ELDERS' SATISFACTION WITH COMMUNITY BASED HEALTH CARE SERVICES

Jane Kolodinsky, University of Vermont
Lee Shirey, University of Vermont

ABSTRACT

Using a sample of 165 disabled elders, aged 50 and over, receiving in home formal care giving, we estimate satisfaction with community based services and compare two different dependent variables. The first is a measure of the probability of being "very satisfied" and the second is the concept of a satisfaction GPA (grade point average). The models perform similarly. Controlling for health and other socio-economic variables, we find that communication, courtesy, and reliability of caregivers have the greatest impact on satisfaction.

INTRODUCTION

Patient satisfaction with health care is dependent on the interaction of the patient, the provider, and the health care system (Swan, 1992; Riley, 1994). The interactions in this system are important at all levels of health care, but have a particular importance to elders, who, because they have more medical problems, are a group that is greatly affected by changes in medical service provision (Ory, Cooper and Siu, 1998). Both providers of services and consumers of services must play an active role in increasing the value of services provided in a changing health care environment. There are many ways to measure the value of these services, ranging from supply side measures of cost containment and decreases in the number of days lost to employers due to ill health, to demand side measures including improved functional status, reduced need for health care utilization, and client satisfaction (Sofaer, 1998). This study focuses on client satisfaction as a measure of value in the provision of community based health care services.

Unfortunately, consumers of health care services are often included only as a minor component of outcome measures of health care quality (See, for example, Zinn and Mor, 1998 and Wholey, Burns, and Lavizzo-Mourey, 1998 for overviews). However, Rodwin (1994) points out the need for increased medical consumerism in shaping the quality of medical service provision, and Steele (1992) summarizes the role of the consumer in shaping health services to meet the needs of both providers and consumers:

> In order to provide health services which are responsive to consumers' needs, those organizations whose role it is to purchase, provide, or assess health services have a duty to carry out consumer appraisal work. Consumers are experts. They are experts on their own priorities, their own needs, and their own experiences, and they should be consulted as should any other expert group (p. 37).

LITERATURE REVIEW

Researchers who empirically examined consumer satisfaction with health care have suggested that satisfaction is influenced by aspects of care that are specific to the health care experience (Abramowitz, Cote, and Berry 1987; Cleary and McNeil 1988; de Ruyter and Scholl 1994; Doering 1983; Russell 1990; Strasser, Aharony, and Greenberger 1993; Ware and Snyder 1975; Woodside, Frey, and Daly 1980), and that consumers are able to form summary measures of their satisfaction based on their satisfaction with components of care (Aharony and Strasser 1993; Kolodinsky 1997; Luft 1981; Strasser, Aharony, and Greenberger 1993).

Having reviewed some of the earlier (pre 1975) literature in the area of patient satisfaction, Luft (1981) characterized satisfaction as being related to access, availability of resources, continuity of care, information transfer, humanness, and quality. Higgins et al. (1991) suggest ten dimensions of quality that are specific to Health Maintenance Organizations (HMOs), that are also applicable to any community based health care provision: reliability, responsiveness, competence, access, courtesy, communication, credibility, security, knowing the customer, and tangibles, such as written communications and billing procedures. Others have identified

attributes of health care such as accessibility, quality and continuity of care, as well as communication with the care provider as important in shaping consumer satisfaction (Russell, 1990; Buller and Buller, 1987).

Some researchers have focused specifically on the process of health care delivery (distinct from the physical outcome) as being a major influence on consumer perceptions of satisfaction with medical services (Buller and Buller 1987; Street and Wiemann 1987; Woolley, Kane, Hughes, and Wright 1978). Swan (1992) has suggested that the formation of patient satisfaction perceptions is based on a reciprocal process that is influenced by both the consumer and provider of medical services. This is an extension of the expectation/ disconfirmation model (Cardozo 1965; Oliver 1989), and is complementary to the work of Woodruff et al. (1983) who assert that consumers develop a set of experience based norms on which they judge whether expectations are disconfirmed. It is Swan's (1992) proposition that "patient expectations and standards for performance are negotiated as health care providers attempt to change unrealistic patient expectations/performance standards" (p. 69).

Few studies specifically examine the satisfaction of older patients. Furthermore, "most patient satisfaction studies have been undertaken in outpatient departments...There has, however, been a recent shift towards including other, more vulnerable groups, such as the elderly...This trend has been fueled by the move toward care in the community..." (Owens and Batchelor, 1996, 1484). While Kolodinsky (1997) found that older persons were less satisfied with a move to managed care health systems, Owens et al. (1996) conclude that elderly consumers are particularly more likely to be satisfied with their care. Beisecker (1988) attributes this to his finding that older people are more likely to "put themselves completely in the hands of the doctor" (See also, Beisecker and Beisecker, 1996). There is other evidence, however, that indicates elders are interested in taking an active role in their health (Ory and de Friese, 1998; Sofaer, 1998).

Lee and Kasper (1998) examined the probability of being highly satisfied (versus generally satisfied) with medical care among a sample of Medicare recipients who live at home. Logistic regression results indicated that predictors of being highly satisfied include increased education and income, while those in poorer health were less likely to be highly satisfied. In addition, technical skills of the care provider were more important than interpersonal skills, and frequency of contact increased the probability of being highly satisfied. Blazer, Landerman, Fillenbaum, and Horner (1995) compared satisfaction with health services between 4,001 rural and urban North Carolinians ages 65 and older. Satisfaction was measured using a 4-point Likert scale, where one represented "very dissatisfied" and four represented "very satisfied." Similar to Lee and Kasper (1998), OLS regression results indicate a positive association between education and satisfaction. Further, Blazer et al. (1995) also found that those in better health were more satisfied with their medical care. Although satisfaction varied by county, there were no significant differences between urban and rural samples. These two studies treated the dependent variable, which was measured on the same scale, differently. While the former categorized satisfaction, the latter treated satisfaction as a continuous variable.

In general, literature on consumer health care satisfaction does not examine community based services, and often fails to differentiate between special populations. "Elderly people cannot be viewed as a homogeneous group with similar needs and capacities" (Owens and Batchelor, 1996). As community based care continues to play a large role in the struggle of older Americans to age in place, more studies need to be conducted to measure elder satisfaction with these services. Of special importance is the use of community services by older Americans in rural areas. Community care services include: medical home health care, high technology care, meals (both home delivered and congregate), homemaker, personal care, senior companion and peer counselor services, adult day care, financial services (supplemental security income, aid to families with dependent children, food stamps, and prescription insurance), and other services (emergency lifeline, fuel assistance and weatherization). This is a trend toward community coalition systems and managed care being developed to insure delivery of quality care.

Whether these new health care arrangements will result in client satisfaction must be ascertained. This study is significant as it incorporates characteristics of older consumers and their care, as well as aspects that characterize the health care system, in a multivariate analyses that predicts satisfaction with community care.

MODEL AND DATA

Use of multivariate statistical methodology allows us not only to identify the direction and magnitude of the effect of each component of quality measured, but also allows us to identify whether and how various socio-economic factors themselves influence overall satisfaction with community based care. Thus, we can look at relationships within a system of care.

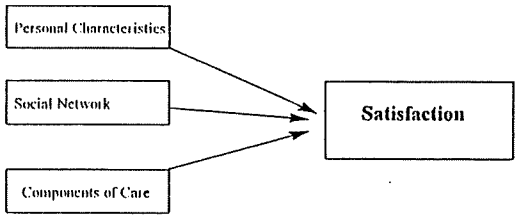
Data

Telephone interviews were conducted in the fall of 1997 with disabled persons who use community services in a rural northeastern state. (The state Department of Aging and Disabilities provided a list of clients.) In addition to extensive measures of their functional and cognitive health status, information on their satisfaction with services as well as on their quality of life was collected. A five-point Likert scale, ranging from A to F, where A represented "very satisfied" and F represented "very dissatisfied," was used to measure satisfaction. Using this scale, we were able to calculate a "satisfaction GPA" grading system. (See, for example, Blazer et al., 1995.) Based on studies by Russell (1990), Buller and Buller (1987), and Higgins et al. (1991) which indicate dimensions of medical care that impact satisfaction, the components of community services that were measured include: accessibility to services, communication, courtesy, involvement, reliability, and overall quality of care. If the client was unable to respond due to his/her health, a proxy other than the formal care provider completed the interview.

Our focus lies on older Americans, and thus the sample was limited to those ages 50 or older based on the minimum age requirement for membership in American Association for Retired Persons (AARP). These individuals comprised 66% of the original 298 completed questionnaires. The final sample size was 197; however, missing data decreased the sample size to 165. Client satisfaction with community based care was matched with the State's "Independent Living Assessment" data base. All respondents were covered by Medicare A, and 34% were on the state Medicaid Waiver Program. None of the respondents had Medicare B coverage, and information on long-term care insurance was incomplete for a portion of the sample.

The independent variables that measure characteristics of the client are categorized into the following four categories: Demographic Factors, Economic Factors, Social Network, and Health. See Figure 1.

Figure 1
Conceptual Model of Satisfaction with Community Based Care



Demographic factors include GENDER (1 = Male) and age of the elder (AGE). *Economic factors* include various measures of transfer income due in part to the finding that all respondents were unemployed or retired. TRANSFER equals one if the respondent receives food stamps, SSI, or fuel assistance on a monthly basis. INCOME is summation of monthly Social Security and retirement/pension payments. Thus, we also included a dummy variable, SOCONLY, if the "income" variable only includes Social Security payments. SOCINC is the interaction term of SOCONLY and INCOME. Variables in the *Social Network* category include URBAN and INFORMAL. URBAN is defined as any location within the only urban county in the state. INFORMAL equals one if the respondent has a primary informal caregiver (caregiver who does not receive monetary compensation for services). Various *health* measures include the number of

Table 1
Descriptive Statistics (N = 165)

Variable	Definition	Mean (S.D.)
Demographics		
AGE	Age in years (50 +)	75.99(11.58)
GENDER	1 = Male	24.85(.43)
Economic Factors		
TRANSFER	1 = Receipt of SSI, Food Stamps, or Fuel Aid	47.27(.50)
INCOME	Monthly Income from Social Security and Retirement Pension	$425.95 (343.95)
SOCONLY	1 = Receives income from S.S. ONLY	44.85(.50)
SOCINC	SOCONLY*INCOME	$256.45(322.52)
Social Network		
URBAN	1 = Resides in an urban area	15.15(.36)
INFORMAL	1 = Has primary informal caregiver	84.85(.36)
Health		
#ADL's	Number of ADL's	4.32 (2.56)
#IADL's	Number of IADL's	4.91 (1.57)
FALLEN	1 = Fallen in past 3 months	38.18(.49)
HEART	1 = Has heart problems	52.73(.50)
CANCER	1 = Has cancer	5.45(.23)
Satisfaction-continuous	GPA from a scale of "A" = 4 to "F" = 0	
ACCESS	Access to services	3.42(.98)
COURTESY	Courtesy of care providers	3.78(.56)
RELIABLE	Reliability of care providers	3.61(.71)
TALK	Communication of care providers	3.73(.64)
INVOLVED	Involvement of consumer in receipt of care	3.56(.82)
Satisfaction-very satisfied		
ACCESS	Access to services	64.80(.48)
COURTESY	Courtesy of care providers	83.00(.38)
RELIABLE	Reliability of care providers	72.10(.45)
TALK	Communication of care providers	81.20(.39)
INVOLVED	Involvement of consumer in receipt of care	70.90(.46)
Dependent		
QUALITY	Overall quality of care ("A" = 4, "F" = 0)	3.69(.65)
HIGHLY	1 = Highly satisfied with quality of care	76.00(.43)

Activities of Daily Living (ADL) (#ADLS) and likewise the number of Instrumental Activities of Daily Living (IADL) (#IADLS). Based on findings by Hobbs and Damon (1996) that heart disease and cancer are the leading causes of death in the 1990's, we included HEART (1 = Has heart problems) and CANCER (1 = Has cancer).

ACCESS, COURTESY, INVOLVED, RELIABLE, AND TALK are the components of care that influence overall measures of satisfaction with quality. We calculated both a GPA grade for these and also identified them by two categories where 1 = highly satisfied and 0 = less than highly satisfied. These dimensions of medical care

have consistently been found to impact consumer satisfaction (Luft, 1981; Higgins et al., 1991; Russell, 1990; Buller and Buller, 1987). ACCESS refers to the accessibility of services; C by the care providers for the client's privacy and personal belongings; INVOLVED is a measure of one's satisfaction with his/her involvement in the decisions made about the care received, as well as being fully informed about the procedures of the care; RELIABLE refers to being able to depend on the care providers to arrive at the scheduled time; TALK is defined as communication with the care providers. The sample characteristics are provided in Table 1.

Empirical Model

Respondents reported satisfaction with overall quality as a grade between F, for failing, and A, for excellent. This scale was used because the Department of Aging and Disabilities (DAD), for whom the original data were collected, wanted a scale that all elders were familiar with. Two focus groups, consisting of clients of community based services, providers of services, and representatives from DAD, confirmed the use of an "A through F" grading system. We calculated a "satisfaction GPA" based on client grading of quality.

To estimate the model, the dependent variable is the overall quality grade assigned by each respondent concerning the quality of their community based care, coded 0 for "F" through 4 for "A" (See, for example, Russell 1990, Buller and Buller 1987, Higgens et al. 1991, and Kolodinsky, 1997). The independent variables include the individual components that add to satisfaction and the controlling variables representing demographics, and socio-economic and health status. The estimated model is written:

$$\text{SATISFACTION GPA} = B_0 + B_1\text{ACCESS}^1 + B_2\ \text{COURTESY}^1 + B_3\ \text{INVOLVED}^1 + B_4\ \text{RELIABLE}^1 + B_5\ \text{TALK}^1 + B_6\ \text{GENDER} + B_7\ \text{AGE} + B_8\ \text{TRANSFER} + B_9\ \text{SOCSEC} + B_{10}\ \text{INCOME} + B_{11}\ \text{SOCINC} + B_{12}\ \text{SOCONLY} + B_{13}\ \text{URBAN} + B_{14}\ \text{INFORMAL} + B_{15}\ \#\text{ADLS} + B_{16}\ \#\text{IADLS} + B_{17}\ \text{FALLEN} + B_{18}\ \text{HEART} + B_{19}\ \text{CANCER} + \text{ERROR}.$$

[1]Measured using the "GPA" scale where "A" = 4 and "F" = 0.

Because in this case we treat satisfaction as being measured on an interval grade point scale, this model is easily estimable using Ordinary Least Squares Regression analysis.

Because we used a conventional measure, GPA, based on transforming reported alphabetic grades into a continuous measure, just as is done in the case of many school grades, and because the majority of respondents rated quality very high (there is little variation in the dependent variable), we also estimated satisfaction using a logistic regression model which uses the true, categorical nature of the dependent variable, overall quality. (See, for example, Lee and Kasper, 1988). For this second specification, the dependent variable is coded 1=highly satisfied (grade of "A") and 0 = less than highly satisfied (grade = "B," "C," "D," or "F"). The independent variables remain the same. The estimated equation is:

$$\text{HIGHLY SATISFIED} = \alpha_0 + \alpha_1\ \text{ACCESS}^2 + \alpha_2\ \text{COURTESY}^2 + \alpha_3\ \text{INVOLVED}^2 + \alpha_4\ \text{RELIABLE}^2 + \alpha_5\ \text{TALK}^2 + \alpha_6\ \text{GENDER} + \alpha_7\ \text{AGE} + \alpha_8\ \text{TRANSFER} + \alpha_9\ \text{SOCSEC} + \alpha_{10}\ \text{INCOME} + \alpha_{11}\ \text{SOCINC} + \alpha_{12}\ \text{SOCONLY} + \alpha_{13}\ \text{URBAN} + \alpha_{14}\ \text{INFORMAL} + \alpha_{15}\ \#\text{ADL} + \alpha_{16}\ \#\text{IADL} + \alpha_{17}\ \text{FALLEN} + \alpha_{18}\ \text{HEART} + \alpha_{19}\ \text{CANCER} + \text{ERROR}.$$

[2]Measured as a dummy variable where 1 = "highly satisfied" and 0 = "less than highly satisfied."

RESULTS

For the OLS model, three of the five components of satisfaction with community based care are significant. See Table 2. Controlling for demographics, socio-economic and health factors, client satisfaction with courtesy of their formal caregiver, the reliability of their caregiver, and communication with their caregiver all contribute positively and significantly towards overall satisfaction with community based care. These variables, in fact, have the greatest effect on the satisfaction GPA, raising it between .2 and .3

Table 2
Results of the OLS and Logit Models

Variable	Definition	OLS	LOGIT	
		Coefficient (S.E.)	β Coefficient (S.E.)	Odds Ratio (exp(β)
Demographics				
AGE	Age in years (50+)	.003 (.004)	-.018 (.029)	.982
GENDER	1 = Male	.079 (.097)	-.614 (.801)	.541
Economic Factors				
TRANSFER	1 = Receipt of SSI, Food Stamps, or Fuel Aid	.111 (.085)*	2.144 (.833)**	.156
INCOME	Monthly Income from Social Security and Retirement Pension	.012 (.014)	.238 (.143)*	1.269
SOCONLY	1 = Receives income from S.S. ONLY	.095 (.177)	2.446 (1.718)	11.544
SOCINC	SOCONLY*INCOME	-.027 (.030)	-.494 (.299)*	.610
Social Network				
URBAN	1 = Resides in an urban area	-.325 (.115)***	-1.837 (.892)**	.159
INFORMAL	1 = Has primary informal caregiver	.203 (.114)*	1.960 (.929)*	7.099
Health				
#ADL's	Number of ADL's	.010 (.021)	.026 (.159)	1.026
#IADL's	Number of IADL's	-.007 (.036)	.217 (.311)	1.243
FALLEN	1 = Fallen in past 3 months	-.121 (.085)*	-1.104 (.662)*	.332
HEART	1 = Has heart problems	-.066 (.084)	-.596 (.718)	.551
CANCER	1 = Has cancer	-.136 (.172)	-1.863 (1.319)	.155
Satisfaction †	GPA from a scale of "A = 4 to "F" = 0			
ACCESS	Access to services	.034 (.051)	-.611 (.867)	.543
COURTESY	Courtesy of care providers	.262 (.078)***	1.519 (.785)*	4.568
RELIABLE	Reliability of care providers	.203 (.071)***	2.781 (.853)***	16.142
TALK	Communication of care providers	.298 (.073)***	2.878 (.902)***	17.762
INVOLVED	Involvement of consumer in receipt of care	.049 (.054)	1.509 (.974)*	4.520
CONSTANT		.214 (.421)	-5.945 (2.642)	

* = p-value < .10; ** = p-value < .05; *** = p-value < .001
† For OLS results satisfaction is a continuous variable, and for Logit results satisfaction is a dummy variable with 1 = highly satisfied.

points if courtesy, reliability, and communication were rated very satisfactory by the client.

Several other variables are significant, and help to paint a picture of how to improve client satisfaction with community based care. Clients who reside in urban areas and who have fallen in the three months previous to the interview were less satisfied with the overall quality of care. Clients with an informal caregiver and those with increased transfer incomes from sources including food stamps and fuel assistance, rate their overall satisfaction higher. The magnitude of these significant variables on the satisfaction GPA, is relatively large for the two factors that decrease

satisfaction (-.32 for URBAN and -.12 for FALLEN). Having an informal caregiver increases the satisfaction GPA by .2, and receiving transfer payments increases the satisfaction GPA by .1.

Overall, we can say that, other than for residing in an urban area, the components of care that influence satisfaction have the highest impact on overall perceptions of quality, holding all else constant. An overall improvement in communication, courtesy, and reliability of caregivers will cause the greatest rise in satisfaction by clients. These are variables representing the supply side of medical care. However, demand side variables also impact satisfaction. Individuals with a greater possibility of community contact (URBAN) and those who are possibly more frail (FALLEN) are important variables to consider when providing community based care. For rural elders, in contrast to urban elders, it appears that communication and contact with the outside world is an important component of the care received. Rural elders may be more satisfied overall because they enjoy the companionship of their care provider, whereas urban elders may only be concerned with the actual (medical) care that they receive. For more frail elders it seems that they are placing themselves in the hands of the care provider, as suggested by Beisecker (1988), and need more care than those who have not fallen. Figure 2. highlights how changes in significant independent variables impact the overall "quality GPA."

The logit results, which estimate the probability of rating care quality "A," show that four of the five components of quality care are significant. See Table 2. Courtesy, involvement with care, reliability of caregiver, and communication all significantly and positively impact clients' perceptions of overall quality. As with the OLS regression, clients who have fallen within the past three months, and those residing in urban areas are less likely to be highly satisfied. Clients who receive transfer income and who have an informal caregiver are more likely to be highly satisfied. The logit results have two additional significant variables as compared to the OLS results. Clients with higher incomes from sources other than Social Security have a higher probability of being very satisfied, while those with higher incomes from Social Security have lower levels of satisfaction. As suggested by Lee and Kasper (1998), perhaps clients who have additional sources of income do not feel disadvantaged, as people in lower socio-economic status may, and thus do not perceive their care as poor quality. On the other hand, clients who have no other resources with the exception of Social Security may be less satisfied because they have no other means of receiving care. They rely totally on community based care to insure them of an independent lifestyle. Thus, these people must receive the best care possible, and in turn are less satisfied. See Figure 1 for a depiction of how each independent variable affects being highly satisfied. Clearly, reliability and communication have the largest impact on overall ratings of quality of care. In fact, individuals who are highly satisfied with the reliability of the care providers are 16 times as likely to be highly satisfied with the overall quality of care. Similarly, individuals who are highly satisfied with the communication of the care providers are 17 times as likely to be highly satisfied with the overall quality of care.

These results suggest that, in general, the components of care have the largest impact on one's satisfaction with the care he/she receives. These findings are valid and are certainly not surprising. Any future improvements in the delivery of medical services need to concentrate on these areas. This study found that courtesy, reliability, and communication are the most important factors impacting satisfaction. Communication clearly relates to what Swan (1992) called the reciprocal process, where clients and care providers work together to improve communications. Courtesy may also be seen as a "two way street" in that a difficult client may make being courteous difficult for a provider. However, respect and courtesy on the part of the caregivers should be emphasized in service provision. Reliability is a "supply side" factor that can be controlled by the providers. This aspect should be given careful attention in the future as community based health systems continue to move toward managed care systems. This variable is a form of vie care when needed has been pointed to as a problem in managed care systems (Kolodinsky, 1997, Higgins et al. 1991, Russell 1990). A major issue in the delivery of

services to older Americans in rural areas is the accessibility of services (Harlow, 1993). Although rurality is commonly associated with access, ACCESS was not a significant component in the satisfaction ratings. Rural versus urban location, however, is a characteristic that affects satisfaction even after accounting for other, specific components of care. Thus, the variable RURAL measures something different than, for example, access or communication. This should be examined in future studies of satisfaction within community based health services.

REFERENCES

Abramowitz, S., A. A. Cote and E. Berry (1987), "Analyzing Patient Satisfaction: A Multianalytic Approach," *Quality Review Bulletin*, 13, (4 April), 122-130.

Aharony, L. and S. Strasser (1993), "Patient Satisfaction: What We Know About and What We Still Need to Explore," *Medical Care Review*, 50, (1), 49-79.

Beisecker, A. (1988), "Aging and the Desire for Information and Input in Medical Decisions: Patient Consumerism in Medical Encounters," *The Gerontologist*, 28, 330-335.

Beisecker, A. E. and T. D. Beisecker (1996), "Research Issues Related to Physician-Elderly Patient Interactions," *Research on Aging: a Quarterly of Social Gerontology and Adult Development*, 18, Special Issue.

Blazer, D., L. Landerman, G. Fillenbaum and R. Horner (1995), "Health Services Access and Use Among Older Adults in North Carolina: Urban vs. Rural Residents," *American Journal of Public Health*, 85, (10), 1384-1390.

Buller, M. K. and D. Buller (1987), "Physicians' Communication Style and Patient Satisfaction," *Journal of Health & Social Behavior*, (28), 375-388.

Cardozo, R. N. (1965), "An Experimental Study of Consumer Effort, Expectation and Satisfaction," *Journal of Marketing Research*, 2, (August), 244-249.

Cleary, P. D. and B. J. McNeil (1988), "Patient Satisfaction as An Indicator of Quality for Care," *Inquiry*, 25, (1-Spring), 25-36.

de Ruyter, Ko and N. Scholl (1994), "Incident-Based Measurement of Patient Satisfaction/Dissatisfaction: A Dutch Case," *Journal of Consumer Satisfaction, Dissatisfaction and Complaining Behavior*, 796-806.

Doering, E. R. (1983), "Factors Influencing Inpatient Satisfaction With Care," *Quality Review Bulletin*, 9, (10), 291-299.

Harlow, K. (1993), "Urban, Suburban, or Rural Location As a Proxy Measure of Need: Implications for Targeting Resources to Elders," *Urban Affairs Quarterly*, 29, (1), 164-176.

Higgins, L. F., J. M. Ferguson and W. J. Winston (1991), "Understanding and Assessing Service Quality in Health Maintenance Organizations," *Health Marketing Quarterly*, 9, (1), 1-22.

Kolodinsky, J. (1997), "Gender Differences in Satisfaction with Primary Care Physicians in a Managed Care Health Plan," *Women & Health*, 26, (4), 67-86.

Lee, Y. and J. D. Kasper (1998), "Assessment of Medical Care by Elderly People: General Satisfaction and Physician Quality," *Health Services Research*, 32, (6), 741-758.

Luft, H. S. (1981), *Health Maintenance Organizations: Dimensions of Performance*, New York: Wiley and Sons.

Oliver, R. L. (1989), "Processing of the Satisfaction Response in Consumption: A Suggested Framework and Research Propositions," *Journal of Consumer Satisfaction, Dissatisfaction, and Complaining Behavior*, 2, 1-16.

Ory, M. G., J. Cooper and A. L. Siu (1998), "Toward the Development of a Research Agenda on Organizational Issues in the Delivery of Healthcare to Older Americans," *Health Services Research*, 33, (2), 287-297.

Ory, M. G. and G. H. DeFriese (1998), *Self-Care in Later Life*, New York: Springer.

Owens, D. and C. Batchelor (1996), "Patient Satisfaction and the Elderly," *Social Science and Medicine*, 42, (11), 1483-1491.

Riley, M. W. (1994), "Aging and Society: Past, Present, and Future," *Gerontologist*, 34, 436-46.

Rodwin, M. A. (1994), "Patient Accountability and Quality of Care: Lessons from Medical Consumerism and the Patients' Rights, Women's Health and Disability Rights Movements," *American Journal of Law and Medicine*, XX, (1&2), 147-167.

Russell, M. N. (1990), "Consumer Satisfaction: An Investigation of Contributing Factors," *Journal of Social Service Research*, 13, (4), 43-56.

Sofaer, S. (1998), "Aging and Primary Care: An Overview of Organizational and Behavioral Issues in the Delivery of Healthcare Services to Older Americans," *Health Services Research*, 33, (2), 298-321.

Steele, K. (1992), "Patients as Experts: Consumer Appraisal of Health Services," *Public Money and Management*, (October-December), 31-37.

Strasser, S., L. Aharony and D. Greenberger (1993), "The Patient Satisfaction Process: Moving Toward a Comprehensive Model," *Medical Care Review*, 50, (2-Summer), 219-248.

Street, R. L., Jr. and J. M. Wiemann (1987), "Patients' Satisfaction with Physicians' Interpersonal Involvement, Expressiveness, and Dominance," M. McLaughlin (Ed.), *Communication Year Book*, 591-612, Beverly Hills, CA: Sage.

Swan, J. E. (1992), "Satisfaction Work: The Joint

Production of Patient Satisfaction by Health Care Providers and Patients," *Journal of Consumer Satisfaction Dissatisfaction and Complaining Behavior*, 569-580.

Ware, J. E. and M. K. Snyder (1975), "Dimensions of Patient Attitudes Regarding Doctors and Medical Care Services," *Medical Care*, 13, 669-682.

Wholey, D. R., L. R. Burns and R. Lavizzo-Mourey (1998), "Managed Care and the Delivery of Primary Care to the Elderly and the Chronically Ill," *Health Services Research*, 33, (2), 322-353.

Woodruff, R. B., E. R. Cadotte and R. L. Jenkins (1983), "Modeling Consumer Satisfaction Processes Using Experienced-Based Norms," *Journal of Marketing Research*, 20, (August), 296-304.

Woodside, A. G., L. L. Frey and R. T. Daly (1980), "Linking Service Quality, Customer Satisfaction, and Behavioral Intention," *Journal of Health Care Marketing*, 9, (4), 5-17.

Woolley, F. R., R. L. Kane, C. C. Hughes and D. D. Wright (1978), "The Effects of Doctor-Patient Communication on Satisfaction and Outcome of Care," *Social Science and Medicine*, (12), 123-128.

Zinn, J. S. and V. Mor (1998), "Organizational Structure and the Delivery of Primary Care to Older Americans," *Health Services Research,* 33, (2), 354-380.

Send correspondence regarding this article to:
Jane Kolodinsky
202 Morrill Hall
University of Vermont
Burlington, VT 05405 U.S.A.