581

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P31
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	25	1358.50000	1325.0	128.542121	54.3400000
5	14	865.50000	742.0	102.592397	61.8214286
3	21	1169.00000	1113.0	120.720147	55.6666667
1	11	503.00000	583.0	92.425271	45.7272727
2	12	487.50000	636.0	96.020190	40.6250000
4	22	1181.50000	1166.0	122.823325	53.7045455

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.2816 DF = 5 Prob > CHISQ = 0.5096

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P32 STATEMENT 12, ITEM 19

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.13998501	1.02799700	1.23	0.3030
Error	98	82.20616883	0.83883846		
Corrected Total	103	87.34615385			

R-Square	C.V.	Root MSE	P32 Mean
0.058846	24.17555	0.9158812	3.78846154

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.13998501	1.02799700	1.23	0.3030

Analysis of Variance Procedure

Level of		-------------P32-------------	
YP	N	Mean	SD
1	11	3.63636364	1.20604538
2	12	4.08333333	0.90033664
3	21	3.85714286	0.91025899
4	22	4.00000000	0.53452248
5	14	3.35714286	1.15072839
6	24	3.70833333	0.90789612

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P32
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	24	1198.00000	1260.00000	116.502427	49.9166667
5	14	588.50000	735.00000	94.377753	42.0357143
3	21	1133.00000	1102.50000	111.002575	53.9523810
1	11	553.50000	577.50000	85.039789	50.3181818
2	12	744.50000	630.00000	88.342339	62.0416667
4	22	1242.50000	1155.00000	112.928257	56.4772727

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.3939 DF = 5 Prob > CHISQ = 0.4942

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P33 STATEMENT 13, ITEM 20

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	3.56668332	0.71333666	0.86	0.5092
Error	98	81.04870130	0.82702756		
Corrected Total	103	84.61538462			

R-Square	C.V.	Root MSE	P33 Mean
0.042152	23.41057	0.9094105	3.88461538

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	3.56668332	0.71333666	0.86	0.5092

Analysis of Variance Procedure

Level of		-------------P33-------------	
YP	N	Mean	SD
1	11	4.09090909	0.83120941
2	12	3.91666667	0.90033664
3	21	3.85714286	1.15263673
4	22	4.09090909	0.61015930
5	14	3.50000000	1.09192843
6	24	3.83333333	0.81649658

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P33
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	24	1190.00000	1260.00000	118.000899	49.5833333
5	14	596.50000	735.00000	95.591653	42.6071429
3	21	1135.50000	1102.50000	112.430306	54.0714286
1	11	634.00000	577.50000	86.133584	57.6363636
2	12	635.00000	630.00000	89.478612	52.9166667
4	22	1269.00000	1155.00000	114.380757	57.6818182

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.3268 DF = 5 Prob > CHISQ = 0.6497

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P34 STATEMENT 14, ITEM 21

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.20021645	1.04004329	0.98	0.4349

Error	98	104.17478355	1.06300800		
Corrected Total	103	109.37500000			

R-Square	C.V.	Root MSE	P34 Mean
0.047545	26.60704	1.0310227	3.87500000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.20021645	1.04004329	0.98	0.4349

Analysis of Variance Procedure

Level of YP	N	-------------P34------------- Mean	SD
1	11	4.18181818	0.87386290
2	12	3.83333333	0.83484711
3	21	4.00000000	1.18321596
4	22	4.09090909	0.61015930
5	14	3.57142857	1.15786845
6	24	3.62500000	1.24455335

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P34
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	24	1141.00000	1260.00000	121.921877	47.5416667
5	14	629.50000	735.00000	98.768008	44.9642857
3	21	1224.50000	1102.50000	116.166183	58.3095238
1	11	662.00000	577.50000	88.995663	60.1818182
2	12	574.50000	630.00000	92.451840	47.8750000
4	22	1228.50000	1155.00000	118.181444	55.8409091

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.0304 DF = 5 Prob > CHISQ = 0.5451

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P35 STATEMENT 15, ITEM 22

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	8.82246753	1.76449351	1.54	0.1841
Error	99	113.36800866	1.14513140		
Corrected Total	104	122.19047619			

R-Square	C.V.	Root MSE	P35 Mean
0.072203	30.78393	1.0701081	3.47619048

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	8.82246753	1.76449351	1.54	0.1841

Analysis of Variance Procedure

Level of YP	N	-------------P35------------- Mean	SD
1	11	3.90909091	0.70064905
2	12	3.58333333	1.08362467
3	21	3.61904762	1.07126983
4	22	3.68181818	0.83872713
5	14	3.28571429	1.06904497
6	25	3.04000000	1.33790882

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P35
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	25	1091.50000	1325.0	123.842258	43.6600000
5	14	668.00000	742.0	98.841329	47.7142857
3	21	1182.50000	1113.0	116.306277	56.3095238
1	11	690.00000	583.0	89.045942	62.7272727
2	12	658.50000	636.0	92.509420	54.8750000
4	22	1274.50000	1166.0	118.332557	57.9318182

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.4896 DF = 5 Prob > CHISQ = 0.3591

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P36 STATEMENT 16, ITEM 23

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	3.56194805	0.71238961	0.61	0.6933
Error	99	115.82852814	1.16998513		
Corrected Total	104	119.39047619			

R-Square	C.V.	Root MSE	P36 Mean
0.029834	30.12577	1.0816585	3.59047619

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	3.56194805	0.71238961	0.61	0.6933

Analysis of Variance Procedure

Level of		-------------P36-------------	
YP	N	Mean	SD
1	11	3.45454545	1.36847626
2	12	3.58333333	1.16450015
3	21	3.66666667	1.15470054
4	22	3.72727273	0.93512506
5	14	3.85714286	0.53452248
6	25	3.32000000	1.18039541

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P36
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	25	1155.50000	1325.0	120.088871	46.2200000
5	14	793.50000	742.0	95.845666	56.6785714
3	21	1173.00000	1113.0	112.781289	55.8571429
1	11	566.00000	583.0	86.347155	51.4545455
2	12	632.50000	636.0	89.705663	52.7083333
4	22	1244.50000	1166.0	114.746158	56.5681818

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.4005 DF = 5 Prob > CHISQ = 0.7914

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 102 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P37 STATEMENT 17, ITEM 24

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6.04627385	1.20925477	0.99	0.4258
Error	96	116.82627517	1.21694037		
Corrected Total	101	122.87254902			

R-Square	C.V.	Root MSE	P37 Mean
0.049208	33.99436	1.1031502	3.24509804

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	6.04627385	1.20925477	0.99	0.4258

Analysis of Variance Procedure

Level of YP	N	P37 Mean	P37 SD
1	11	2.90909091	1.22102788
2	12	3.33333333	1.07308674
3	21	2.90476190	1.04425868
4	21	3.42857143	0.97833678
5	14	3.57142857	1.22249969
6	23	3.30434783	1.14553610

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P37
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1225.50000	1184.50000	117.854483	53.2826087
5	14	835.00000	721.00000	97.045186	59.6428571
3	21	891.50000	1081.50000	114.030440	42.4523810
1	11	472.00000	566.50000	87.475349	42.9090909
2	12	643.00000	618.00000	90.861630	53.5833333
4	21	1186.00000	1081.50000	114.030440	56.4761905

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.2639 DF = 5 Prob > CHISQ = 0.3845

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P38 STATEMENT 18, ITEM 25

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	3.09877416	0.61975483	0.44	0.8226
Error	95	135.11904762	1.42230576		
Corrected Total	100	138.21782178			

R-Square	C.V.	Root MSE	P38 Mean
0.022419	35.84913	1.1926046	3.32673267

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	3.09877416	0.61975483	0.44	0.8226

Analysis of Variance Procedure

Level of		------------P38------------	
YP	N	Mean	SD
1	11	3.36363636	1.36181697
2	12	3.33333333	0.98473193
3	21	3.38095238	1.16086995
4	21	3.00000000	1.18321596
5	14	3.50000000	1.22474487
6	22	3.45454545	1.22386090

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P38
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1200.50000	1122.0	117.601046	54.5681818
5	14	783.50000	714.0	98.448690	55.9642857
3	21	1092.50000	1071.0	115.622123	52.0238095
1	11	564.00000	561.0	88.757262	51.2727273
2	12	604.50000	612.0	92.187476	50.3750000
4	21	906.00000	1071.0	115.622123	43.1428571

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.4251 DF = 5 Prob > CHISQ = 0.7877

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 103 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P39 STATEMENT 19, ITEM 26

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	3.47101563	0.69420313	0.54	0.7464

Error	97	124.95616883	1.28820793
Corrected Total	102	128.42718447	

R-Square	C.V.	Root MSE	P39 Mean
0.027027	34.18252	1.1349924	3.32038835

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	3.47101563	0.69420313	0.54	0.7464

Analysis of Variance Procedure

Level of		-------------P39-------------	
YP	N	Mean	SD
1	11	3.36363636	0.92441628
2	12	3.50000000	1.24316312
3	21	3.52380952	1.16700675
4	21	3.28571429	1.10194633
5	14	2.92857143	1.26881445
6	24	3.29166667	1.08263634

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P39
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	24	1209.50000	1248.0	123.646158	50.3958333
5	14	603.50000	728.0	100.235251	43.1071429
3	21	1200.00000	1092.0	117.836011	57.1428571
1	11	574.00000	572.0	90.334099	52.1818182
2	12	692.50000	624.0	93.836711	57.7083333
4	21	1076.50000	1092.0	117.836011	51.2619048

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.5612 DF = 5 Prob > CHISQ = 0.7673

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P40 STATEMENT 20, ITEM 27

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	2.30366251	0.46073250	0.38	0.8642
Error	95	116.46861472	1.22598542		
Corrected Total	100	118.77227723			

R-Square	C.V.	Root MSE	P40 Mean
0.019396	35.16713	1.1072422	3.14851485

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	2.30366251	0.46073250	0.38	0.8642

Analysis of Variance Procedure

Level of YP	N	P40 Mean	P40 SD
1	11	3.09090909	1.04446594
2	12	3.41666667	1.08362467
3	21	3.00000000	1.09544512
4	21	3.28571429	1.00711753
5	14	3.21428571	1.36880472
6	22	3.00000000	1.06904497

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P40
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1038.00000	1122.0	117.253010	47.1818182
5	14	743.00000	714.0	98.157335	53.0714286
3	21	960.00000	1071.0	115.279943	45.7142857
1	11	543.00000	561.0	88.494588	49.3636364
2	12	708.50000	612.0	91.914650	59.0416667
4	21	1158.50000	1071.0	115.279943	55.1666667

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.6755 DF = 5 Prob > CHISQ = 0.7499

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 99 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P41 STATEMENT 21, ITEM 28

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	4.53154626	0.90630925	0.65	0.6635
Error	93	130.01390829	1.39799901		
Corrected Total	98	134.54545455			

R-Square	C.V.	Root MSE	P41 Mean
0.033680	34.22650	1.1823700	3.45454545

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	4.53154626	0.90630925	0.65	0.6635

Analysis of Variance Procedure

Level of		-------------P41-------------	
YP	N	Mean	SD
1	11	3.09090909	1.04446594
2	11	3.18181818	1.07871978
3	21	3.42857143	1.39897922
4	19	3.78947368	0.97632801
5	14	3.42857143	1.60356745
6	23	3.52173913	0.89795552

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P41
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1160.00000	1150.0	116.530427	50.4347826
5	14	721.50000	700.0	96.148409	51.5357143
3	21	1062.50000	1050.0	112.804278	50.5952381
1	11	449.00000	550.0	86.717411	40.8181818
2	11	469.50000	550.0	86.717411	42.6818182
4	19	1087.50000	950.0	108.665183	57.2368421

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.3239 DF = 5 Prob > CHISQ = 0.6502

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P42 STATEMENT 22, ITEM 29

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6.78989206	1.35797841	0.93	0.4646
Error	95	138.57644457	1.45869942		
Corrected Total	100	145.36633663			

R-Square	C.V.	Root MSE	P42 Mean
0.046709	58.08781	1.2077662	2.07920792

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	6.78989206	1.35797841	0.93	0.4646

Analysis of Variance Procedure

Level of		-------------P42-------------	
YP	N	Mean	SD
1	11	2.45454545	1.63484778
2	12	2.08333333	0.99620492
3	21	2.23809524	1.30018314
4	20	1.60000000	0.99472292
5	14	2.14285714	1.35062053
6	23	2.13043478	1.05762804

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P42
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1250.50000	1173.0	116.900601	54.3695652
5	14	720.00000	714.0	96.322816	51.4285714
3	21	1145.50000	1071.0	113.125410	54.5476190
1	11	612.00000	561.0	86.840662	55.6363636
2	12	651.50000	612.0	90.196805	54.2916667
4	20	771.50000	1020.0	111.086947	38.5750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.1758 DF = 5 Prob > CHISQ = 0.3948

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P43 STATEMENT 23, ITEM 30

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.50688876	1.10137775	0.90	0.4856
Error	94	115.24311124	1.22599055		
Corrected Total	99	120.75000000			

R-Square	C.V.	Root MSE	P43 Mean
0.045606	40.26344	1.1072445	2.75000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.50688876	1.10137775	0.90	0.4856

Analysis of Variance Procedure

Level of YP	N	P43 Mean	P43 SD
1	11	2.45454545	1.36847626
2	12	2.50000000	1.16774842
3	20	2.60000000	0.88257995
4	20	2.75000000	0.96654567
5	14	2.78571429	1.31140391
6	23	3.13043478	1.09976641

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P43
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1393.50000	1161.50000	117.160156	60.5869565
5	14	694.50000	707.00000	96.601508	49.6071429
3	20	936.00000	1010.00000	111.360367	46.8000000
1	11	475.50000	555.50000	87.108795	43.2272727
2	12	538.50000	606.00000	90.469590	44.8750000
4	20	1012.00000	1010.00000	111.360367	50.6000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.6278 DF = 5 Prob > CHISQ = 0.4630

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P44 STATEMENT 24, ITEM 31

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	2.48943723	0.49788745	0.46	0.8033
Error	94	101.22056277	1.07681450		
Corrected Total	99	103.71000000			

R-Square	C.V.	Root MSE	P44 Mean
0.024004	37.46198	1.0376967	2.77000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	2.48943723	0.49788745	0.46	0.8033

Analysis of Variance Procedure

Level of YP	N	-------------P44------------- Mean	SD
1	11	2.54545455	1.12815215
2	12	2.75000000	0.86602540
3	20	2.80000000	1.00524938
4	21	2.95238095	1.02353263
5	14	2.50000000	0.75955453

6 22 2.86363636 1.24577207

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P44
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1148.50000	1111.00000	115.356231	52.2045455
5	14	608.50000	707.00000	96.626369	43.4642857
3	20	1047.50000	1010.00000	111.389026	52.3750000
1	11	477.50000	555.50000	87.131213	43.4090909
2	12	588.00000	606.00000	90.492873	49.0000000
4	21	1180.00000	1060.50000	113.424170	56.1904762

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.6917 DF = 5 Prob > CHISQ = 0.7474

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 99 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P45 STATEMENT 25, ITEM 32

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	0.47424242	0.09484848	0.06	0.9971
Error	93	136.25303030	1.46508635		
Corrected Total	98	136.72727273			

R-Square	C.V.	Root MSE	P45 Mean
0.003469	42.94994	1.2104075	2.81818182

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	0.47424242	0.09484848	0.06	0.9971

Analysis of Variance Procedure

Level of		------------P45------------	
YP	N	Mean	SD
1	11	2.81818182	1.32801972
2	12	2.91666667	1.16450015
3	20	2.70000000	1.26074331
4	21	2.85714286	0.96362411
5	14	2.78571429	1.12171376
6	21	2.85714286	1.38873015

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P45
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	21	1067.50000	1050.0	112.695717	50.8333333
5	14	699.00000	700.0	96.055877	49.9285714
3	20	928.50000	1000.0	110.682512	46.4250000
1	11	549.50000	550.0	86.633955	49.9545455
2	12	621.00000	600.0	89.970620	51.7500000
4	21	1084.50000	1050.0	112.695717	51.6428571

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 0.47384 DF = 5 Prob > CHISQ = 0.9930

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P46 STATEMENT 26, ITEM 33

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	15.82094312	3.16418862	2.09	0.0736
Error	95	143.98103708	1.51558986		
Corrected Total	100	159.80198020			

R-Square	C.V.	Root MSE	P46 Mean
0.099003	39.59885	1.2310929	3.10891089

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	15.82094312	3.16418862	2.09	0.0736

Analysis of Variance Procedure

Level of YP	N	-------------P46------------- Mean	SD
1	11	3.09090909	1.13618180
2	12	3.33333333	0.98473193
3	20	3.75000000	1.01954582
4	21	3.14285714	1.35224681
5	14	2.64285714	1.54954797
6	23	2.69565217	1.22232203

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P46
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	951.00000	1173.0	119.258920	41.3478261
5	14	585.50000	714.0	98.266004	41.8214286
3	20	1309.00000	1020.0	113.327983	65.4500000
1	11	541.50000	561.0	88.592559	49.2272727
2	12	658.50000	612.0	92.016408	54.8750000
4	21	1105.50000	1071.0	115.407569	52.6428571

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 9.7034 DF = 5 Prob > CHISQ = 0.0841

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P47 STATEMENT 27, ITEM 34

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	8.92709957	1.78541991	1.34	0.2542
Error	94	125.23290043	1.33226490		

Corrected Total	99	134.16000000

R-Square	C.V.	Root MSE	P47 Mean
0.066541	35.19018	1.1542378	3.28000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	8.92709957	1.78541991	1.34	0.2542

Analysis of Variance Procedure

Level of YP	N	-------------P47------------- Mean	SD
1	11	3.09090909	0.83120941
2	12	3.16666667	1.02985730
3	20	3.85000000	1.08942283
4	20	3.25000000	1.11803399
5	14	3.21428571	1.47692880
6	23	3.00000000	1.20604538

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P47
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1000.50000	1161.50000	117.767044	43.5000000
5	14	705.00000	707.00000	97.101902	50.3571429
3	20	1291.50000	1010.00000	111.937212	64.5750000
1	11	489.50000	555.50000	87.560018	44.5000000
2	12	561.50000	606.00000	90.938221	46.7916667
4	20	1002.00000	1010.00000	111.937212	50.1000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 7.2193 DF = 5 Prob > CHISQ = 0.2048

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P48 STATEMENT 28, ITEM 35

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	1.66332021	0.33266404	0.23	0.9488
Error	95	137.76242236	1.45013076		
Corrected Total	100	139.42574257			

R-Square	C.V.	Root MSE	P48 Mean
0.011930	42.82591	1.2042137	2.81188119

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	1.66332021	0.33266404	0.23	0.9488

Analysis of Variance Procedure

Level of YP	N	-------------P48------------- Mean	SD
1	11	3.00000000	0.77459667
2	12	2.75000000	1.13818037
3	20	3.00000000	1.07605517
4	21	2.71428571	1.18923745
5	14	2.78571429	1.62568667
6	23	2.69565217	1.22232203

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P48
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	23	1097.50000	1173.0	119.800204	47.7173913
5	14	700.00000	714.0	98.712007	50.0000000
3	20	1111.00000	1020.0	113.842348	55.5500000
1	11	622.00000	561.0	88.994657	56.5454545
2	12	590.50000	612.0	92.434046	49.2083333
4	21	1030.00000	1071.0	115.931373	49.0476190

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.4019 DF = 5 Prob > CHISQ = 0.9241

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P49 STATEMENT 29, ITEM 36

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	7.78795853	1.55759171	2.28	0.0533
Error	89	60.80151515	0.68316309		
Corrected Total	94	68.58947368			

R-Square	C.V.	Root MSE	P49 Mean
0.113545	19.72889	0.8265368	4.18947368

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	7.78795853	1.55759171	2.28	0.0533

Analysis of Variance Procedure

Level of YP	N	-------------P49------------- Mean	SD
1	10	3.80000000	0.91893658
2	12	4.16666667	0.93743687
3	19	4.00000000	1.20185043
4	20	4.35000000	0.58714295
5	12	3.83333333	0.57735027
6	22	4.59090909	0.59032605

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P49
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1333.00000	1056.0	104.036507	60.5909091
5	12	394.50000	576.0	81.929944	32.8750000
3	19	882.00000	912.0	98.649886	46.4210526
1	10	356.50000	480.0	75.687203	35.6500000
2	12	576.00000	576.0	81.929944	48.0000000
4	20	1018.00000	960.0	100.544570	50.9000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 12.454 DF = 5 Prob > CHISQ = 0.0291

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P50 STATEMENT 30, ITEM 37

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	1.72049442	0.34409888	0.34	0.8875
Error	89	90.11108453	1.01248410		
Corrected Total	94	91.83157895			

R-Square	C.V.	Root MSE	P50 Mean
0.018735	42.67462	1.0062226	2.35789474

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	1.72049442	0.34409888	0.34	0.8875

Analysis of Variance Procedure

Level of		-------------P50-------------	
YP	N	Mean	SD
1	10	2.60000000	0.96609178
2	12	2.33333333	1.23091491
3	19	2.47368421	1.12390297
4	20	2.15000000	0.81272770
5	12	2.33333333	0.77849894
6	22	2.36363636	1.04860245

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P50
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1059.50000	1056.0	107.467075	48.1590909
5	12	580.00000	576.0	84.631556	48.3333333
3	19	947.00000	912.0	101.902832	49.8421053
1	10	550.50000	480.0	78.182962	55.0500000
2	12	557.50000	576.0	84.631556	46.4583333
4	20	865.50000	960.0	103.859993	43.2750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.5200 DF = 5 Prob > CHISQ = 0.9107

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P51 STATEMENT 31, ITEM 38

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	11.96212121	2.39242424	1.44	0.2171
Error	89	147.65893142	1.65908912		
Corrected Total	94	159.62105263			

R-Square	C.V.	Root MSE	P51 Mean
0.074941	52.29289	1.2880563	2.46315789

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	11.96212121	2.39242424	1.44	0.2171

Analysis of Variance Procedure

Level of		-------------P51-------------	
YP	N	Mean	SD
1	10	2.10000000	1.10050493
2	12	2.41666667	1.16450015
3	19	2.36842105	1.53516291
4	20	2.60000000	1.31389337
5	12	1.83333333	0.93743687
6	22	2.95454545	1.32655202

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P51
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1280.50000	1056.0	109.258244	58.2045455
5	12	425.50000	576.0	86.042122	35.4583333
3	19	840.50000	912.0	103.601261	44.2368421
1	10	412.50000	480.0	79.486049	41.2500000
2	12	577.00000	576.0	86.042122	48.0833333
4	20	1024.00000	960.0	105.591042	51.2000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 7.2338 DF = 5 Prob > CHISQ = 0.2038

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 94 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P52 STATEMENT 32, ITEM 39

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6.14615528	1.22923106	0.85	0.5206
Error	88	127.82192982	1.45252193		
Corrected Total	93	133.96808511			

R-Square	C.V.	Root MSE	P52 Mean
0.045878	50.80241	1.2052061	2.37234043

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	6.14615528	1.22923106	0.85	0.5206

Analysis of Variance Procedure

Level of YP	N	-------------P52------------- Mean	SD
1	10	2.00000000	0.81649658
2	12	2.25000000	1.05528971
3	19	2.31578947	1.56534098
4	20	2.60000000	1.09544512
5	12	2.00000000	1.20604538

6 21 2.66666667 1.15470054

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P52
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	21	1148.50000	997.500000	106.258767	54.6904762
5	12	463.00000	570.000000	85.131688	38.5833333
3	19	822.00000	902.500000	102.447444	43.2631579
1	10	410.00000	475.000000	78.656268	41.0000000
2	12	550.00000	570.000000	85.131688	45.8333333
4	20	1071.50000	950.000000	104.405782	53.5750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.1635 DF = 5 Prob > CHISQ = 0.3963

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 94 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P53 STATEMENT 33, ITEM 40

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	2.58022329	0.51604466	0.32	0.9018
Error	88	143.41977671	1.62977019		
Corrected Total	93	146.00000000			

R-Square	C.V.	Root MSE	P53 Mean
0.017673	31.91561	1.2766245	4.00000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	2.58022329	0.51604466	0.32	0.9018

Analysis of Variance Procedure
Level of -------------P53-------------

YP	N	Mean	SD
1	10	4.10000000	1.19721900
2	11	4.00000000	1.18321596
3	19	4.10526316	1.10023921
4	20	4.20000000	1.54238366
5	12	3.83333333	1.33711585
6	22	3.77272727	1.19250909

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P53
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	939.500000	1045.00000	106.039050	42.7045455
5	12	548.000000	570.00000	83.576809	45.6666667
3	19	955.500000	902.50000	100.576304	50.2894737
1	10	515.500000	475.00000	77.219659	51.5500000
2	11	535.500000	522.50000	80.505143	48.6818182
4	20	971.000000	950.00000	102.498874	48.5500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.3421 DF = 5 Prob > CHISQ = 0.9305

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 93 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P54 STATEMENT 34, ITEM 41

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	5.05229142	1.01045828	0.87	0.5078
Error	87	101.59286988	1.16773414		
Corrected Total	92	106.64516129			

R-Square	C.V.	Root MSE	P54 Mean
0.047375	44.66552	1.0806174	2.41935484

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	5.05229142	1.01045828	0.87	0.5078

Analysis of Variance Procedure

Level of YP	N	------------P54------------ Mean	SD
1	10	2.60000000	1.17378779
2	12	2.08333333	0.90033664
3	17	2.52941176	1.37466573
4	20	2.45000000	0.99868334
5	12	2.00000000	1.12815215
6	22	2.63636364	0.90213791

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P54
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1160.00000	1034.0	102.706879	52.7272727
5	12	455.00000	564.0	81.019984	37.9166667
3	17	829.00000	799.0	93.409334	48.7647059
1	10	504.00000	470.0	74.868316	50.4000000
2	12	472.50000	564.0	81.019984	39.3750000
4	20	950.50000	940.0	99.296844	47.5250000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.1134 DF = 5 Prob > CHISQ = 0.5332

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P55 STATEMENT 35, ITEM 42

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	14.84146730	2.96829346	2.16	0.0651
Error	89	122.04274322	1.37126678		
Corrected Total	94	136.88421053			

R-Square	C.V.	Root MSE	P55 Mean
0.108424	35.77043	1.1710110	3.27368421

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	14.84146730	2.96829346	2.16	0.0651

Analysis of Variance Procedure

Level of YP	N	-------------P55------------- Mean	SD
1	10	4.20000000	0.78881064
2	12	3.50000000	1.38169856
3	19	3.21052632	1.31567251
4	20	3.40000000	1.14248114
5	12	2.83333333	1.46680440
6	22	2.90909091	0.86789789

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P55
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	844.50000	1056.0	110.244705	38.3863636
5	12	472.00000	576.0	86.818972	39.3333333
3	19	900.00000	912.0	104.536647	47.3684211
1	10	689.00000	480.0	80.203706	68.9000000
2	12	637.00000	576.0	86.818972	53.0833333
4	20	1017.50000	960.0	106.544393	50.8750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 10.829 DF = 5 Prob > CHISQ = 0.0549

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P56 STATEMENT 36, ITEM 43

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	1.53899522	0.30779904	0.47	0.7960
Error	89	57.99784689	0.65166120		
Corrected Total	94	59.53684211			

R-Square	C.V.	Root MSE	P56 Mean
0.025849	18.56883	0.8072553	4.34736842

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	1.53899522	0.30779904	0.47	0.7960

Analysis of Variance Procedure

Level of		-------------P56-------------	
YP	N	Mean	SD
1	10	4.60000000	0.51639778
2	12	4.25000000	1.21543109
3	19	4.26315789	0.99118926
4	20	4.40000000	0.75393703
5	12	4.50000000	0.67419986
6	22	4.22727273	0.52841345

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P56
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	876.500000	1056.0	101.766213	39.8409091
5	12	630.000000	576.0	80.142062	52.5000000
3	19	892.000000	912.0	96.497139	46.9473684
1	10	551.000000	480.0	74.035550	55.1000000
2	12	621.500000	576.0	80.142062	51.7916667
4	20	989.000000	960.0	98.350477	49.4500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.9948 DF = 5 Prob > CHISQ = 0.5502

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 94 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P57 STATEMENT 37, ITEM 44

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	2.51282195	0.50256439	0.64	0.6722
Error	88	69.45526316	0.78926435		
Corrected Total	93	71.96808511			

R-Square	C.V.	Root MSE	P57 Mean
0.034916	20.31876	0.8884055	4.37234043

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	2.51282195	0.50256439	0.64	0.6722

Analysis of Variance Procedure

Level of YP	N	-------------P57------------- Mean	SD
1	10	4.30000000	0.82327260
2	12	4.08333333	1.16450015
3	19	4.31578947	0.88522637
4	20	4.50000000	0.88852332
5	12	4.66666667	0.49236596
6	21	4.33333333	0.91287093

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P57
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	21	951.00000	997.500000	97.9778691	45.2857143

5	12	652.00000	570.000000	78.4972535	54.3333333
3	19	863.50000	902.500000	94.4635678	45.4473684
1	10	439.00000	475.000000	72.5264726	43.9000000
2	12	505.00000	570.000000	78.4972535	42.0833333
4	20	1054.50000	950.000000	96.2692903	52.7250000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.0088 DF = 5 Prob > CHISQ = 0.6986

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P58 STATEMENT 38, ITEM 45

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	7.27280702	1.45456140	1.01	0.4161
Error	89	128.05350877	1.43880347		
Corrected Total	94	135.32631579			

R-Square	C.V.	Root MSE	P58 Mean
0.053743	32.28120	1.1995013	3.71578947

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	7.27280702	1.45456140	1.01	0.4161

Analysis of Variance Procedure

Level of YP	N	P58 Mean	P58 SD
1	10	3.60000000	1.42984071
2	12	3.25000000	1.28805703
3	19	3.47368421	1.42861320
4	20	4.00000000	1.16979530
5	12	3.66666667	1.15470054
6	22	4.00000000	0.81649658

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P58
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1142.50000	1056.0	106.893215	51.9318182
5	12	545.50000	576.0	84.179635	45.4583333
3	19	837.50000	912.0	101.358685	44.0789474
1	10	472.00000	480.0	77.765476	47.2000000
2	12	451.00000	576.0	84.179635	37.5833333
4	20	1111.50000	960.0	103.305394	55.5750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.6839 DF = 5 Prob > CHISQ = 0.4557

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P59 STATEMENT 39, ITEM 46

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	6.23285486	1.24657097	0.89	0.4913
Error	89	124.65135566	1.40057703		
Corrected Total	94	130.88421053			

R-Square	C.V.	Root MSE	P59 Mean
0.047621	32.21452	1.1834597	3.67368421

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	6.23285486	1.24657097	0.89	0.4913

Analysis of Variance Procedure

Level of YP	N	-------------P59------------- Mean	SD
1	10	3.10000000	1.19721900

2	12	4.00000000	0.60302269
3	19	3.63157895	1.34207660
4	20	3.85000000	1.34848843
5	12	3.41666667	1.44337567
6	22	3.77272727	0.92230654

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P59
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1065.00000	1056.0	108.640054	48.4090909
5	12	526.50000	576.0	85.555290	43.8750000
3	19	916.00000	912.0	103.015078	48.2105263
1	10	344.50000	480.0	79.036311	34.4500000
2	12	630.00000	576.0	85.555290	52.5000000
4	20	1078.00000	960.0	104.993601	53.9000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.2740 DF = 5 Prob > CHISQ = 0.5107

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P60 STATEMENT 40, ITEM 47

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	4.53811802	0.90762360	0.60	0.7005
Error	89	134.78819777	1.51447413		
Corrected Total	94	139.32631579			

R-Square	C.V.	Root MSE	P60 Mean
0.032572	39.90129	1.2306397	3.08421053

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	4.53811802	0.90762360	0.60	0.7005

Analysis of Variance Procedure

Level of		------------P60------------	
YP	N	Mean	SD
1	10	3.40000000	1.17378779
2	12	2.83333333	1.26730446
3	19	2.78947368	1.39757518
4	20	3.20000000	1.10501250
5	12	3.00000000	1.47709789
6	22	3.27272727	1.03195691

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P60
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1143.00000	1056.0	109.162320	51.9545455
5	12	560.00000	576.0	85.966581	46.6666667
3	19	799.00000	912.0	103.510304	42.0526316
1	10	550.00000	480.0	79.416263	55.0000000
2	12	504.50000	576.0	85.966581	42.0416667
4	20	1003.50000	960.0	105.498338	50.1750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.9055 DF = 5 Prob > CHISQ = 0.7146

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P61 STATEMENT 41, ITEM 48

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	7.31850080	1.46370016	0.90	0.4870
Error	89	145.27097289	1.63225812		
Corrected Total	94	152.58947368			

R-Square	C.V.	Root MSE	P61 Mean
0.047962	45.45763	1.2775985	2.81052632

Source	DF	Anova SS	Mean Square	F Value	Pr > F
YP	5	7.31850080	1.46370016	0.90	0.4870

Analysis of Variance Procedure

Level of YP	N	-------------P61------------- Mean	SD
1	10	2.50000000	0.84983659
2	12	2.75000000	1.35680105
3	19	2.42105263	1.26120707
4	20	2.95000000	1.46808145
5	12	2.83333333	1.40345893
6	22	3.18181818	1.13960576

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P61
Classified by Variable YP

YP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
6	22	1230.50000	1056.0	109.308848	55.9318182
5	12	580.00000	576.0	86.081973	48.3333333
3	19	755.00000	912.0	103.649245	39.7368421
1	10	421.50000	480.0	79.522863	42.1500000
2	12	561.50000	576.0	86.081973	46.7916667
4	20	1011.50000	960.0	105.639947	50.5750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.4923 DF = 5 Prob > CHISQ = 0.4809

APPENDIX 11

Comparison of Means for Items 17, 33, 36 and 42 with the Variable "Years in the Profession"

YP = years in the profession

1= 0 to 5 years
2= 6 to 10 years
3= 11 to 15 years
4= 16 to 20 years
5= 21 to 25 years
6= more than 25 years

```
Duncan's Multiple Range Test for variable: item 17

NOTE: This test controls the type I comparisonwise error rate, not
the experimentwise error rate
Alpha= 0.1  df= 98  MSE= 1.233755
Harmonic Mean of cell sizes= 15.7724

Number of Means      2     3     4     5     6
Critical Range   .6568 .6945 .7192 .7371 .7508

Means with the same letter are not significantly different.

Duncan Grouping              Mean       N  YP

               A           3.7619      21   3
               A
       B       A           3.5000      22   4
       B       A
       B       A   C       3.2727      11   1
       B       A   C
       B       A   C       3.0833      12   2
       B           C
       B           C       3.0000      14   5
                   C
                   C       2.7500      24   6
```

Duncan's Multiple Range Test for variable: item 33

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.1 df= 95 MSE= 1.51559
Harmonic Mean of cell sizes= 15.51316

Number of Means	2	3	4	5	6
Critical Range	.7342	.7763	.8039	.8239	.8392

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	YP
	A	3.7500	20	3
	A			
B	A	3.3333	12	2
B	A			
B	A	3.1429	21	4
B	A			
B	A	3.0909	11	1
B				
B		2.6957	23	6
B				
B		2.6429	14	5

Duncan's Multiple Range Test for variable: item 36

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.1 df= 89 MSE= 0.683163
Harmonic Mean of cell sizes= 14.46645

Number of Means	2	3	4	5	6
Critical Range	.5108	.5401	.5592	.5731	.5837

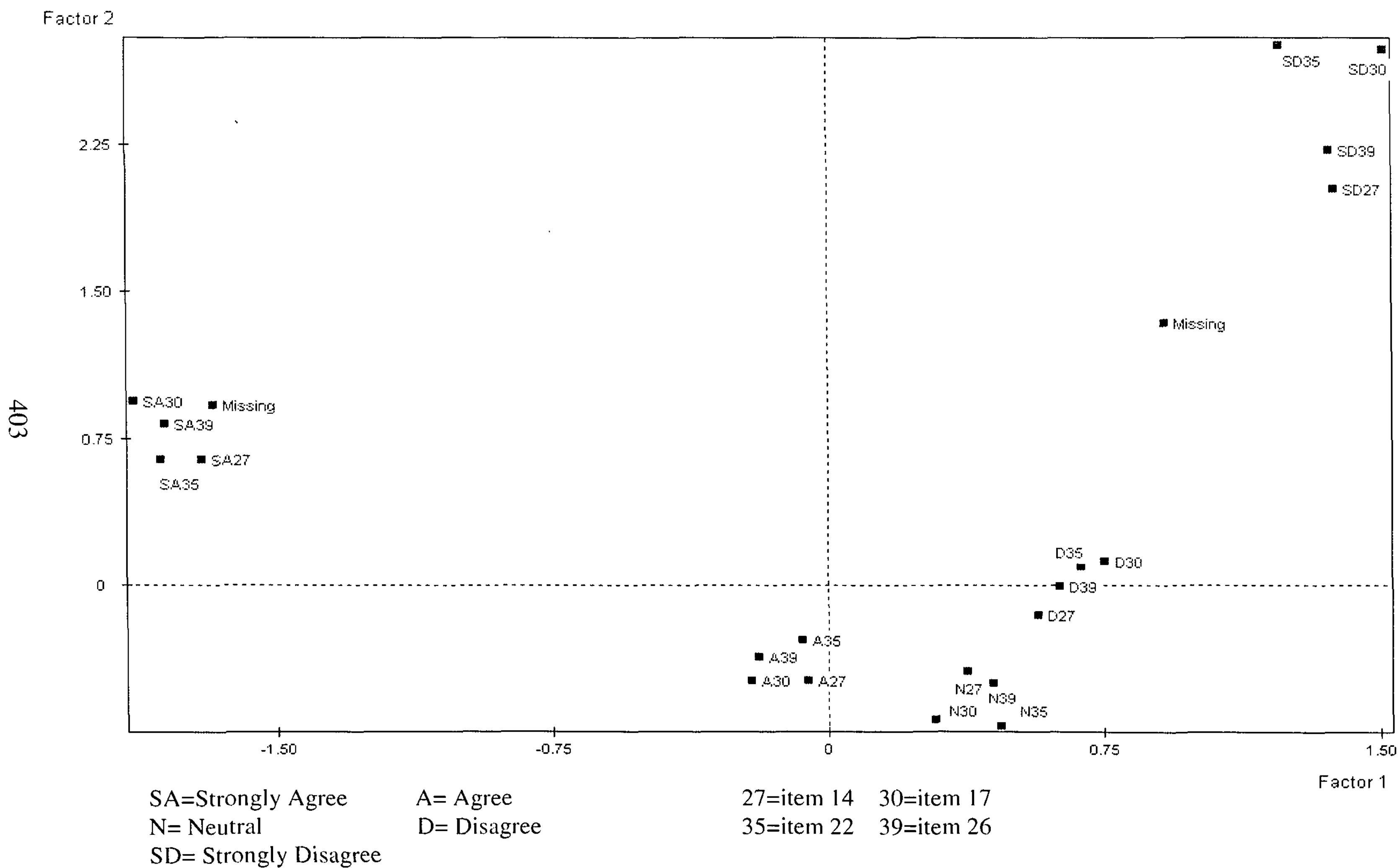
Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	YP
	A	4.5909	22	6
	A			
B	A	4.3500	20	4
B	A			
B	A	4.1667	12	2
B				
B		4.0000	19	3
B				
B		3.8333	12	5
B				
B		3.8000	10	1

```
Duncan's Multiple Range Test for variable: item 42

NOTE: This test controls the type I comparisonwise error rate, not
the experimentwise error rate

Alpha= 0.1  df= 89  MSE= 1.371267
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 14.46645

Number of Means      2     3     4     5     6
Critical Range   .7237 .7652 .7923 .8119 .8269

Means with the same letter are not significantly different.

Duncan Grouping              Mean      N  YP

                A           4.2000    10  1
                A
          B     A           3.5000    12  2
          B
          B                 3.4000    20  4
          B
          B                 3.2105    19  3
          B
          B                 2.9091    22  6
          B
          B                 2.8333    12  5
```

APPENDIX 12

Perceptual Map for Items Related to “Level of Agreement with Marketing”



Perceptual Map for Items Related to “Level of Agreement with Marketing”

APPENDIX 12

APPENDIX 13

Hierarchical Classification

APPENDIX 14

Analysis of Variance: "level of agreement with marketing" versus each of the 41 statements

GROUP = "level of agreement with marketing"

1= strongly disagree with marketing
2= neutral with marketing
3= strongly agree with marketing

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P21 STATEMENT 1, ITEM 8

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	13.83416968	6.91708484	4.97	0.0087
Error	102	142.01344937	1.39228872		
Corrected Total	104	155.84761905			

R-Square	C.V.	Root MSE	P21 Mean
0.088767	51.40873	1.1799528	2.29523810

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	13.83416968	6.91708484	4.97	0.0087

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P21

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 1.392289
Harmonic Mean of cell sizes= 17.12737

Number of Means	2	3
Critical Range	.7998	.8417

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.0000	10	1

```
      A
B     A          2.3544    79  2
B
B                1.5625    16  3
```

N P A R 1 W A Y   P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P21
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	4394.50000	4187.0	128.843422	55.6265823
3	16	495.50000	848.0	107.279570	30.9687500
1	10	675.00000	530.0	87.624153	67.5000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 12.271   DF = 2   Prob > CHISQ = 0.0022

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 102 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P22 STATEMENT 2, ITEM 9

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	14.11848555	7.05924278	9.33	0.0002
Error	99	74.87171053	0.75627990		
Corrected Total	101	88.99019608			

R-Square	C.V.	Root MSE	P22 Mean
0.158652	21.79451	0.8696435	3.99019608

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	14.11848555	7.05924278	9.33	0.0002

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P22

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 99 MSE= 0.75628
Harmonic Mean of cell sizes= 17.07865

Number of Means 2 3
Critical Range .5905 .6214

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.8125	16	3
B	3.8816	76	2
B			
B	3.5000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P22
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	76	3605.50000	3914.0	120.228510	47.4407895
3	16	1270.50000	824.0	100.328244	79.4062500
1	10	377.00000	515.0	82.036648	37.7000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 20.930 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P23 STATEMENT 3, ITEM 10

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9.12790541	4.56395270	5.72	0.0045
Error	97	77.43209459	0.79826902		
Corrected Total	99	86.56000000			

R-Square	C.V.	Root MSE	P23 Mean
0.105452	42.14429	0.8934590	2.12000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	9.12790541	4.56395270	5.72	0.0045

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P23

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 97 MSE= 0.798269
Harmonic Mean of cell sizes= 17.04415

Number of Means 2 3
Critical Range .6074 .6392

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.4000	10	1
A			
A	2.2297	74	2
B	1.4375	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P23
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	74	3982.0	3737.0	118.520646	53.8108108
3	16	469.0	808.0	99.058354	29.3125000
1	10	599.0	505.0	81.061144	59.9000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 12.159 DF = 2 Prob > CHISQ = 0.0023

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P24 STATEMENT 4, ITEM 11

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	0.65820957	0.32910479	0.23	0.7986
Error	98	143.10416667	1.46024660		
Corrected Total	100	143.76237624			

R-Square	C.V.	Root MSE	P24 Mean
0.004578	37.43837	1.2084066	3.22772277

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	0.65820957	0.32910479	0.23	0.7986

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P24

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 98 MSE= 1.460247
Harmonic Mean of cell sizes= 17.06161

Number of Means	2	3
Critical Range	.8210	.8640

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.2667	75	2
A			
A	3.1875	16	3
A			
A	3.0000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P24

Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	75	3884.50000	3825.0	123.091429	51.7933333
3	16	812.50000	816.0	102.796887	50.7812500
1	10	454.00000	510.0	84.087454	45.4000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 0.46073 DF = 2 Prob > CHISQ = 0.7942

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 103 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P25 STATEMENT 5, ITEM 12

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8.46701551	4.23350775	3.62	0.0303
Error	100	116.89220779	1.16892208		
Corrected Total	102	125.35922330			

R-Square	C.V.	Root MSE	P25 Mean
0.067542	37.62169	1.0811670	2.87378641

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	8.46701551	4.23350775	3.62	0.0303

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P25

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 100 MSE= 1.168922
Harmonic Mean of cell sizes= 17.09528

Number of Means 2 3
Critical Range .7337 .7721

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	GROUP
	A	3.3000	10	1
	A			
B	A	2.9481	77	2
B				
B		2.2500	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P25
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	77	4131.0	4004.0	127.155955	53.6493506
3	16	596.0	832.0	106.028907	37.2500000
1	10	629.0	520.0	86.665479	62.9000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.8647 DF = 2 Prob > CHISQ = 0.0533

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 103 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P26 STATEMENT 6, ITEM 13

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	27.43502080	13.71751040	13.61	0.0001
Error	100	100.77857143	1.00778571		
Corrected Total	102	128.21359223			

R-Square	C.V.	Root MSE	P26 Mean
0.213979	25.65761	1.0038853	3.91262136

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	27.43502080	13.71751040	13.61	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P26

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 100 MSE= 1.007786
Harmonic Mean of cell sizes= 17.09528

Number of Means 2 3
Critical Range .6812 .7169

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.8750	16	3
B	3.8571	77	2
C	2.8000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P26
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	77	3803.0	4004.0	124.951491	49.3896104
3	16	1285.0	832.0	104.190716	80.3125000
1	10	268.0	520.0	85.162986	26.8000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 24.526 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P27 STATEMENT 7, ITEM 14

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	65.85334539	32.92667269	36.58	0.0001
Error	102	91.80379747	0.90003723		
Corrected Total	104	157.65714286			

R-Square	C.V.	Root MSE	P27 Mean
0.417700	28.38000	0.9487029	3.34285714

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	65.85334539	32.92667269	36.58	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P27

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 0.900037
Harmonic Mean of cell sizes= 17.12737

Number of Means	2	3
Critical Range	.6430	.6767

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.7500	16	3
B	3.2911	79	2
C	1.5000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P27
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	3994.50000	4187.0	129.235168	50.5632911
3	16	1434.50000	848.0	107.605752	89.6562500
1	10	136.00000	530.0	87.890573	13.6000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 43.912 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P28 STATEMENT 8, ITEM 15

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1.50358650	0.75179325	0.55	0.5769
Error	102	138.62974684	1.35911517		
Corrected Total	104	140.13333333			

R-Square	C.V.	Root MSE	P28 Mean
0.010730	40.66782	1.1658109	2.86666667

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	1.50358650	0.75179325	0.55	0.5769

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P28

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 1.359115
Harmonic Mean of cell sizes= 17.12737

Number of Means	2	3
Critical Range	.7902	.8316

Means with the same letter are not significantly different.

Duncan Grouping Mean N GROUP

A	2.9114	79	2
A			
A	2.8750	16	3
A			
A	2.5000	10	1

N P A R I W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P28
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	4292.50000	4187.0	129.801552	54.3354430
3	16	841.50000	848.0	108.077343	52.5937500
1	10	431.00000	530.0	88.275760	43.1000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.3046 DF = 2 Prob > CHISQ = 0.5208

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P29 STATEMENT 9, ITEM 16

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	19.95225286	9.97612643	8.96	0.0003
Error	102	113.60965190	1.11382012		
Corrected Total	104	133.56190476			

R-Square	C.V.	Root MSE	P29 Mean
0.149386	40.89098	1.0553767	2.58095238

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	19.95225286	9.97612643	8.96	0.0003

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P29

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 1.11382
Harmonic Mean of cell sizes= 17.12737

Number of Means 2 3
Critical Range .7153 .7528

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.4000	10	1
B	2.6582	79	2
C	1.6875	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P29
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	4372.00000	4187.0	130.174882	55.3417722
3	16	476.50000	848.0	108.388191	29.7812500
1	10	716.50000	530.0	88.529656	71.6500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 14.473 DF = 2 Prob > CHISQ = 0.0007

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P30 STATEMENT 10, ITEM 17

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	73.99629179	36.99814589	61.27	0.0001
Error	101	60.99409283	0.60390191		
Corrected Total	103	134.99038462			

R-Square C.V. Root MSE P30 Mean

0.548160	23.98207	0.7771112	3.24038462

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	73.99629179	36.99814589	61.27	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P30

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 101 MSE= 0.603902
Harmonic Mean of cell sizes= 16.72941

Number of Means	2	3
Critical Range	.5330	.5609

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.8667	15	3
B	3.1646	79	2
C	1.4000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P30
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	3947.50000	4147.50000	126.971013	49.9683544
3	15	1413.50000	787.50000	104.390666	94.2333333
1	10	99.00000	525.00000	87.596138	9.9000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 52.747 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P31 STATEMENT 11, ITEM 18

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	27.54312839	13.77156420	13.68	0.0001
Error	102	102.68544304	1.00672003		
Corrected Total	104	130.22857143			

R-Square	C.V.	Root MSE	P31 Mean
0.211498	40.36483	1.0033543	2.48571429

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	27.54312839	13.77156420	13.68	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P31

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 1.00672
Harmonic Mean of cell sizes= 17.12737

Number of Means 2 3
Critical Range .6801 .7157

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.3000	10	1
B	2.6076	79	2
C	1.3750	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P31
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	4478.50000	4187.0	130.265882	56.6898734
3	16	365.00000	848.0	108.463961	22.8125000
1	10	721.50000	530.0	88.591543	72.1500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 22.276 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class Levels Values

GROUP 3 1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P32 STATEMENT 12, ITEM 19

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	17.72421292	8.86210646	12.86	0.0001
Error	101	69.62194093	0.68932615		
Corrected Total	103	87.34615385			

R-Square	C.V.	Root MSE	P32 Mean
0.202919	21.91540	0.8302566	3.78846154

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	17.72421292	8.86210646	12.86	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P32

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 101 MSE= 0.689326
Harmonic Mean of cell sizes= 16.72941

Number of Means	2	3
Critical Range	.5695	.5993

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.7333	15	3
B	3.6835	79	2
B			
B	3.2000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P32
Classified by Variable GROUP

Sum of	Expected	Std Dev	Mean

GROUP	N	Scores	Under H0	Under H0	Score
2	79	3842.50000	4147.50000	118.159300	48.6392405
3	15	1269.00000	787.50000	97.146015	84.6000000
1	10	348.50000	525.00000	81.517018	34.8500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 26.862 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P33 STATEMENT 13, ITEM 20

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	24.14743590	12.07371795	20.17	0.0001
Error	101	60.46794872	0.59869256		
Corrected Total	103	84.61538462			

R-Square	C.V.	Root MSE	P33 Mean
0.285379	19.91838	0.7737522	3.88461538

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	24.14743590	12.07371795	20.17	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P33

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 101 MSE= 0.598693
Harmonic Mean of cell sizes= 17.11152

Number of Means	2	3
Critical Range	.5248	.5522

Means with the same letter are not significantly different.

Duncan Grouping Mean N GROUP

A	4.8750	16	3
B	3.7949	78	2
C	3.0000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P33
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	78	3759.0	4095.0	121.274272	48.1923077
3	16	1400.0	840.0	101.049933	87.5000000
1	10	301.0	525.0	82.565502	30.1000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 34.558 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 104 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P34 STATEMENT 14, ITEM 21

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	27.90961538	13.95480769	17.30	0.0001
Error	101	81.46538462	0.80658797		
Corrected Total	103	109.37500000			

R-Square	C.V.	Root MSE	P34 Mean
0.255174	23.17684	0.8981024	3.87500000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	27.90961538	13.95480769	17.30	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P34

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 101 MSE= 0.806588
Harmonic Mean of cell sizes= 17.11152

Number of Means	2	3
Critical Range	.6091	.6410

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.8750	16	3
B	3.8077	78	2
C	2.8000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P34
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	78	3830.50000	4095.0	125.304019	49.1089744
3	16	1356.00000	840.0	104.407657	84.7500000
1	10	273.50000	525.0	85.309020	27.3500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 29.637 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P35 STATEMENT 15, ITEM 22

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	25.86895720	12.93447860	13.70	0.0001
Error	102	96.32151899	0.94432862		
Corrected Total	104	122.19047619			

R-Square	C.V.	Root MSE	P35 Mean
0.211710	27.95490	0.9717657	3.47619048

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	25.86895720	12.93447860	13.70	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P35

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 0.944329
Harmonic Mean of cell sizes= 17.12737

Number of Means	2	3
Critical Range	.6587	.6932

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.2500	16	3
B	3.4810	79	2
C	2.2000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P35
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	4033.0	4187.0	125.502993	51.0506329
3	16	1242.0	848.0	104.498211	77.6250000
1	10	290.0	530.0	85.352386	29.0000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 19.576 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

Analysis of Variance Procedure

Dependent Variable: P36 STATEMENT 16, ITEM 23

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	29.92338758	14.96169379	17.06	0.0001
Error	102	89.46708861	0.87712832		
Corrected Total	104	119.39047619			

R-Square	C.V.	Root MSE	P36 Mean
0.250635	26.08432	0.9365512	3.59047619

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	29.92338758	14.96169379	17.06	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P36

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 102 MSE= 0.877128
Harmonic Mean of cell sizes= 17.12737

Number of Means	2	3
Critical Range	.6348	.6680

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.5000	16	3
B	3.5696	79	2
C	2.3000	10	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P36
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	79	3973.50000	4187.0	121.699273	50.2974684
3	16	1308.00000	848.0	101.331101	81.7500000
1	10	283.50000	530.0	82.765543	28.3500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 26.255 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure

Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 102 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P37 STATEMENT 17, ITEM 24

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	5.60676619	2.80338310	2.37	0.0991
Error	99	117.26578283	1.18450286		
Corrected Total	101	122.87254902			

R-Square	C.V.	Root MSE	P37 Mean
0.045631	33.53824	1.0883486	3.24509804

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	5.60676619	2.80338310	2.37	0.0991

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P37

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 99 MSE= 1.184503
Harmonic Mean of cell sizes= 16.07733

Number of Means 2 3
Critical Range .7617 .8015

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.7778	9	1
A			
B A	3.2727	77	2
B			
B	2.8125	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P37
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	77	3987.0	3965.50000	121.306483	51.7792208
3	16	668.0	824.00000	102.559964	41.7500000
1	9	598.0	463.50000	79.989204	66.4444444

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.5363 DF = 2 Prob > CHISQ = 0.1035

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P38 STATEMENT 18, ITEM 25

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	8.80261710	4.40130855	3.33	0.0398
Error	98	129.41520468	1.32056331		
Corrected Total	100	138.21782178			

R-Square	C.V.	Root MSE	P38 Mean
0.063687	34.54313	1.1491576	3.32673267

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	8.80261710	4.40130855	3.33	0.0398

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P38

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 98 MSE= 1.320563
Harmonic Mean of cell sizes= 16.06262

Number of Means	2	3
Critical Range	.8047	.8468

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	GROUP
	A	4.1111	9	1
	A			
B	A	3.3289	76	2
B				
B		2.8750	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P38
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	76	3832.50000	3876.0	122.959786	50.4276316
3	16	673.00000	816.0	104.029318	42.0625000
1	9	645.50000	459.0	81.171106	71.7222222

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 6.4298 DF = 2 Prob > CHISQ = 0.0402

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 103 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P39 STATEMENT 19, ITEM 26

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	58.31874430	29.15937215	41.59	0.0001
Error	100	70.10844017	0.70108440		
Corrected Total	102	128.42718447			

R-Square	C.V.	Root MSE	P39 Mean
0.454100	25.21717	0.8373078	3.32038835

	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	58.31874430	29.15937215	41.59	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P39

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 100 MSE= 0.701084
Harmonic Mean of cell sizes= 16.09169

Number of Means 2 3
Critical Range .5856 .6163

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.8125	16	3
B	3.1923	78	2
C	1.7778	9	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P39
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	78	3736.50000	4056.0	125.394580	47.9038462
3	16	1459.50000	832.0	105.945149	91.2187500
1	9	160.00000	468.0	82.593647	17.7777778

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 43.898 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P40 STATEMENT 20, ITEM 27

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	5.11145851	2.55572926	2.20	0.1158
Error	98	113.66081871	1.15980427		

Corrected Total	100	118.77227723

R-Square	C.V.	Root MSE	P40 Mean
0.043036	34.20476	1.0769420	3.14851485

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	5.11145851	2.55572926	2.20	0.1158

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P40

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 98 MSE= 1.159804
Harmonic Mean of cell sizes= 16.06262

Number of Means	2	3
Critical Range	.7541	.7936

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	GROUP
	A	3.6250	16	3
	A			
B	A	3.0921	76	2
B				
B		2.7778	9	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P40
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	76	3756.00000	3876.0	122.595891	49.4210526
3	16	1020.50000	816.0	103.721447	63.7812500
1	9	374.50000	459.0	80.930884	41.6111111

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.5017 DF = 2 Prob > CHISQ = 0.1053

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 99 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P41 STATEMENT 21, ITEM 28

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	3.82417076	1.91208538	1.40	0.2506
Error	96	130.72128378	1.36168004		
Corrected Total	98	134.54545455			

R-Square	C.V.	Root MSE	P41 Mean
0.028423	33.77899	1.1669104	3.45454545

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	3.82417076	1.91208538	1.40	0.2506

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P41

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 96 MSE= 1.36168
Harmonic Mean of cell sizes= 16.0321

Number of Means	2	3
Critical Range	.8181	.8609

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.0000	9	1
A			
A	3.4459	74	2
A			
A	3.1875	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P41
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	74	3651.00000	3700.0	119.882140	49.3378378
3	16	739.50000	800.0	101.570516	46.2187500
1	9	559.50000	450.0	79.325192	62.1666667

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.0719 DF = 2 Prob > CHISQ = 0.3549

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P42 STATEMENT 22, ITEM 29

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	1.92883663	0.96441832	0.66	0.5197
Error	98	143.43750000	1.46364796		
Corrected Total	100	145.36633663			

R-Square	C.V.	Root MSE	P42 Mean
0.013269	58.18625	1.2098131	2.07920792

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	1.92883663	0.96441832	0.66	0.5197

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P42

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 98 MSE= 1.463648
Harmonic Mean of cell sizes= 16.06262

Number of Means	2	3
Critical Range	.8472	.8915

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.3333	9	1
A			
A	2.3125	16	3
A			
A	2.0000	76	2

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P42
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	76	3826.00000	3876.0	120.304626	50.3421053
3	16	805.50000	816.0	101.782937	50.3437500
1	9	519.50000	459.0	79.418320	57.7222222

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 0.58032   DF = 2   Prob > CHISQ = 0.7481

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P43   STATEMENT 23, ITEM 30

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	3.36333333	1.68166667	1.39	0.2541
Error	97	117.38666667	1.21017182		
Corrected Total	99	120.75000000			

R-Square	C.V.	Root MSE	P43 Mean
0.027854	40.00284	1.1000781	2.75000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	3.36333333	1.68166667	1.39	0.2541

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P43

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 97 MSE= 1.210172
Harmonic Mean of cell sizes= 16.04755

Number of Means 2 3
Critical Range .7708 .8111

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.8533	75	2
A			
A	2.5000	16	3
A			
A	2.3333	9	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P43
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	75	3997.50000	3787.50000	120.551133	53.3000000
3	16	705.50000	808.00000	102.063462	44.0937500
1	9	347.00000	454.50000	79.673265	38.5555556

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.2625 DF = 2 Prob > CHISQ = 0.1957

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P44 STATEMENT 24, ITEM 31

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	12.35111111	6.17555556	6.56	0.0021
Error	97	91.35888889	0.94184422		
Corrected Total	99	103.71000000			

R-Square	C.V.	Root MSE	P44 Mean
0.119093	35.03562	0.9704865	2.77000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	12.35111111	6.17555556	6.56	0.0021

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P44

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 97 MSE= 0.941844
Harmonic Mean of cell sizes= 16.04755

Number of Means	2	3
Critical Range	.6800	.7156

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.5556	9	1
B	2.8133	75	2
C	2.1250	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P44
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	75	3877.0	3787.50000	120.582158	51.6933333
3	16	546.0	808.00000	102.089729	34.1250000
1	9	627.0	454.50000	79.693769	69.6666667

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 9.9337 DF = 2 Prob > CHISQ = 0.0070

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 99 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P45 STATEMENT 25, ITEM 32

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	29.95043339	14.97521669	13.46	0.0001
Error	96	106.77683934	1.11225874		
Corrected Total	98	136.72727273			

R-Square	C.V.	Root MSE	P45 Mean
0.219052	37.42260	1.0546367	2.81818182

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	29.95043339	14.97521669	13.46	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P45

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 96 MSE= 1.112259
Harmonic Mean of cell sizes= 16.0321

Number of Means	2	3
Critical Range	.7394	.7781

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.7778	9	1
B	2.9459	74	2
C	1.6875	16	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P45
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	74	3941.50000	3700.0	119.766767	53.2635135
3	16	357.50000	800.0	101.472766	22.3437500
1	9	651.00000	450.0	79.248851	72.3333333

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 22.818 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class Levels Values

GROUP 3 1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P46 STATEMENT 26, ITEM 33

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	22.32208254	11.16104127	7.96	0.0006
Error	98	137.47989766	1.40285610		
Corrected Total	100	159.80198020			

R-Square	C.V.	Root MSE	P46 Mean
0.139686	38.09766	1.1844222	3.10891089

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	22.32208254	11.16104127	7.96	0.0006

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P46

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 98 MSE= 1.402856
Harmonic Mean of cell sizes= 16.06262

Number of Means 2 3
Critical Range .8294 .8728

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.0625	16	3
B	3.0132	76	2
B			
B	2.2222	9	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P46
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score

2	76	3674.50000	3876.0	122.731616	48.3486842
3	16	1188.00000	816.0	103.836276	74.2500000
1	9	288.50000	459.0	81.020481	32.0555556

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 15.503 DF = 2 Prob > CHISQ = 0.0004

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 100 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P47 STATEMENT 27, ITEM 34

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	44.58694444	22.29347222	24.14	0.0001
Error	97	89.57305556	0.92343356		
Corrected Total	99	134.16000000			

R-Square	C.V.	Root MSE	P47 Mean
0.332342	29.29739	0.9609545	3.28000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	44.58694444	22.29347222	24.14	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P47

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 97 MSE= 0.923434
harmonic Mean of cell sizes= 16.04755

Number of Means 2 3
Critical Range .6733 .7086

Means with the same letter are not significantly different.

Duncan Grouping Mean N GROUP

A	4.5625	16 3
B	3.1733	75 2
C	1.8889	9 1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P47
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	75	3573.50000	3787.50000	121.175586	47.6466667
3	16	1317.50000	808.00000	102.592149	82.3437500
1	9	159.00000	454.50000	80.085971	17.6666667

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 33.887 DF = 2 Prob > CHISQ = 0.0001

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105
NOTE: Due to missing values, only 101 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P48 STATEMENT 28, ITEM 35

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	25.25468994	12.62734497	10.84	0.0001
Error	98	114.17105263	1.16501074		
Corrected Total	100	139.42574257			

R-Square	C.V.	Root MSE	P48 Mean
0.181134	38.38557	1.0793566	2.81188119

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	25.25468994	12.62734497	10.84	0.0001

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P48

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 98 MSE= 1.165011
Harmonic Mean of cell sizes= 16.06262

Number of Means 2 3
Critical Range .7558 .7954

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.8750	16	3
B	2.6842	76	2
B			
B	2.0000	9	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P48
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	76	3670.0	3876.0	123.288662	48.2894737
3	16	1206.0	816.0	104.307561	75.3750000
1	9	275.0	459.0	81.388212	30.5555556

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 17.112 DF = 2 Prob > CHISQ = 0.0002

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P49 STATEMENT 29, ITEM 36

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	7.35561850	3.67780925	5.53	0.0054
Error	92	61.23385519	0.66558538		
Corrected Total	94	68.58947368			

R-Square C.V. Root MSE P49 Mean

0.107241	19.47343	0.8158341	4.18947368

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	7.35561850	3.67780925	5.53	0.0054

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P49

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 0.665585
Harmonic Mean of cell sizes= 14.27707

Number of Means 2 3
Critical Range .6065 .6382

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.7857	14	3
A			
B A	4.5000	8	1
B			
B	4.0411	73	2

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P49
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3160.50000	3504.0	104.036507	43.2945205
3	14	949.50000	672.0	87.421754	67.8214286
1	8	450.00000	384.0	68.488493	56.2500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 11.966 DF = 2 Prob > CHISQ = 0.0025

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P50 STATEMENT 30, ITEM 37

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	4.69239108	2.34619554	2.48	0.0896
Error	92	87.13918787	0.94716509		
Corrected Total	94	91.83157895			

R-Square	C.V.	Root MSE	P50 Mean
0.051098	41.27513	0.9732240	2.35789474

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	4.69239108	2.34619554	2.48	0.0896

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P50

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 0.947165
Harmonic Mean of cell sizes= 14.27707

Number of Means	2	3
Critical Range	.7234	.7613

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.4286	14	3
A			
A	2.4247	73	2
B	1.6250	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P50
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3652.0	3504.0	107.467075	50.0273973
3	14	683.0	672.0	90.304457	48.7857143
1	8	225.0	384.0	70.746878	28.1250000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 5.0775 DF = 2 Prob > CHISQ = 0.0790

Analysis of Variance Procedure

Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P51 STATEMENT 31, ITEM 38

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	3.02687455	1.51343727	0.89	0.4145
Error	92	156.59417808	1.70211063		
Corrected Total	94	159.62105263			

R-Square	C.V.	Root MSE	P51 Mean
0.018963	52.96654	1.3046496	2.46315789

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	3.02687455	1.51343727	0.89	0.4145

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P51

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 1.702111
Harmonic Mean of cell sizes= 14.27707

Number of Means	2	3
Critical Range	0.970	1.021

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.5205	73	2
A			
A	2.5000	14	3
A			
A	1.8750	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P51
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3581.00000	3504.0	109.258244	49.0547945
3	14	672.50000	672.0	91.809574	48.0357143
1	8	306.50000	384.0	71.926026	38.3125000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.1783 DF = 2 Prob > CHISQ = 0.5548

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 94 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P52 STATEMENT 32, ITEM 39

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	2.22602161	1.11301081	0.77	0.4666
Error	91	131.74206349	1.44771498		
Corrected Total	93	133.96808511			

R-Square	C.V.	Root MSE	P52 Mean
0.016616	50.71828	1.2032102	2.37234043

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	2.22602161	1.11301081	0.77	0.4666

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P52

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 91 MSE= 1.447715
Harmonic Mean of cell sizes= 14.26415

Number of Means	2	3
Critical Range	.8949	.9418

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.4306	72	2
A			
A	2.3571	14	3
A			
A	1.8750	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P52
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	72	3522.50000	3420.0	108.011820	48.9236111
3	14	636.50000	665.0	90.824435	45.4642857
1	8	306.00000	380.0	71.184906	38.2500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.2833 DF = 2 Prob > CHISQ = 0.5264
Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 94 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P53 STATEMENT 33, ITEM 40

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	0.82341270	0.41170635	0.26	0.7731
Error	91	145.17658730	1.59534711		
Corrected Total	93	146.00000000			

R-Square	C.V.	Root MSE	P53 Mean
0.005640	31.57676	1.2630705	4.00000000

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	0.82341270	0.41170635	0.26	0.7731

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P53

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 91 MSE= 1.595347
Harmonic Mean of cell sizes= 14.26415

Number of Means 2 3
Critical Range .9395 .9886

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.2143	14	3
A			
A	3.9722	72	2
A			
A	3.8750	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P53
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	72	3322.00000	3420.0	106.039050	46.1388889
3	14	774.50000	665.0	89.165582	55.3214286
1	8	368.50000	380.0	69.884757	46.0625000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.5082 DF = 2 Prob > CHISQ = 0.4704

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 93 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P54 STATEMENT 34, ITEM 41

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	0.62604660	0.31302330	0.27	0.7672

Error	90	106.01911469	1.17799016
Corrected Total	92	106.64516129	

R-Square	C.V.	Root MSE	P54 Mean
0.005870	44.86124	1.0853525	2.41935484

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	0.62604660	0.31302330	0.27	0.7672

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P54

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 90 MSE= 1.17799
Harmonic Mean of cell sizes= 14.2509

Number of Means	2	3
Critical Range	.8078	.8500

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.4648	71	2
A			
A	2.2857	14	3
A			
A	2.2500	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P54
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	71	3439.0	3337.0	102.706879	48.4366197
3	14	573.0	658.0	86.424441	40.9285714
1	8	359.0	376.0	67.766253	44.8750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 1.1125 DF = 2 Prob > CHISQ = 0.5733

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P55 STATEMENT 35, ITEM 42

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	4.28122618	2.14061309	1.49	0.2318
Error	92	132.60298434	1.44133679		
Corrected Total	94	136.88421053			

R-Square	C.V.	Root MSE	P55 Mean
0.031276	36.67296	1.2005568	3.27368421

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	4.28122618	2.14061309	1.49	0.2318

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P55

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 1.441337
Harmonic Mean of cell sizes= 14.27707

Number of Means 2 3
Critical Range .8924 .9391

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.3699	73	2
A			
A	3.1429	14	3
A			
A	2.6250	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P55
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3647.0	3504.0	110.244705	49.9589041
3	14	633.0	672.0	92.638497	45.2142857

1	8	280.0	384.0	72.575425	35.0000000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 2.4213 DF = 2 Prob > CHISQ = 0.2980

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P56 STATEMENT 36, ITEM 43

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	5.18654856	2.59327428	4.39	0.0151
Error	92	54.35029354	0.59076406		
Corrected Total	94	59.53684211			

R-Square	C.V.	Root MSE	P56 Mean
0.087115	17.67993	0.7686117	4.34736842

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	5.18654856	2.59327428	4.39	0.0151

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P56

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 0.590764
Harmonic Mean of cell sizes= 14.27707

Number of Means	2	3
Critical Range	.5713	.6012

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.7857	14	3
A			
A	4.7500	8	1

A
A 4.2192 73 2

NPAR1WAY PROCEDURE

Wilcoxon Scores (Rank Sums) for Variable P56
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3182.50000	3504.0	101.766213	43.5958904
3	14	884.50000	672.0	85.514029	63.1785714
1	8	493.00000	384.0	66.993931	61.6250000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 10.001 DF = 2 Prob > CHISQ = 0.0067

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 94 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P57 STATEMENT 37, ITEM 44

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	2.23594225	1.11797112	1.46	0.2379
Error	91	69.73214286	0.76628728		
Corrected Total	93	71.96808511			

R-Square	C.V.	Root MSE	P57 Mean
0.031069	20.02082	0.8753783	4.37234043

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	2.23594225	1.11797112	1.46	0.2379

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P57

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 91 MSE= 0.766287
Harmonic Mean of cell sizes= 14.26415

Number of Means 2 3
Critical Range .6511 .6852

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.8750	8	1
A			
A	4.3333	72	2
A			
A	4.2857	14	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P57
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	72	3300.0	3420.0	99.5943040	45.8333333
3	14	662.0	665.0	83.7463569	47.2857143
1	8	503.0	380.0	65.6373640	62.8750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.5536 DF = 2 Prob > CHISQ = 0.1692

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P58 STATEMENT 38, ITEM 45

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	5.04329231	2.52164615	1.78	0.1743
Error	92	130.28302348	1.41611982		
Corrected Total	94	135.32631579			

R-Square C.V. Root MSE P58 Mean

0.037268	32.02572	1.1900083	3.71578947

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	5.04329231	2.52164615	1.78	0.1743

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P58

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 1.41612
Harmonic Mean of cell sizes= 14.27707

Number of Means 2 3
Critical Range .8846 .9309

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	4.3750	8	1
A			
A	3.9286	14	3
A			
A	3.6027	73	2

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P58
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3330.50000	3504.0	106.893215	45.6232877
3	14	720.50000	672.0	89.822243	51.4642857
1	8	509.00000	384.0	70.369099	63.6250000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 3.7484 DF = 2 Prob > CHISQ = 0.1535

Analysis of Variance Procedure
Class Level Information

	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P59 STATEMENT 39, ITEM 46

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	0.35656865	0.17828432	0.13	0.8821
Error	92	130.52764188	1.41877872		
Corrected Total	94	130.88421053			

R-Square	C.V.	Root MSE	P59 Mean
0.002724	32.42317	1.1911249	3.67368421

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	0.35656865	0.17828432	0.13	0.8821

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P59

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 1.418779
Harmonic Mean of cell sizes= 14.27707

Number of Means 2 3
Critical Range .8854 .9317

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	3.8750	8	1
A			
A	3.6575	73	2
A			
A	3.6429	14	3

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P59
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3458.50000	3504.0	108.640054	47.3767123
3	14	674.50000	672.0	91.290110	48.1785714
1	8	427.00000	384.0	71.519064	53.3750000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 0.37231 DF = 2 Prob > CHISQ = 0.8301

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P60 STATEMENT 40, ITEM 47

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	6.51124730	3.25562365	2.26	0.1106
Error	92	132.81506849	1.44364205		
Corrected Total	94	139.32631579			

R-Square	C.V.	Root MSE	P60 Mean
0.046734	38.95702	1.2015165	3.08421053

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	6.51124730	3.25562365	2.26	0.1106

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P60

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 1.443642
Harmonic Mean of cell sizes= 14.27707

Number of Means	2	3
Critical Range	.8931	.9399

Means with the same letter are not significantly different.

Duncan Grouping		Mean	N	GROUP
	A	3.1918	73	2
	A			
B	A	3.0000	14	3
B				
B		2.2500	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P60
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3661.0	3504.0	109.162320	50.1506849
3	14	661.0	672.0	91.728969	47.2142857
1	8	238.0	384.0	71.862878	29.7500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)
CHISQ = 4.2713 DF = 2 Prob > CHISQ = 0.1182

Analysis of Variance Procedure
Class Level Information

Class	Levels	Values
GROUP	3	1 2 3

Number of observations in data set = 105

NOTE: Due to missing values, only 95 observations can be used in this analysis.

Analysis of Variance Procedure

Dependent Variable: P61 STATEMENT 41, ITEM 48

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	2	9.21569678	4.60784839	2.96	0.0569
Error	92	143.37377691	1.55841062		
Corrected Total	94	152.58947368			

R-Square	C.V.	Root MSE	P61 Mean
0.060395	44.41742	1.2483631	2.81052632

Source	DF	Anova SS	Mean Square	F Value	Pr > F
GROUP	2	9.21569678	4.60784839	2.96	0.0569

Analysis of Variance Procedure

Duncan's Multiple Range Test for variable: P61

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 92 MSE= 1.558411
Harmonic Mean of cell sizes= 14.27707

Number of Means 2 3
Critical Range .9280 .9765

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	GROUP
A	2.9726	73	2
A			
A	2.4286	14	3
A			
A	2.0000	8	1

N P A R 1 W A Y P R O C E D U R E

Wilcoxon Scores (Rank Sums) for Variable P61
Classified by Variable GROUP

GROUP	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
2	73	3753.50000	3504.0	109.308848	51.4178082
3	14	556.50000	672.0	91.852096	39.7500000
1	8	250.00000	384.0	71.959339	31.2500000

Average Scores Were Used for Ties

Kruskal-Wallis Test (Chi-Square Approximation)

CHISQ = 5.7303 DF = 2 Prob > CHISQ = 0.0570

APPENDIX 15

Contigency table for variables: "years in the profession" and "Level of agreement with marketing"

YP : "Years in the profession"
YPC: "Years in the profession, Collapsed"

The SAS System

TABLE OF YP BY GROUP

YP GROUP(LEVEL OF AGREEMENT/DISAGREEMENT)

Frequency / Percent / Row Pct / Col Pct	Strongly desagree	Neutral	Strongly agree	Total
0 to 5 years	0	10	1	11
	0.00	12.66	6.25	10.48
6 to 10 years	1	9	2	12
	10.00	11.39	12.50	11.43
11 to 15 years	1	13	7	21
	10.00	16.46	43.75	20.00
16 to 20 years	2	19	1	22
	20.00	24.05	6.25	20.95
21 to 25 years	2	10	2	14
	20.00	12.66	12.50	13.33
More than 25years	4	18	3	25
	40.00	22.78	18.75	23.81
Total	10	79	16	105
	9.52	75.24	15.24	100.00

STATISTICS FOR TABLE OF YP BY GROUP

Statistic	DF	Value	Prob
Chi-Square	10	10.916	0.364
Likelihood Ratio Chi-Square	10	11.379	0.329
Mantel-Haenszel Chi-Square	1	2.154	0.142
Fisher's Exact Test (2-Tail)		**0.434**	
Phi Coefficient	0.322		
Contingency Coefficient	0.307		
Cramer's V	0.228		

Sample Size = 105

TABLE OF YPC BY GROUP

YPC GROUP(LEVEL OF AGREEMENT/DISAGREEMENT)

Frequency / Percent / Row Pct / Col Pct	Strongly desagree	Neutral	Strongly agree	Total
0 to 20 years	4	51	11	66
	40.00	64.56	68.75	62.86
More than 20years	6	28	5	39
	60.00	35.44	31.25	37.14
Total	10	79	16	105
	9.52	75.24	15.24	100.00

STATISTICS FOR TABLE OF YPC BY GROUP

Statistic	DF	Value	Prob
Chi-Square	2	2.574	0.276
Likelihood Ratio Chi-Square	2	2.481	0.289
Mantel-Haenszel Chi-Square	1	1.724	0.189
Fisher's Exact Test (2-Tail)		**0.332**	
Phi Coefficient		0.157	
Contingency Coefficient		0.155	
Cramer's V		0.157	

APPENDIX 16

Contingency table for variables: "type of marketing activity undertaken" and "level of agreement with marketing"

TMAU : "type of marketing activity undertaken"
TMAUC: "type of marketing activity undertaken, Collapsed"

TABLE OF TMAU BY GROUP

TMAU Frequency Percent Row Pct Col Pct	GROUP(LEVEL OF AGREEMENT/DISAGREEMENT) Strongly, desagree	Neutral	Strongly, agree	Total
No	6 75.00	30 42.25	5 33.33	41 43.62
Less than others	2 25.00	21 29.58	3 20.00	26 27.66
More or less than, others	0 0.00	18 25.35	5 33.33	23 24.47
More than others	0 0.00	2 2.82	2 13.33	4 4.26
Total	8 8.51	71 75.53	15 15.96	94 100.00

STATISTICS FOR TABLE OF TMAU BY GROUP

Statistic	DF	Value	Prob
Chi-Square	6	8.686	0.192
Likelihood Ratio Chi-Square	6	9.664	0.140
Mantel-Haenszel Chi-Square	1	6.051	0.014
Fisher's Exact Test (2-Tail)		**0.210**	
Phi Coefficient		0.304	
Contingency Coefficient		0.291	
Cramer's V		0.215	

TABLE OF TMAUC BY GROUP

TMAU GROUP(LEVEL OF AGREEMENT/DISAGREEMENT)

Frequency Percent Row Pct Col Pct	Strongly desagree	Neutral	Strongly agree	Total
No/Less than others	8 100.00	51 71.83	8 53.33	67 71.28
More or less/ More than othres	0 0.00	20 28.17	7 46.67	27 28.72
Total	8 8.51	71 75.53	15 15.96	94 100.00

STATISTICS FOR TABLE OF TMAUC BY GROUP

Statistic	DF	Value	Prob
Chi-Square	2	5.593	0.061
Likelihood Ratio Chi-Square	2	7.583	0.023
Mantel-Haenszel Chi-Square	1	5.352	0.021
Fisher's Exact Test (2-Tail)		**0.060**	
Phi Coefficient		0.244	
Contingency Coefficient		0.237	
Cramer's V		0.244	

APPENDIX 17

PRINQUAL Iteration History and Principal Component Analysis for Internal Factors

PRINQUAL MTV Iteration History

Iteration Number	Average Change	Maximum Change	Proportion of Variance	Variance Change
1	0.20953	5.00645	0.43622	.
2	0.10021	0.48604	0.47971	0.04349
3	0.07757	0.30279	0.49328	0.01357
4	0.06576	0.29048	0.50228	0.00900
5	0.05400	0.25367	0.50866	0.00638
6	0.04284	0.18014	0.51313	0.00446
7	0.03247	0.12510	0.51590	0.00277
8	0.02402	0.09759	0.51750	0.00161
9	0.01700	0.07491	0.51841	0.00091
10	0.01155	0.05702	0.51892	0.00050
11	0.00870	0.04315	0.51919	0.00028
12	0.00659	0.03311	0.51936	0.00017
13	0.00499	0.02553	0.51946	0.00010
14	0.00378	0.01957	0.51952	0.00006
15	0.00288	0.01498	0.51956	0.00004
16	0.00220	0.01146	0.51958	0.00002
17	0.00170	0.00877	0.51960	0.00001
18	0.00131	0.00673	0.51960	0.00001
19	0.00102	0.00521	0.51961	0.00001
20	0.00079	0.00417	0.51961	0.00000
21	0.00062	0.00333	0.51962	0.00000
22	0.00049	0.00267	0.51962	0.00000
23	0.00038	0.00213	0.51962	0.00000
24	0.00030	0.00171	0.51962	0.00000
25	0.00024	0.00137	0.51962	0.00000
26	0.00019	0.00109	0.51962	0.00000
27	0.00015	0.00088	0.51962	0.00000
28	0.00012	0.00070	0.51962	0.00000
29	0.00010	0.00056	0.51962	0.00000
30	0.00008	0.00045	0.51962	0.00000
31	0.00006	0.00036	0.51962	0.00000
32	0.00005	0.00029	0.51962	0.00000
33	0.00004	0.00023	0.51962	0.00000
34	0.00003	0.00019	0.51962	0.00000
35	0.00003	0.00015	0.51962	0.00000
36	0.00002	0.00012	0.51962	0.00000
37	0.00002	0.00010	0.51962	0.00000
38	0.00001	0.00008	0.51962	0.00000
39	0.00001	0.00006	0.51962	0.00000
40	0.00001	0.00005	0.51962	0.00000

NOTE: Algorithm converged.

Principal Component Analysis

86 Observations
16 Variables

Correlation Matrix

	TPP21	TP22	TPP23	TPP25	TP27	TP35	TP36	TP39	
TPP21 Transformation	1.0000	0.4471	0.3942	0.2758	0.3902	0.3447	0.2601	0.5119	PP21
TP22 Transformation	0.4471	1.0000	0.4668	0.4189	0.2811	0.3883	0.4621	0.5441	P22
TPP23 Transformation	0.3942	0.4668	1.0000	0.3265	0.2969	0.3066	0.3602	0.4062	PP23
TPP25 Transformation	0.2758	0.4189	0.3265	1.0000	0.4069	0.4616	0.4644	0.5250	PP25
TP27 Transformation	0.3902	0.2811	0.2969	0.4069	1.0000	0.5327	0.4140	0.6284	P27
TP35 Transformation	0.3447	0.3883	0.3066	0.4616	0.5327	1.0000	0.5540	0.5546	P35
TP36 Transformation	0.2601	0.4621	0.3602	0.4644	0.4140	0.5540	1.0000	0.5294	P36
TP39 Transformation	0.5119	0.5441	0.4062	0.5250	0.6284	0.5546	0.5294	1.0000	P39
TPP44 Transformation	0.3054	0.3482	0.2555	0.2281	0.3571	0.4347	0.2865	0.3342	PP44
TPP45 Transformation	0.4724	0.4506	0.4455	0.4756	0.6097	0.5395	0.4153	0.5718	PP45
TP46 Transformation	0.2457	0.4103	0.2658	0.3733	0.2771	0.3353	0.5375	0.3423	P46
TP47 Transformation	0.2284	0.3652	0.2134	0.4673	0.5092	0.4981	0.5085	0.5954	P47
TP48 Transformation	0.2356	0.3663	0.3176	0.3685	0.4986	0.4921	0.2857	0.3955	P48
TPP57 Transformation	0.1618	0.1607	0.1658	0.3218	0.2248	0.2525	0.2415	0.2270	PP57
TPP60 Transformation	0.2676	0.3260	0.1436	0.3874	0.0774	0.1408	0.3759	0.2260	PP60
TPP61 Transformation	0.1095	0.2235	0.1123	0.3935	0.1542	0.1618	0.4055	0.1363	PP61

Principal Component Analysis

Correlation Matrix

	TPP44	TPP45	TP46	TP47	TP48	TPP57	TPP60	TPP61	
TPP21 Transformation	0.3054	0.4724	0.2457	0.2284	0.2356	0.1618	0.2676	0.1095	PP21
TP22 Transformation	0.3482	0.4506	0.4103	0.3652	0.3663	0.1607	0.3260	0.2235	P22
TPP23 Transformation	0.2555	0.4455	0.2658	0.2134	0.3176	0.1658	0.1436	0.1123	PP23
TPP25 Transformation	0.2281	0.4756	0.3733	0.4673	0.3685	0.3218	0.3874	0.3935	PP25
TP27 Transformation	0.3571	0.6097	0.2771	0.5092	0.4986	0.2248	0.0774	0.1542	P27
TP35 Transformation	0.4347	0.5395	0.3353	0.4981	0.4921	0.2525	0.1408	0.1618	P35
TP36 Transformation	0.2865	0.4153	0.5375	0.5085	0.2857	0.2415	0.3759	0.4055	P36
TP39 Transformation	0.3342	0.5718	0.3423	0.5954	0.3955	0.2270	0.2260	0.1363	P39
TPP44 Transformation	1.0000	0.6643	0.1078	0.3648	0.4287	0.2892	0.1108	0.0246	PP44
TPP45 Transformation	0.6643	1.0000	0.2042	0.5062	0.5222	0.2480	0.2735	0.1153	PP45
TP46 Transformation	0.1078	0.2042	1.0000	0.4885	0.4498	0.2928	0.3451	0.3111	P46
TP47 Transformation	0.3648	0.5062	0.4885	1.0000	0.6192	0.2253	0.1861	0.1472	P47
TP48 Transformation	0.4287	0.5222	0.4498	0.6192	1.0000	0.2833	0.0007	-.0513	P48
TPP57 Transformation	0.2892	0.2480	0.2928	0.2253	0.2833	1.0000	-.0500	-.0537	PP57
TPP60 Transformation	0.1108	0.2735	0.3451	0.1861	0.0007	-.0500	1.0000	0.7516	PP60
TPP61 Transformation	0.0246	0.1153	0.3111	0.1472	-.0513	-.0537	0.7516	1.0000	PP61

Eigenvalues of the Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
PRIN1	6.34743	4.38092	0.396714	0.396714
PRIN2	1.96650	.	0.122907	0.519621

Eigenvectors

	PRIN1	PRIN2	
TPP21	0.225029	-.015326	PP21 Transformation
TP22	0.267090	0.088011	P22 Transformation
TPP23	0.218187	-.026516	PP23 Transformation
TPP25	0.274166	0.153426	PP25 Transformation
TP27	0.277286	-.166756	P27 Transformation
TP35	0.289532	-.106784	P35 Transformation
TP36	0.283841	0.190568	P36 Transformation
TP39	0.312631	-.058491	P39 Transformation
TPP44	0.224665	-.237824	PP44 Transformation
TPP45	0.308633	-.158904	PP45 Transformation
TP46	0.232702	0.185094	P46 Transformation
TP47	0.287133	-.084067	P47 Transformation
TP48	0.258585	-.274466	P48 Transformation
TPP57	0.151664	-.191479	PP57 Transformation
TPP60	0.161048	0.557383	PP60 Transformation
TPP61	0.134549	0.585679	PP61 Transformation

APPENDIX 18

PRINQUAL Iteration History and Principal Component Analysis for External Factors

PRINQUAL MTV Iteration History

Iteration Number	Average Change	Maximum Change	Proportion of Variance	Variance Change
1	0.15810	1.30376	0.47677	.
2	0.09035	0.73927	0.50914	0.03238
3	0.06964	0.55906	0.51887	0.00972
4	0.05662	0.41262	0.52504	0.00617
5	0.04387	0.29841	0.52938	0.00435
6	0.02992	0.25347	0.53233	0.00294
7	0.01751	0.16918	0.53398	0.00165
8	0.01095	0.04165	0.53454	0.00056
9	0.00659	0.02730	0.53470	0.00017
10	0.00409	0.01813	0.53477	0.00006
11	0.00260	0.01217	0.53479	0.00003
12	0.00168	0.00825	0.53480	0.00001
13	0.00111	0.00574	0.53481	0.00000
14	0.00077	0.00526	0.53481	0.00000
15	0.00055	0.00478	0.53481	0.00000
16	0.00040	0.00429	0.53481	0.00000
17	0.00030	0.00381	0.53481	0.00000
18	0.00023	0.00336	0.53481	0.00000
19	0.00017	0.00294	0.53481	0.00000
20	0.00014	0.00256	0.53481	0.00000
21	0.00011	0.00222	0.53481	0.00000
22	0.00009	0.00192	0.53481	0.00000
23	0.00008	0.00166	0.53481	0.00000
24	0.00006	0.00143	0.53481	0.00000
25	0.00005	0.00123	0.53481	0.00000
26	0.00004	0.00106	0.53481	0.00000
27	0.00004	0.00091	0.53481	0.00000
28	0.00003	0.00078	0.53481	0.00000
29	0.00003	0.00067	0.53481	0.00000
30	0.00002	0.00057	0.53481	0.00000
31	0.00002	0.00049	0.53481	0.00000
32	0.00002	0.00042	0.53481	0.00000
33	0.00001	0.00036	0.53481	0.00000
34	0.00001	0.00031	0.53481	0.00000
35	0.00001	0.00026	0.53481	0.00000
36	0.00001	0.00022	0.53481	0.00000

NOTE: Algorithm converged.

Principal Component Analysis

90 Observations
11 Variables

Correlation Matrix

	TPP29	TP30	TPP31	TP32	TP33	TP34
TPP29	1.0000	0.4793	0.5620	0.2804	0.4095	0.4358
TP30	0.4793	1.0000	0.4115	0.5174	0.6902	0.5981
TPP31	0.5620	0.4115	1.0000	0.3682	0.5183	0.5424
TP32	0.2804	0.5174	0.3682	1.0000	0.6788	0.4873
TP33	0.4095	0.6902	0.5183	0.6788	1.0000	0.7623
TP34	0.4358	0.5981	0.5424	0.4873	0.7623	1.0000
TPP37	0.2767	0.2015	0.3361	0.0358	0.2656	0.2600
TP40	0.2121	0.1629	0.3446	-.0565	0.1423	0.1762
TP49	0.1066	0.1737	0.1502	0.3201	0.1935	0.1940
TP53	0.0459	0.1710	0.0704	0.4024	0.2854	0.1956
TP59	-.1571	0.0830	-.1766	0.0092	-.0447	0.0897

	TPP37	TP40	TP49	TP53	TP59
TPP29	0.2767	0.2121	0.1066	0.0459	-.1571
TP30	0.2015	0.1629	0.1737	0.1710	0.0830
TPP31	0.3361	0.3446	0.1502	0.0704	-.1766
TP32	0.0358	-.0565	0.3201	0.4024	0.0092
TP33	0.2656	0.1423	0.1935	0.2854	-.0447
TP34	0.2600	0.1762	0.1940	0.1956	0.0897
TPP37	1.0000	0.4549	0.0368	0.0003	-.2066
TP40	0.4549	1.0000	0.0597	-.1848	-.0665
TP49	0.0368	0.0597	1.0000	0.4053	0.2687
TP53	0.0003	-.1848	0.4053	1.0000	0.2050
TP59	-.2066	-.0665	0.2687	0.2050	1.0000

Eigenvalues of the Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
PRIN1	3.97099	2.05905	0.360999	0.360999
PRIN2	1.91194	.	0.173813	0.534812

Eigenvectors

	PRIN1	PRIN2	
TPP29	0.325289	-.205304	PP29 Transformation
TP30	0.390703	0.047250	P30 Transformation
TPP31	0.364912	-.224507	PP31 Transformation
TP32	0.352566	0.277835	P32 Transformation
TP33	0.438435	0.066671	P33 Transformation
TP34	0.412013	0.026801	P34 Transformation
TPP37	0.203556	-.383370	PP37 Transformation
TP40	0.150238	-.417573	P40 Transformation
TP49	0.173660	0.348181	P49 Transformation
TP53	0.166737	0.461578	P53 Transformation
TP59	**-.011335**	0.408943	P59 Transformation

APPENDIX 19

PRINQUAL Iteration History and Principal Component Analysis for External Factors (minus item 46)

PRINQUAL MTV Iteration History

Iteration Number	Average Change	Maximum Change	Proportion of Variance	Variance Change
1	0.14984	1.29431	0.51168	.
2	0.08685	1.01948	0.54471	0.03303
3	0.06632	0.46395	0.55660	0.01189
4	0.05085	0.29264	0.56387	0.00728
5	0.03549	0.25987	0.56821	0.00434
6	0.02486	0.21325	0.57050	0.00229
7	0.01543	0.11348	0.57162	0.00113
8	0.00938	0.03688	0.57206	0.00044
9	0.00568	0.02147	0.57220	0.00014
10	0.00353	0.01416	0.57225	0.00005
11	0.00223	0.00940	0.57227	0.00002
12	0.00143	0.00628	0.57228	0.00001
13	0.00093	0.00420	0.57228	0.00000
14	0.00061	0.00282	0.57228	0.00000
15	0.00041	0.00189	0.57228	0.00000
16	0.00028	0.00127	0.57228	0.00000
17	0.00019	0.00096	0.57228	0.00000
18	0.00013	0.00075	0.57229	0.00000
19	0.00009	0.00060	0.57229	0.00000
20	0.00006	0.00048	0.57229	0.00000
21	0.00004	0.00038	0.57229	0.00000
22	0.00003	0.00031	0.57229	0.00000
23	0.00002	0.00025	0.57229	0.00000
24	0.00002	0.00020	0.57229	0.00000
25	0.00001	0.00017	0.57229	0.00000
26	0.00001	0.00014	0.57229	0.00000

NOTE: Algorithm converged.

Principal Component Analysis

90 Observations
10 Variables

Correlation Matrix

	TPP29	TP30	TPP31	TP32	TP33
TPP29	1.0000	0.4865	0.5649	0.2790	0.4113
TP30	0.4865	1.0000	0.4132	0.5143	0.6905
TPP31	0.5649	0.4132	1.0000	0.3645	0.5186
TP32	0.2790	0.5143	0.3645	1.0000	0.6807
TP33	0.4113	0.6905	0.5186	0.6807	1.0000
TP34	0.4308	0.5974	0.5441	0.4851	0.7611
TPP37	0.2884	0.2305	0.3389	0.0733	0.2856
TP40	0.2201	0.1711	0.3568	-.0542	0.1489
TP49	0.1092	0.1746	0.1593	0.3133	0.1954
TP53	0.0286	0.1738	0.0917	0.4115	0.2871

	TP34	TPP37	TP40	TP49	TP53
TPP29	0.4308	0.2884	0.2201	0.1092	0.0286
TP30	0.5974	0.2305	0.1711	0.1746	0.1738

TPP31	0.5441	0.3389	0.3568	0.1593	0.0917
TP32	0.4851	0.0733	-.0542	0.3133	0.4115
TP33	0.7611	0.2856	0.1489	0.1954	0.2871
TP34	1.0000	0.2733	0.1868	0.1941	0.2099
TPP37	0.2733	1.0000	0.4692	0.0659	0.0077
TP40	0.1868	0.4692	1.0000	0.0584	-.1668
TP49	0.1941	0.0659	0.0584	1.0000	0.3988
TP53	0.2099	0.0077	-.1668	0.3988	1.0000

Principal Component Analysis

Eigenvalues of the Correlation Matrix

	Eigenvalue	Difference	Proportion	Cumulative
PRIN1	4.00403	2.28520	0.400403	0.400403
PRIN2	1.71882	.	0.171882	0.572285

Eigenvectors

	PRIN1	PRIN2	
TPP29	0.322817	0.210126	PP29 Transformation
TP30	0.389465	-.026366	P30 Transformation
TPP31	0.363885	0.214694	PP31 Transformation
TP32	0.349666	-.346044	P32 Transformation
TP33	0.435667	-.100422	P33 Transformation
TP34	0.409330	-.010313	P34 Transformation
TPP37	0.218047	0.406316	PP37 Transformation
TP40	0.157821	0.523289	P40 Transformation
TP49	0.175341	-.304154	P49 Transformation
TP53	0.169923	-.497682	P53 Transformation

APPENDIX 20

Computations for Indexes of Internal/External Valiables

Internal Variables

	Prinqual Output Weight	Rescaled	Weighted	Standarized 0-100
Statement 8	0.23			
Strongly agree	-0.65	0.00	0.00	0.00
Agree	-0.65	0.00	0.00	0.00
Neutral	-0.65	0.00	0.00	0.00
Disagree	-0.62	0.03	0.01	0.05
Strongly disagree	1.55	2.20	0.50	3.72
Statement 9	0.27			
Strongly disagree	-0.86	0.00	0.00	0.00
Disagree	-0.86	0.00	0.00	0.00
Neutral	-0.86	0.00	0.00	0.00
Agree	-0.54	0.32	0.09	0.64
Strongly agree	1.54	2.40	0.64	4.82
Statement 10	0.22			
Strongly disagree	-1.17	0.00	0.00	0.00
Disagree	-1.14	0.03	0.01	0.05
Neutral	-0.20	0.97	0.21	1.59
Agree	1.51	2.68	0.58	4.40
Statement 12	0.27			
Strongly agree	-1.16	0.00	0.00	0.00
Agree	-0.61	0.55	0.15	1.13
Neutral	-0.11	1.05	0.29	2.17
Disagree	-0.11	1.05	0.29	2.17
Strongly disagree	2.97	4.13	1.13	8.52
Statement 14	0.28			
Strongly disagree	-1.16	0.00	0.00	0.00
Disagree	-0.68	0.48	0.13	1.00
Neutral	-0.53	0.63	0.17	1.31
Agree	-0.11	1.05	0.29	2.19
Strongly agree	2.04	3.20	0.89	6.68

Statement 22	0.29			
Strongly disagree	-1.06	0.00	0.00	0.00
Disagree	-0.65	0.41	0.12	0.89
Neutral	-0.65	0.41	0.12	0.89
Agree	-0.11	0.95	0.28	2.07
Strongly agree	2.35	3.41	0.99	7.43

Statement 23	0.28			
Strongly disagree	-0.81	0.00	0.00	0.00
Disagree	-0.78	0.03	0.01	0.06
Neutral	-0.78	0.03	0.01	0.06
Agree	-0.19	0.62	0.18	1.32
Strongly agree	2.27	3.08	0.87	6.58

Statement 26	0.31			
Strongly disagree	-0.85	0.00	0.00	0.00
Disagree	-0.85	0.00	0.00	0.00
Neutral	-0.70	0.15	0.05	0.35
Agree	0.13	0.98	0.31	2.31
Strongly agree	2.14	2.99	0.93	7.03

Statement 31	0.22			
Strongly agree	-1.67	0.00	0.00	0.00
Agree	-0.83	0.84	0.19	1.42
Neutral	-0.24	1.43	0.32	2.42
Disagree	0.17	1.84	0.41	3.11
Strongly disagree	2.62	4.29	0.96	7.25

Statement 32	0.31			
Strongly agree	-0.81	0.00	0.00	0.00
Agree	-0.81	0.00	0.00	0.00
Neutral	-0.67	0.14	0.04	0.33
Disagree	0.32	1.13	0.35	2.62
Strongly disagree	2.24	3.05	0.94	7.08

Statement 33	0.23			
Strongly disagree	-0.36	0.00	0.00	0.00
Disagree	-0.36	0.00	0.00	0.00
Neutral	-0.36	0.00	0.00	0.00
Agree	-0.36	0.00	0.00	0.00
Strongly agree	2.74	3.10	0.72	5.43

Statement 34	0.29			
Strongly disagree	-0.96	0.00	0.00	0.00
Disagree	-0.76	0.20	0.06	0.43
Neutral	-0.56	0.40	0.11	0.86
Agree	0.00	0.96	0.28	2.07
Strongly agree	2.13	3.09	0.89	6.68

Statement 35	0.26			
Strongly disagree	-1.07	0.00	0.00	0.00
Disagree	-0.62	0.45	0.12	0.88
Neutral	-0.09	0.98	0.25	1.91
Agree	0.60	1.67	0.43	3.25
Strongly agree	2.58	3.65	0.94	7.10

Statement 44	0.15			
Strongly agree	-0.15	0.00	0.00	0.00
Agree	-0.06	0.09	0.01	0.10
Neutral	-0.06	0.09	0.01	0.10
Disagree	-0.06	0.09	0.01	0.10
Strongly disagree	9.16	9.31	1.41	10.62

Statement 47	0.16			
Strongly agree	-0.40	0.00	0.00	0.00
Agree	-0.40	0.00	0.00	0.00
Neutral	-0.26	0.14	0.02	0.17
Disagree	-0.26	0.14	0.02	0.17
Strongly disagree	2.90	3.30	0.53	4.00

Statement 48	0.13			
Strongly agree	-0.46	0.00	0.00	0.00
Agree	-0.46	0.00	0.00	0.00
Neutral	-0.46	0.00	0.00	0.00
Disagree	-0.46	0.00	0.00	0.00
Strongly disagree	2.16	2.62	0.35	2.65

13.29

External Variables

	Prinqual Output	Rescaled	Weighted	Standarized 0-100
	Weight			
Statement 16	0.32			
Strongly agree	-1.55	0.00	0.00	0.00
Agree	-0.87	0.68	0.22	2.12
Neutral	-0.6	0.95	0.31	2.97
Disagree	0.51	2.06	0.67	6.43
Strongly disagree	1.73	3.28	1.06	10.24
Statement 17	0.39			
Strongly disagree	-1.27	0.00	0.00	0.00
Disagree	-1.01	0.26	0.10	0.98
Neutral	-0.32	0.95	0.37	3.58
Agree	0.32	1.59	0.62	5.99
Strongly agree	2.22	3.49	1.36	13.15
Statement 18	0.36			
Strongly agree	-2.4	0.00	0.00	0.00
Agree	-1.27	1.13	0.41	3.98
Neutral	-0.36	2.04	0.74	7.18
Disagree	0.39	2.79	1.02	9.82
Strongly disagree	1.45	3.85	1.40	13.55
Statement 19	0.35			
Strongly disagree	-1.62	0.00	0.00	0.00
Disagree	-1.09	0.53	0.19	1.79
Neutral	-1.08	0.54	0.19	1.83
Agree	-0.15	1.47	0.51	4.97
Strongly agree	1.96	3.58	1.25	12.11
Statement 20	0.44			
Strongly disagree	-1.64	0.00	0.00	0.00
Disagree	-1.4	0.24	0.10	1.01
Neutral	-0.92	0.72	0.31	3.03
Agree	-0.18	1.46	0.64	6.15
Strongly agree	1.69	3.33	1.45	14.03

Statement 21	0.41			
Strongly disagree	-1.77	0.00	0.00	0.00
Disagree	-1.06	0.71	0.29	2.81
Neutral	-0.9	0.87	0.36	3.44
Agree	-0.31	1.46	0.60	5.78
Strongly agree	1.43	3.2	1.31	12.67

Statement 24	0.22			
Strongly agree	-3.11	0.00	0.00	0.00
Agree	-0.08	3.03	0.66	6.39
Neutral	0.13	3.24	0.71	6.83
Disagree	0.79	3.9	0.85	8.23
Strongly disagree	1.25	4.36	0.95	9.20

Statement 27	0.16			
Strongly disagree	-4.03	0.00	0.00	0.00
Disagree	-0.07	3.96	0.62	6.05
Neutral	0.36	4.39	0.69	6.70
Agree	0.36	4.39	0.69	6.70
Strongly agree	0.36	4.39	0.69	6.70

Statement 36	0.18			
Strongly disagree	-1.22	0.00	0.00	0.00
Disagree	-1.22	0.00	0.00	0.00
Neutral	-1.22	0.00	0.00	0.00
Agree	-0.6	0.62	0.11	1.05
Strongly agree	1.25	2.47	0.43	4.19

Statement 40	0.17			
Strongly disagree	-1.35	0.00	0.00	0.00
Disagree	-0.8	0.55	0.09	0.90
Neutral	-0.8	0.55	0.09	0.90
Agree	-0.8	0.55	0.09	0.90
Strongly agree	1.18	2.53	0.43	4.16

10.34

APPENDIX 21

Analysis of Variance: "years in the profession" versus internal/external indexes

YP = years in the profession

1= 0 to 5 years
2= 6 to 10 years
3= 11 to 15 years
4= 16 to 20 years
5= 21 to 25 years
6= more than 25 years

EXTERNAL VARIABLES

General Linear Models Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 90

EXTERNAL VARIABLES

General Linear Models Procedure

Dependent Variable: INDEX

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	1481.02751082	296.20550216	0.79	0.5593
Error	84	31466.28999446	374.59869041		
Corrected Total	89	32947.31750528			

R-Square	C.V.	Root MSE	INDEX Mean
0.044951	35.74480	19.3545521	54.14648721

Source	DF	Type I SS	Mean Square	F Value	Pr > F
YP	5	1481.02751082	296.20550216	0.79	0.5593

Source	DF	Type III SS	Mean Square	F Value	Pr > F
YP	5	1481.02751082	296.20550216	0.79	0.5593

EXTERNAL VARIABLES

General Linear Models Procedure

Duncan's Multiple Range Test for variable: INDEX

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 84 MSE= 374.5987
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 13.87509

Number of Means	2	3	4	5	6
Critical Range	14.61	15.38	15.88	16.25	16.54

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	YP
A	58.446	19	3
A			
A	56.677	11	2
A			
A	56.040	10	1
A			
A	56.009	20	4
A			
A	49.548	18	6
A			
A	47.234	12	5

INTERNAL VARIABLES

General Linear Models Procedure
Class Level Information

Class	Levels	Values
YP	6	1 2 3 4 5 6

Number of observations in data set = 86

INTERNAL VARIABLES

General Linear Models Procedure

Dependent Variable: INDEX

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	5	971.33780663	194.26756133	0.53	0.7557
Error	80	29529.61355384	369.12016942		
Corrected Total	85	30500.95136047			

R-Square	C.V.	Root MSE	INDEX Mean
0.031846	73.34632	19.2125003	26.19422414

Source	DF	Type I SS	Mean Square	F Value	Pr > F
YP	5	971.33780663	194.26756133	0.53	0.7557

Source	DF	Type III SS	Mean Square	F Value	Pr > F
YP	5	971.33780663	194.26756133	0.53	0.7557

INTERNAL VARIABLES

General Linear Models Procedure

Duncan's Multiple Range Test for variable: INDEX

NOTE: This test controls the type I comparisonwise error rate, not the experimentwise error rate

Alpha= 0.05 df= 80 MSE= 369.1202
WARNING: Cell sizes are not equal.
Harmonic Mean of cell sizes= 13.50813

Number of Means	2	3	4	5	6
Critical Range	14.71	15.48	15.99	16.36	16.65

Means with the same letter are not significantly different.

Duncan Grouping	Mean	N	YP
A	31.160	18	3
A			
A	28.586	12	5
A			
A	26.824	18	6
A			
A	23.390	11	2
A			
A	22.879	17	4
A			
A	21.972	10	1

APPENDIX 22

CASE 1

Solo practice, located in the western area for four and a half years. Has four full-time employees and the physician. The specialty of the practice is ophthalmology.

Q: What do you understand by marketing?

A: Marketing is embelishing the (patients') senses to inform the public.

Q: Have you dealt with marketing?

A: Yes, when dealing with the patients there is interpersonal relationships from physician to client. The person wants more than a routine check, more than just eyeglasses, the person also comes to relate with others.

Q: What else?

A: I place advertisements in the local newspaper; not advertisements, a presentation card, a presentation of a local service.

Q: You told me they are not advertisements.

A: It is a presentation card, that shows the day I am present, my name, address, the telephone number and that's it.

Q: You don't call that an advertisement?

A: Well, it is not an advertisement, it is basically a presentation card, nothing sophisticated in marketing. I am not conducting a marketing study, I am not making big promotions so that people come, it is simply a formal invitation to make myself known.

Q: You told me that you use the local press, is that correct?

A: Yes, it is.

Q: What has been the process to use the local press? How did you make that decision?

A: Well, I saw other physicians using it and that brought the idea of utilizing local press to reach other people and I did it.

Q: What was the decision process like?

A: I made the decision, (called and placed the ad) now it is renewed (periodically).

Q: Does anyone else gets involved in this process?

A: My wife, I make the decision and she takes action.

Q: Is she one of the employees?

A: No, she is the administrator.

Q: What involvement does she have in the process of decisions for the advertisements?

A: Well, I basically delegate on her and she keeps the books and makes the decision of how to pay...

Q: In other words, the implementation part. So in the case of a negotiation with the newspaper, she does that?

A: Yes, she does that.

Q: Do you understand that those advertisements produce results?

A: Initially they did. I asked patients and there was a very high percentage of them that knew about my practice because of the newspaper advertisements. Originally a good percent of patients learned of that practice through the newspaper advertisements, but now I believe is more through word of mouth.

Q: The advertisement in the newspaper has been placed since you began the practice?

A: I advertised the opening of the practice with the ad.

Q: In addition to making the advertisements originally for the opening of the practice, did you continue the ads with certain frequency in these four and a half years?

A: There are times when we go for or three months without any ads and then we place them again. We are putting them every year, at least during a certain period every year.

Q: Do you think that brought patients here?

A: Yes.

Q: How do you know it brought patients

A: Because they stated so in the record: " I saw (the practices advertised) in the newspaper".

Q: They write in the record that they had seen it in the newspaper, and now is more word of mouth?

A: In one part of the record it reads: "referred by neighbors, mother..."

Q: You mentioned that the majority of the patients know of your practice by word of mouth so people keep announcing you.

A: Some (patients) serve as messengers to the others. I believe everybody gets to know (the practice) through messengers...

Q: Some of your other colleagues in this same specialty advertise in the same geographical area. Do they advertise as often as you do or less often than you do?

A: More often...

Q: Why do you think they place the advertisements ?

A: I think it is for the same reason, if everyone is advertising...

Q: That is in relation to other ophthalmologists, and in relation to the practices of other specialties?

A: They also advertise.

Q: But in the same...

A: In the same way, but others have the marketing look format, the marketing of how they offer the services. They hire a firm to oversee and make the advertisement and that type of doctor does a campaign of new service centers, new image.

Q: So it's an advertisement...

A: It is an advertisement for controlling the mind: " look at that, that is the marketing, it is the advertising ".

Q: In addition to the presentation card, what other effort do you undertake?

A: Inform, talk to patients.

Q: Tell me more about your practice.

A: My practice has three aspects: procedures (surgery), visits and optics. The appointments generate the most (patient flow), operations are the least in terms of volume and the process of prescribing and selling eyeglasses is in between. For example, from 220 patients that I see, I prescribe to 30. From those, 40%, let's say 10 buy the eyeglasses from me. The volume of eyeglasses is a little higher than the surgeries.

Q: The number of units, the number of eyeglasses, does not necessarily represent the income?

A: No, I think that appointments and surgeries generates more income.

Q: So surgeries are less but provide more income?

A: Yes, yes.

Q: How do patients learn about your prices?

A: Word of mouth.

Q: Those that reach you, even the ones that just come for a routine exam only once a year, why do they continue to come to you and not to other ophthalmologists?

A: Because of the time I dedicate when attending them.

Q: Do you think it is because of yourself?

A: Because of my talent, personal treatment, in other words, because of the marketing, I believe one always uses marketing.

Q: Is that your belief or has some of them told you so?

A: Two or three people have told me, clients that go and say: "this guy is really good". That they liked the way they were treated and then return.

Q: Is there any action of any type that you have considered or undertaken to attract or retain patients?

A: I send notes at the moment of sending appointments. It is not being done now, because it requires a lot of work. I have the computer but I don't have the time.

Q: The decision for doing that is yours or your wife's?

A: It's mine. What happens is that it takes much work to do that now.

Q: Any action that you have desired but have not undertaken. Actions that you have declined doing.

A: Right now, formally advertising myself beyond the placing of a presentation card in the newspaper.

Q: Are others doing that?

A: Not at this moment, but when they begin doing it, I will join them.

Q: When who does, other physicians or specialists?

A: Ophthalmologists from my area.

Q: Of your same geographical area?

A: That is right.

Q: If they are ophthalmologists from other areas of Puerto Rico that will not impact in your area, will that concern you?

A: The criteria is, if it impacts my practice in this area (I will do it).

Q: So you have discarded it for the moment, but that does not mean you will not do it?

A: Exactly, it does not mean I will never do it, but when someone else starts doing it...

Q: So, the moment another ophthalmologist in this region starts advertising...

A: When I see it is impacting me, I will do it.

Q: And how do you notice it is impacting your practice?

A: When the number of patients decreases and when somebody that works on a town near my practice examines patients from a town farther from my practice, there I notice something is wrong, that is when it is impacting my practice in a negative way.

Q: What other things impact (the patient)?

A: The time the patient waits, how he is taken care of and the treatment provided. Parking is needed for the clients to use it. Not the clients, the patients. I don't think they are synonyms.

Q: What is the difference?

A: The client comes seeking a service. The patient wants more than a service, he or she comes to relate with others. When patients see me they say: "tell me what it is wrong" and I talk to them for about three hours.

Q: Tell me about the parking

A: It is more efficient for the family. I do not have one yet, but I am in the process of having one.

Q: So that is a conscious marketing decision?

A: Exactly, that is a basic need for a business.

Q: How was the process to make that decision?

A: I conducted a formal survey during February of 1996 with a questionnaire where I asked the patients where would they like the office to be located, in the center of town or on the road to the town? I wanted to know if it was important for them that my office be located in one place versus the other.

Q: That is interesting, at the beginning when talking about what is marketing and what marketing actions you undertook, you did not mention the survey and you are doing so now, later in the interview.

A: I had forgotten.

Q: Do you consider the survey part of marketing?

A: Sure, that is a marketing study. Relocating the office is marketing. The study that I did to change the office will help me do marketing, for that reason I did not consider it marketing but it will fall into the phase of what I will do to market.

Q: The process of searching for a new location was done by you or your wife?

A: It was done by me. By word of mouth people learned that I was looking for an office with parking facility. We are buying it to move in.

Q: Any particular idea of how you are going to make the new location known.

A: In the same way as I advertised the presentation card. I was considering a reception for physicians but...

Q: What criteria do you use to refer a patient to another doctor?

A: First of all is the doctor's competence, second is the type of specialty and how he treats patients.

Q: And what feedback mechanisms you have to know how they were treated?

A: They (the patients) talk about it when they come back.

Q: So practices that patients speak well about, you keep in your list of candidates to refer to?

A: Yes, sometimes by poorly treating my patient they reduce the number of patients that returns to me.

Q: Let's ask the question from another point of view. Other health professionals send you patients (specialists and others). What criteria do you think other health professionals have to send you these patients?

A: I think it is the geographical area and my specialty, I am the only one with a certain type of specialty in this area, plus I also treat the patients well. I believe that everyone has the same way of thinking I do, and to that referred patient a "preferred" treatment is always given.

Q: That is a conscious decision, it does not happen by accident?

A: It is a conscious decision, because if the patients' condition is a problem or a difficult situation, there is the need for one to give more emphasis to that patient than to other cases. The medical form that the patient brings in indicates who referred him.

Q: Is the health reform programme having any impact in your private practice?

A: Yes.

Q: Are you (classified as) a secondary doctor

A: That is correct.

Q: Given that the patients are referred to you by primary doctors, (under the health reform programme) is it fair to say that the primary physician is receiving more patients?

A: Yes, I believe that is correct.

Q: So, the impact is more patients?

A: The impact that it has is positive for the primary physician. I see very few patients from the health reform programme. Because of the way the reform programme works, that type of patient is already upset when he gets here because the primary physician has been treating him without success.

Q: What is the referral process for those patients from the health reform programme, why are they referred to you vs. another ophthalmologists?

A: I do not know. There are many reasons why patients have to be operated and they prefer a particular ophthalmologist.

Q: So, the primary physician refers them to an ophthalmologist. The ophthalmologist recommends operation, then the patients goes back to the primary physician who refers him again to another ophthalmologist, and after the other ophthalmologist makes a recommendation the patients returns to the primary?

A: Yes, and in the meanwhile...It has no logic. The problem is that the health reform programme rarely works, it just works in a minority of situations. They use cheaper medicines (generic type) and not the ones that are more specific for a particular condition (which even though it is a more expensive medications), it goes directly into solving the problem.

Q: The primary physician pays for the medicines under the health reform programme?

A: He is supposed to.

Q: In regards to the patient from the health reform programme, the ones you have examined, what is your opinion?

A: It varies. Many are unhappy, there are some who are receiving everything needed. Usually patients come to me with a lot of problems. If it is a very delicate patient I think the primary physician is using purely defensive medicine in that case; within the capitation they receive, in order not to spend much, the primary physician takes more time diagnosing (before referring to me) and that use of extra time makes the situation worst. When the patient finally reaches the secondary physician I have to hospitalize which ends up costing to the primary physician the capitation of 10 years.

Q: And when that happens two or three times?

A: What happens is that there are a lot of patients that register under a primary physician and hardly visit him, resulting in extra capitation dollars for the primary physician.

Q: Is the reaction negative?

A: Completely negative, because of the reality of the system. When you are sick and need a specialist, the primary physician will do everything possible so you do not see a specialist.

Q: In that case the specialist is on the losing side?

A: What happens is that most of these patients had never visited a specialist because they did not have a way of covering those expenses, but now that they have the health reform plan they have more possibilities of being operated.

Q: So you are talking that in this phase (operation) the patient under the health reform programme is someone who did not have a health plan at all.

A: Now those patients ask for more because it is a treat.

Q: But someone that already had a plan, let's say a government employee for whom they substitute his health plan with the reform programme...

A: That is going to be very negative.

Q: Negative for the patient or the doctor?

A: I think that for both. That is my personal critique. I have a system that when you are sending a patient that has been ultra filtered, extremely sick that there is nothing to offer to him. I want to detect where there is a pattern from people who have already been examined and I will tell the primary physician about it...

Q: Ah, so the primary physician that you detect has that pattern will receive your call informing him not to send you that kind of patient.

A: Do not send me that type of patient because I will not see them. I have not done it yet, but I will to do so to avoid risks. I plan not to accept patients from that type of physician because they are sending doomed patients.

Q: So you are in the process of doing it?

A: I am in the process and that is what I am going to do.

Q: What impact, if any, do you believe the health reform programme has in terms of the activities you might undertake to attract and retain patients?

A: I do not know, I do not know if I receive more or less (patients). One of the strategies is to negotiate with the state (with the payer of services) and the other is to force to the government to pay adequately for the service.

Q: So first is going directly to the provider to have them send patients to a particular secondary doctor?

A: And the next thing is that the patient specifies the doctor he wants to go to. You have to treat patients well so that they insist on going to that doctor. That works well on the long term, it is a very slow process of convincing people that you are not cheating them. You need to tell the physician who refers to you about the convenience of utilizing your service because you do not have the tendency of spending and prescribing high cost medicines since you have never done so nor plan to. One needs to explain that one uses one medication for one illness and not a whole lot of medications- thus one prescribes the medication that will solve the patient's problem at the lowest cost.

Q: Is it common in Puerto Rico for spouses of physicians to be involved in the practice?

A: Yes, and it is common in the United States too. In fact, there the IRS (Internal Revenue Service) looks for the former wives of divorced doctors to know about the real income the practice was generating. It is truly a part-time function that can be done even from home and that allows you to be more involved in the practice and thus one can dedicate more time to the patients.

Q: And the other employees, the four full-time, what do they do?

A: There is a receptionist, one who evaluates the patient before I see it, one attends the optic and another that attends patients, answers the phone and does tasks similar to the others.

Q: And you use other services outside the office?

A: Only the accountant, who is under contract.

Q: What other staff do you need?

A: The one who makes the lenses, the man picks-up the orders at the office and then brings them back. He basically collects orders. They sell me the lenses, so to speak, then I put them in the frames.

Q: Any other person?

A: The one who does the cleaning who is not full-time.

Q: Any additional comment

A: This matter of communicating with patients was not like this before. No, it was only and exclusively by word of mouth.

Q: What is the reason for these changes?

A: An Arizona lawyer that took the first case to the Federal Trade Commission about prohibiting lawyers from advertising. He broke the ice.

Q: And others followed?

A: That is right, what happens is that once you start...for example the presentation cards in the newspaper have been used since I can remember but the aggressive marketing of refractive surgery, a procedure I understand no one needs, is unprecedented.

Q: Is there is more or less competition for health professionals like optometrist which are not ophthalmologists but invade the field.

A: I think it is more competition now, not against the routine visits nor with the surgery but with the optic portion of my practice.

Q: In what way do independent optical stores or others impact you? For example: J. C. Penney which are retailers with a optic department.

A: I do not know because a lot of patients do not reach me because they are not properly oriented. The optic department of an ophthalmologist office takes care of the patient's health, it is not only about the eyeglasses. The focus of the optometrist, I think, is more about selling eyeglasses than the health of a patient's eyes. For me wearing eyeglasses is a problem, if the eye is ok there is no need for them.

Q: As compared to other specialists, is there a higher level of competition?

A: In technology, the ophthalmologists are the only ones being attacked from all sides. Now there are more ophthalmologists and what some (geographic) regions really need is more optometrists.

Q: The number of professionals in the specialty today vs. a couple of years ago. Does that impact ophthalmologists?

A: Yes, but there is still a lot of areas where there is market available. There are more of us but there are still areas where to establish the practice. The time will come, however, that all of this (attracting and retaining patients) will be done via marketing. The time will come when this is going to be all marketing.

Q: In your case, your office has always been located in a town different from the one where you live, any reason for that?

A: There are many ophthalmologists where I live, whereas there was none where I located my practice.

CASE 2

The type of practice is solo, located in the west area for a period of 16 years. It consists of two service offices, one located within the area where the health reform programme is operating, and another in a town not yet covered by the health reform.

Q: How many employees in office #1, without including you as doctor?

A: Four.

Q: Full-time?

A: No, we have the person that cleans, that will be an hour every day; we have my wife, that makes the work of administration and some of the work of hospitalizations and we have a secretary that makes data entry with regards to the payments and invoices and the receptionist. In office #2 I only have a receptionist.

Q: So office #1 provides some support to office #2?

A: Yes, definitively yes.

Q: Are all employees full timers, except for the one who cleans one hour daily and your wife?

A: The employee from office #2 only works the days that I go to office #2.

Q: If you would go more days?

A: I would have to use another system of support. All of this is for optimizing collections because some of the medical plans, which are the larger part of my billings, requires one to be in top of them. They fail to pay you for a minimal detail so you need to follow up on them. Yet, there is a 3 or 4 percent that they never pay you.

Q: How patients know, find about your practice? How do they get here?

A: Most of the patients came to me referred by other doctors, that is my opinion. And then the service, the type of service that you give them, is what promotes you. For example when I came here (to the town where is office #1 is located) there were very few doctors that did intensive medicine, critical medicine. Practically none. And then, after I treated well the very sick patients and they recovered, those patients brought me more patients. Definitively the most important thing here is the role of word of mouth of the patient.

Q: You refer to the success ratio of patients that were, for your type of specialty, in very bad condition.

A: They were in bad condition and the doctors did not like to work those cases, thus the patients on many occasions had to go to other metropolitan areas: they would go to San Juan and they would go to Ponce. We began to treat patients like we did at the medical residence training: struggling with the bad patients without having the fear that they could die. I opened the unit of intensive care for patients in a main hospital of the area. That unit was designed for me and I had it full the whole time with my patients. The others surgeons, when they realized that I was willing to take the pressure, they referred the very sick patients to me and then those patients brought me healthy patients.

Q: Those patients are literally "living testimonials".

A: That is so, and I believe that has been all of the basis for the success of my practice. I have been successful and I believe that I owe it to that.

Q: When you say most of your patients are referred, is that because of your type of specialty?

A: No, I am specialist in primary medicine. What happens is that I am specialist for other areas of the medicine, for example I am consulted for gynecology, obstetric and surgery

because I can deal with more illnesses than what they are used to deal with. They operate and finish the problem, I have to deal with the medical problem because they don't struggle with that. When you take a difficult case from a medical colleague, because the doctor made a mistake and you help him out, that is a grateful colleague that is not going to forget you. Every time that doctor needs to refer something related to internal medicine, he is going to refer to you. And every time that he has a problem in the operating room he is going to say "call Dr. so-and-so" without a doubt, because in other occasions you have been of great help. That is another part of the internal medicine that most people do not know.

Q: What part?

A: The one were we deal with other doctors in order to solve problems or we solve problems of patients that have arisen under the care of other physicians. A patient that is operated of an appendix that had pierced, usually the physician struggles, but they call on a physician that deals with the "estrolitos", with the antibiotics, with this, with that. We are not talking about bad practice, we are talking about the usual patient.

Q: When the thing gets complicated...

A: When it gets complicated we enter in action, because we are "complicologists".

Q: You talked about how patients know about you or how they come to you by word of mouth, many are referred patients that continue referring because they are satisfied with the doctor...What other actions you take or have taken so that potential patients learn of your practice, of your location, etc?

A: Usually a mailing is made. Initially, when you are going to open an office, you invite the doctors so that the other doctors have empathy with you, because they refer patients to you; you advertise in the local newspapers; you begin to give conferences of some topics in the

community. In my case, I was the only instructor of CPR in the area, so that got me involved with many in the community. I also informed others about the skills of an internist, and that gives results: when people have a problem they say "I am going to see Dr. so-and-so".

Q: Was that mailing at the beginning?

A: At the beginning upon establishing my office.

Q: That was 16 years ago. . .

A: There are doctors that when the patient fails to make two appointments the physician sends a letter to remind them. I do not do that since I understand that the patient has the right to change physicians if he wants to. It is that simple. I have always respected that.

Q: Did you say advertisements in newspapers, have you made advertisements recently?

A: What I do is that I cooperate with some causes like the policemen, the firemen, I then appear in the listings of doctors, with the hours the office is open...

Q: How is that?

A: Because you know that the firemen, the police, and this type of institutions in the area of office #1 and in other areas of Puerto Rico, provide a listing of doctors and emergency services. They come to look for donations and based on a donation they announce you in their listing of services. They have a way embeleshing the request so that you feel you are cooperating with a noble cause.

Q: What else?

A: My name in the listings of the medical plans, it also appears in the listings of Medicare. If a patient has X medical plan and wants to see a doctor and my name is there, given that my name has had enough exposure, he sees it and comes to see me.

Q: Being listed there, because people would be looking at those listing, does that have an effect?

A: Yes. Since I provide a good service the medical plan refers patients to me. When someone complains that there is no way of getting a good doctor, the person of the medical plan says "go to see Dr. so-and-so, he is you going to solve your problem".

Q: The medical plans refer directly?

A: It has happened to me many times. And it doesn't matter that a patient comes only once, because if he leaves satisfied the first time, he brings me a lot of patients.

Q: Why do the patients continue coming?

A: Because I continue providing time to them, I continue listening to them. Many times it is not important even to prescribe them, neither to touch them, just to listen to them and nothing else. The main inconvenience that we have in these times is the telephone. Since we are involved with the care of gravely sick patients, we can not deny quick telephone access to patients. That means that a patient could be here and while I am with him I need to be interrupted by two telephone calls. That is not probably the most effective thing in order to maintain clientele because there will be patients that are bothered by this. However, the patient that does not understand that I deal with patients that are gravely ill is someone that I do not want as a patient. Because that means that the day that I do not arrive in the morning because I had to

stay in the intensive care unit of the hospital with a patient, I lose the patient because they could not wait for me. These are problematic patients that are going to bring problems also. But patients that are bothered with such interruptions do not return.

Q: What other actions do you take so that patients continue visiting your practise?

A: I have a good system of distributing the medicine samples that are given to me. Patients that do not have a medical plan receive most of the samples. Of course, I do not give samples to persons that are not patients of mine. Neither because so-and-so referred the patient so that I give them a sample, not me, if I do not see the patient I do not give samples. This also has medical-legal implications, since any medicine could cause secondary effects, some unexpected. I distribute my samples in a fair way and what I have is for my patients. Patients also know that I am an honest person, that I am going to charge them exactly what is due. That means that I will not charge less nor more. I am not marketing nor selling medications like some other doctors, that exploit patients. A patient that has gone to some of these doctors that have sold the medicine samples; have given then many injections and have charged them seven dollars deductible fee of the medical plan and two hundred dollars in other things, is a patients that continues coming to me because they say I am a "right" guy, an honest person.

Q: But, do some physicians sell samples?

A: Aha! Many, many samples are sold!

Patients also visit one because of your appearance, your serenity when a patient arrives gravely sick. Your secretary, I learned soon that your secretaries are a way of making propaganda very effectively and I when the secretaries are not pleasant with my patients, they do not solve problems to my patients, they have to leave from here. I prefer a secretary that is not so

effective but that is pleasant to the sight, to the hearing and in how they deal with people, that is very effective so that the patients are pleased as they wait to be seen by the physician. The television is also an important thing so that the patient sits down in the waiting room.

Q: Television in the waiting room?

A: Yes, I used to have it but it was removed because the wait room was too crowed and then I got anxious, it looked like I was not going to finish. Maybe I saw more people in the waiting room because they sat down to wait for their turn there watching the television, but what happened was that the operation of the office became very cumbersome, and there was much noise and the secretary was not able to keep things under control.

Q: What do you mean by the operation of the office?

A: The billing, recording of invoices, the filling of records, answering the telephone, because there was so much people requesting information in the office that it required for a nurse out there in order to take care of all that. It was impossible for the office to operate properly when the waiting room was full. Now we have the same number of patients in a day but in the waiting room we only have those whose turn to see the physician is next. We provide an advantage over other doctors. The patients call and tell us they will be coming to the office and we tell them "OK. You make patient number ____ in the list". When the patient asks, "at what time (more or less) will I be seen by the doctor" we indicate to them to call at 2:00 p.m, for example, in order to find out how we are progressing. That means that the patient's wait at the office is reduced to a minimum.

Q: Does that technique reduces the number of patients in the waiting room?

A: Exactly.

Q: Versus when you had the television set where all the patients for the day were in the waiting room at the same time.

A: Waiting, because they were being entertained by the television and they stayed.

Q: Have you advertised in the regional newspaper?

A: A while ago in some listings of professional services that they made, but not in an advertisement in the regional press like the ones which you see now a days that talk about: "we make this and that procedure, come to check yourself", No, I do not advertise.

Q: In the process of being included in those listings who makes the decision of being listed or not. You, your wife, you and the secretary...

A: I make the decision.

Q: What type of criteria, if any, do you utilize?

A: Usually the type of listing as I told you, if it was for the firemen, if it was for the police, for a school, if they convinced me of that. The only thing that I did different when I started the practice was that I bought approximately one thousand plastic sliding cards that fit under the telephone and when you pull out that card you could see the most important telephone numbers, including those of my medical friends from several specialties. It was like a directory but only of the people that I had chosen, the police, the firemen, etc. I now remembered when you brought the subject up.

Q: And how was that distributed?

A: The patients took them and put them under their telephone. Also for Christmas we had pens, key rings and gave them to the patients.

Q: What did the pens or key rings had printed on them?

A: Dr. So-and-so, telephone, address.

Q: The decision process was taken by you?

A: No, the idea of the pens and the key rings was my wife's. It was her idea and she does here what she wants to, this is a team.

Q: It sounds as if you only did that at the beginning. Do you continue such initiatives?

A: From time to time we buy some pens with our name and they are given out. It has been almost two years since we did that. It is not that we do not believe that it works, although I believe giveaways is done more to express gratefulness to the patient, rather than trying to keep a patient with a Christmas gift.

Q: It is not done as a strategy?

A: No, it is more like a spontaneous thing, something not planned.

Q: Who makes that happen, that is to say, who orders, who decides if the physician's name will be in large or small letters?

A: Many of the times my wife, but when the cost is high, like the listings in the telephone book, I do. That means that I was the one who decided about the phone book. The type of listing in the telephone books was not a convincing way of advertising a medical practice and I decided not to continue paying $160 to $200 monthly so that my name appears listed in bold letters. I found that was a ridiculous matter and that it was wiser to eliminate that expense.

Q: Are you talking about being listed in the white pages with bold letters, or about the yellow pages.

A: No, about the white pages. In the yellow ones I also appear in the smaller print, nothing that costs me a lot of money.

Q: So the cost of the activity has to do with it.

A: Definitively, when I realized that I was spending $200 monthly just so that my name appears in the phone guide in bold letters, I got hysterical, that is foolish!!!

Q: You were not aware of the amount of money it was costing you monthly when you signed for it?

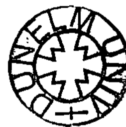
A: I did not know about the total cost, neither that it increased every year.

Q: So one day the invoice arrived and you...

A: That day when they called me... Then they did not want to change that. They are aggressive in selling that, they are very aggressive. If you are not careful they do something different in order to charge you more. They charged $60 at the beginning and they later began to charge me $200. This was increasing steeply year after year. It is a catch and all of my friends said the same when I told them, since they had not realized it.

Q: Anything else you do.

A: I have probably forgotten some of the things that I have done in order to attract patients. I remember that in office #2 I placed a sign that defined what an internist is: " It is a doctor that has studied more time in order to become a specialist in this and we are specialists in helping you get well.." Because people don't know or do not necessarily have to know what a specialist is for.



Q: So that was something rather educational.

A: Exactly.

Q: We talked about the decision making process and of implementation. Let us speak now of the process of evaluation. How you do you measure the results, how do you know if the activities that you undertook have produced results?

A: I do not measure that. The flow of patients has stayed more or less constant. There are times that it decreases and one looks for a logical explanation for that. Why did I sew only fifteen patients when I usually see thirty. You analyze: the date of paying taxes, mother's day, father's day, Christmas or long weekends. But definitively people also respond to economic changes. There was a time when I had 50 patients every day, but of those 50 patients there were 15 that had medical plan X. I was the only one that accepted that medical plan and stopped accepting it because they didn't pay me.

Q: For that reason you discontinued that plan, it provided you with many patients but in the long run the plan didn't pay you?

A: Exactly. What happens is that, after 16 years in practice, I can decide which plans to continue accepting and which ones not to accept.

Q: Do you see the same number of patients these days, do you see more or less?

A: That fluctuates a little, I believe that I am seeing about the same number.

Q: You mentioned most of your patients are referred by other physicians and by the patients themselves. What formal or informal system do you have in order to measure referrals?

A: I make some listings of all the consultations that I do to the hospitals and I take a mental inventory, because if physician so-and-so was consulting me often and suddenly stops

consulting me, that has happened, I usually look for an explanation in order to feel well. I ask myself: Am I failing? Most of the times the explanation is that a relative of them has arrived and the physician is referring patients there, or that another physician opened a practice closer to the patients, in the same building, for example. Another doctor was a gynecologist and obstetrician and when a female internist arrived she began to send the patients to the female internist, that is to say that she was a feminist. But before there was a female internist in town she referred her patients to me. One looks for a logical explanation to explain for the decreases...but the truth is that the number of consultations at the hospital decreased because the patients come to the office and I am making many of the pre-surgery consultations that I used to make in the hospital at the office now. If you ask me "has there been a slight decrease of patients in the number of patients?" I would tell you subjectively "yes". There has been a slight decrease because the number of internists has increased in the geographical zone, definitively.

Q: In the geographical area?

A: Definitively, the number of internists has increased and are there doctors willing to do anything to take a patient away from you, you know what I mean? Some have became pirates in the emergency room...

Q: What do you mean by pirates in the emergency room?

A: When you are listed as "on call" in the emergency room for the patients that come in bad condition that day and doesn't have another doctor, the hospital is supposed to call the doctor listed as "on call". But then this "pirate" doctor is wandering around the emergency room, and

when the opportunity arises, he makes any maneuvers so that he gets to see the patient. "Look, I am here if this patient needs me, assign me the consultation, I am here." Some other doctors are able to buy the services of doctors in emergency room, so that the consultation is assigned to them for a "kick back".

Q: But, to whom do they buy it in that case?

A: To the doctor of the emergency room, the one who is going to assign the consultation.

Q: Not the institution.

A: Not the institution, the doctor at the emergency room. Of course, that is extra official. There have been cases of "kick backs" where they pay 20 dollars for each patient that the physicians is consulted in the emergency room. If your have 5 patients in that situation that is 100 dollars; but those patients were supposed to have been seen by me because I am the one listed the roster of the emergency room, yet another physician got the consultation. When you are in the roster of the emergency room of the hospitals, the hospitals get you patients so that is also a way of making yourself well-known. You solve a problem to the hospital (by being listed "on call" in their emergency roster) and the hospital gets you patients.

Q: Explain to me about the roster.

A: Legal requirements establish that all the hospitals need to have a listing of available doctors, by specialty, for each day. If you are in the lists of the doctors of internal medicine when the hospital needs an internist, the hospital calls you the day assigned to you. A patient that you see in the emergency room and you "seduce" with your good manners and with good service, is a patient that brings you more patients. It is a patient that you see in the hospital

and then you schedule for follow-up appointments at your office. It is a patient that you saw in the hospital, that you hospitalize, solved his acute problem and then brought to your office.

Q: That is a way of making yourself known, that the patients know about you.

A: Definitively, yes.

Q: Do you do that, have you done it?

A: I always do, I believe that is an obligation for us physicians to make ourselves available for emergency room consultation. It is the dirty work of medicine: you get called at any moment to see very serious cases. But that is also good opportunity to get them to know you and make more patients, definitively yes.

Q: We have spoken of the patients that arrive to you by way of referrals, are there cases where you are the one that refers?

A: Sure, the internists are those that know where to send the patients. There are people that come here in order to know what they have and after you know what they have, if you could not help them, you know whom to refer them to. That is not an art that all doctors dominate. It is an art that we the internists dominate. That means that we are a great source of referrals.

Q: And what is the process that you use in order to refer to some physicians vis-a-vis others?

A: First, the empathy, that is something that is important. Now, I have empathy with many doctors that are not very good and I do not refer patients to those doctors even thought they are friends of mine. Usually the good doctors, after you know them, are friends of yours, because there is empathy and also because they provide quality services. In my case, I do not refer a patient to someone that I do not trust for treating my dad and my mom. For referrals I am very selective. And there is also a matter of team work in this. We are doctors of a winning team,

we usually do not change to another team. And when we depart from the team a big turmoil is formed.

Q: Team means what...?

A: Physicians I have been identified for the empathy or knowledge and for the results of previous work, so we feel confident with them that everything is going to turn out well. And usually when we depart from those groups, a big turmoil is formed. A winning team is one where all the team members are equally committed and there is no professional jealousy among them. I do not feel that I am the one that knows more about this; no, here everybody knows and everyone does their little bit and deals logically for the good of the patient. They are all looking after the patient.

Q: Is the Health Reform programme having an important in your particular practise, either here or the one in the other town?

A: Of course, definitively, because most of the patients that are covered by the health reform programme are the patients that have acquired it not for the service, but because it covers the cost of the medications. Those patients that need many medicines are the patients that used to have Medicare (which does not cover medicines). The Medicare programme today is the plan that pays better. It is a plan that is not wanted by anyone, but here in Puerto Rico is the plan that pays better and because of the health reform programme my income from Medicare has decreased in the last few years. What happens is that I am seeing more patients than pay me directly because the patient wants good medical service and if I do not accept the health reform programme and the patient wants to see me, he comes here and pays me directly. And that is happening a lot, I am making more cash than before. That was not the initial intention of the health reform programme. The income from the Medicare programme has decreased,

that was the programme that paid the best, but I have gone up in the number of patients that come and pay me directly.

Q: Does that occur in office #1 or in office #2?

A: In office #2

Q: The area where office # 2 is located is already under the health reform.

A: Yes, that is where the total income has decreased, definitively, but not by much. If the intent of the health reform is that I work twice as much in order to earn the same, then I am going to continue working less.

Q: In your case, in office #2, for how long does the health reform has been in place?

A: The health reform has been in place for one year in the area of office #2.

Q: You could compare a practice before the health reform, during the reform and parallel to the reform because you have office #1 in the area that has yet to implement the health reform programme.

A: That is right.

Q: How is the number of patients with the health reform?

A: The volume of patients is going to increase, but I did not want to register in the health reform as a primary doctor, for the health reform I am listed as a secondary physician. That means that in order to see me, the patient needs to bring a referral and the health reform programme pays me better than to other doctors. They pay me as if it was a private medical plan. The problem for me and many doctors is that primary physicians that have the contracts of the health reform are paying us in a poorly manner. They do not pay on time. That also

means that primary physicians are going to send us fewer patients. Because they have to pay us better, primary physicians send me only what they could not deal with, the tough cases. Bad thing for them, because the tough cases that they play with are the cases I am used to handle . If the difficult patients are sent to me earlier it would cost the primary physician less money. For example, I had a patient that the primary physician was seeing him for around four months. When he arrived here, I did X diagnosis, he was hospitalized several months until he died. All the money "saved" in those four months, was they lost when I had to hospitalize the patient. They let him fall into an irreversible condition. If X treatment was done on time, the patient would have probably been out of the hospital in only one week and probably would be alive today. The health reform programme, in that sense, is killing people. Most of the doctors that are eager to run the heath reform system are the people that had been economically limited in the past. Why do some doctors do poorly in a town? Because patients do not go to see them, and, there is a reason why people do not go to see the doctor. A doctor that is good, a doctor that is honest, that gives good service, that does the things he is supposed to, that is a scientific doctor, he should not have any problem in obtaining patients. What happens is that the doctors that are able to change their system from a scientific system, like the one which we had, to an empiric system, like the government pretends, those are the doctors that do not know anything about medicine. It happens in every profession or job. You know engineers, lawyers, policemen that do not know what they are doing, and with physicians it is the same, we have a very big group of inept doctors and in their hands the health of the people is being placed, in the hands of those that are willing to do anything for money. This is like a wave, where everybody gets wet and tries to do the best medicine, the appropriate medicine, or you would practice only for the rich, for the ones that can pay for it. And I do not want to be doctor of rich people only. That means that we are gathering in groups. There are groups of physician being organized, those of us who are working with other medical plans, as a way of trying to give services of quality, while trying keeps costs under control as much as possible. I do not believe that goal is

completely appropriate, I do not believe it is completely possible to do so, but already the wave is so big that everybody should be thinking of this one way or another.

Q: That sounds like "self help", I do not know if I am describing it well, like a movement of a group of doctors that are saying: "look, let's learn, let's organize ourselves".

A: I am struggling now trying to create something that could handle this, a way that I unite with other physicians and feel comfortable about it. I have tried to perform medicine in the most honest way possible and I am not going to kill people by not requiring laboratory tests to be done nor by not prescribing the appropriate medicines. We look at this from the outside plus we understand the inner workings, thus we know where the health reform programme has its shortfalls. That means that the groups that are being formed now are going to come together on the basis of experience. It is possible that these groups could improve the quality of medical services to the patients based on maintaining a good percent of the patient population. There is no way you could provide medical services of quality if you do not have many healthy patients among your groups of patients. For you to have money in order to pay for the medicine to the older population you have to have patients that do not use medicines.

Q: But you are talking about a group in order to administer a. . .

A: Yes to administer the health reform programme in our area. Remember that this is health reform programme is based on doctors' administering. For you to have enough money in order to run a system that is effective your medical group has to have many doctors with exposure, physicians that are well known. Doctors that are well recognized as good doctors

because of their exposure and experience and thus patients want to see them. I hope to be one of them, and that our group gets a good slice of the best patients.

Q: Are you talking about creating sort of a major league team with well known doctors, so that when do they go to the field the patients go after that team. For what reason will a patient go to another team if the best ones are here… is that the concept?.

A: Exactly.

Q: You need to generate volume.

A: We needed volume in order to pay for the medicines because I believe that that is the main problem of this health reform programme.

Q: Because in the system of "capitation" the payment of medicines is included.

A: And of laboratory test as well as hospitalization. There is another problem with this health reform programme, it does not have a limit. The people under this programme have a plan that is better that any another plan and they are paying a fifth of what one is paying. That works only in theory because your know that this is not possible. But in theory this plan does not have limit: coronary bypass, open heart surgery, brain surgery, because everything is covered. They need to establish some rules: "the programme can afford up to here, from there on you have to pay.". I do not know what they (the government) will do.

Q: When does the area of office # 1 comes under the health reform programme?

A: We don't know, but we think that probably at the beginning of next year.

Q: Those groups of which you are speaking, are they operating in the other places under which the heath reform programme is in place?

A: I believe that has been tried. I believe that there are good groups in other places but I believe that the strongest group, in this sense, will be ours, since we already have about one hundred doctors pre-selected here in the area of office # 1 ready for when the heath reform is in place.

Q: Once the health reform is in this geographical area (office #1) are you going to act as a primary physician? What type of activities do you visualize that you, and/or the group that you referred to, could undertake in order to attract and/or retain patients?

A: I believe that the most important thing here is already in place. In order to attract clients, in this group in particular, the most important is the fact all of the physicians already have a reputation. But I believe we are going to guide people to our practices with signs. In fact that is what the insurance companies recommend.

Q: Is this in order to recruit to the doctors?

A: No, in order to recruit the patients. In this question of recruiting patients there are patients that come to your office and ask you "with what group is your practise going to be affiliated?"

Q: Are they asking you already?

A: Yes.

Q: Because that will be part of the decision patients undertake of where to sign up for medical services

A: Exactly. Many patients that are in a private medical plan system will change to the health reform programme.

Q: How is that?

A: Because patients know that hardly any of the prepaid medical plans includes the payment of medicines, and these patients are going to believe that this health reform programme is a marvel. Thus, some are going to change a good private medical plan for this one on the basis that it is going to provide them with the medicines. In fact, that is happening with the patients of the Medicare programme who want the health reform programme because the majority of those patients are retired and they don't have enough to pay for the medicines. The medicines are very expensive and it is impossible to pay for the medicines of those patients with the amount of capitation that the health reform programme pays per patient.

Q: But the reality of the health reform programme, is that some of those patients did not have other health coverage...

A: Yes, but the health reform programme does not have limits, and that is nonsense. It is like Medicare, but instead of paying you well, they will pay poorly. From the ethical point of view, moral and medical: this is anti-ethical, anti-moral and anti-doctor. This is based on breaking the relationship that exists between the physician and the patient which is usually a philanthropic relationship. This is now a business relationship. If you are a sick (very ill) patient I would be interested in having you change and register with another medical group. I would not want you in my group because you spend twenty dollars a month in medicines more than other patients. This is what the health reform programme seeks to do. That this relationship becomes a relationship of business. This is based on something mentioned at a university in Boston in terms that the only way of lowering medical costs was that the payment of the medical services would be paid by the doctors, so that the doctor would feel the impact of the increase of the cost of medical services. But then the technology is not valued at all !!! That means that we are going to begin to treat patients with the medicine of 30 years ago because it is cheaper. Instead of using a new medication that is good, with fewer secondary

effects, we are going to use the older medicine, with more secondary effects, just because it is cheaper. And it is cheaper because nowadays nobody wants to use it. It is cheaper because if no one prescribes it, they have to sell it cheaper.

Q: You mentioned that your wife is among the people that work in the practice. Any reason in particular for that?

A: She has the ability for this, she has not studied anything of this but she has ability for this. Initially she helped in order to lower the operational costs of the office and we then realized that she is the better one to do that function.

Q: I ask you because it appears to be quite common in Puerto Rico for the spouse to be quite involved in the administration of physician practices. Some doctors have explained to me that their spouses have to deal with the sensitive aspects of the administration.

A: We in this case have a system in order to assure us that nothing is missing. The checks arrive at home, etc. But it could be said she works with me because of that reason.

Q: What you do understand by marketing?

A: Marketing is the way of your project yourself to the community so that they use your services.

Q: Do you visualize that this is something appropriate or not for medical services.

A: I think that this is something appropriate in these moments but when I left the School of Medicine I understood that it was completely unethical. Because that was what they taught me, that doctors did not advertise themselves as if we were selling meat, that doctors do not have clients, as doctors we have patients, it is possible that there are patients that can pay us more than others which can not pay us. And we are going to see all the patients, always. That was

what they taught me. That is exactly the opposite to what they teach me now, to what the government is teaching me. We don't have patients, we have clients and it is necessary to treat them well so as to retain them, but it is necessary to impose to them the responsibilities that they have. That is to say that if what they have to pay is 50 cents, that is what they have to pay, if it is seven dollars, then they pay seven, if they don't have a medical plan then they have to pay me. One gets used to this because this is question of getting used to. Initially one was very puristic on this matter, but later on one realizes that you can not do anything about it. One can stop, say how one thinks, but then one has to dance to the rhythm that they play.

Q: You say it with resignation.

A: Yes, exactly, and that is not necessarily good. My dad, my mom and my children are going to continue receiving good health care services. I am not sure this will be so with other people. I am not sure that the people that can not pay as much as others will be treated equally.

CASE 3

Type of practice is solo, located in the southern area for a 36 year period. Had two offices in two different towns of that zone, but for 23 years now has had only the office in the biggest city of the zone.

Q: Doctor, for how many years have you been in the private practice

A: Thirty five, thirty six years. During one occasion I had it for 14 years in both towns at the same time, one in the morning and when I went out of that one I came to this one.

Q: In various places in a given moment?

A: Yes, then the Eloisa hurricane came and flooded one of the towns and I kept the private practice here only. Everything was flooded there, so I never opened the office again and that did me a favor because the practice was so intense in both places that I could no longer handle that. It was sad to leave the town, because the practice in small towns is very good and the people are very friendly and cooperative, but I had to end it.

Q: How does the patient know that you exist, that your practice exists, where it is located, how they find out in order to come to you?

A: Well within the medical practise the commercial advertisement, is not ethically accepted. We "advertise" in the newspapers and we put the title, the name of the physician, the office, the phone number and the specialty, nothing more. It is not a matter of writing: "we are the best in these services", nothing like that is accepted ethically. I had the opportunity to specialize and did not do it because I understand that for the practice of the medicine you have to see the patient from a total point of view and not from a fragmented point of view. That is the way it is defined by the United Nations, the definition that they have for health has to do with a complete state of well-being: physical, mental and social, and not merely the absence of illnesses. That is

the definition of the United Nations and it can be applied perfectly to my practise of family medicine. I am (very well) recognized, as evidenced by the awards and plaques in the office, for my participation in many aspects of my community and of Puerto Rico.

Q: And that exposure...?

A: My exposure has been sincere because I believe that the medical profession is a privilege that God has provided us, and one cannot limit it only to the practise of medicine. For example, most of my friends are not doctors, they are people related to community matters. I am the president of the Commission for Reforestation and Ornate, all the trees that are planted here are part of our work, we care for the cleanness of the city, for the ornate, the planting of trees, we have a campaign, we give conferences at schools, we have groups where there are doctors, dentists, professionals, teachers and agronomists and we also have a group of the community that participates in cultural matters.

Q: You were telling me that you are announce your practise in the regional newspaper...

A: It is good that you bring that subject, because it is not done to get any promotion. I had a television program for 17 years where we discussed medical issues. That helped me to be known all around Puerto Rico. I did not do it for promoting my name, neither the other doctors that took part in the program. The program was not rehearsed, the program was not edited, the doctors that took part in it could not be praising themselves in the program, they could not say: "I am a phenomenal guy" and that.

Q: And until what year that program was in the air?

A: That program lasted until 1989 when the television channel went out of the area. They wanted me to continue doing the program in San Juan, but I did not have time to travel to San Juan to do the program. In that program we even once had Dr. René J. Favorola, an

Argentinean, graduate of Cleveland Clinic that was the one that invented the Bypass, the auto-coronary bridge, we had him in a program and one of the parts that impacted the people was having a man of such world fame in the program...

Q: What other activities do you undertake?, you told me of the announcements at the regional press, you told me of...?

A: I write a column in the regional newspaper for ten years now. I started in radio, then TV where I stayed for 17 years.

Q: And, how else does the patient learn about you?

A: Well, the newspaper has a section, called "Medical Directory", where there are physicians presenting the services they offer, the specialty, schedule and the location of the office. The majority of them, with the exception of the chiropractic, offer that type of information.

Q: And talking about that advertisements, the person that decides what to include and what not to include in it, is it you or someone else.

A: No, because it is not supposed to be a matter of just writing in a commercial style that says "I am the best", like the better soda or the better store, the best shoes. In this case in particular the information provided is limited so that people know through the newspaper that the medical practise does exists. Some newspapers have approached me to place advertisements, but I say to them that I don't put advertisements of a commercial type. The public knows me for the civic and cultural activities in which I am involved.

Q: How many people work with you in the practise, besides yourself?

A: Here, the secretary and the nurse because my family medicine practise at the office is during the morning from 9:00 to 12:00. From then on I make house visits, visiting the patients at their

home and later, in the evening or between visits to patients, I have several meetings in order to deal with all the other activities of the community in which I am involved.

Q: Then you have a nurse full-time in the morning plus a secretary for a total of two people?

A: Yes, I have a limited practice in the sense that I see the patients in a very complete way. Economically I am all right as a doctor, I don't have any (economic) problems, so I am not desperate for catching patients. I don't find it necessary because, I can not see a patient in a hurry, I have to see them well. That is why the matter of the health reform programme, of seeing a lot of patients without examining them, forces the doctor to prescribe without examining patients closely. Since they (the physicians working the health reform programme) have a capitation system they have to see a lot of patients and they are paid an amount of money for seeing more patients, but that is low quality medicine. The goal becomes quantity and not quality. I don't agree with that type of medicine...Some medical plans have offered their plans for certain groups, very big plans that have a doctor who goes to a company or industry and they send patients to you, that doctor is given a salary, or an amount of money for that service, but I have not accepted that. I have never accepted that here in my practise because I understand that patients that come here to my office, come to me because of who I am. When I walk in the office I see that those patients are here because they want to see me, not because they read it in the newspaper or because I wrote something somewhere praising myself. The patients see me and they recommend me for the service that I provide and for the human quality of listening to them. I listen to them and a lot of times they tell me: "you have been the only doctor that has listened to us; today's doctors do not listen, they do not pay attention to what we say". I see it that way. My secretary has instructions that if someone arrives here without being capable of affording the service, she won't tell them to go without me seeing them. If, for example, they are not able to pay the deductible fee and they tell the nurse or the secretary, I tell them not to collect it at all.

Q: The deductible of the different plans.

A: Of the different medical plans. Now, those who can afford it must pay the deductible. If they are very poor people, I cannot refuse to see them because they cannot pay the deductible; I cannot do that. This is a practise that I feel happy and joyful about what I do and the success that I have had, I have had it based on my effort and my relationships with the community in several aspects.

Q: And that patient that already comes here continues to come to this office for that reason?

A: They continue coming here. I have patients that have 20, 25 years coming here. They do not make a move with out consulting me, even when I request consultations with other specialists on a condition which is outside of my specialty or if the patient has to be hospitalized, or operated or needs a series of more sophisticated tests in order to arrive to a better diagnostic. I have a certain group of specialists to which I refer them. I do this because in the first years of my practise when I referred a patient to a different doctor, they kept my patient.

Q: How's that?

A: They kept the patient, we referred the patient, say for any condition of their specialty, and many patients did not returned and when you asked them why you had not seen him for so long, the patient would say that the doctor to which I referred them further referred the patient to another physician and that was like pirating the patient. And since that is a reality, I have developed a list of competent physicians, humans, decent, honest, well prepared to whom I refer my patients because I have the responsibility when I refer a patient to refer to the appropriate professional. The problems I encountered occurred early in my career, then I did the changes I am explaining to you.

Q: Then you were more careful to whom you refer.

A: I was more careful to whom I was referring. The physician to whom I refer knows how I am. They can not say to a patient: "it is necessary to operate you" without having the patient responding: "well, if I have to be operated I then have to speak with my doctor first" and the patient comes to me and asks for my opinion. I have the other doctors call me to provide me with feedback of the situation. The same happens with colleagues that do not do visits at home and they call me on a cardiac patient, for example, that has a cold or any other thing that I can deal with. I then go to the patient's home, and send him with a note to his doctor that says I saw him and then the other doctor continues to treat him.

Q: The criteria that you have in order to refer to some physicians in particular, besides the fact that from experience you know that they would not "pirate" your patients is...

A: The approach is the question that I ask myself if I am going to deal with a patient and I honestly understand that I can not deal with that patient. With the limitations that there are, because there are specialties, subspecialties, primary hospitals, secondary and tertiary too, I never maintain patients when I understand that the treatment that I am giving them does not respond or I understand that another colleague could do a better job than me. Not an equal job, but better than me, then I refer the patient. And the patients appreciate that. No patient has complained with that and I have never lost any patient with this way of dealing with these other physicians.

Q: And the opposite, why do they refer to you?

A: They refer to me in the matters of home visits, first because they do not make visits at the home. Secondly they understand my medical capacity and they know that I do not complicate things, that I do not keep a patient more time than required. There are doctors that know that they could not solve the problem and yet they continue with the patient for the money that they

are going to receive from the medical plans. I do not do that, the medical plans do not have problems with me, I do not keep patients extra time and that helps people know about the type of professional that I am.

Q: Going back to the advertisement in the regional newspaper, what is then the main motivation for using it, for placing an announcement it in the Medical Directory of the newspaper?

A: I include it in the Medical Directory because in Puerto Rico and in the United States the visits to the home are not practiced anymore. People are surprised, they ask me: "but physicians no longer make visits in the home". The only physician that is making visits in the home is me, there is one or another that advertises so, but they do not do home visits. The only one that makes visits is me because I like it and I believe that I am making a human work, one sees the situation of a patient inside the home, of the family, and this is by far more satisfactory. The President of the Academy of Family Physicians of the United States made the statement a year ago that the family doctors and other physicians of the United States do not know the enormous satisfaction that he has in making visits to the home, and that satisfaction I have had because I love doing house visits. People make you feel like a king. Add to that the many of problems you solve in the home. Today, when a problem arises at home you take the patient to the emergency room or a hospital, and the condition in hospitals today is not a human condition, the patient is a mere number to be attended. You see this in the newspaper, people protesting by the way they were treated in the emergency room of a hospital. You are attended by physicians that are in residence or in internships, sometimes these boys are not well prepared in order to do a proper approach to the patient.

Q: In what way?

A: Interpersonal, that is very important so that the patient feels better. I remember when I used to be on call at the district hospital, I was there from 11 pm to 4 in the morning because my

children were studying in college and I needed some more income. One night at midnight a desperate patient came with a tooth ache, and the nurse told me: "look doctor there is a patient in the emergency room with a tooth ache, but the doctors have not seen him. He has been here for hours and now that you arrive we are going to let him be attended". "I thought he had just arrived", I said. "No, nobody wants to see him because a tooth ache does not have any importance". Then I saw him and examined him, he had an abscess in a molar teeth and I provided him with the treatment. You do not have any idea of the letter of appreciation that I received. What happens is these young physicians are trained to show off with the difficult diagnostics, and when they have to do a simple diagnostic it is as if they are not in the mood of doing so. I would like to know how they would feel if it was them that had the pain. But that happens at the institutional level, at some hospitals that have residence in different specialties that type of ailment is not important because "it is too simple".

Q: They are so specialized that...

A: So specialized that they forgot to be human beings and say "that's not my specialty, my internship is in this and not in that". There you see words like those from Dr. René Favorola: "every time a patient of mine dies, a part of me also dies", a man of worldly fame, saying so simple yet profound words. So the way you treat human beings is the best advertisement that you have together with your honesty. Within the practice of medicine today, you find doctors that want to be nice with their patients and they begin doing immoral and illegal things. Like for example completing driver's license documents without examining the patient. The person who comes here must be willing to be examined. I do that because I have to defend you, me and my community about having somebody capable of driving motorized vehicles. If you need a medical exam for going into college, into sports, I examine you completely when you come here. Some times they say: "but that medical form is just to play Basketball". You have to be

examined, otherwise I don't complete the forms. They come here, wanting to have the forms completed without the examination and I tell them I won't do that, and that bothers people.

Q: And there are other doctors that do it?

A: They do it. Some people come in and say: "we were sick for two weeks and we were absent to work for two weeks". The nurse tells them: : "The doctor will not give you the certificate of illness because if you were out for two weeks and did not see the doctor, the doctor will not provide such a certificate". " But why?, other physicians do it". "Don't go in, he will not do so" and I don't. Once somebody said: "I will pay you any amount of money that is necessary". This is not a matter of money, it is about honesty. "But nobody is going to know", he said. Of course they will know, three persons will know, you, me and God who is up there, I can not do that. They also come here with prescriptions to be signed in order to buy medicines for other patients that do not have medical plans. "Ah, but it doesn't cost you anything". But that is honesty, how can I do that, for you to go with a prescription in your name and then you give the medicines to someone else. Those people don't come here anymore...

Q: Is it common for that to happen, was it like that before...

A: In today's world yes, it was not so common before. In today's world yes, because in today's world, unfortunately, the medical profession as well as for lawyers, engineers, teachers, people have already fallen in this sea of immorality. There is so much corruption that you see congressmen and mayors involved in corruption. I don't get into those matters, my parents taught me to be honest and it was hard for me to establish my practise because I have done things that people do not like.

Q: The people, the patient itself?

A: Yes, there are people that are bothered when you ask questions. There are people that arrive and they want that you prescribe them two or three things and I say: "look, I have the time available to evaluate you, please answer my questions". And they are bothered for that reason. In the study that you are doing it is important that you put a balance. How is it possible that a doctor obtain a clientele making immoral things, like unnecessary surgery and a series of unnecessary procedures, in order to earn more money? That happens here and in other parts of the world. That is a price that the honest doctor pays, that a number of patients does not return. How about when the physician has to give bad news to a patient. Listen about the experience of a patient that the doctor told her: "look, you are finished, here we have a positive reading of cancer, so begin getting ready, there is little time left for you". That patient told me that she almost physically hurt the doctor. That doctor is somebody that knows a lot, is very competent, but the way you say things, is very important. You cannot place monetary earnings in front of the medical practise. The best relation that you can have, the marketing of what you are, is the projection that you have in the community, not only from the point of view as a doctor, it is the position you have as a human being within a community. There are physicians which are very good from a technological and scientific point of view, but when examined under the humanitarian point of view, they do not fulfill expectations, they do not participate in the different aspects of the community: in sports, in a music concert, in the arts, in certain areas which are of extreme importance for a better quality of life.

Q: Are you the one who makes the decisions of proceeding in a certain way?

A: Yes

Q: Do you have any formal or informal process of evaluating if something is working or not, the advertisements...?

A: Well, yes, new people that arrive to the community and don't know any physician, because they do not know the community, look at the newspaper and find a family doctor then call here and that helps them to learn about you.

Q: And when that new person in the community comes to the office, how do you realize...

A: Yes I do, I rarely ask for that, they mention it by themselves, they say: "Doctor, we looked in the regional newspaper and found out you are a family doctor", because you must remember that this is a big city, so it is important that they know that there is a doctor for them.

Q: What impact, if any, have you already experienced with the health reform programme in your practise? I know that it has not begun in this city yet.

A: Well the health reform programme has not arrived here. This is the only town in the zone that does not have it yet. There are some physicians from here that do not have a lot of clients but want to produce more income, so they visit the medical groups of those towns that already have the health reform programme to get them to refer patients to their office in this city. Because for you to provide services under the health reform you must have a group in a place where the health reform programme is under way, so those physicians connect with those groups and they see the patient here.

Q: Volume has increased for them?

A: Patients of the private medical plans have canceled their contracts. Patients from all those towns that used to come here do not come here anymore but rather go see a physician of those groups that administer the health reform programme in those towns, which are looking for quantity of services but not for quality. The patients come to us and pay us directly for health

services. They come here from some towns with the health reform programme and tell us: “we don't like the way in which they treat us”.

Q: What way?

A: Since these physicians operate under a “capitation” system they have to see a lot of patients. With the health reform they have to see patients until eight, nine, ten in the evening. Those patients were used to receive more dedication from the physician. The physician now can not provide the same attention because of the increase in the number of patients from the health reform programme. And those patients are in the waiting room because the doctor belongs to a group associated with the health reform programme, not because they want to see that particular physician. When I go into my office I know that those patients come to see me, they do not come here because of the health reform programme, they come to see me. Sometimes I am surprised when I see patients under the health reform programme that come and pay me directly. The reason: “I do not like that medical system. Before the doctor listened to me, for half an hour, an hour, now I get there and it is a total disarray of people, and I can not speak with the physician”.

Q: That is to say that the physician to patient relationship...?

A: Is lost. Then one goes into the waiting room to find a group of patients that is not used to visit a private practice, they are used to arrive to a hospital, to a health center, and if they do not find the doctor they begin to shout: “what is happening with this”, then they get into politics. They go to the office of the doctors' that accept the health reform programme and when the doctor cannot assist them because the office is full to the maximum, they begin complaining, insulting the secretary and everybody else too, demanding that they be attended because “that is our (medical) plan, the plan of the poor”. Then the other patients are affected too, the whole environment in the waiting room changes. These people are not bad, it is just that they are not

used to this type of service. They are used to being treated quickly, and I do not offer that sort of practise.

Q: What do you understand is marketing?

A: Marketing is a system for you to promote a service to be offered. There are people that do not understand marketing, and it is possible that they market a product and that they do not provide it as it is supposed to be delivered. You can promote yourself as the best doctor in the world and you can dress with the best clothes in the world or have the best ice-cream or the best restaurant and you promote that and when people find out that what you offer is not what they have read about, then no matter how much effort you put into promoting your service, people will not endorse nor support your service.

Q: In order for it to be effective it has to go in accordance to what it is said to be.

A: Sure, what is said needs to match what it is. Otherwise, it is going nowhere and that is a reality. Because it is the quality, what the people look for is quality. And another thing, when marketing a product sometimes there are other things that help that marketing be to effective, such as positive word of mouth.

Q: Any question that I you think we have had left out...

A: No, I believe that I have not given you the opportunity to talk... I have spoken so much that I have not given you the opportunity to speak... what happens is that I am very passionate with the things I like...I believe we have talked thoroughly on the issues...

CASE 4

The type of practice is solo, located in the western area for a period of 17 years. It has four full-time employees and the physician. The specialty is ophthalmology.

Q: How do patients learn that your practice exists?

A: Intuition tells me that the most powerful weapon that you have is your own patient.

Q: "Word of mouth" as they call it?

A: Yes, the success when you are assisting a patient, when you cure a patient from the region, when there is an accident and you intervene and the person recovers successfully. People begin to talk and to pass the information along and, as it is repeated, what they say about you is augmented. Sometimes I say to myself "all this people come here as if I am a great thing." When in fact I am a person that from the beginning was simply trying the best I could, but I was not better than others.

Q: What formal or informal actions, if any, have you taken, in order to inform the public that you exist, that you are here?

A: In this matter I hope to be different from those physicians which you have already interviewed, because you are you going to be surprised to learn that, in the 17 years that I have been practising, I have never advertised. I have never paid for an announcement where my name appears. If I have to give a contribution, I give it to the pertinent entities, but I never allow that they put my name, I haven never permitted it in 17 years.

Q: Any reason for this?

A: Because I understand that within my formation that is the most ethical thing. But it is necessary to define the word ethical again, I imagine that you are understanding me.

Q: But you mentioned that it is being used more than before?

A: Advertising? Oh, yes, of course, now advertising is used to market in the field of healthcare, to market with health, to market yourself, you advertice yourself in television, in radio, in interviews, you grant interviews to magazines boasting how excellent you are, this and the another. I want you to know that when I started my practice in Puerto Rico a committee of ethics in the medical association existed and none of these activities were approved.

Q: That committee no longer exists...?

A: The medical association doesn't exist, remember that now there is the College of Physicians which is writing their statutes now, that is to say, that we are in a limbo, we are in a limbo where nobody knows what is happening, but everybody is doing what they please. It was understood that ethics dictated that you did not promote yourself, that you were not going to market your services, because medicine was not to be marketed, it was a career you undertook where you maintained a charisma, you maintained an image, you maintained a reputation, you maintained a responsibility to your patients, to your fellow citizens, and those activities were not well seen. In fact, when you undertook these type of activities, they called the chapter...

Q: They called to the medical association...

A: Yes, and if they believed that your were entering into very serious things, they had the power of referring the case to the examining board of physicians which could revoke your license. But that does not happen anymore. You have to interview physicians older than me in order for you to hear this personally. But those physicians younger than me, or those that they are bit older than me, they are audacious. There are many of those around here nowadays.

Q: What is your definition, your understanding of marketing?

A: Well, I believe that, the good aspect is that you can use it to educate about health services in an area. That if they (patients) have a problem and you could educate or channel them where they should go without getting lost and avoiding many deviations. But in our society, marketing many times results in commercialisation, business, multiplying income, and not much about multiplying services or reducing the costs of services. Yes all of this has happened, but we continue being professionals that get paid for our services and will not starve. I do not believe either that you are you going to become a millionaire in a few years, unless you have the luck of developing an incredible practice.

Q: We talked about how patients learn of you. What do you do to motivate them to continue visiting your practice?

A: Look, you are providing a service, but it is more than a service, you have to introduce the term "health". Your mission is looking for health, you want then to be in shape and you want them to feel well. They want their illnesses to disappear or reduced and they want to be heard, to feel like a human being that is being helped by another human that is seeing you as a family member and not as a source of income or as patient number forty of the day. And I believe that when you individualize your practice and you give time to your patients in order to listen to them, even though you have the office full office it brings in results. If you see a patient that is gravely sick you might need to spend an hour with that patient. I begin to work at seven o'clock in the morning and I don't eat lunch. If the office is packed I even forget taking a juice for a break. Because I get involved so deeply and I believe that the people always respond to it. In India, in China, in Russia, in Europe, in North or South America the psychiatric aspect of the treatment is important. After all, what is it that you are curing? You are curing a patient. And the patient that comes with an gravely sick eye, that has been four days without sleep with a pain in an eye, you do not believe that is not just looking for any

treatment, that patient is looking for hope. If you offer that to the patient, you do not lose that patient. At least that is my opinion.

In all these years of practice I have never wanted that the number of patients grow too much. I never took measures so that the number of patients grew in order to avoid that the situation would get out of control. First because I am going to maintain my solo practice, and because I want to have time to take appropriate care of my patients. Because, for example, if I get sick or a relative of mine gets sick, and when you treat him I want to ask a question and your answer is: "the one who asks all the questions here is me", I would leave and not return. I have had cases in which that is what happens.

Q: Then the patient goes to another place.

A: Obviously what the patient is looking for is something authentic, to feel that the physician in fact is interested in doing something for him.

Q: Investing time with the patient, which you say could be up to an hour, is that typical in medical service practices? Does that produce results?

A: It definitively produces results, and it is not typical. I know about other physicians that does it the same way and I understand that they have a very solid practice. I want you to understand that I have seen practices that have gone up really fast and then in three years those practices have fallen very rapidly. I can make these comparisons, because my practice has been operating for close to twenty years now.

Q: How many employees do you have?

A: Four employees and my wife that doesn't figure in the payroll, but she is the one that takes care of all the administrative matters.

Q: They are all full-time employees?

A: Full-time

Q: What type of functions do they perform?

A: Secretary and assistant to the doctor

Q: All four of them?

A: Yes, the four are prepared in both aspects and perform them very well. They can assist in surgery, as well as in the administrative work, in everything...

Q: And in working with the invoices?

A: Yes, that also.

Q: Does your wife work full-time or part-time?

A: Part-time.

Q: Taking care of the administrative matters?

A: Yes, she assists with most of that.

Q: Any reason why she takes care of that?

A: Because I am not a good administrator, it is that simple. If you ask her, she will tell you that I am excellent and I say that I am not an administrator and do not like to administer.

Q: You do not like the administrative phase, you prefer...

A: For example I do not know how to check the billing of the medical plans, I have never done that in 17 years.

Q: In the area of decision making, who determines who does what from day to today?

A: I have an employee with seniority that handles that and her pay is higher. This person is excellent, I would tell you that she is marvelous. She is in the office all day, and everything runs well, not because of my administration, but because of the cooperation of all in the team.

Q: And to what do you attribute that? Because you had mentioned to me about the process of recruiting and selection and the importance that you place for the people that are hired.

A: Because I am continually teaching my employees, I teach them as if they were in a school. Why do I take this concern if this is not medical personnel? It is a personnel that has to make decisions with patients before I get to see them and if that employee has a well developed clinical eye it allows them to recognize when a patient needs to be examined by me right away. The staff has to be able to recognize if the condition is something that deserves this and that, if it is an ulcer of the cornea, or if it is a detachment of the retina. By asking and interviewing the patient she finds out the problem and tells me "I believe the patient could suffer from such a thing, etc..." That is a patient that I know requires of a certain priority and I believe that is how we function best with cooperation and mutual respect from the staff. The response is excellent. The quality of the employees definitively impacts on the image that the patient has of the practice, how comfortable the patient feels about how he is being treated.

Q: And that training, that you say is like in school, do you provide it yourself?

A: I do.

Q: How often?

A: My employees take courses periodically, but the training I give them includes discussing the correspondence that we receive. When I have very bad case, I allow them to see and understand what the situation is. I have a "solo practice" and I have an unwritten commitment

with a colleague that is a friend of mine who also has a solo practice, to cover for him when he is not in town and he covers for me. When I am out if a patient calls my employees they tell them not to worry and asks if the patient wants to see a particular ophthalmologist or they will call Dr. so-and-so that is the one that sees my patients when I am out.

Q: In that sense they go beyond...they make the decision of referring directly...

A: Yes, because if I am out of Puerto Rico and a very ill patient arrives, they are not going to be calling me to see if they can get hold of me. They write a note: "this patient arrived in such a date with such a complaint and such and such measures were taken". When I return I have those notes on my desk, and I begin to look at them to learn what happened when I was gone. It works very well.

Q: You mention it like it is a very common occurrence, etc., but this is to a great extent by design, you want them to know more in order to diagnose...

A: No, they do not have to diagnose. I have helped them develop the intuition of sensing when something is not right.

Q: And that this is by design to a certain extent, it has not happened by accident...

A: No, not by accident because all these girls have worked with me all of their careers. They have been many years with me and they feel all right.

Q: Who gets involved in the process of implementing things, you, your wife, the senior person?

A: Sometimes they have to make an inventory and one day is selected to do so, sometimes a Saturday is chosen in order to make a complete inventory. This is all done by the senior person which informs me about it.

Q: The senior is the one that...

A: She cyclically does that, she sets a date on a Saturday, for example, and all personnel comes in the morning for the inventory to see how everything is going. I do not know if you are aware that I share my office with another doctor.

Q: Does he has another specialty?

A: Yes, he has another specialty, and since we share office space these inventories have been taken with more frequency. Approximately every six weeks we make an inventory.

Q: When you say that you share the office with another doctor does that mean that you also share staff.

A: No, we share physical space, expenses...

Q: But that staff that you described before, that is your staff?

A: That is my staff. It does not have to do anything with the other doctor.

Q: The waiting area is shared.

A: That is what we have in shared space, nothing else and there have not been any type of problem or conflict between patients or employees.

Q: The layout of the waiting area helps, was that the work of a designer or of the people that work with you.

A: The building was designed by me, my office was designed by me. From the first granite until the last. I designed the outside, I designed the inside and my wife decorated it, but all the furniture of my office is designed by me.

Q: And your reason for designing it in a particular way...

A: I wanted my patients to have quite a pleasant wait, that they have access to something that entertains them. I designed for me and I designed for them. I put televisions for the kids, programmed with programs adequate for children and in another area with programs for adults. Popular magazines are available as well as access and information on their medical conditions, such as hand-outs and pamphlets. The pamphlets discuss what you should know if you have glaucoma, diabetes, things that you should take care of. These are things that the patient thanks you for them and it does not cost me a cent. Since I moved into this office the amount of complaints have decreased, practically no one complains.

Q: They complained more before?

A: Yes, because the waiting room in the previous location was about a fifth of the size of the one I have now. There were not enough seats to accommodate the number of patients. Here I am very comfortable and apparently the patients also feel comfortable.

Q: Going back to an earlier question, this type of concern with the environment at the office of which you speak, is this part of the actions that you have taken to retain those patients or do you do that just to improve the environment...?

A: The only thing that I have not improved is the service to patients, because it continues being good. I see my patients and know that they are receiving a good medical service. I really know that what I did makes it more comfortable for patients waiting in the office. I see patients that travel one hour to get here and they want to be comfortable as they wait for me. I want to accelerate the pace of seeing patients and sometimes I am able to do so, but there are days that I am not able to. For example a patient may come with a piece of metal in an eye that is perforating the eye, and you do not realize it. He could have an ulcer that also has the potential of perforating the eye and if you do not give him the proper time he could have a hole in the

retina if that it is not detected on that day. If I do not give it the proper importance, if I do not search, if I do not take time with that patient, next week he could come with a horribly damaged retina. Do you understand me?

Q: So a patient in the waiting room does not necessarily realize why they have to wait...

A: Ah yes, and the secretary needs to explain to the patient: "look the Dr. is examining at this hour a series of emergencies". If you do not take the time by being objective, by being courteous, people get mad, people get into arguments. I do not believe that is a problem here because we have a peaceful environment.

Q: What process do you have, to evaluate whether something is providing results? For example, you mentioned that the complaints had lowered.

A: That is a subjective measure, not an objective one. It is very palpable. If you ask our employees they do say that since we are in this location people feel more comfortable. Do you know what also helps me a lot? There is a food business next to here, and many of my patients eat a sandwich and a refreshment there for two or three dollars. The times that I do not tolerate the hunger I eat a sandwich and a refreshment from there and I spend less than three dollars.

Q: That nearby eatery helps...

A: I was looking for positive things to help patients. Please note that I did not want to move from my previous location. I left because the owner of the previous locale forced me to move. I have not been sorry about changing locations, though.

Q: The process of having patients referred from other health professionals, is that typical in your type of practice?

A: Yes.

Q: The reverse is also true, you refer to other health professionals?

A: Yes, I refer to others. Within my colleagues I refer many cases, especially to the retinologists. I also refer to endocrinologist, neurologists, and pediatricians, among others.

Q: Once you decide to refer to another health professional, what is the process of referring a patient to physician A vs. B vs. C, besides the specialty, I suppose...

A: Look, I simply never specify to which specialist I am referring you to, because I believe that it is an action of the patient. I write "To endocrinologist", "To neuro-ophthalmologist", then the secretary tells the patient all the people that I have as source of referrals and their addresses. If the patient asks me: “Dr. do you have somebody in particular who you believe that could manage this case?” Then I can respond: " I have seen very good results of the work done by this person”. I do not take away merits from others. I only emphasize that person does a work of excellence, but my referral is for you to go to a specialist. The possibility to have a patient evaluated from A to Z in this area has improved. It is done quicker now. Before there were no facilities locally and the patient had to travel to distant locations to be examined ...

Q: There were no physical facilities or...

A: Facilities in order to make studies or diagnoses, now those diagnoses can be done locally in more or less the same time. I refer much less to other locations now, almost everything is done locally.

Q: The reverse question, do doctors that refer to you do so directly to you...

A: They refer to me, with my name and surname.

Q: And that is due to what?

A: I don't know, maybe in a medical congress they heard of any conference or presentation I made. Because, although you may get the image that I socialize a lot, I do not. I socialize because my wife mobilizes me, if she were here she will tell you that it is true. Otherwise I am a very quiet person that does not go out much...

Q: You do not understand that it is because you socialize excessively with the colleagues...

A: No, I attend the indispensable, activities of the medical association. I do not go to civic clubs to talk about my practice, etc. Other physicians evaluate you and the patients also check you out.

One of the better teachers that I had in my professional formation was a pediatrician that told me to let the patient speak, because when you let the patient speak, the diagnosis will be evident. If the patient is a kid, let the mother speak, do not hurry her, because she knows the diagnosis, she does not know that she knows it, but when she begins to explain what she has observed in that kid, she is you going to give you the clue to the diagnosis. And that advise touched me very deeply. When I see a patient that wants to speak, that has much to tell me, I let him go on, you know, I let him go! That is what helps in the clinical judgment, in the clinical eye. Why do doctors' fail so much? We fail because of the rush in which we try to see patients.

Q: And that rush is done for speed?

A: Sure

Q: To achieve volume?

A: Sure

Q: The health reform programme has not begun yet in this town but do you have patients of other towns where the health reform programme has been established? What impact, if any, has it had in your practice?

A: I have patients from the health reform programme and I understand that this programme is not going to be successful and I reaffirm that anywhere. When the health reform programme began there were doctors that wanted to market their services. I could mention to you ophthalmologists from this area that visited doctors in the towns where the health reform programme was in place so that they continue referring cases to them. They even tried, in some cases, to engage in some type of extra-official arrangement, you know. I tell you this because many patients mentioned that to me. When the health reform programme began in nearby zones I felt some of my patients withdrew from my practice, and I now am seeing all of them again under the health reform programme.

Q: Have they returned?

A: They have returned with the health reform programme. Many of these patients had private medical plans and changed that for the health reform programme in order to save some money (before they paid part of the cost of the private medical plan). These patients told me that they had not visited me under the health reform programme because it was necessary for the primary doctor to refer them as a family to me and that had taken some effort on their part.

Q: That sounds like they insisted in going to the primary doctor ...

A: Oh yes. I am not you going to tell you something you already know: this health reform programme is a system of health where they are putting the power at the hands of the least prepared (qualified) physician, the primary doctor.

Q: The primary physician has to see the patient first and then decides whether to refer the patient, when and to whom he refers a patient?

A: Since there is a set budget for services for a whole group of patients, the primary physician earns by not referring patients. How do you fix that?

Q: And the payment for referrals comes from the amount of capitation that the primary physician gets paid...

A: They find it difficult, because once you refer a case to me, if you retire it from me the only thing that they want me to write in the record is what I recommend. I do not do that, I write down a diagnostic impression, an assessment of recommendations, because the day that there is a problem, when they look for my written comments I want them to be able to say "but this ophthalmologist told you that this patient needed to be referred for such and such service". I do not want them to say, that doctor dispatched his patient in five minutes because the patient was of the health reform programme. With the patients of the health reform programme I take a longer time, more than with the ordinary patients. For the ordinary patients I put the diagnosis in the insurance form and sign it, and if they want the record in order to revise it they request it from me. That is not the case under the health reform programme where I prepare a report that clearly makes my position known so if that other colleagues plans to omit some of my recommendations, he will not be able to do so because I clearly spelled them. To do such detailed record keeping takes a longer time.

Q: You have talked about the health reform programme in the periphery and of the impact that it has already had. What will happen when the health reform programme is underway within this geographic area?

A: Well, we, the secondary physicians, are going to earn a lot less and the primary physician will earn more...The more prepared the doctor is the more he is in the hands of the primary physician and there could be a trend for internal arrangements between the groups: "Look, I am going to refer patients to you, but I want you to do an arrangement with me, because if not, I will not refer to you". And you know that this is happening. I will be the last to learn of this because I am not interested in listening to what is happening, but that is going to be a trend...The power is going to be in the hands of the primary doctor and that primary doctor is going to do what he desires. If he believes in you, you are going to receive patients, if he does not believe in you, less referred patients will arrive. Even if the same number of patients arrive, you are going to be earning much less than what you have been used to collect for your services. Because the health reform programme does not pay what other (private) medical plans pay you and the deductible which the patient pays to you is almost zero. The deductible is what you collect from the patient, sometimes a dollar or two dollars for patients from the health reform programme. If I see 20 patients one day, for example, I collect $40 of deductible payments whereas I used to earn $300 in a day from deductibles and if you consider the cost of my employees for a day, that leaves you.... I understand that physician practices, if that (health reform programme) comes to being, will need to make some re-arrangements and that the mega-corporations will have to fire personnel and many will need to make reductions in order to be more successful economically. Many patients are not going to receive the treatment that they want. If you are in the health reform programme and you should get a CT scan, do you know how much is left of the capitation of the primary doctor by having a CT scan done to you? And if 10 more patients also need to have a CT scan done? The health reform programme is not going to allow for that type of payment, never. The health reform programme has a positive

aspect- some people will have access to medical treatment for which they would have only dreamed about. That is true for people of some small towns that have never had a health plan and they are having it for the first time. But such a health reform programme is also going to be open the possibility for a patient to be told : "you are all right", in order to avoid some advanced studies, when in fact he could have an aneurysm that will not be detected by other means.

Q: Any another comment that you would like to add?

A: Puerto Ricans are not dumb. The Puerto Rican people are smart, were are sharp. No matter how you put it, it will take a lot to fool a Puerto Rican.

CASE 5

The type of practice is solo, located in the western area for a period of four years. The specialty is internal medicine.

Q: How many years have you been in the private practice?

A: The private practice is only four years old because I worked in internal medicine at the Regional Medical Center until four years ago. I had always been at the Regional Medical Center in the Department of Internal Medicine and in the intensive care unit of coronary and it has been only four years since I am in private practice.

Q: Before that, upon finishing medicine and before establishing your private practice four years ago, for how many years have you been a physician.

A: As a specialist in internal medicine I have approximately thirteen years of experience and in the private practice four.

Q: All of those four years in this location?

A: Yes, in this place.

Q: In this same locale and in solo practice.

A: Yes, always by myself.

Q: How many people besides you work here in the practice?

A: My secretary and sometimes I have part-time employees for periods of time, depending on the month.

Q: What type of work your full-time employee performs?

A: Secretarial. She is an auxiliary nurse. Not a graduate nurse. She does a bit of everything. I basically do the codification because I prefer to do that myself.

Q: Codification of the medical plans?

A: Yes, codes of medical plans. I am involved in that because previously I belonged to a corporation of internal medicine in another town, and the secretaries made mistakes so often, again and again, that I decided to get myself completely involved in the process and I learned so much about it that now I do it.

Q: Most of the problems of collecting late from the medical plans, of not being able to collect are...

A: Either a secretarial mistake or the doctor does not give the work to the secretary so that she finishes the paper work before the deadlines, because basically all the medical plans have certain deadlines that need to be followed.

Q: You have a very important reason for it to be done correctly...

A: The fact is it needs to done correctly in order to avoid having paperwork returned or rejected by the plans. We do not have returns because I get involved, and the doubts that I have I consult with a some of the employees of a hospital. Because of this we practically do not have returns.

Q: It is an aspect of the practice in which you get involved...

A: Yes, and many doctors do so, in order to avoid late payments, because all the medical plans take a long time to pay. They say in their literature that it takes 15 days to send the payments, but a month can go by before it is sent to the physician.

Q: From the point of view of the current or potential patient, how does that patient find out that this practice exists?

A: Well, we have many ways: referrals from other specialists or generalists, I advertise in the local regional newspaper, I am listed in the yellow pages of the telephone book, and the verbal communication of patient to patient or of patient to any relative or to any friend that they refer to me.

Q: A patient that already visited your practice?

A: Yes, that patient recommends me with any relative, neighbour or friend and then they visit me.

Q: In the case of advertising in the local regional newspaper or the yellow pages, who makes the decision to advertise or not to advertise?

A: In my case, I decided to announce my practice four years ago, because I had never been in private practice. I was quite well-known in the Regional Medical Center, but the people in the street, they did not know about me. The local regional newspaper covers much of this area and I realised, by asking the patients, that most of the patients come more because of the newspaper ad than because of the listing in the yellows pages. Probably it is easier for the patient to evaluate an ad in the newspaper than to look for my name in the telephone guide.

Q: They tell you this?

A: I have always been curious to learn about how the patient comes to the practice so I always ask them.

Q: When you say that you ask the patient, is it in the form that they complete or when...?

A: I ask them directly if they are referred by another doctor, and they tell me yes or no. If it is not a referral from another doctor I ask if any relative brought him. If that is not the case, I ask how he learned of the practice: if he saw the sign at the door, or if he saw the advertisement. A high percentage of the visits is because of the advertisement in the local newspaper.

Q: If we are going to enumerate the most important source of patients for you...

A: First is the advertisement in the local newspaper, second referred by family, third referred by other doctors and last is the listing in the telephone guide (yellow pages).

Q: You advertised your practice when you began, four years ago. Do you continue advertising?

A: I continue advertising because I continue receiving patients as a result of the newspaper advertisement, and in order to have some expenses to deduct from the income tax form. Instead of giving the money to the government, I give it to other people that work for it, and I get to deduct the expense from my taxes.

Q: It seems that you are very up to date in terms of the income tax matters...

A: Sure, it is necessary to learn a little of everything.

Q: The decision to be listed in the yellow pages, where does that decision came from?

A: They made the promotion to me over the telephone.

Q: They called you ?

A: Yes, I began to test it for one year and I plan to drop it because, truly speaking, very few people make reference of the phone guide. I plan to continue with the advertisement in the local newspaper, definitively, and maybe do one more year of listing in the yellow pages.

Q: We already talked about how the patient learns, and arrives here, the reasons in the order of priority. Once they visit for the first time,, what motivates them to continue being patients, to continue coming here versus going to another place.

A: It seems that they are satisfied with the service. I explain thoroughly about their illness, their medications, complications of the medications and required diets, if pertinent. I even have patients that I have said to them that they have an open appointment, that they can visit when they believe that it is necessary. The patients appear to be satisfied with the service.

Q: For a patient, what does it mean be to be satisfied with the service? In your appreciation.

A: Well, normally, the patient cares a lot that the doctor explains to them what type of illness they have, the complications they have. That they talk about the medications, that the physician explains calmly how to take the medications, and do diets, and exercises.

Q: You dedicate your time...

A: Yes, it is necessary to dedicate time. Almost always I spend between 20 to 30 minutes with a patient, even with follow-up patients. It is necessary to ask them many things because sometimes the patients forget to tell you. The doctor has to be aware of certain details.

Q: Is that because of your type of specialty?

A: I always have done so, but yes, it has to do with the specialty. The type of practise deals with heart illnesses, hypertension, and diabetes, and these patients could have many types of long term complications, which is necessary to try to avoid. The more informed the patient is, the more he is going to take care of himself. If I say to you that you hurt yourself by smoking, you don't understand the message. However, if I begin to show you this graphs and I begin to explain what damages that cigarette produces, it is possible that you understand and

you try to abandon a toxic habit. It is necessary to take time with patients with any chronic illness that could develop into a long term health risk situation.

Q: And that time you invest with the patients helps him to...

A: To continue well, to improve, he stays better.

Q: What formal or informal activity do you undertake so that do they continue coming to your practice?

A: Sometimes we show them educational videos...

Q: In the waiting room?

A: Yes, in the waiting room. We have also programmed two or three ambulatory clinics of cholesterol and diabetes.

Q: What it is that of ambulatory clinics of...?

A: They come to do destrotix tests and they bring family or friends for the tests of destrotix in order to see if they are diabetics...

Q: Is that done here?

A: Yes, it could be sponsored by a pharmaceutical company. It is done mainly in order to provide information to patients.

Q: That would be an activity done together with "X" pharmaceutical company...

A: Yes, exactly.

Q: Where the pharmaceutical company provides certain...

A: Certain pamphlets, they could provide lancets, because I already have the machine of destrotix, and that way we orient people. And those people that we believe could be diabetics, are sent for a more advanced study, almost always for a blood sample.

Q: And how does the patient know that there is a clinic?

A: Well, we have advertised it in the newspaper and we provide verbal information to them when they visit with us so they can bring other people, neighbours or family.

Q: Is the patient paying for such a "clinic"?

A: No, he is not paying when they are ambulatory clinics of screening because the supplier of the pharmaceutical company is almost always present, the one that is giving the service, and then you are only supervising and you detect those patients that could be really sick persons.

Q: The pharmaceutical company is making the tests...

A: Yes, you receive help that day, their employees are not present, but they facilitate for you to give the service to the patient.

Q: What is the process of decision making in your practice of all these things: if a clinic is performed, if you put on an advertisement, if you get listed in the yellow pages, if you go off the yellow pages? Is it you?

A: Yes, I am the one that makes any decision.

Q: Does your assistant provide you with input on this type of things...?

A: I have very good secretary, she has a very good relationship with my patients, sometimes she makes me aware of many details that most of the secretaries are not. Sometimes she gives me a hint of many patients with uncontrolled diabetes that do not follow the diet well. Then we show them videos about the resultant complications so that they see; because it is more dramatic for that type of patient that is not very cooperative, to show them the long term effect, what is going to happen and that makes them think. Then they worry more for their health on the long term and they take more care. My secretary has direct contact with the patients. For example if the patient has any type of economic problem, she comes and tells me "you know, so-and-so was telling me that he can not pay" and I say: "let him pay when he is able to." There is a good relationship between her and me, because we are friends, and in a professional level because we get along very well. As I told you, she is my right hand, not just because she is the only employee, but because she is really competent...

Q: Tell me about the referred patient, how does that work?

A: The referrals are patients for evaluations prior to an operation. Surgeons or any doctor that performs invasive procedures, such as ophthalmologists and urologists, want to know the patient's cardiovascular status, and they refer them to us for that evaluation. One decides the category of surgical risk of the patient for the particular procedure, depending on the type of anesthesia to be administered and previous illnesses of the patient that can affect their condition for surgery.

Q: Is that a type of referral that you get?

A: That is a type of referral, unfortunately it is the most common. There are many medical generalists that keep very complicated patients to avoid loosing the patient. That is wrong because a patient so complicated under a doctor that is not sufficiently prepared to handle the

situation ends referring the patient once the condition has worsened. Under our care those patients could have been sparred of the worsening of the condition if the referral occurred earlier.

Q: From the perspective of the other doctor, the surgeon that is going to refer, what criteria does that doctor has in order to refer a patient specifically to you versus to another physician?

A: They are doctors that know your professional level or merely by reference from patients. They decide to refer them to a particular doctor once they establish that the patient in not a patient of a medical internist and that the secondary doctor is the medical surgeon. The surgeon is not supposed to refer to another internist in that case, although there are doctors that refer to those physicians that they know or to relatives, but that is not supposed to happen, that would be unethical.

Q: But a possibility that could occur is that you refer in other cases to other doctors for any family relationship not for...

A: Yes, it can happen, but since I am not from this geographic area, and I don't have relatives here, other than my children, that is not my case.

Q: But in other cases it could be...

A: Yes, that they are cousins, they are siblings or they studied together, a relationship of friendship, or a family relationship...

Q: We are going to ask the opposite question: when you refer, you refer to...

A: Yes, I refer many.

Q: What approaches you use in order to refer to physician X?

A: Depending on the illness of the patient that needs another type of service that I could not offer, mainly invasive procedures. I refer to either a gastroenterologist, urologist, neurologist, a surgeon. Logically, I could not keep that patient because if I could not offer a solution to that problem, I could not keep the patient. The patient has to be referred to a person with higher capacity or knowledge on the problem that is affecting him.

Q: In that case a criteria is that if it is a problem of the type that requires for an urologist, you refer to a urologist.

A: Yes, to a sub-specialist...

Q: But in that case, do you refer to a particular or urologist...?

A: No, I first ask the patient if he has any doctor that is assisting him on that, if he already has a doctor, then I do not change it. If he does not know anybody or does not have specific preference for someone, then I make the decision of sending it to one of several physicians, I am not "married" to a specific one.

Q: But you do not refer to the whole universe of specialists...

A: Not to the whole universe, I also consider in what place the patient lives, because if he lives in Mayagüez, I am not sending him to San Juan, unless the patient is requesting me to do so. One has to look for the patient's comfort because it is necessary to understand the patients' access for transportation to the other physician. That is to say it is necessary to facilitate and look for accessibility of the patient towards the provider of a professional service.

Q: An approach for referring a patient to a specialist in particular could be the location, besides the specialty...

A: Yes, it has a lot of weight, the location is important. The capacity, mainly economical, that the patient has in order to arrive to that doctor needs to be considered. Because if he is a patient that does not have a vehicle, that travels in public transit, it is necessary for you to look at how to ease the patient's needs. If the patient does not visit the other physician, if he is going to stay in his house because he does not have money in order to pay for transportation, then we do not achieve our goal. Patients do stay in their homes, unfortunately, because the medical-indigent population in Puerto Rico is very high and only a low percentage of them has a medical plan. Then there are people, mainly the senior citizens- which are my highest patient population, that survive on a public assistance check of $200. With what money are they going to be paying their medicines and all the rest? It is necessary to look out for them, if they can walk I refer them to somebody that is located close by and do not send them to another city where I know they are not going to go.

Q: You say that most of the patients are the elderly...

A: Yes, it should not be so, but unfortunately for internal medicine in Puerto Rico, people visit the physician once they have got an illness, when they are older people...

Q: They waited for help until they already...

A: Yes, either because the generalist that assisted them did not refer them earlier or because they were not provided with information or medical education, that is to say there is no medical education for preventive medicine. In Puerto Rico very little information is available to the population in general. It is not like in the United States where they give a lot education of preventive medicine via television so that people learn and they know what kind of help to look for. The people, many times because they don't have the education and they don't have facilities

for learning, arrive when they already have an advanced illness, chronic, with secondary effects, because the young people "don't have time" to visit the doctor. They have to feel very ill in order to be looking for help, they are always busy working or studying. And they sometimes are diabetics, they sometimes are hyper tense that believe that because they have forty or less than forty years nothing is going to happen to them. A heart attack can happen to a 30 year old as well as to one of 100. They do not understand it, they believe that because they have 30 or 40 years, nothing will happen to them and they think all their problems are just related to stress...

Q: Then they believe that the pain that they have is product of the stress, but stress also kills...

A: Of course, and it makes many conditions worse.

Q: A while ago you told me that you are the one that makes the decision and explained to me what was the role of your assistant. Once the decision is taken, like continue placing the advertisement in the local newspaper or the listing in the yellow pages, who implements the decision, who does that?

A: Normally the notifications are given by me, either verbally or in writing, regarding the decision that I took...

Q: Once the decision to advertise in the local newspaper is made...

A: Well it is through my secretary, but almost every time by a letter, they are called and then they are notified by mail...

Q: In order to confirm...

A: Yes.

Q: Your process of evaluation in all this, you have evaluated that the advertisement in the local newspaper has worked because the people tell you...

A: It should be done double blinded, what I think and what the patient thinks, in writing, but I have not done that yet. The evaluation is based on my appreciation. I personally notice when the patient arrives and the following week brings me family or neighbours, and that indicates to me that they are satisfied with the service, its dependability, but the evaluation should be done in writing.

Q: It is not so formal of an evaluation but you make it constantly...you follow up on the situation.

A: Yes, of course.

Q: It is not an accident that from time to time you ask...

A: No, it is almost a routine. I am interested in knowing how the patient arrives here, because that gives me an idea of how I am doing and if the means that I am using in order to promote myself are acceptable or not.

Q: If results are being obtained...

A: Exactly.

Q: What you do you understand by marketing?

A: Well marketing, is almost always like promoting some services. This takes place via different methods, basically print and television.

Q: Do you market your practice?

A: Only on newspapers, nothing else.

Q: The decision of locating the practise in this city first and second in this place in particular?

A: It had to locate specifically here because my personal life is in this city and although I have grown-up children, it is necessary to dedicate time to them. I had the opportunity to locate in other towns where I was quite well known, I almost located my office in another town and I had several offers of cardiologists and other sub-specialists that wanted me to go into private practise with them. I decided in the end to remain here because of the private hospital facilities in this area, including the tertiary center, that is the Regional Medical Center that offers much support to the doctor when one has a complicated patient.

Q: There is certain infrastructure...

A: Exactly, more available here that in other places, that in spite of the fact that in other places there are public hospitals that work ok, they do not have the quality of service that one wants. One should look for the quality, for the better service to the patient and here I had the infrastructure, and in other towns of the Island I did not have that infrastructure.

Q: I understand the reason for locating in this city, now the reason for this street in specific...

A: The office had to be located on the first floor, unless there was an elevator, because many of my patients are very old people with serious illnesses, that have difficulty using stairways, and I have to facilitate the service to them.

Q: Any another reason?

A: The good location of the place, it is accessible, it is near the public transportation. I have thought of other places, but I have to think if my patients are going to be able to get to those places. Because there are many offices for sale available for physicians which are very well located for the doctor, but we have to think about the patients. The offices under construction in front of the Regional Medical Center, they have called me many times offering several facilities

that are very good for me and for the patient that has private transportation it is also very good because there is parking available. But what about the patient that does not have transportation? That for me is a high percentage of my patients. I have patients that come from many towns of the Island in spite of the fact that I have referred them to other doctors of their towns, they continue coming here and if they come them here I can not throw them away...

Q: And the reason why they insist in visiting you?

A: Because they are satisfied.

Q: Do they tell you, do they communicate this to you?

A: Well almost all of my patients are very expressive, full of affection, kissing and hugging you... Maybe I'll buy office space here in front of the public transit terminal.

Q: Is there a market for so many physician offices, because those two buildings in front of the Regional Medical Center is office space for doctors only...

A: Supposedly for the population level of the area there are too many doctors, definitively. But since there is people that do not mind traveling they continue showing up from other towns in the region. What happens is that a lot people from other towns come here in order to be treated. We are going to see what happens when the health reform programme arrives to this area.

Q: What can you tell me about the health reform programme? It has not arrived here yet?

A: It has not arrived. There has been some resistance from the doctors, not for the concept of health reform but for the middlemen involved in the reform programme. One is going to lend a service practically for free, as the benefits go to the intermediary and the patient is going to have a partial benefit. The quality of the service is bad, because basically the health reform

programme is based on medical generalists that makes the referrals. But the generalist has a system of capitation that means that he is going to receive certain fixed amount of money for each patient that signs up with him and out of that amount they have to pay medical laboratories, medications and refer to sub-specialists. The more the use of those services, the less is going to be left of the capitation of that patient for the physician and unfortunately there are many people that think first about their pockets and then of the patient.

Q: They refer the less possible...

A: They refer the less possible and they keep extremely complicated patients that are not being evaluated properly nor are laboratory test done, because the laboratories require more money. The other day there was an incredible thing what I witnessed. I received a 40 year old patient whose womb and ovaries had been removed 10 years ago, diabetic since she was 20, all bent because of the osteoporosis, the blood pressure extremely high as well as the diabetes and they were giving her medications that had been used 20 years ago which no one is using today. The reason?, because the lady was in the health reform programme. They did not want to spend, they did not provide give her the hormonal supplement, they did not prescribe the best medications for her condition, advanced laboratory studies are not done, only the basic laboratory studies were performed for this complicated patient. She responded to the advertisement I placed in the local newspaper and came here because she felt very ill, do you understand? And unfortunately, that demonstrates to us what is going to happen when the health reform programme is in place here.

Q: In that case the person is of another town that has the health reform programme in place...

A: Yes, of another town, yes.

Q: And in a given moment the patient comes here...

A: Yes, but I have many people from the health reform programme that come and pay here, that do not visit me with the frequency they should, but they come...

Q: How is it that they have the benefits of the health reform programme and yet visit and pay you?

A: They use the health reform programme because they know that it is granted to them, but they also look for another type of quality of service and they compensate the "deficit" that the health reform programme has by looking for more help later on and paying for that.

Q: Does that mean doctor, that you have already been impacted by the health reform?

A: No, because basically patients from nearby towns where the health reform programme is in place have continued coming here.

Q: Patients from towns that have the health reform programme continue coming to see you with the same frequency.

A: Yes, they visit me but not with less frequency.

Q: Maybe that patient goes one month there and one month here...

A: Exactly.

Q: And when the health reform programme is implemented here, what do you believe would happen to you?

A: All the doctors are going to participate, we could not say that we are not. The problem continues being until what point is the primary doctor going to refer the patients to a specialist. Up to where he is going to care about the effects of that capitation in order to give a service

adapted to the patient. The most probable scenario is that the same the results obtained in the other towns will occur here.

Q: Within the health reform programme you could he catalogued as a primary and as secondary doctor?

A: We, the internists, are considered primary.

Q: Does that mean that in order for the patient to come here, they would have to come referred?

A: They have to come referred by the generalist that has the contract with the health reform. Here the highest probability is that the internists unite to create a company were we face the risks as well as the benefits.

Q: And being listed as a primary physician or as a secondary physician also.

A: Yes, as the two, depending on what IPA (IPA refers to the health reform unit) applies here.

Q: You have one of the few specialties that can operate as both primary and secondary physician.

A: Yes, we could be either of the two, direct suppliers under the health reform as well as suppliers of service by payments ... from the patient...pay for service.

Q: Is there something that I have forgotten, that you think is very important or that you want to add or delete from of what we have spoken?

A: Perhaps the most important thing is the education of the patient. The Municipality and the Mayor have given much importance to the recreational part of the population and have constructed recreation facilities. These sites are ideal for the middle and lower class that does not have the ease of going to expensive places for amusement. They should also take advantage

of those public places where so much people go in order to give another type of education to the patient, mainly of preventive medicine. Also in the shopping malls where certain companies have sponsored these initiatives, but the Municipality could coordinate that also...

Q: Something more massive, but organized.

A: Yes, more organized and not as expensive as going to the television. Perhaps they could announce a free or educational clinic by T.V. explaining what the clinic is for. They could conduct these educational clinics in specific places using the same personnel that they already have.

Q: Have you advertised in television at any time?

A: No.

Q: Have you contemplated such possibility?

A: No.

Q: Why?

A: Not just because of the cost, I don't know. I understand that it is not worth advertising yourself, the important thing is to provide an adequate service to the patient, that is the best promotion, a happy patient. After they are happy, they come back.

Q: But you continue using ads in the local newspaper...

A: I was going to discontinue the ad but I figured that in order to have an additional expense to include in the income tax report, since I don't have so much expenses...

Q: Do you see this as an expense...

A: No because it is published biweekly, the advertisements are biweekly and are not expensive and I have had much coverage. I am amazed every time that I ask, hoping that the patient will say that they were passing by in the car and saw the sign or something else, but they do not, they say “I saw your ad in the local newspaper”, and I say “well, it works”.

Q: Have you also advertised in the other local newspaper?

A: Never.

Q: And any reason why you have never been advertised there?

A: No, since the patients tell me that they read one of the local newspapers, and not the other I do not advertise in the other newspaper. But I do not believe that I will be advertising for more than one year. Not because of the cost, I never thought that I would ever advertise myself, but...

Q: You never thought of advertising, tell me about that?

A: I don't like it that much.

Q: No?

A: No.

Q: Because of your original comments I had the opposite impression.

A: The yellow pages of the telephone book appear more attractive to me than the newspaper. But results have been favorable for the newspaper.

Q: And what scares you and did not make you feel at ease about advertising in the newspaper?

A: I do not know, one thinks that the doctor should not be advertising himself, that it should be based on the service basically, one should be known for the services, not for advertisements. But nowadays, if one does not advertise, you are not noticed.

Q: However, there are some doctors that advertise repeatedly, as you do, and there are others that never advertise.

A: Exactly.

Q: And in some of the interviews that I have had some of the physicians made it clear they have never advertised and do not plan to do so.

A: If we go to the ethical part of medicine, satisfaction of the patient towards the doctor is supposed to be the driving force and that it should not be necessary to commercialise. But today it is different. The question is up to what level will you get into advertising: In my case I am sure that I would never get to advertise in television. For that is to put the practise of the medicine at a one hundred percent commercial level. I know that practising medicine can not be done for free, neither is it done as a mission. The economic part, yes it is important, but it should not be the main issue. At least that is my personal opinion about practising medicine. It is not that one is going to give the service completely for free but you should keep more in mind other things and to get to advertise in television I see as one hundred percent commercial. The advertisement in the newspaper I also see it as commercial, but maybe due to the fact that the ad is biweekly, and I hardly read the newspaper...

Q: You say that you would not advertise in television, but do you believe that the moment will arrive in which that is more common, between colleagues.

A: Yes, it could be.

Q: I have seen certain advertisements of physicians in television...

A: Yes, I have seen them also, but of internal medicine not so much, they practically have been of pediatricians and another type of service. Let's see what happens.

Q: Will the health reform programme push that in one direction or in another?

A: No, on the contrary what happens is that with the health reform the patient is guided directly to a specific place for the services. The patient can not go to any place, he has to go directly to the corresponding IPA (health reform contractor), you need to have an authorization so that the service can be covered (by the health reform programme). You can not use an emergency room nor hospitals without prior authorization, even in an emergency. I mean it, sincerely, that the health reform programme is been going to become very cumbersome. The population has to learn how to use the medical services, mainly the prepaid medical plans. I do not know if it is characteristic of the Puerto Rican population or it is a world characteristic that the people use a medical plan for everything, very inadequately, and for that reason there are plans that could not subsist and they have ended in bankruptcy, and I do not believe the health reform programme to be the exception. Because I have received so many confidences from the medical generalists regarding the patient population that they have in each IPA (health reform contractor) or in each clinic corresponding to a specific IPA regarding people that visit weekly for assistance of all in the family, regardless of whether they are sick or not. If they have a sick baby, they take all the other children "just in case" since they are there, "let's take them all." And the same is going to happen.

Q: That is true with the private medical plans for the reasons...

A: For the reasons I just told you, let us see how long does the health reform programme subsists!

CASE 6

Q: How many years have you been in the practise?

A: As doctor or as a surgeon? I am a doctor since1988 and a surgeon since 1993.

Q: Is this a private practice, "solo" type?

A: Private practice and "solo" too.

Q: Since when are you in "solo practice"?

A: In fact, here in this office I have been for a month and half, but I have been in solo practice for two years.

Q: How many employees do you have here?

A: Three employees, one full-time and two of them part-time.

Q: What are their functions?

A: The secretary/receptionist is full-time. There is a nurse and a cleaning employee which are part-time. The nurse is like half the total time and the cleaning guy is like a fourth of the time or something like that.

Q: And your specialty is surgery?

A: Yes, surgery, intensive.

Q: Doctor, how are patients informed, how do they learn of your practice?

A: There are several ways, one is through advertisements in the newspaper that I place, the other method is through a series of radio programs, and a program in television that we will

have soon. That is what we are doing. The other method of reaching patients is through groups. We have contracts with groups of doctors that in turn have contracts to provide health services to institutions, to groups of employees. We have signed contracts in order to give services to some groups that are exclusive providers of these services- those are controlled groups.

Q: That is to say, for example, that a labour union that has their own plan...

A: Exactly, unions that have their own medical plan and we have contracts with them...

Q: Is that contract directly with the union?

A: Exactly.

Q: Or with the provider...

A: With the union. Other contracts are through CESCA groups, we have contracts with CESCA groups of the hospital, that includes a private hospital, five medical plans of several groups. The other is through another private hospital that includes the teacher association, Plan Care, and another new group: Premedic which is United Health Care, and we have contracts with the health reform programme.

Q: Those are contracts that the patient finds out about you because of the medical plan that he uses?

A: Because you are a provider to that group, I provide very specialized services to several groups and I, for that reason, generate those contracts.

Q: And you negotiate that yourself with the medical plan or with the group?

A: I negotiate them.

Q: You told me of the television program, did you say we?

A: Ah, well, my wife and I, that is to say that we are the ones who run the office.

Q: Is your wife involved in the practice?

A: My wife is the one that helps me in the administration of the office.

Q: She is not any of the people that you mentioned when you listed the employees?

A: Not any of those people.

Q: Is she full-time or part-time?

A: She is like a part-time. She comes and checks the administrative part.

Q: She does that administrative part for any reason in particular, besides being your wife, did she study that?

A: No, she likes that type of administrative work.

Q: You talked to me about the advertisements, can you tell to me a little bit of the process, that is to say, who decides I am going to place an advertisement here, I am going to put it there, in the case of your practice?

A: I decide that.

Q: And what criteria is mostly used for determining the type of announcement you develop, the a specific size, or making a television or a radio program?

A: Lately, the advertisements had more emphasis with the change of office. We already had our practice developing and knew we were going to have a new office, this one. We were going to begin and develop the advertisements as part of the marketing of the office in order to avoid

losing those patients, because besides communicating with them by phone, sending letters and communications with colleagues, we also wanted to communicate via the newspaper.

Q: At the moment of changing locations, you sent letters to all patients...?

A: It was communicated by phone, "we are moving", plus the advertisements in the newspaper.

Q: You told me also about communication with the colleagues, what type of communication?

A: The communication, we can say, has been direct. We have a pattern of referring that keeps us communicated, I communicate with my colleagues directly, I gave them letters, cards and they had been called by phone too. It has turned out all right.

Q: Regular communication with them. You told them:: "look from such a date on I am going to be in such location...

A: Exactly, and they also received their letters by mail.

Q: To all the colleagues or just to...?

A: Those that in that moment were referring patients.

Q: Why did you move?

A: Well I moved, because the practice... I have been in two offices, in the first there were two surgeons and in the second there were two surgeons also, besides me, and the direction of the practice, to my understanding, the direction where they were going is very different from my goal and so I decided to establish a "solo" practice.

Q: In that previous practice you shared the practice with more than one doctor?.

A: Well, what we shared were the office expenses, we did not share patients, we were sharing some expenses, etc. but that limited the potential of the practice...

Q: It was located in the same place but you divided expenses...

A: At the end of the month we divided expenses.

Q: But if the patients were yours, you had your own secretary/receptionist.

A: The operational expenses were shared, but in fact the patients were mine, they were mine, if no one came to see me I had no patients.

Q: When you say that you did not agree with the direction of the practice, in what direction do you want to take your practice?

A: Well, in the number one direction, in the direction of marketing. With the changes that are taking place in medicine, you have to be very aggressive. When I studied medicine, you set up your office and people went to you because you were good, because you were a good doctor. That is not happening any longer. People go to you because they have a health card that they bought or that a group bought and those people go to receive a service, whether it is good or bad. That is reality. And in the health reform programme that is reality. The medical plans have their contract with a surgeon at a price and that is where the patients that have that medical plan go to.

Q: And the other physicians....

A: No, they had a limited vision to all of this and I do not agree with that. I believe that in a practice you have to be very flexible willing to diversify your practice in such a way that you maintain patients' volume, a volume of work, so that you are successful. You have to adapt

yourself with the times. And the first thing that it is necessary to adapt to is with this matter of the health reform programme and with the changes that are related to the mentality of "managed care", that mentality that now every one is falling in love with here, while there are others that are already divorcing from that. In Europe there are people very upset with that, in United States there are people that do not want to know about managed care, in California even the Critical Care is based on managed care. So then you have to go adapt yourself to that type of practice. And that type of practice is very different from the private practice that we had. Your control of costs is different, you have to know how much is spent in your office, to the penny. In those other medical practices there was no control of costs. How are you going to set an office in Puerto Rico like that? You have to know how much it costs you to see a patient per hour. If you do not know, you can not make negotiations. Other colleagues do not agree. You have to plan you practice, you have to diversify it, and that requires being more aggressive and making the most efficient practice you can; so that you need to maximize the time that you spend in the office, the time that you spend in operation rooms, you need to maximize it. And you need to have your practice well diversified because if you are a surgeon there are days when you need to have a lot of input in order to maintain the practice alive.

Q: When you say diversified, and given the telephone conversation that you just had, I understand that for that reason you go to several places, you are in several hospitals...

A: I go to all hospitals in the area and I offer different types of services, within surgery. The diversification consists in that I work the general surgery; within general surgery, I work with very high risk patients and I also provide my services as an intensivist, that is an area that is still in low demand here. There are cardiologists that are intensivists, there are some neumologists, that role is not clearly seen yet. There is another area that I exploit: very complicated patients that nobody wants to assist and those are the patients I am trained to manage. The "extremely complicated cases" are my specialty, those that nobody wants. The

reason?, Because that is marketing, you know. The easy case, that of a patient that is less than 20 years old, to take out a gallbladder, even a resident can do that, anybody can operate on them. But the very complex cases: renal failure, breathing failure, bleedings, those nobody wants them. So we feature the whole range of the general surgery plus the "critical care" or intensive, and that provides us a better way of doing better marketing for the practice. Right now I have been named head of the intensive care section of a private hospital, and there we go, because that is a part of the practice that we are going to develop. Little by little, while the people get used to. Because the surgeon in this area, is the one that only operates, but we are going to bring to the market the surgeon that operates on you, that can deal with you in intensive; it is difficult to do that, but it can be done. And that is what I have done, diversified the practice and I do certain areas of oncology; not that I do everything like a "Jack of all trades", but that is an area where I have good experience, in oncology, I do that. I deal with traumas, with intensive and I exploit in the best possible way what I am able to, I maximize each...

Q: If you do only one of those things and nothing else, the practice would not be growing, it would be limited.

A: Not really, in this zone there are like thirty surgeons.

Q: So that is a new function of a new surgeon?

A: Exactly. You have so much people competing for a pool of patients, there is a great number of surgeons that have to bill for their practice. So the more surgeons there are, the more procedures that are done if the limited pool of patients does not grow as quickly as the number of surgeons in the area grows. Because if you are devoted to seeing just the cases that everybody wants to see, you are not going to survive. You have to take the patients that

nobody takes, you have to take the cases that nobody takes, to allow you to have a growing practice where you could solidify...

Q: In your case, you are obviously a young person, recently graduated, relatively speaking, and most of those 30 surgeons have been practising for years...

A: The majority have been around a few years, there are some surgeons that already have been around for 30 years and they are not looking forward to retirement.

Q: That way of determining how to develop the practice, would you say that it has to do with the fact that you are beginning your practice, does it has to do with the fact that other practises have been established for many years, and that in a certain way demands for you to look for another way of making it...

A: What happens is that now the patients are already captured, according to the "managed care" principle, patients are captured as part of a group and are referred to whomever the group wants. You have to be very aggressive, you have to make a contract with that group.

Q: In your case, are you a secondary physician?

A: Exactly.

Q: And almost every patient comes to you from referrals?

A: Exactly.

Q: Because of the health reform programme?

A: And because of other groups of "managed care" operate like that also.

Q: Because your patients in a great measure are referred, you have to see that there are many sources of referrals?

A: Exactly, there are many patients that have private medical plans that allow them to select the physician (free selection), so I attack them directly with several methods of marketing, but I also have to attack groups/entities, those that have captured patients.

Q: When it is free selection you go directly to the patient, you let them know that you are there for them.

A: Exactly.

Q: For the other patients you go after the entity that in a given moment would refer here.

A: Exactly.

Q: With different strategies?

A: Yes, this is very dynamic.

Q: And did they teach you that in the School of Medicine? That part?

A: No, that I learned. If you come to see that has been multi-factorial. When you finish the School of Medicine, you do not have an idea, neither when you finish the residence. Where I learned this was during my fellowship, because I had the luck that my boss was an expert in marketing, that man sold himself...

Q: Your boss, means the physician.

A: My boss, the doctor, the programme director, that man was a star. That gentleman had an ability to get contracts and in regards to marketing, he was a star. Yesterday he called me in

order to offer me work: "look I have achieved such a thing, I am going to have such a contract and I need you.

Q: And that is here in Puerto Rico?

A: No, in New Jersey, my program director is a five star general. He has an aggressive attitude, the attitude of giving a good service, a service of quality and at the same time to sell, sell the image, sell the service and offer it better than others.

Q: And how do they offer a better service than the others?

A: Well what he has done, as I see it, is that he gives a service of quality, of excellence, and he shows his results: "Such and such thing is going to be done, the costs are such, it can be cheaper for you". Well, it is very interesting the way in which he develops the practice; I learned a lot from him.

Q: He shows those results to the patient or to the medical plan?

A: To the plan. Almost all the negotiations are with the plans and with the hospitals.

Q: He tells the plan: "look, with me less patients die, and it costs you less..."

A: It is cheaper and I can show you in these figures...That is his strategy and we have tried to apply a little bit of that mentality that has worked out fine, you know, a very aggressive person...

Q: And the medical plans like that?

A: The private plans here do not have that mentality yet, the people that are in "managed care" are beginning to look for ways of providing a good service at a price that is better, at the cheapest price. The health reform programme is still a little bit indifferent, they like to look for

the cheapest things but it depends on the group that administers the programme in a given area. There are groups that want everything to go just right, because there are so many groups, that the one that gives you the cheapest offer that is the one to which you sell the service. That is to say that there are people that are already beginning to think like that, the private medical plans have not done so yet and the hospitals are moving in that direction even slower.

Q: And why is that so slow?

A: I do not understand. Where I trained it was very important for the hospital that the doctor that provides the service would be cheaper to the hospital whilst providing better results. When I trained, everything had to turn out well, it was an obsession with providing the service in a proper manner. I trained my first year of trauma and as the patient came through the door relatives were taken into a room where a representative of the hospital explained all that was happening.

Q: There was good communication with the relatives...

A: Boy!, the people were charmed even if the relative died. It is necessary to have communication. Here, that has not developed in that way, it is a little bit more difficult, but we are evolving toward that direction.

Q: But do you see it like a tendency in the future?

A: Yes, I see it like a tendency, there are people that are beginning to talk about that already.

Q: You have mentioned a lot the word marketing, what is your definition of marketing?

A: Well, marketing is to make available a service that satisfies a consumer, to provide it in a way that (the consumer) is satisfied. You are not just giving a service. I understand that if I provide a service of surgery, the patient has to come out of the intervention well, he has to

remain satisfied with the results: The service in general is supposed to be so that the patient always knows that here in this office he is to be assisted, he is not going to be left waiting on the telephone, he is not going to be left 10 hours there in the waiting room. If during a weekend, any problem arises, that you can locate me. For me that is the best way of giving reference to a patient, so when they leave, they know that they can come here, they are going to be attended, we are going to solve their problem and that is what they are going to transmit to other hospitals, to the other patients that decide by themselves where to go for assistance.

Q: That is "word of mouth"

A: That is "word of mouth". That is the strongest part of the marketing in this office in particular: "there the patient is seen at any time". If you could come at six, you are attended at six, you come at seven, at seven o'clock in the morning, you are seen at the time when you can come".

Q: It is done by appointment...

A: In general, we have some hours where we see the major number of patients. Each patient is treated individually, the renal patient has to be dialyzed, he has to be attended first even if there are twenty waiting there.

Q: That is to say that for the type of condition...

A: For their condition, they call me, and say: "look I leave from work at five", then I will wait for you, it is the service... we adjust to the patient.

Q: We were talking about how they know of the practice. Why they continue coming? What action is done in order to retain that patient?

A: The patients that stop coming, are called by phone, it is like that. If we perform an operation, we call the next day: "how are you, how are you feeling..."

Q: To the house...?

A: To the house, it is something done routinely. But if there are things that are more delicate, then after the patient is seen, follow-up calls are made and we maintain that way of communication.

Q: And is that already a work done by the secretary/receptionist?

A: Exactly, she takes care of calling him to find out what has happened. If it is a cancer patient I am the one that communicates with the patient. In this office we try to maintain a more personal approach. I get upset when I go to a place and they treat me like just one more. I have patients that tell me: "we come here because here we are not just a number" and what happens is that we give them personal importance. They can call me at any hour and reach me, unless I am out of Puerto Rico, and in those cases I leave somebody to cover for me.

Q: Besides treating them in a very personal way, what else makes the patient feel he is not just another number in the list?

A: The employees. The nurse makes a very extensive interview thus she knows them from top to bottom. Why? Because it is important that she knows them, she is the one that sees them first and, together with the secretary, she handles their telephone calls. One of the things that is explained to the staff when they are being interviewed to work here is that the patient is first, whether they have money or not, the patient is first. All of us have to eat, but there are times

that someone arrives who does not have the financial resources and the assistance is provided in an equal manner, on the phone, personally...

Q: This is not by accident, it has been decided to be done like this.

A: Exactly. We are, I say we because my wife works with me, we are directing the practice to a practice concentrated on the patient and we do that from previous experience. If in your office you do not pay attention to the patient, you fall into problems. For example, the billing is not performed...

Q: Physically it is not performed here, the personnel who is here has to be paying attention to the patient.

A: Paying absolute attention to the patient. Problems of medical plans, billings and things like those are not dealt with here. Routinely administration work is done, but paper work, billing, the arguments with the medical plans, those are not done here. The whole focus is for the patient, because you begin to involve yourself in those matters and you end up paying more attention to the papers than to the people.

Q: And you are upset with a medical plan that you have just had an argument with and the next call you handle comes from a patient...

A: That is usual, you know.

Q: When you say that some of those actions have given you results, have you measured it somehow?...

A: It is a feeling based on what I have seen, the response of the patients. They are called and they come: "ah, they called me and I came because I was informed that you were here". That is how it has been, I have not used any instrument in order to measure it.

Q: What is your "feeling" about the results of the advertisements in the regional newspaper?

A: It is rather anecdotal. Patients that say: "I have seen the advertisements". Instruments in order to see that directly, no, I do not have those. Because the statistics that are generated in the office, after the change of location, will reveal if there are new patients and if previous patients have continued with us. I generate certain graphics of the practice where I can see...

Q: Are those statistics generated here in the office?

A: These are done by the agency that bills, a group that does my billings...

Q: Your employees do not do the billings, you have a contractor, an entity that...

A: They generate a type of report where I can see how many patients, there are, how many news ones have come, how many we have lost. Those are the type of details that nobody likes. Because of the recent change in office location these graphs take more importance because I can see what is happening. I know quite precisely how I am doing.

Q: And those graphs and data that they prepare is part of the package that they have or you pay extra for that...

A: No, no, this is...

Q: Is it included in the price already?

A: In the complete price of the service that they provide, daily reports of the transactions of the office, monthly reports, what it is called the "aging" of the invoices with the medical plans. A continuous audit is also included. All of the staff is audited, even I am audited. The complete process of the office is totally audited monthly. Let me get you a record that shows you how is the process: when a patient enters here there is a process, a process of information, of verification, of all in the practice and...

Q: And it is already established...

A: It is already established, with time measurement as part of that process as it goes through the nurse, and after that process goes by me, each area is audited...

Q: To see if they followed all the steps.

A: Yes, because there are different steps. They have to verify if the medical plan is active, if they have the medical card, if they have been referred, if the deductible is covered, verify if there is a debt, the nurse is the one that verifies all the materials that are used in the office, the procedures, then they verify if I documented them and if they were adequately documented...

Q: And that audit is done by that contractor?

A: At the end of each month each section of the office is audited. The errors committed are detected, where we lost money, where we were all right, where something was wrong and then what recommendations are put forward.

Q: Who established those measurement parameters originally?

A: That was discussed between the billing group and I.

Q: You gave them the parameters, etc.

A: Exactly, they evaluated the practice, made some recommendations, I made mine, and we decided to make it like this. Soon we are going to automate it, I am developing a software for the office, I have developed it with my brother and that process is going to be automated.

Q: And do you plan to market it?

A: That is the idea, we are running here the beta version of the program and the idea is to optimize it the best that we are able to, and then eliminate most of the paperwork done in an

office, in order to make from it the most efficient thing, thus assisting the patient in a better way.

Q: That sounds as if you have everything...

A: We are not there yet, little by little, we are now testing the program, if you want to see a part of it, I am going to show something so that you see it. We are going to install a network in the office, we are still waiting for a computer that has not arrived.

Q: You really thought of that possibility...

A: We already are developing the beta version here in office. To install the network, we are only waiting for the server to arrive. We are going to have a server that we are going to begin using and we are developing a software in Oracle for data base. That is the result of a very curious thing, because I was in another office and I was upset because there was a group of people that sold to the person that was sharing the office with me $26,000 in computer equipment with "software" included. I said to my colleague: “think calmly about this decision, evaluate it very objectively”. That was part of the reason for my departure from there. He decided to invest in that, and that people brought five computers into the office, twenty thousand scanners and stuff and they left him with that disconnected. The vendor did not respond to him. That same vendor did that to other doctors here. So I said: “look there is a need here”, the need for someone that knows about computers to get the proper software developed. Computing has been my hobby all my life. I spoke with my brother about the need that I was perceiving. We are going to make a good program that offers these services at a reasonable cost.

Q: Eventually you could market the program, or sell it or install it...

A: For that reason we are in alliance with Oracle because your know that Oracle is the most solid data system that there is. We entered into a partnership with them and this week the software arrives in order for us to develop it and we are going to be part of an Oracle Alliance. We could market our software through them, you know it is one of those commercial relationships that is going to be very good...

Q: And you will market as a separate corporation

A: Yes, that is a separate corporation that we have developed. This situation originally gave me so much anger, how they came with no regards to anyone and charged $26,000 for nothing. My colleagues and I continue being friends and they tell me: "look, this people cheated us, this matter is already being pursued by the lawyers, the copy of the contract and all that". Because he is going to sue, they promised a lot and they did not fulfill the deal, $26,000 thrown away. With us, with we less than $12,000, you are going to have a network ten times better, the machine that we have here is double Pentium, with 128K of RAM, so forget about it, that runs foster than a car and I spent very little compared with what they charged him. They swindled him, they swindled him out of $26,000.

Q: You mentioned a while ago that those decisions were taken by you. The process of implementing the decision once taken, how is that process? Who implements it?

A: Generally my wife carries out whatever has to do with the advertisements, the secretary does part of that function in order to coordinate those type of things. If it is necessary to meet with the people of the newspaper, she makes an appointment, we call them, meet with that person, and then proceed.

Q: That is to say, that it is shared?

A: It is shared, the final decision is mine but I use the personnel in order to coordinate the aspects that are involved in the implementation process.

Q: The process of evaluation that we talked about a couple of minutes ago, what type of evaluation do you make, for example regarding the advertisements, or if this company that does the of billing services is providing you with good results or not, what is the process of evaluating such things?

A: For the people that perform the billing procedures, we audit them in certain ways: how quickly they send out the invoices. There is good communication the whole time, it is always a two-way communication between us. In our office we have internal control numbers of ours, the same way they have their control numbers. At all times we keep a copy of whatever material is provided to them, we have control numbers with dates, etc. They have to generate a communication with the patient of all debts that the patient has and what we monitor is the time it takes for them to generate the invoice and to have the patient receive an invoice for the debt that he has. That is where we catch them (the billing agency). We have caught them two or three times, when they have taken too much time, about a month or so. At the same time that they are auditing us, in the meetings that we have with them, we take our own agenda, and tell them about the invoices that they made, communications we have received from Medicare...because all of the communications with the medical plans are done through us. We receive all communication, we evaluate. The billings entity is afraid of us, every time that we call them...Things have improved lot. We have formal meetings with them monthly.

Q: And in that meeting who sits on behalf of this office?

A: On behalf of the office is my wife and me.

Q: And there is where you receive the statistics...

A: The good and the bad. They show us the results of the audit for the secretary, the nurse, and me. That sometimes gets me under stress because I am not trained for running a business and it is very difficult to get the mentality of a business-doctor, but that is the bottom line. We have our internal controls of all that is given to them, the complete communication with the medical plans, all the contracts, we have all of those controls.

Q: And you measure your effectiveness with those statistics.

A: Yes. Since we moved recently, I know that the figures for this period are going to be unusual...

Q: And those meetings of your wife and you with them, does some of what is discussed is shared with the personnel?

A: Yes, we meet with the personnel, with the secretary individually, with the nurse, we go through each of the points covered.

Q: And how do they receive that type of information? Is this type of feedback typical in the medical practises? For example the nurse told me that she had worked with other doctors...

A: Yes they worked for 15 years with another surgeon, the two employees. They have a lot of experience. They worked differently, everything was manual and the first month controls were not taken, my God. But they have been adapting very well and the most important thing is that we have in the office is that this is a two way street. We have this system, but they have experience. The secretary provides a lot of feedback, she knows a lot and maintains that feedback all the time and, until now, thanks to God we have worked very well together. It is not a matter of imposing unilaterally what to do. Suggestions are accepted, she has called my attention to things that should be done, they have even used the computer program and none of

them used computers before. We installed Windows 95, I trained the personnel, it is a challenge and they are discovering how convenient it is. They really like it, faxes, having E-mail and all those things and now they say: "but look how good this is!"

Q: You mentioned at the beginning the matter that has to do with patient referrals. Being a specialist, and a secondary physician, a great percent of your patients are referred to you. What criteria you believe the doctors or the plans have in order to refer to you vs. to another physician that they could refer to.

A: What I have done is to offer to different groups services that they did not have covered. For example, the group than handles the health reform programme of a nearby town did not have someone that dealt with the surgery of renal patients. None of the surgeons they contracted originally had experience with that type of patient nor in the surgery required for vascular accesses and all those other things. They took note that most of their patients were under Medicare and that I have treated them before. I had a meeting with them where we established that I was the one who would deal with those special patients and at the same time I was solving them a problem. It is necessary to sell a solution that solves a problem and that is how we have achieved the contracts. I have marketed the things that nobody is capable of including in their practice around here. When I began in the private practice, there was not so much influence of this thing of "managed care". What was I doing? I was providing solutions. Because when the patients were captured by those groups that did not have someone to do some of the jobs because those that make that type of procedure in the community are limited to two or three surgeons. Providing such solutions I have established several contracts.

Q: Whoever has X problem you sell the solution to that problem and to another party you sell another solution. Given the problem one has to be able to solve it. You do not have the same "sales pitch" for everyone…

A: If he has a problem, I solve it, if he has another problem, I am capable of solving it too. That is the way that the contracts have happened, because they have been in the need for my services.

Q: Do you refer patients? Is that common for this type of practice.

A: No, it is not so typical.

Q: Is it more typical that they refer to you than you refer to them?

A: Yes. There are some that I refer to. Since I am a sub-specialist the problem is that when I receive some cases they already require another sub-specialist. Generally infectologists, nefrologists, endocrinologists, but it is not so much.

Q: And what approach you have in order to refer to one neurologist versus to another, for example?

A: Well right now in this region I provide services to all the groups of neurology, except for one group which I have not solved the problem that they have, but I am confident that they will come to me, because now they refer to another surgeon. Except for that group of neurologists, I provide services to all the others. When that other group of neurologists starts referring me patients I will refer patients to them, it is a matter of reciprocity.

Q: But they sent you patients based on the contracts you have with them?

A: No, what happened here was basically a historical matter. When I arrived here two years ago, there was a problem in the regional hospital. In this hospital there is a renal center that

has around three hundred patients and they had no surgeon, nobody wanted to attend their patients. Where I was trained we provided support to the neurologists, surgery, and all those things. So I called them and told them: "look there is a problem here" and they confirmed that they had it because their response: was "nobody wants to see these patients", nobody wanted to see them. So I provided them with the service, we established a relationship and continued working. What I did was to solve a problem that existed in the community, a serious problem, nobody wanted to deal with those patients and it is very sorrowful. They are patients that could receive a transplant, they have a life, look, they had the right to be assisted and there was no help, a gigantic problem existed.

Q: And why others did not want to see them?

A: For the complexity, there were very complex patients and almost nobody likes to deal with the bad cases. But those are cases, and if you look at it very coldly, they represent a market that is there without being exploited. Other physicians do not like this type of patients, they just do not like them. They run from those cases. The problem is that I do not have someone who can cover for me (when I am on vacation).

Q: The health reform programme has not been established in their town. Do you also work with people that already have the health reform programme?

A: No, they refer to me. Yes, I have contracts in several towns where the health reform programme is on already.

Q: And those people come here?

A: Exactly. If they consult me, they consult with me here, they consult with me in the hospital. Generally, what happens is that they have a patient with a problem they admit it to the hospital and they consult with me. For any minor matters the patient comes here.

Q: What impact has the health reform programme had in your practice?

A: The health reform programme has impacted my practice in various ways. You change your way of practising. You have to go to the group and sell your service. It is the same patient, because I have patients that used to go to my office and they later stopped once they became part of the health reform programme and then they came back when I had contracts through the entity that runs the health reform programme.

Q: You lost them in a given moment and if there would not have been any contract, possibly...

A: I would not see them any more, that is why I say that it changed my way of practising. It also changes your way of working in the sense that the analysis of your practice is very different. If the patient is from the health reform programme there are some rules and there is a fixed amount of payments for appointments at the office. If we look closely, visits to the office and nothing else, it is not a very good payment. If you operate the patient, the payment is reasonable. Economically it impacts you, an impact that results from you seeing more patients (volume) and earning relatively the same or less.

Q: You work more, you see more patients, but economically your income stays the same?

A: That was what led me to make a more detailed analysis of the practice. How much does it costs to see a patient per hour, you have to know in detail, how much does your practice costs, how much does it cost per hour to have this office open and that is the way that you know how you are going to control your costs, how you are going to negotiate the contracts. And there is not much to negotiate, that is to say, they have your rates, it is almost a take it or leave it situation. What you have to do is make your practice more efficient.

Q: Given those rates, given those services that they contract you to deliver...

A: That is the most difficult thing, that is to say, that is the control of costs of the office. That is one of the reasons we had for opening our own office, because I understand that it was necessary to put some cost controls and you have to be very aggressive in this. What is not included in the contract, you have to charge to the patient. You may have a contract with "Blue Cross" and it may pay for the visit, but does it pay the procedure that I am going to make? It is not going to pay it.

Q: That is charged separately?

A: That has to be charged separately, because if you do not you crash financially.

Q: That is where the audit of the processes comes into place: you saw that patient and charged Blue Cross for the visit but you did not collect X that is supposed to be deductible or the things that you did? And if there are no controls, nobody even knows about it because then it is to the discretion of the nurse if to one it was charged or not to the patient.

A: For that reason there is a document of requisition of materials, it travels when the patient goes by here, she brings it to me, I sign it, I compare it, and the secretary collects the charge. And everything is analyzed to see the costs: how much is the cost of the material and other computations that are taken out in order to be reasonable.

Q: Doctor, those physicians that do not do this, are they conscious of what is happening to them?

A: Well, I do not know, each one evaluates their own practice, I evaluate my practice from the point of view of a business and this is like a business, sorrowfully. Within all this you have to provide a very humane service and all those things, but you need to have your controls, now the meeting with the billing group is coming up and it is going to be hotter than ever because now is

when we are going to see how things are going. But you begin to think how much you spend, how much a bandage costs to you? Ask a surgeon how much a bandage costs him. Sterile or not sterile. Do he knows how much it does costs in an office?

Q: That is very important?

A: Of course it is important, because for you to get that bandage you have to call, spend money on the telephone calls, the cost per hour of the time of the person calling, there is some expenses there.

Q: And that was taught to you by the physician in New Jersey or...?

A: Part of it, boy! That man is out of this world, he taught me part of it. But that is also in the manuals. There are these manuals, they are great you know, from the AMA (American Medical Association) I do not know if you have seen them before.

Q: You already spoke a little bit of how you have changed, do you believe that when the health reform programme is all over the Island it is going to have an impact in the activities that are carried out in order to attract and retain patients?

A: The activities in order to attract patients, definitively. If the health reform programme is going to stay, and I hope is that does not happen The doctors will definitively have to change their way of working. It is necessary to change the way of working and the way in which you direct your practice.

Q: Changing it to what?

A: To a more efficient practice and at the same time impacting in the lifestyle of the professionals, you are talking about a practice monitored by the Government of Puerto Rico and that is a big problem. You are talking about socialized medicine. Several things are going

to happen: exodus of professionals, that is a thing that is going to happen. I am one that every time my ex-boss calls I have to grab on to my seat and my wife ties me to the seat and does not allow me to go running because to practice medicine in this environment is very difficult. You have the complete responsibility and you are not compensated appropriately. It is not that you become a millionaire, it is just that you are not compensated appropriately. But what I foresee is that when the health reform programme matures and reaches what it is supposed to reach, there is going to be a balance, there has to be a balance. The doctors should take a role in the decisions that have to do with the development or implementation of a change in the Health System. And when I talk about the doctors, I talk about the professionals that are here in the battle front, you know, I do not believe that things are to be an unilateral thing, where the government is the one that decides how much you are going to be paid. Dr. Juan Alberto Mendoza, President of the Medical College wanted participation, the government said no, that they were going to negotiate with insurance companies and that we have to get what we have to get. Look, it is necessary that the medical class is the one that has to be involved in this, so that it results in a good and properly done health reform. Now, what are we reforming? That is the question that I have been asking myself, what are we reforming? They say that the government is going to be a supplier, an insurer, but, is that economically viable? Is it going to be more expensive than the previous system? Do we really want a reform? It is the same question that the delegates of the College of Physicians were facing: we have one of the best systems of health in the world, for what reason are we going to reform it?

Q: They say that it is in order to have more people.

A: More coverage? Look, I trained in the public system, they provided all the services, and there are things that is necessary to improve. But now you are impacting all of an industry, not just the doctor, it is the medical representative that could not give discounts any more, it is to whom they rented the cars for their job, it is to the mechanic that fixed the fleet of cars to that

company, you are really impacting the whole industry. I do not understand, I can not agree that overnight, in three or four years you pretend to change a whole well established system. It is for that reason that this is going to reach an equilibrium, this is going to be like a pendulum from side to side, it could crash. The health reform programme is a topic that gives me so much anger!!! How are you going to begin in (the region of) Fajardo. Begin with a hospital of the School of Medicine and then overnight pretend to have the whole Island covered... You have to collect data to evaluate the results, say infant mortality in that region, how is the prenatal care, the mortality rate in intensive care, the mortality rate for trauma, did it decrease? Cardiovascular illnesses that could be prevented, are they improving? Of course not, sufficient time for doing any program of prevention was not provided.

Q: There is not something to measure this health reform programme against...

A: How are we going to say that those places, how are you going to come and at a given moment and change everything...

Q: Apparently the criteria is that if you have more people covered by a health programme than before...

A: What happens is that you are dealing with people's health. How are you going to implement a system that depends a lot on the "gatekeeper" which should be a physician that is well trained, a primary doctor. If you ask me about implementing the health reform programme, I am going to ask you about the gatekeeper's competency. But in Puerto Rico we have a dual-training system where you can have a person that goes to the Dominican Republic, finishes, comes and gets accredited and establishes a practice locally.

Q: It is not the same level?

A: It is not the same level, who supervised that person? Could that person be a "gatekeeper"? Does that person know how to distinguish a stomach pain from an appendicitis? You do not have the base, the structure, the scaffolding in order to begin with the health reform programme, if your health system is dual, if your training of doctors is dual, you have credited doctors and doctors that are not credited. Until recently one of the local medical school was not credited. If your gatekeeper is not a well trained gatekeeper, you are dead. That is where you have to begin.

Q: If the reform is based on the gatekeeper and you do not have good gatekeepers it is already taking off...

A: You already have that wrong, and we are thinking of that from the medical point of view and nothing else. You need to have a scaffolding so very well done that you are sure that the gatekeeper is well trained, that knows about computer science, that knows about information, of all those things that everyone hates, about numbers and that knows about good medicine and it is understood that he can realize a good job. But if you suddenly push them to join into groups, all physicians that you call primary physicians, give them a lot of money, to create a corporation and give them 10,000 lives to take care of; what criteria are you using? They are crazy, this is crazy people's stuff. How are you going to implement a change like that? You must take an area of the island, do a well defined study, analyze the data, see the results and finally decide whether it can be a final project, without pushing it on to everybody, whether they want it or not. All this, to my understanding, responds to a political agenda, not to a serious agenda, I think that the health reform programme does not have any seriousness. At this moment the second part of the health reform programme, the selling of public medical facilities to the physicians, is underway. A hospital at this moment is for sale and they are asking for 40 millions dollars. Who is going to have enough resources to finance this. They want to give it to

the doctors, to the medical corporations, it is crazy. The intent to transform everything from one day to the next, something that had to be attended in a paused and organized way and with a data that shows that it is economically viable.

Q: And most of the doctors think as you do, or do you believe it is a minority?

A: Everybody to whom I speak is uncomfortable, some more than others. Remember that sub-specialists are very removed from the health reform programme, and the primary physician is the one in front, is the one with the money in his hands and that is also a problem. But there are other physicians that talk to me quite upset about the changes that the health reform programme has brought. To my understanding, it would have been necessary to evaluate if that was necessary and also evaluate in a very serious way if the health reform programme was necessary, as they had planned it. You should have studied the Canadian system and others. You should know that in those systems the medicine that is practised is a lot different. But since they wanted to impose a system overnight!!! I do not understand the need. Is it economically viable? Have you seen the newspaper what it says, now you have to play lotto everyday to maintain the health reform programme. Today's headline is: "no matter how much it costs". The idea of the health reform programme was to bring costs down, now it turns to be more expensive. That should not be done in such a way, you cannot transform an industry overnight, you cannot deal with a change like that. How can you take a medicine student that is graduating from Medical School and that owes $120,000 in loans, and tell him that he is going to be looking at patients for 15 dollars each. Assume that he finishes his residence, is he going to see patients as an internist at 15 dollars a patient? How many patients does he have to see to pay 3,000 monthly on loans for 30 years? He has to see a lot of patients. How are you going to do that? How are you going to transform all your system? All matters are connected. How are you going to provide a change like that without studying it? What is strange to me is that they forgot about studying it, doing changes without having the data, well, taking for example

the infant mortality, which is a health system indicator. Right now we are the ones with the highest mortality. What parameters are you going to use to say that the reform is working properly?

CASE 7

The type of practice is solo, located in the southern area. The specialty is surgery.

Q: How many years have you been in the practice?

A: Thirty years, more or less.

Q: And this is a solo practice?

A: We began first as a group. We grew to become up to five doctors. We had almost everything: surgery, vascular surgery, surgery of the colon, of the rectum. Nowadays, each one has established on their own and the society was dissolved and I have stayed here alone. A doctor of another specialty shares office space with me.

Q: Is a separate practice but you share expenses and office space.

A: Common space.

Q: Your practice is solo although you share expenses of the office, the reception area, etc. In those thirty years you have had a group of up to five physicians and now you are alone, but sharing with another that is also in solo practice.

A: Yes, I am in solo practice specializing in general surgery and surgery of the colon and rectum.

Q: How many people work in your solo practice, besides you?

A: There is the administrator, that is our CPA (Certified Public Accountant), we have two nurses, one of them is a graduate nurse, and three secretaries.

Q: Are all those on full-time or the CPA is...?

A: No, the CPA comes once or twice in the week in order to handle all the papers and everything. One of the girls is a temporary employee because the other doctor is also temporary.

Q: That is to say that that secretary on temporary time is basically the secretary of the other doctor?

A: Yes, they are two, she was going to be temporary but he is going to use her services when he leaves.

Q: And then the other secretaries work for the practise or are they shared?

A: Yes shared, it would then be a secretary and two nurses.

Q: And those are on a full-time basis?

A: Yes.

Q: Is anyone part-time?

A: No.

Q: So the CPA is part-time in the sense of...?

A: The CPA is part-time because he comes twice a week.

Q: And he deals with the billings?

A: He deals with it. He deals with the billing of the physicians that were partners previously. He goes to their practises and maintains all their accounts.

Q: Has the CPA specialized...

A: No, he also has other clients that are not doctors.

Q: The secretary does reception work and office related tasks?

A: Sometimes she performs as a receptionist while the other person is working at the computer. For the time being, there are two that interchange from receptionist to computer work. When the other physician leaves then only one of the nurses would stay, she is not a certified nurse so she would stay in reception.

Q: And do the nurses also perform clerical work, the work of the receptionists?

A: Yes, some of that clerical work, but the majority of their work is with the patients. They prepare the patient, complete background information, take the vital signs before the patient sees me.

Q: The patient goes first with the secretary receptionist...

A: Then he goes to the nurse, the nurse completes a short record, then I confirm the record, we speak with the patient and I examine him.

Q: How does a potential patient find out about your practice?

A: Well many times from neighbours of the patient that have been our patients. Other times, patients that I have seen visit me because of my specialty, I am one of only two in this geographical zone dealing with problems of the colon and the rectum.

Q: Are those patients referred by another health professional?

A: They are almost always referred by a medical generalist, the ones that make most of the referrals. Primary doctors refer and at other times gastroenterologists refer patients for ulcer problems and colon-rectum problems. Those are the ones that refer the most patients to me.

Q: Besides referrals by "word of mouth", in what other ways, if any, do you get patients...the medical plans?

A: No, I do not believe the plans know that we do that work. I do not know how to answer that.

Q: For example if a person has X medical plan and you accept that plan...

A: Yes, one reason patients come is because I accept almost all of the medical plans. But I believe that there is a predilection if a physician works in a hospital and practices a specialty and they have a listing of the doctors that work in that hospital if that medical plan is sponsored by that hospital. Take as an example the medical plan of hospital A, that only operates in hospital A, that plan only refers to the doctors of that plan. It is easier to refer patients to physician with whom one has worked in a particular hospital. Many of the medical surgeons did their specialty at the District Hospital where for 20 years I taught. Many of them latter did only two years, left and came with a specialty, thus they already knew me, we had a relationship, it is a little bit easier that way.

Q: A personal and a work relationship was developed.

A: Of friendship and work, yes.

Q: Do you refer patients?

A: Yes, mainly patients with rectal bleeding. After I perform a rectal exam and I do not find anything then I refer to a gastroenterologist. The gastroenterologist sees and makes the complete workup. If he sees that it is something surgical, then he refers the patient again to me.

Q: What criteria do you have for referring patients?

A: Most of the times the patient that is not in need for surgery and we understand could have an ulcer in the stomach I would refer to a gastroenterologist. If upon examination the patient has a problem of gynecology, then I refer to the gynecologist.

Q: And, for example, if you decide to refer to a gynecologist do you refer to a specific gynecologist or...?

A: First I ask the patient who is their gynecologist of preference. Many already visit a particular gynecologist, they have been familiarized with a certain gynecologist or they prefer a particular gynecologist, then I refer them to him.

Q: And if she does not have a gynecologist or a physician of the specialty that is required?

A: Then I mention some that are located in the area and she then chooses which one to go.

Q: In the area means in...

A: ...in this city.

Q: The criteria is geographical?

A: And also depending of the hospital. If she is been going to be operated and she is a patient of X hospital, then I refer to the gynecologists that works in that particular hospital.

Q: You have explained how patients learn about your practice and come here. For what reasons does the patient continues coming here?

A: It would be depending of the work that has been done to him. If he is satisfied with the treatment. If they are not satisfied, they always look for another physician. Patients also return based on how well they are treated, the relation between the doctor and the patient.

Q: When you say that they are treated well, are you referring only to the doctor...?

A: No, many things are included there, the physician-patient relationship, the relationship of where he was operated, if he had a problem or did not like the way the nurse assisted him, the treatment provided by the one that takes him to the operations room and the post-operative follow-up. Because sometimes the doctor operates a patient but if the patient does not feel very well assisted by the hospital staff it reflects on him not liking the doctor.

Q: So the degree of satisfaction of the patient is not limited to the doctor but to the whole set of good or bad experiences that the patient has had in the process of being assisted in the hospital, operated, the care. That means that there are many things that you do not control there, doctor.

A: Indeed, that is one of the biggest problems that we currently have in medicine. Suppose the patient sues. Many times it is due to a situation outside the control of the doctor and sometimes the doctor is not the one responsible for the problem, but then the lawsuit goes to the doctor. For that reason the doctor has to keep his eyes very open.

Q: That example that you have given me is basically the case of an operation and the environment of the hospital. In the case of a visit to the office, besides the interaction of the doctor, would there be other aspects...?

A: Yes, many, the treatment of the nurse with the patients, the receptionist, how that has been. The receptionist is very important in the communication by telephone. We have the policy of

calling patients the next day or within two days of an operation to ask how they feel, etc. That helps many of them to have a pleasant memory of the treatment that we provided them.

Q: And that is the work of the receptionist, the follow up by phone to their home...?

A: Sometimes the nurse also does it.

Q: Is this something standard, a written standard procedure or is it done out of tradition?

A: No, tradition. This has also been used in almost all of the hospitals, at ambulatory surgery clinics. The nurse at the operation room calls the patients two days latter to ask and that has also given very good results. And the patients say that is much better, that they feel more protected, they see that one is really interested in seeing how they are responding to the operation, how they are improving and that, psychologically speaking, helps a lot with the patients.

Q: In the process of decision making, for example if a new employee is going to be hired, if a policy is to be established, such as from now on we are going to call a patient twice instead of once after an operation, any type of decisions, who makes the decision, you alone?

A: No, we meet, those of the group and the CPA also intervenes and we talk about the matter. We conduct interviews, we speak with them, he speaks with the people, it is the same team, so we do it as a group. We then have the person work for one or two days to evaluate how the person works, how it relates to patients and depending on how that turns out, we make a decision.

Q: And the evaluation of that person would be by one of the doctors, or is done together with the group?

A: Together, nobody takes a decision alone, we share it, "what do you believe about of this?", we comment about it.

Q: When you mentioned about how patients learned of the practice you didn't mention the yellow pages and I noticed that you are listed in the yellow pages?

A: Yes, I suppose so, that is one of the things that patients look for, because if someone needs a surgeon they search the telephone took to see who is listed. I forgot to mention that.

Q: In the case of the yellow pages, the decision of being listed or not in the yellow pages, which is like an advertisement for which you pay an additional fee. That process of decision making, how was it?

A: Before doctors did not advertise but lately they are doing so. It was not ethical for a doctor to advertise as if it was a matter of commercialisation. But nowadays they do not even refer to the patient as patient, but as a client. Everything is acquiring another type of...

Q: That is to say that the name of the patient has changed and now is referred to as a client.

A: A client.

Q: Going back to the yellow pages, was that your decision?

A: Yes, we decided to use it for the office. The size and what to include depended on the costs, because it is a bit expensive to be listed in the yellow pages. The group was dissolved for that reason, the expenses were enormous. It was much better working in group because suppose I was on call this weekend and the other physicians were in charge of office. That way there was an interval of a week free or one free weekend that I could spend with the family. But what

happens is, that since we were five physicians in the group we had to pay an enormous fee for insurance.

Q: The cost of the insurance.

A: Yes and then that also serves like a magnet. If a patient wants to sue, he is attracted to do so figuring there is better chance of collecting if they go after a group of physicians.

Q: Did the group practice advertised?

A: Yes.

Q: Where?

A: In the yellow pages under our group's name. And we even had planned to make a logo but that never happened and we continued the way we were before.

Q: And in print, doctor, as group, in the regional newspaper, have you advertised at some point in time?

A: I do not believe that we ever advertised. The other Dr. that is with us has advertised in the regional newspapers, particularly after the society he had with another physician dissolved. That is when he came with us temporarily, until his new office is completed.

Q: Is that advertisement of the type of " from such a date on Dr. X is providing the services of...in such a place."

A: Exactly, I understand that the ads were going to be placed on television in the area.

Q: And you in your individual practice, in your "solo practice", have you used newspapers, television?

A: No.

Q: Any reason for not using it?

A: No, I had not thought about it, but I do not believe that could bring in more patients, perhaps the same patients I already have. If you change location you might want to announce it, but I do not believe that would help much.

Q: It would not help much to what, to the...?

A: Because the patient would look for it on the moment that he needs a physician, he is not going to be watching you in the TV: "ah look at this," and take note of it. It is more or less talking with friends, that is how they learn more about their options for medical treatment.

Q: Would you say that would be because of the type of specialty of yours, that is to say that you are not a primary doctor?

A: No. I believe one could place an announcement to inform of a change of location. But maintaining an advertisement, I do not believe it is warranted. Yellow pages perhaps, because that is used a lot. But I do not believe that everybody is looking at the T. V. screen only for the advertisements, although they say that for other goods it has been very good and very profitable to advertise.

Q: Like which?

A: An advertisement of a business.

Q: Not the...?

A: Not in medical matters, no.

Q: In many regional media, specifically in the regional newspaper of this area they have a medical directory.

A: A section.

Q: A section with many advertisements of physicians. Have you considered that type of advertisement?

A: No.

Q: In the case of the yellow pages, the decision is yours and you execute it, do you call the yellow pages, or do they call you, how is that?

A: Well, what I do first is go to the CPA. I would talk with him, "well, this is happening , I do believe that we should be listed" and then he says yes, the idea is good or it is not good and I then talk with the others.

Q: You involve the CPA in that...

A: Yes the whole transaction, any purchases that one makes outside of the regular ones, we would need to speak with him.

Q: You said: “we” have to speak...

A: Yes, because we were in a society, now I only consult it with him, the CPA.

Q: For what reason, to share the risk of the decision or...?

A: No, because they way this is run what I receive is a check. I am a partner of the office and then the CPA is the one that takes care of all the calculations and the involvement of the office.

Q: Is that check based on what you generate?

A: Yes.

Q: Everything is channeled through the C.P.A. all the revenue that enters and he in turn channels what leaves. Besides he knows the dynamics of the operation...

A: Before when we were in a group it was different, then, so that there was no problem each one had to get through the CPA, what each one generated, then each one got a check. When the end of the year arrived, if there were earnings, then the profits were divided depending on the revenues that each one had generated.

Q: Proportional?

A: Proportional and this way there was no problem: "such and such worked more, the other one worked less and they gave this much to you and to the other".

Q: But in the "solo practice" that does not...

A: That is not the case.

Q: I perceive, and you correct me, that there is an element of feeling comfortable with the idea of consulting that.

A: Yes, because the CPA is also like a partner of ours, because with those physicians that were previous partners, we have several investments together and the CPA is also in the investments.

Q: Of another type?

A: Of another type, outside of the medical thing, have some investments in common and the CPA communicates with us if it is necessary to make a sale or a transaction and we all meet again in any of our offices. We were partners, the medical society was dissolved, but we maintain the union, a common interest in some investments.

Q: What formal or informal evaluation process do you have here in your practice? Say to evaluate the operation of the office, the level of satisfaction of the patients.

A: Well it is a bit difficult. I hoped that this was going to happen in another way. Today it is worse because before we did most of our work in a particular hospital and because of this in that hospital one had more access to the issue of programming of surgery, because the process was simpler. Now I work in almost all of the hospitals in the area. And it is a bit hard on one because then one has to go making rounds in more places. One has to distribute his time very well.

Q: In your case today, you go to so many hospitals, how do you evaluate if the patients are satisfied or not? You told me many aspects were very important for the total degree of patient satisfaction.

A: The increase or reduction of referrals is a way of measuring.

Q: Say that in a given moment they referred you many patients from X practice, from X hospital and you notice that those referrals are decreasing, what do you do?

A: That is the problem.

Q: Do you call the other party, "look, what is happening that they are not referring patients to me", do you ask "have patients remained satisfied", or do you send a letter or you meet with them...

A: We always meet in one activity or another, either at the hospital or in different groups. I always comment about how the situation is, if there is any difficult operation that one is going to make in a future, and one has certain doubts of any type of mechanism that it is necessary to utilize in the operation, then one asks some one that has more experience in this, and so one ends up speaking, and one relates to the other physicians. The one area that serves as an indicator of how things go is the economy.

Q: And you ask formal or informally, "look it has been a while since you sent me patients" or to those that are sending you only the extremely difficult cases you ask "what is happening..."

A: Those difficult cases we call the rockets...yes, there are cases that, mainly older people, with heart problems, with problems of diabetes, with problems of cancer, that are problematic, very complicated and any thing has a complication (ready to explode). Sometimes several of these cases arrive to you at the same time and one does not know what to do and gets scared; you have to make consultations and consultations (with other doctors) so that there is not a problem in dealing with these cases. Other times operations that are simple, that could be done via ambulatory surgery, are becoming a bit more complicated. For any type of operation one has to have more care than before, watch over the post-operative problems, the relatives, there are many persons related to the patient with tendencies to be aggressive. It is necessary to deal with all of these things and that is what makes this sometimes very satisfying. But on the other hand there is more work and there is not all the time available in order to be with one's family.

Q: The demand for time is higher.

A: Yes. And it requires more time to be with the patient that before, because the patient now is more inquisitive, he wants to know more about the illness. Sometimes one has to look for a photocopy of these types of operations, to show them, to explain. After you explain it to them, they want you to explain it to the spouse of the patient because she did not understand the problem very well, it is necessary to call the husband, to speak with the husband...

Q: The patient has changed, it is not like before...

A: It has changed, it is more intelligent than before, it wants to know what is going on, now it is an obligation of the doctor to make all of these explanations. Until recently one mentioned to the patient the type of operation and its complications and the patient signed the forms. Now if the patient does not sign the forms prior to arriving to the hospital, the hospital calls us and we have to go there, explain it in front of a nurse so that there is a witness to the fact that I explained the document to the patient. Today these matters are very much enforced and that is taking more of our time than before.

Q: They are more demanding, a demand of time... and you mentioned to me when we talked about the advertisements, etc. that it was not ethical at a time, that you were not listed in the yellow pages until now.

A: That was what was said before, that the doctor was not to advertise, that it was not ethical. Some thought: "no, I do not need to advertise my practice" and they did not want to advertise for that reason, they preferred that the patients go to them for their work, because of their work in the community. That lately began to change, they put on signs, this and the another. Some physicians exaggerate a bit also by advertising "I am the doctor that knows this much, I do this, I do that, this and that".

Q: In the medical community this was not done before. It began say with using more the yellow pages than before and now apparently all physicians are listed in the yellow pages. There was no advertising in print or it was minimal, and now there are specific supplements of physicians in the regional newspapers. Within the medical community, how is this seen?

A: As you say, everything has already changed and in fact it is more acceptable, and physicians are advertising. Physicians now are being formed more like groups and my impression is they do so looking for sort of a protection, because the groups are the ones that administer the health reform programme. Groups of primary physicians have to see certain amount of patients in a given region. Then other groups are being formed within the hospitals and that is the reason why this is changing. Physicians see these changes and wonder what is going to happen us? I think it is beginning of the socialization of the medical practice and we do not realize it yet. We believe that this would not be able to happen. It is very difficult that there is a socialization of the medical practice in a place that is not a socialist country because how do you expect one to cover the cost of a career of medicine by working for a salary? Nowadays the new doctor that finishes medical training, finishes with an enormous debt. At this moment I understand the medical school of Ponce has an annual fee of $15,000.

Q: The School of Medicine?

A: The School of Medicine. And for opening a new office there are also some expenses that are quite large. So when the new physician begins to work, he starts with a huge debt.

Q: What do you understand, in your way of thinking that marketing is?

A: I would say marketing is to make yourself known in the community, advertise more, make surgery more attractive, of informing about the exams...

Q: Exams?

A: The exams refers to examining the patient, the evaluation of the patient to make sure that the patient is comfortable in the office. That when one has to refer the patient to another physician, he is conscious of the need to explain things to the patient, because that has a bearing. There are patients that I see and tell me: "I visited such doctor and he did not lay a hand on me, he did not examine me."

Q: Do you understand that marketing would include the aspect of the time one spends with the patient and the quality of the physician-patient relationship.

A: Relationship and work, yes.

Q: The health reform programme is not in place in this area, but it is in the periphery. Have you had any impact in your practise because of the health reform?

A: I do not think so, it has been neither good nor bad. I am seeing patients that are under the health reform programme. I saw the other day a case of rectal bleeding, I examined the person and the bleeding was not from the lower part of the intestine so immediately I referred the case to a gastroenterologist so that he examines the patient and completes the study. But I was told by the health reform programme administrator that I had to send the patient back to the primary doctor, then the primary doctor was to refer the case.

Q: That patient arrived in your office referred by the primary physician.

A: Referred by the primary physician.

Q: A that primary physician is in the health reform programme.

A: Exactly. It would have been easier to refer the case and for me to further refer it. Do not send the patient to a place and then back and forth. That could create problems and confusion.

Q: And what is the idea of the patient returning to the primary physician.

A: I do not know.

Q: Any other question that I have not asked about all of this, marketing actions that you plan or do not plan to make…

A: Well there is another thing, regarding what we were discussing just now. Today I saw an adult lady requiring an operation that these days is made with some new instruments to minimize a negative impact the operation can have on the nerves. But the health reform programme does not pay for the use of those instruments and if one makes the operation without that instrument, the operation is very risky and the complications are very high. What you do in that case? I do not want to get myself in a mess, I do not want the complications of operating without that instrument, so I prefer to send the patient to another physician who would do the same (further referring the patient) and the patient will be wandering around. I was calling one of the members of the health reform programme here in order to see what one could do with the case. If the hospital would admit it to a program of charity so that it could donate the use of those instruments. There are many problems that you have to undertake in order to help a patient. I believe that the health reform programme is going to face problems. The same is happening in the United States in an effort to provide access to medical treatment for everyone. But every day, notwithstanding everything that has been made in order to lower health care costs, the costs keep going up. There are pills against cancer that cost almost $80.00 for one pill. Imagine that you have to use a pill every day. It is necessary to try to look for the most appropriate mechanisms.

Q: Other doctors have mentioned to me that they like to give presentations at schools, civic groups...

A: That helps many in their marketing. It is very good, because the public will know that the physician specializes in a particular area and is very informed in the matter.

Q: Have you done so?

A: Yes.

Q: In the last 10 years, for example...

A: No, lately not. No, I am almost retiring. No, lately I have not been giving conferences.

Q: Although you did that.

A: Yes, before. Now I prefer to spend more time with the family, my parents already are getting older...

Q: You are in a stage in which you continue active in the practice but the free time you want to dedicate to other things.

A: And with the free time being so reduced, it is a problem.

CASE 8

Two physicians, each working half time, in a medical services society specializing in family medicine.

Q: Is this a private practice of two doctors?

A: Two doctors on a part-time basis, both of us are the equivalent to a full-time physician at the practice.. We have a society, for almost 14 years and we complement each other because both of us work in private medicine here as well as in the academic phase. I work with the School of Medicine and my partner has worked with the school but now he is more in the administrative phase in a family medicine center that serves as a training place for doctors specializing in family medicine, a residence program.

Q: A residence program of the School of Medicine.

A: No, it is not of the School, it is a private hospital but it is affiliated to the School. It serves as a shop for what I do which is to concentrate mostly in the education of students. In this private independent practice, we complement each other, he works half time and I work the other half.

Q: Both of you dedicate half of your time in this private practice and the other half to the other activities.

A: Exactly.

Q: How many other people are involved in the practice?

A: Personnel that is not medical, we have a receptionist, a graduate nurse, a person that serves for data entry for the process of billing and another person that has functions of billing and

secretarial matters at the same time, although she is not a secretary, and finally the person that is in charge of the maintenance of the office.

Q: How many are full-time? Is the person in charge of maintenance part-time?

A: Maintenance is part-time, the other four people are full-time.

Q: Full-time, forty hours the week.

A: Forty hours. We have two additional people, I had forgotten to mention. A girl that comes to cover a shift from 4:00 p.m. on, or the excess of extra time that could arise, and two people that work on Saturday mornings, because we are open on Saturday mornings also.

Q: Those two people only come on Saturday.

A: Yes, and this girl comes for the excess of regular working hours in the afternoons.

Q: In order to avoid the overtime of the ones that are in...

A: Exactly, the resistance of the employees to work the more hours.

Q: Does the wife of any of the two partners work here?

A: No, none of our wives work in the practice at all.

Q: And for how long have you been a physician?

A: I have been a physician for sixteen years, the last 14 of which I have always kept the same arrangement in this service society.

Q: I believe that you mentioned before to me that someone performs the administrative function.

A: What happens is that we have an administrating partner.

Q: One of the doctors is the administrating partner.

A: Although we share the decisional phase, he is the one with administrative mentality and he is the one to whom that at function is mostly delegated.

Q: In the "day to day management" of the practice combined decisions are taken together, between the two partners...

A: Among the two of us, when somebody is going to negotiate something, for example, with a medical plan, whatever, he is the one that enters in that phase, although in the day by day I am able to deal with some matters. For example, to make checks, pay bills, whom ever of us has the time, the one that finishes earlier with patients is the one that does it.

Q: And, is that a combination of him having the "administrative mentality" and of you preferring that he does that also?

A: Well, I believe so. I believe that he has a lot of the administrative mentality and it is not the area where I feel comfortable so therefore I prefer to delegate that phase. Quite sincerely, if I have to perform it I would not feel uncomfortable with it. But since he has the personality for that, he is more aggressive, and a negotiator until the end.

Q: How do the patients or potential patients of the private practice, find out about your practice?

A: Mostly by mouth to mouth of patient to patient, and I believe that it is because the nature of the specialty in family medicine which is understood very little and people do not understand it until they have experienced it. So I believe that the efforts that we did initially in marketing the practice through announcements in the newspaper was nothing close to effective and rather the practice has grown based on what the patients say about us.

Q: Tell me about the beginning, what was done by advertising in the newspaper...

A: Basically the other doctor had already begun the practice, and I entered one year later, when he moved to this office. The other doctor was known, because he is originally from here while I was the one that came from out of town, so therefore I was not known locally. So through the other doctor was how patients come. Initially perhaps the main group of patients that we had (when some principles of "managed care" began) had to do with a medical plan for the police whereby they selected us as a primary medical center for that group.

Q: Where patients had to visit here first, and you referred to other physicians.

A: Exactly, and that is how we began to enter in that type of arrangements and that helped to promote the practice, together with the good reputation enjoyed by the other doctor in this community. We also made a name for ourselves because we were entering in an academic environment, where we made ourselves known inside the community, in the School of Medicine where the family of the employees of the School came to be part of our private practice. When I joined the practice there was the opportunity to market again, and we did it in a simple form, like many do with an announcement in the newspaper that informed was becoming a member of the practice and basic information.

Q: The ad said "Dr. so-and-so has joined this practice, located in such a place..."

A: Exactly and although it was not very descriptive about what family medicine is, the ad basically said that we were here. We did that through several editions of the local newspaper, not through other means outside the local newspaper.

Q: And that was done with the purpose of informing that you had joined the practice, it was not continued later.

A: Later on it was not done.

Q: I has been 12-13 years that you have not done something like that.

A: We did that in the first or second year, after that we understood that it was not worthwhile.

Q: The reason...

A: We understood that it did not give us any results. The other thing was that we understood that the announcement attracted another type of patient, not the one that was recommended by our patients. We were not searching or fishing for patients that did not know us nor the type of practice we have...We were not interested in that type of patient at that moment. We understood that the practice at that moment was growing at a good enough pace and we did not have to go out to market aggressively. We preferred a slow, but steady growth.

Q: What other efforts were done in the past or more recently in order to attract...

A: Well, quite frankly there has not been much efforts in attracting because we are lucky that patients look for us. Family medicine, in the face of the new efforts of coordinated care and the search for primary physicians with good reputation, with good use patterns like us, gets invitations to unite to them. First we had the Police from Puerto Rico whom eventually changed their medical plan to another type of plan. The "Blue Cross" of Puerto Rico approached to us because they wanted us to attend to their population of students of the Inter American University.

Q: In that case the "Blue Cross" came looking for your services.

A: Yes, they came looking for us, we did not approach them.

Q: Why you and not others physicians? Did they search for all the doctors in this geographical zone?

A: No, I believe that simply because our patients are members of the University's administration, and they said "why don't our students go to these doctors, we know them and they have our confidence?" They call us, recommended us to them, there was room at that moment to accommodate this population, so perfect. Some medical plans like Health Plus from Puerto Rico are basically based on primary doctors where the patient has to select a primary doctor. Companies like Sears, JC Penny and other industries in this community that are covered by this plan choose us as their primary doctors. In that manner the practice has grown. And for us the practice is important but the other things that we do are as important as this is.

Q: Those plans come to you in part because of very satisfied patients that they have some inherence or they recommend you.

A: Something very important for us has been that we have wanted to keep the volume of the practice within a range that we can manage, that does not get out of our control. Part of that control has been achieved by eliminating those plans that we understand do not yield us the results we would like. For example, in some given moments when the practice was growing there were medical plans were slow in paying or they limited our practice in one way. These plans were eliminated and that lowered the volume of patients which in turn allowed us to develop another population of patients, new patients of "managed care" or patients of the private type in such a way that it allowed us to maintain a practice with a volume that we work well with, but that allows us to do the other things that we want to.

Q: And does that give you the luxury in a certain sense, of being selective based on your experience with the plans. What criteria is used to eliminate or accept a plan?

A: Exactly. Although the amount of payment is very important, the most important criteria has to do with the plans' willingness to respect the principles of how we, the family doctors practise. There are plans that seek to be restrictive towards us. Those plans we simply eliminate. For example a plan that tells us that it does not allow us to deal with such and such studies, that is a plans that we eliminate. Medical plans that do not pay with due diligence are also eliminated: obviously I am better off staying at home for free than working for free.

Q: The process of decision taking in those cases, is it shared?

A: It is shared.

Q: And is that made once a year, once every six months, or it is a not so formal of a process.

A: It is not formal, it happens basically when a problem is identified, if in the process of analyzing the billings, X problem is found with a medical plan, we sit down and weight the benefits. There is no formal process whereby we sit down at certain times to evaluate what is happening.

Q: But the minute that a plan begins to give you a certain a type of problem, that is a sign of...

A: Exactly, in our daily dynamics with the patients, when we encounter a difficulty of handling patients due to medical plan that becomes a sign that says: " let's begin evaluating what is happening". Recently when this population of patients of the Inter American University changed to another medical plan that entered into arrangements with primary doctors, most of that population of patients stayed with us, even though they have the freedom of selecting a primary doctor.

Q: Originally, you had been selected primary doctors?

A: We had been selected, but the arrangement with the plan changed; before we were assigned a capitation and now it was changed to the direct payment system, pay per service. A negative red flag is that to order a study, an eco-cardiogram, I have to refer the patient to the cardiologist. The other red flag is that I may send a patient to be admitted to the hospital and they inform me that the hospital where I refer my patients to is not a supplier for that plan. OK, that is another red flag for me. Why? Because in a given moment this is going to affect the care that I give to that patient and I have to choose whether I give care in an incomplete manner or let somebody else provide it.

Q: If there is a red flag, do you speak about it, do you make the decision together, who implements it?

A: We both sit down and evaluate the contracts. Based on the contracts, we make a decision using as a basis how much notice we have to provide that medical plan and a written notification is prepared. The other doctor, the administrating partner, then implements the decision.

Q: When you were placing the advertisements, it was decided by the two of you...?

A: Yes, the complete text, the size, was decided between the two of us and basically either he or I, through the secretary, called the newspaper and they came and picked it up...

Q: We talked about attracting patients in a given moment. Why do you believe that those patients continue coming to this practice in particular vs. going to another?

A: I believe that there are several factors, obviously, the different focus that we have toward the practise of medicine, we do not focus on the problem, but we focus on the person and people look for that type of medical focus.

Q: How is that about the focus in the person?

A: The family doctor in his training is guided to try the person in their entirety. Therefore, our specialty is not focused in treating some health problems but of treating the person that has a health problem. What defines the patient that enters in this practice? It is defined by the person, not by the problem. Different from a cardiologist that is visited by patients with a heart problem, here the person defines it. The person perceives that he is feeling a heart problem, the head, the stomach or a psycho-social problem. So in that sense the door is open to all and when we see the person we do not focus only on the his problem, but we focus on the complete evaluation of that person. And there are many people that look for that type of practise where they do not feel comfortable with the medicine broken into fragments of organs and systems and in sub-specialist and all that. They want a person that sees them in their entirety. That sits down and speaks with them as a friend, that treats their health problem, besides being competent and solving their problem. In that sense I believe that we were able to have patients with that focus here because we have tried to practise it, and because we practise it academically. Here we always have students of medicine as part of their process of training. Today there are none around because on Wednesday afternoons they are not here, but the rest of the week I have a student with me, participating with me in the practice.

Q: Like an "on the job training", as they say: "shadowing you."

A: He is allowed to apply some theoretical concepts that has been taught to them and we assigned them patients of the practice so that they can interview them, examine them, and together we discuss and make decisions in terms of the diagnosis. I corroborate the findings when I examined the patient...

Q: He sees them first, makes a "screening", questions, then you see them...

A: He sees them first, I go to him in front of the patient, the patient is introduced to me, and everything in their record, all the findings are presented to me. I corroborate the record, I corroborate the physical exam, we discuss the diagnostic impression that he has in front of the patient. I have the ability of being able to do it in such a way that it is not going to become threatening to the patient and we then make the decision together. In other occasions the student participates with me in the evaluation. For them I serve as a model and this forces us in a certain way to maintain the highest possible standards of the practise since we are serving as models at the same time.

Q: And is that something that makes in this practice unique, having students. I say unique in the positive and the negative sense because there is some people may not want to pay so that a student learns from him?

A: Definitively, there are people that think that way.

Q: And those patients do not return: “no I am not going to go there because a student is the one who assists me”.

A: The option is provided, the patient is always informed by the nurse that a student is involved and that the patient has the option of saying that he does not want a student to assist him. In fact we have a sign that says so.

Q: The patient is warned and he could choose an option...

A: He is warned about the possibility that a student is assisting, exactly. There are some patients that ahead of time, warn you: “I do not want students”. It is not so much because they do not like the student, it is because they perceive that sometimes when the student is assisting, their evaluation takes more time. Obviously the student is more detailed in many things,

obtaining data already in the record that I already know and it becomes repetitive for the patient to tell the same story in several occasions, so it could be uncomfortable for them. So those are the characteristics that makes the practise different. We talked about the type of practice. We talked about our patients which are different. Our practice is different, because it is much more organized. We have an appointment system, almost no doctor here uses a system of appointments. That has been something that has attracted North Americans in the area that has used to that. There is a high percent of North Americans that come here, they appreciate that system.

Q: They like that the appointment will be such day at a given time.

A: Exactly, at such an hour, precisely.

Q: And that is the usual procedure for everyone, everybody leaves here with an appointment.

A: No, not everybody, because of the nature of the practice does not allow for that. Being primary physicians we receive patients with chronic and acute problems and some of these do not have appointments. We have a flexible system that allows us to incorporate those patients without appointment at certain times during the day.

Q: One who does not have appointment can come.

A: He will be helped. Always someone fails to show for an appointment so we can see patients that did not have an appointment, as priorities are set according to the type of problem. The nurse knows when somebody is very sick and requires to be examined quickly.

Q: That is part of the role of the nurse, determining who is assisted first because of the type of condition

A: That is determined by her, not us. We do not deal in that aspect at all. We let one of the nurses that has quite good judgement decide who needs to be seen first. The other thing is that the system of appointments is not directed so that you are going to be assisted at an exact time. I had a patient today with whom I spent 45 minutes, for that reason we fell behind in schedule. The system of appointments deals with the issue of spacing patient's arrival so that there is not a clutter in the office at a given time.

Q: What other aspects of the practise account for the public's desire to continue being your patients?

A: I believe that the personnel influences that. We have very efficient personnel and our receptionist and nurses are very pleasant people, they treat people well and the patients feel comfortable with them. This is not necessarily the case with the billing personnel and the secretarial employees that sometimes have to assume a certain role when someone is absent and they do not have the ability of managing public so effectively. We had problems in the past with people that come in contact with the patient and were rough with them.

Q: How is that detected on a day by day basis?

A: The patients tell us. Many patients that know you personally and have the confidence to tell you: "look I was assisted in such a way," "they did not give me an appointment, "I am calling you at your home because I called your office and your secretary did not want to transfer the call." We receive that "feedback" one way or another.

Q: And in that case, we can say that it is an informal system, but it works.

A: It works. We are not going to react to all the gossip that comes our way. If there is something that gets to us, we sit down with the person, we dialogue about what happened, and in the context of what happened we give credibility and weight to what is brought our attention. When the behavior becomes repetitive, we provide "feedback" of what is happening and sometimes we establish policy. Obviously that is not the only approach that we use to determine if an employee stays or leaves. There are other elements in terms of efficiency in their work. We are tolerant in terms of the personnel, we try to modify their behavior so that they improve to avoid having to make the employee redundant. I do not think that we have laid off anyone because of having that type of problem, but before they have been named as full-time employees that influences our decision to retain people.

Q: I noticed that in the yellow pages, your name was listed and when I called and they answered with a name like "institute of...". Why a name for the practice?

A: Good question, I have never thought of that issue. It was like that when I entered the practice. Perhaps it is due to a pattern of other similar practices family medicine.

Q: You have mentioned me several times that the other activities outside this practice give you much satisfaction and that is why you are here part of the time and the rest over there. You like and receive satisfaction from that other activity.

A: The other activity complements this practice, that is the creative phase of one, that is the part of the teaching, the part of developing a program, the growth of some projects. This is more of a monotonous practise in the sense that what I do is examining patients. It provides me with patient satisfaction from the point of view of providing care to the patient, of trying to make the best possible for a patient, but it is more or less a pattern. Here, from the point of view of creativity, there is not that much that can be done because it is a matter of how we

maintain the practice so that it flows. We have not needed to enter in the area of making the practice grow more, because we have left the practice to grow at its own rhythm. That provides us the opportunity to do the other activity which is the creative one.

Q: That is to say that the part of creation, of projects and of other things, is satisfied by the other activity...

A: Exactly.

Q: And this is a workshop, a practice for the students...

A: A workshop that is used as the model to students of medicine, it complements their training. It allows you to practise what you preach.

Q: You mentioned at the beginning the term marketing. What is your understanding of marketing and for what reason is it used?

A: To me marketing is selling. How I could sell myself and the fact that I am available for consultations. For me marketing is mainly what I do with my patients. But I can market myself presenting T.V. ads, advertising what I do, visiting industries to sell my product, what I do, to persons that have the need for this type of practice. Selling myself, that is what I consider as marketing, I do not consider that we have transcended very far in that aspect. The other activity supplies my basic needs, therefore this practice does not become the main part of my income. I am not concerned about making it grow more, because it could interfere in the other things that I do, so, I am comfortable with that. In fact, we have requested to our accountant to perform an evaluation of the practice so that he measures how efficient we are, is this type of arrangement that we have worthwhile? do we need to make adjustments? What else can we do to this practice in order to take it to the maximum; in that sense we are feeling a little uncomfortable in terms of the business phase of the practice, how efficient we are.

Q: How efficient since your motivations...

A: Exactly.

Q: Is this the first time that you request that to the accountant?

A: We did something similar a couple of years ago, we requested to another accountant to perform an audit. An analysis was made and he made a series of very specific recommendations, in terms of organisation of the practice, of the personnel, and that was done.

Q: Levels of staff, who performs what functions...

A: Exactly, recommendations the types of patients, handling of the administrative issues. Of all these findings a series of recommendations were proposed and many of them were implemented.

Q: And now it is being done again...?

A: Now we are requesting it again.

Q: What motivates that?

A: Maybe we are getting old, and one enters in another phase of life. We plan to retire at 60, I am going to be 43, and the other doctor 48, so we are speaking about what to do for the next 12, 13 years of the practise, we have been here some 13 years - we are half way to our goal and we are going to readjust towards where we are heading, perhaps in a more organized way. Where are we heading? how are we going to make it? Given all the changes that are taking place in medicine that definitively could have an impact in the practise, we need to have the know how of how we are doing, is it worthwhile? So that when the moment of truth comes to make a decision we can make the correct one.

Q: It was a decision of both of you: "look we are going to request to this people to do...

A: Basically we felt uncomfortable in terms of not having clear our revenue in terms of how effective the billing system is, how are we managing the economic issues, that perhaps it is not as well organized so we need to. So we need to sit down, evaluate it, and since we do not have the time for that, we pay someone to do it for us and to tell us what we could do.

Q: You say of getting ready for what is coming, do you refer to the health reform programme?

A: The health reform programme, "managed care" in general terms, because it does not necessarily has to be the health reform. The system of "managed care," for example, I would not be surprised if in a few years a multinational company comes to buy this practice. The way in which we run the practice makes it is very attractive for somebody to say "we want to buy the practice from you and have you work for us". That is what is foreseen that is going to happen with medicine in the future.

Q: And that is because of this specialty in particular or...?

A: It could be because of this specialty in particular.

Q: Because you are primary physicians and act as gatekeepers for the medical plans?

A: Exactly, possibly a multinational company is geared towards this type of practice and that is going to happen.

Q: What impact, if any, has the health reform programme had in the private practice?

A: In our practice, very little at this time. Although the health reform programme has not arrived here, it has arrived to bordering towns and we have patients within that population. There are patients from health reform programme that use us now as consultants and not as their primary doctors. Once they are part of the health reform programme, they have to go to

other primary doctors and they come to us (when they do not rely on their primary doctor) to consult us if what they are making is all right or not.

Q: When they come to you their visit is not paid by the health reform programme, they pay you directly?

A: They come paying directly or via Medicare.

Q: Have you lost some patients in those towns...?

A: We have lost some patients.

Q: When the health reform programme is implemented here, what impact, if any, do you believe it would have you private practice?

A: I am going to answer you in several ways. The impact that I fear the most is in terms of volume of patients, of having the conflict of having to close the doors to the people. There is always the option of closing the doors completely and closing could have an economic impact for me up to a certain point. There is fear and uncertainty with Medicare because many of those with Medicare are going to have access to the health reform programme and Medicare is the plan that better pays physicians in Puerto Rico right now. If the majority of the medicare population enters the health reform progamme, you are you going to be forced to enter in the health reform programme. Otherwise you will loose that percent of the population that is important. If we take the health reform programme, my fear is that the practise is going to get out of control because of the higher volume. The impact that the health reform has had with other practices is that they simply could not practise medicine like they would like because they have a very high volume.

Q: Because they are primary physician?

A: Exactly, right now I am used to see fifteen patients in four hours and that is more than enough. I have colleagues that see 60, 70, 80 patients in a day. With the equivalent of a volume of thirty patients a day I could not be able to deal with that volume. I sincerely prefer to refrain from practising medicine in that fashion. If that happens I will hang my stethoscope and go some where else.

Q: What about the area of referrals towards you?

A: We are primary physicians, therefore we do not many referrals. There is a group of physicians that refer to us: sub-specialists, psychologists refer many patients to us, psychiatrics also. But those are sub-specialties that are not within primary medicine, so we are used as consultants by them also.

Q: When they decide to refer patients, why do they refer to you in particular and not to other family doctors?

A: Because there are few family doctors in this area. There are so few doctors with the specialty of family medicine in the area, I believe that there are only five practises of family medicine in all of this large city.

Q: However in the yellow pages many more family doctors were listed?

A: Many generalists that call themselves family doctors.

Q: But they do not have...

A: They do not have specialty in family medicine.

Q: They use it almost like a generic name.

A: Exactly, if the medical plan does not check in detail they go along as family physicians. Since the newspaper does not inquire if you are a family doctor or not, they get to advertise that way. The other doctor and I are recognized as the pioneers the of family medicine in this region. We have worked in the department of family medicine of the School of Medicine and the residence program, so the other family doctors were our students. Thus we have very good standing within the community while the others are beginning their practise now.

Q: Do you refer patients?

A: Sure we do.

Q: What criteria do you have in order to refer patients, I know that if it is a problem of throat it is necessary to see a specialist in that, but...?

A: The approach is that I refer when I do not feel comfortable dealing with a problem. We manage 90% of the primary problems that we see here and only a 10% of the problems that we see are referred to other specialists.

Q: When you refer that 10% of patients, what criteria do you have in order to refer them to X or to Y?

A: Almost always when we referred it tends to be to a medical sub-specialists in the surgical areas because the patient requires a procedure that we are not performing at the moment or because the nature of the problem is so complicated that I prefer to send it to another specialist. There are several criteria. One is the clinical competency of the physician. Secondly, that the way they deal with the patients, resembles what we try to do with the patients: I like to explain everything to the patients. My goal is to refer to a doctor that, besides being competent, is expressive, talks with the patient and treats him in a correct way. The combination of that

criteria plus the fact that the physician respects us. That is to say that if there is a doctor that for X reasons does not respect the family medicine as a discipline, he has to be extremely competent in his area and unique for me to refer to him.

Q: What do you mean by not respecting family medicine?.

A: A person that obviously speaks bad about family medicine. There is a lot of people that do so because of ignorance, of fears that we are invading their field, economic fears, to such persons, I tend not to refer.

Q: You mentioned that the patient is well treated by the other physician, how could you know if the patient is treated well?

A: The patients let us know. When we make a referral, that patient usually returns to us. The great majority think of us as primary doctors and they tell us: "I felt comfortable with this doctor and was well treated" or "I did not like him, please refer me to another physician."

Q: When you begin to see a pattern of a physician that many patients are saying that they did not like...

A: Exactly, we are in a relatively small community and obviously one knows what is happening. In this city there are many "tribes" because in different hospitals there is much rivalry between some physicians and others. Medicine students are a source of feedback since many times they come to us with some questions and eventually they tell us: "Oh boy! I thought that this was another thing because such physician told me this and that."

APPENDIX 23

HOW PATIENTS LEARN OF PHYSICIAN PRACTICES, WHY THEY RETURN TO THEIR PRACTICES

Case	How patients learn of their practice, why they return to their practices
Case 1	RELATIONSHIP- interpersonal relationships, time spent with patient ADVERTISING - publishes "presentation card" in regional newspaper WORD OF MOUTH - "most come in today by word of mouth"
Case 2	WORD OF MOUTH - "definitively the most important" RELATIONSHIP - "patients return because I continue ... listening to them" REFERALS - by physicians and patients is what makes practice successful STAFF - how well they treat the patient is "a way of effectively promoting..."
Case 3	ADVERTISING - in medical services section of regional newspaper RECOGNITION - because of involvement in a variety of community activities RELATIONSHIP - "the service I provide and the humane treatment I give by listening", physician makes house calls
Case 4	WORD OF MOUTH - "the most powerful weapon ... is your own patients" RELATIONSHIP - "the patient wants his health to be maintained, to be well treated, to be heard, to feel as a human being treated by another human being" STAFF - "constantly" trained by physician in clinical aspects, emphasis on attention to patients' needs
Case 5	ADVERTISING - patients repeatedly explain they visit because of the ad WORD OF MOUTH - referrals by satisfied family members RERERALS - by other physicians PATIENT SATISFACTION - patients "appear satisfied with the service" RELATIONSHIP - dedicating time to patients "results in recuperation and maintenance of their wellness" STAFF - secretary maintains excellent communication with patient and phys.
Case 6	ADVERTISING - to directly attract patients with private (free selection) plans REFERALS - via contracts with those that already have "captured" patients WORD OF MOUTH - "the strongest ... marketing in this particular practice" RELATIONSHIP - "the patient is first ... we are directing the practice to be patient centered" STAFF - always comes in contact first with the patient at the practice or by tel.

Case 7	WORD OF MOUTH - "by a neighbor [of a prospect] that has been my patient [and recommended me]...(it) is a continuos chain" SPECIALTY - physician is one of two in the region with particular specialty REFERALS - from other physicians PATIENT SATISFACTION - "if patient is satisfied with previous treatment" RELATIONSHIP - "would mostly attract the patient [to return]". "Today's patient demands more time ... is more inquisitive, wants to know more about his medical condition ... is more intelligent ... that requires more of the physician's time"
Case 8	WORD OF MOUTH - "the practice has grown based on what patients say about us". REFERALS - "at the beginning majority of patients came because of [our] contracts with medical plans". RELATIONSHIP - patient wants "to talk to [the physician] as a friend ... " STAFF - "influences (in patients return) because they are quite efficient ... very likable, treat people well and patients feel comfortable with them".

APPENDIX 24

NOTE ON THE DIFFUSSION PROCESS/ADOPTION PROCESS

In chapter 7 reference is made to the Diffusion Process/Adoption Process as used mostly to describe the adoption of innovation by consumers over time. The chapter also explains that this research shows the Diffusion/Adoption Process applies very well to professional service providers and their behaviour of adopting marketing techniques for their practice. The purpose of this brief note is to further expand on the concepts of innovation diffusion and consumer adoption.

Kotler (1991, p. 342) describes an innovation referring "...to any good, service, or idea that is *perceived* by someone as new. The idea may have a long history, but it is an innovation to the person who sees it as new."

Diffusion Process, as defined by Hawkins et at (1995, p. 174) is "the manner in which innovations spread throughout a market", based on the time it takes for innovations to be adopted, over time, by consumers in a particular market place. The adoption process, on the other hand, has to do with the process experienced by the individual from the moment he/she learns of an innovation to the time of the actual adoption (Rogers, 1983). Thus, adoption is the "decision of an individual to become a regular user to a product [good, service or idea]" (Kotler 1991, p. 342).

The adopter is divided into five categories, on the basis of the relative time of adoption of innovations. The adopter categories are defined as:

Innovators:	the first 2.5 percent to adopt
Early adopters:	the next 13.5 percent to adopt
Early majority:	the next 34 percent to adopt
Laggards:	the next 16 percent to adopt
Late majority:	the final 34 percent to adopt

REFERENCES

Hawknis D.I., R.J. Best, and K.A. Coney (1995). Consumer Behavior. Irwin, 6th edition.

Kotler, P. (1991). Marketing Management. Prentice Hall, 7th edition.

Rogers, E. M. (1983). Diffusion of Innovations. The Free Press, Macmillan Publishing, 3rd edition.