Patient Advocacy and Cancer Screening in Late Life

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Abstract: *Objective*: We explored the influence of patients' proactivity in communication, their age, and co-morbidities on physician recommendations of breast and colorectal cancer screening. We focused on mammogram and colonoscopy/sigmoidoscopy, as the recommended screening tests for these prevalent late life cancers.

Methods: Data are based on interviews with 414 independent community dwelling elderly participants in a long-term panel study (Mean age 81.2; SD 7.6).

Results: Patient age was found to be the strongest deterrent to physician recommendation for each of the two cancer screening tests. Patient advocacy in requesting referrals resulted in higher rates of screening recommendations for both tests considered. Multivariate analyses indicated that, contrary to practice guidelines, patients with more chronic illnesses were more likely to receive screening recommendations for both cancers. On the other hand, being free of functional limitations increased screening recommendations for cancers considered. We found significant concordance between physician recommendation and patient screening adherence.

Conclusion: Elderly patient initiative and assertiveness in communication with physicians can play a significant role in eliciting cancer screening recommendations. Such consumer proactivity and advocacy can counteract current practices of using age, rather than life limiting illness, as the criterion for curtailing cancer screening of elderly patients.

Practice Implications: Improved self-advocacy by older patients is likely to contribute to better preventive health care.

Keywords: Cancer screening, elderly, communication.

INTRODUCTION

In this paper, we report the results of an empirical study based on 414 community dwelling elderly persons that examined the role of consumer initiative in obtaining cancer screening recommendations from primary care physicians. We explore the relative influence of patients' age, demographic, and health characteristics, and consumer advocacy in physicians' recommendations of cancer screening tests for two of the most prevalent late life cancers, i.e., colorectal and breast cancer. Colorectal cancer screening was considered for both genders and breast cancer screening only for women. We also examine the relationship between physician recommendations of screening tests and adherence to these recommendations among the older adults we studied [1].

Our steadily growing population of older adults represents the age group at highest risk for cancer (10 times greater than younger age groups) [2]; yet older adults are underserved in terms of cancer prevention and care [3,4]. Doctors are less likely to discuss preventive practices and less likely to recommend cancer screening tests of proven efficacy to elderly patients than to middle aged individuals [5]. Focus on detection and preventive practices has been found to occur in less than one-third of medical visits for elderly persons [6].

Prevention and early detection of cancer have been recognized as important public health strategies for reducing cancer burden on society and on individuals [7]. Indeed, the benefits of preventive health behaviors and cancer screening for aged persons with a life expectancy of five or more years are widely supported in clinical practice guidelines of primary care [8]. Older adults have also been found to show preferences for continued screening [9]. Medical advice plays a key role in older patients obtaining tests for early detection of cancer [10]. Thus, physician communication contributes to proximal, intermediate, and primary health outcomes of patients in terms of cancer prevention and screening [1].

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In an effort to call greater attention to patients' roles in communicating with physicians, we developed a Health Care Partnership model of patient-physician communication [11]. Building on Query & Kreps' Relational Health Communication Competence Model [12], we emphasize the proactive roles patients can play in achieving better health outcomes through consumer advocacy by seeking health information and by showing initiative in their interactions with physicians [1]. The Healthcare Partnership Model [11] serves as a conceptual foundation for our paper. The model considers doctor patient communication as a bidirectional process wherein active roles exist for both patients and physicians. Patients' active roles as health care consumers are alternatively referred to as proactivity, initiative, and assertiveness, reflecting the multidimensional opportunities available.

Tailoring screening recommendations on the basis of chronic health conditions (that serve as a proxy for anticipated longevity) would target those elderly patients who can most benefit, and are least likely to be harmed by cancer screening [13]. Nevertheless, research indicates that in current practice, physicians decrease screening recommendations based on a patient's age without regard to life expectancy [14]. Limiting cancer screening and prevention advice to older adults is often based on presumed lack of interest or adherence by this age group [15]. To address this issue, in our study we examined the relationship between elderly patient reports of screening recommendations and their adherence to obtaining screening. Furthermore, we considered the influence of proactive health care consumerism among older adults on receipt of cancer screening recommendations. Based on our Health Care Partnership Model of communication [16, 17], we hypothesized that patient advocacy, including initiative and assertiveness in communication, will enhance older patients' preventive care for breast and colorectal cancer.

BACKGROUND: FOCUS ON PATIENT PROACTIVITY AND CANCER SCREENING

The Health Care Partnership Model proposes that the more actively patients are involved in health communication with physicians, the better their health outcomes will be [11,18]. Recent U.S. Preventive Services Task Force (USPSTF) guidelines [19] recommend limiting cancer screening for the very old (age 75+). Discussions between patients and physicians that result in tailored recommendations are now called for by the Task Force [20]. Such tailored advice is predicated on active communication to ascertain patients' preferences and values. Communication competence in discussions with physicians is likely to benefit older adults in discussions regarding screening, as well as in all other aspects of their health care [21].

We focus on two key elements of patients' health communication: initiative and assertiveness. Initiative is reflected in patients seeking medical information from multiple sources including books and the media [22]. By using media sources to enhance understanding of their health risks and to improve their knowledge of the availability of health services, elders can be more active in prevention efforts [23]. Patient proactivity also involves assertiveness as a health care consumer. Such assertiveness implies a willingness and ability to advocate for oneself and when needed, to voice

questions and concerns [24]. Collectively, we refer to these behaviors as patient proactivity, reflecting health care consumerism [25]. Patient proactivity is anchored in extensive prior conceptual and empirical work [26] A review of health communication research [27] shows that patients who are more assertive and take greater initiative in communicating with their physicians receive more information and responsive communication. Our prior work has focused on proactive adaptations more generally, and has shown that older adults engage in preventive and corrective adaptations as they face normative stressors of late life, such as chronic illness [28,29]. We found that marshalling support is an important resource for maintaining good quality of life among older adults facing chronic illnesses [30].

Consumerist orientation is a newly emerging trend that has not been prevalent in the past among aged patients in communicating with their physicians [4]. Older people have been found to defer to medical recommendations and opinions [31]. They exhibit trust and loyalty rather than a consumerist orientation [32]. In today's complex health care environment, characterized by time limited medical encounters, it is incumbent on older persons to take greater initiative in their health care [33]. Older patients were less likely in the past than younger patients to engage in self-advocacy and in health care consumerism [34]. This reticence may reflect concerns by older adults that asking questions and expressing preferences may pose a challenge to medical authority. However, there are indications of a changing orientation to consumer initiative among older adults. Our ongoing research based on cancer survivors reveals that elderly persons recognize the value of assertiveness as health care consumers. Even while they seldom engage in consumerist action, elders frequently advocate that other elders should take greater initiative in their care [35]. This suggests behavioral intentions that comprise a critical first stage of health behavior change [36].

CONCEPTUAL MODEL AND HYPOTHESES

Our conceptual model for this study is presented in Fig. (**1**). This model includes selected components of the broader Healthcare Partnership Model [1]. Fig. (**1**) depicts our expectations regarding the roles played by contextual factors of patient demographic characteristics such as age, gender, marital status and education (Component A) as potential influences on physicians' cancer screening recommendations (Component D) (Path 1), and adherence by patients in obtaining screening tests (Component E). Demographic characteristics that reflect personal resources such as male gender, younger age, being married and having higher education, are expected to lead to more cancer screening recommendations. A second set of influences proposed in our model involves patient health characteristics (Component B). We hypothesized that, in accordance with practice guidelines, poorer patient health (i.e., greater number of chronic health conditions, ADL/IADL problems, and number of hospitalizations) would decrease screening recommendations by physicians (Path 2). The third important set of influences refers to proactive health care consumerism (Component C). We anticipated that health care consumerism, as reflected in health information seeking and patient assertiveness in communication with physicians, would enhance cancer screening recommendations (Path 3). Physician cancer screening recom-

Predictors   **Outcomes**
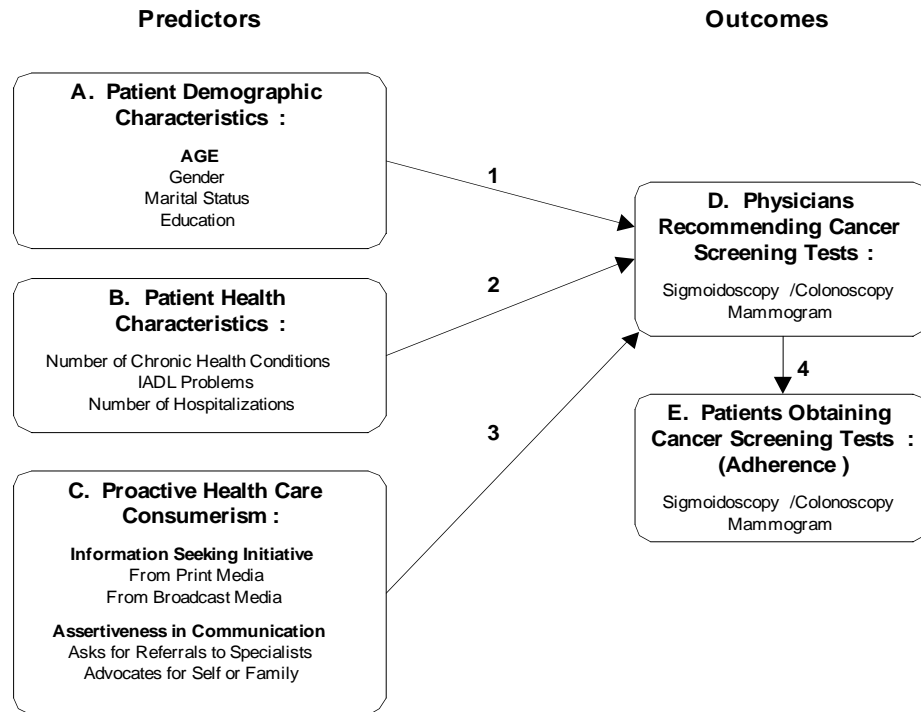
Fig. (1). Conceptual model of predictors of cancer screening among the aged.

mendations (Component D) were expected to play a key role in patients actually receiving screening tests (Component E) (Path 4).

Sample Description, Design, and Analysis

Data were derived from wave 5 of our ongoing panel study of successful aging, based on annual interviews with representative samples of residents living independently in two communities: Clearwater, Florida (N=178) and Cleveland, Ohio (N=236) [17]. With the funding of our research on doctor patient communication relevant to cancer, respondents were first interviewed about their cancer screening experience during wave 5 of our study. Eligible respondents at baseline were age 72 or older and able to complete a face-to-face interview. Death and institutionalization were the two greatest sources of attrition. Mortality was determined and confirmed for non-respondents each year of data collection through the National Death Index, kin, or a contact person designated by the respondent. Respondents who moved to another location continued to be followed up as long as their health would allow. Loss to follow-up accounted for only 7% of annual attrition

In supplementary analyses, we assessed whether there was substantial selection bias due to nonrandom attrition between W1 and W5. Men, those at the oldest ages, and those with three or more health conditions were significantly less likely to survive to Wave 5. The potential bias on our estimates is minimal for two key reasons. First, the benefits of cancer screening among those who are nearing the end of life are few [13], so statistically adjusting our estimates to give more weight to those who suffer from multiple co-morbidities could obscure the actual relationship between healthy older adults and cancer screening. Second, we include each of these risk factors for attrition in the substantive models.

MEASURES

Physician Recommendation and Adherence

There are two key outcomes in this study: whether a physician recommended a sigmoidoscopy/colonoscopy to screen for colon cancer and whether a physician recommended a mammogram to screen women for breast cancer. We further measured whether the respondent followed through on the recommendation for a screening test.

Colonoscopy/Sigmoidoscopy

Physician's recommendation was obtained by the question, "Did your doctor recommend Sigmoidoscopy or Colonoscopy in the past five years?" Adherence was assessed by the question, "When did you last have a Sigmoidoscopy or Colonoscopy exam?" with responses ranging from "never" to "over 10 years ago".

Mammogram

We elicited physicians' recommendation regarding mammograms using the question, "Did your doctor recommend a mammogram in the past year?" Adherence was assessed based on the question, "When did you last have a mammogram" with responses ranging from "never" to "during the past year".

METHODS

Chronic Illnesses

Chronic illnesses were assessed using the OARS inventory [37]. Respondents were asked to indicate whether they had one or more of 26 chronic illnesses and disorders during the past year [38]. Examples of health conditions include: arthritis, asthma, emphysema, heart trouble, cancer, stroke, Parkinson's disease, hypertension, diabetes, and kidney dis-

ease. A summary score is derived based on the number of health conditions endorsed.

Functional Limitations

Functional limitations were measured using the instrumental activities of daily living (IADL) scale [39]. Respondents were asked about difficulty performing six activities: getting from room to room, going outdoors, walking up or down stairs, doing housework, preparing meals, and shopping for groceries. Response categories range from "0" for never having difficulty to "3" for having difficulty all of the time. These six items were summed up together, creating a single continuous measure ranging from no functional limitations to having difficulty in all six domains all of the time.

Hospitalization

Respondents were asked about the number of hospitalizations they experienced during the past year.

Demographic Characteristics

Interview questions yielded information on age, gender, marital status, race, and education.

Proactive Health Care Consumerism

We measured Proactive Health care Consumerism in two ways: as health information seeking and advocacy in communication.

Health Information Seeking

Two interview items were used to assess patients' propensity to seek health information. One inquired about the likelihood of obtaining health information from books and periodicals. The second item considered obtaining health information from media sources. We categorized both items as binary responses (yes/no).

Advocacy in Communication

Two interview items were used to assess patient assertiveness in communicating with physicians. Based on the relatively low rates of endorsing these items we dichotomized responses as "never engaging" in this form of behavior versus "having engaged" in it. One question considered whether the respondent asks for referrals to a specialist. The other inquired whether the respondent advocates for self or family members.

ANALYSIS

To address our research questions, bivariate analyses were conducted using t-test for continuous variables and chi-square test for categorical variables. We did not consider race as a predictor, since there were an insufficient number of African-American respondents in the sample for analytic purposes. Multivariable logistic regression analyses were conducted to determine the relative influence of chronic illness, hospitalization, ADL/IADL limitations, age, other demographic characteristics, and health care consumer proactivity on physicians' recommendation for each of the two cancer screening tests. In the multivariable logistic regression, no significant interactions were observed between respondent community and any of the key explanatory variables. Likelihood ratio test was used to choose the most appropriate and parsimonious model. Of the total study sample

of 414, bivariate and multivariate analyses were conducted on a total of 388 study participants on whom there was no missing information on any of the explanatory variables. All analyses were conducted using SAS software Version 9.1.

RESULTS

Sample Characteristics

Table **1** summarizes sample characteristics. Demographic characteristics observed were typical of community dwelling older adults [40]. Regarding health care consumer proactivity, rates of proactivity were generally low among these elders. Respondents were more likely to express initiative in seeking health information than to portray assertiveness or engage in advocacy while interacting with their physicians.

Recommendations for sigmoidoscopy/ colonoscopy during the previous five years were reported by 50.5% of the sample. Physician recommendations for mammograms were reported by 73.0% of female respondents. Adherence rates for obtaining recommended tests were high among those referred for a screening test; 87.7% for sigmoidoscopy and 76.5% for mammograms. We found significant concordance between patient adherence and physician recommendations for both colonoscopy/sigmoidoscopy and mammograms (Chi-square p<0.001).

Bivariate Analysis - Predictors of Screening Recommendations

The bivariate results are shown in Table **2**. They reveal that patient's age was the strongest predictor of physician's recommendations for both cancer screening tests. The mean age of patients who were recommended for colonoscopy/ sigmoidoscopy was 78 years while their non-recommended counterparts had a mean age of 84 years. Likewise, the mean age of women who reported physician recommendation for mammograms was 79.7 years, while their non-recommended counterparts had a mean age of 85.3 years. Married patients (who tend to be younger), were significantly more likely to be recommended for both cancer screening tests than those who were not married.

Respondents with no functional limitations were more likely to be recommended for colonoscopy, and for mammograms, than were their functionally more impaired counterparts. Patients who asked their physician for referrals to specialists were more likely to be recommended for both breast and colorectal cancer screening than were less proactive patients. Patients who advocated for better health care, and who sought health information through broadcast media, were more likely to be recommended for colonoscopy/sigmoidoscopy.

Multivariate Analysis

Table **3** shows the results of the multivariable logistic regression analysis estimating the likelihood of colonoscopy and mammogram screening tests, respectively. After controlling for all other factors, patient's age remained the most important deterrent to physician screening recommendations for both tests. For every year of increase in age, a patient was 5% less likely to be recommended for colonoscopy/sigmoidoscopy and 8% less likely to be recommended for a mammogram.

Table 1. **Sample Characteristics (N = 414)**

Demographics	n	%	Mean	SD
Age (*yrs*)			81.2	(7.6)
Gender				
Males	166	(40.1)		
Females	248	(59.9)		
Ethnicity				
White	359	(87.8)		
African American	45	(11.0)		
Other	5	(01.1)		
Education				
Less than 12 Years	19	(4.8)		
High School Graduate	110	(27.6)		
1-2 Years College, Tech.	110	(27.6)		
College Graduate (BA/BS)	71	(17.8)		
Postgraduate Work/Degree	88	(22.1)		
Marital Status				
Married	285	(68.8)		
Widowed	111	(26.8)		
Divorced, Separated, Never Married	18	(4.4)		
Health Characteristics				
Number of Chronic Illnesses			5.5	(2.9)
Number of Functional Limitations			1.5	(2.7)
Number of Hospitalizations				
None	310	(74.9)		
One Hospitalization	74	(17.9)		
Two or More Hospitalization	30	(7.4)		
Health Care Consumer Proactivity				
Asks for Referrals to a Specialist	107	(25.2)		
Advocates for Self or Family Members	179	(43.8)		
Seeks Health Information from Magazines or Books	315	(76.3)		
Seeks Health Information from Radio or Television	206	(50.1)		
Physician Recommendation				
Sigmoidoscopy/Colonoscopy Screening for Colorectal Cancer	209	(50.5)		
Mammogram Screening for Breast Cancer	181	(73.0)		
Patient Adherence				
Sigmoidoscopy/Colonoscopy Screening for Colorectal Cancer	179	(85.6)		
Mammogram Screening for Breast Cancer	137	(75.6)		

Table 2.　Bivariate Analysis of Physician Recommendation for Each Screening Test

	Colonoscopy (N=388)		Mammogram (N=230)	
	Recommended	**Not Recommended**	**Recommended**	**Not Recommended**
Demographics				
Age (*yrs*), Mean (SD)	78 (6.4)	84 (7.9) **	79.7 (7.0)	85.3 (8.6) **
Gender, *n* (%)				
Males	84 (53.5)	73 (46.5)	— —	— —
Females	112 (48.5)	119 (51.5)	— —	— —
Education, Mean (SD)	3.6 (1.4)	3.2 (1.4) **	3.2 (1.3)	3.1 (1.2)
Marital Status, *n* (%)				
Married	147 (56.5)	113 (43.5)	100 (80.0)	25 (20.0)
Other	49 (38.3)	79 (61.7) **	67 (63.8)	38 (36.2) **
Health Characteristics				
Number of Chronic Illnesses, Mean (SD)	5.1 (2.8)	5.8 (3.0)	5.8 (2.9)	5.9 (2.6)
Number Functional Limitations, *n* (%)				
No Functional Limitations	143 (55.4)	115 (44.6)	113 (80.1)	28 (19.9)
One or More Functional Limitations	53 (40.8)	77 (59.2) **	54 (60.7)	35 (39.3) **
Number of Hospitalizations, *n* (%)				
No Hospitalizations	148 (50.3)	146 (49.7)	132 (74.2)	46 (25.8)
One or More Hospitalizations	48 (51.1)	46 (48.9)	35 (67.3)	17 (32.7)
Health Care Consumer Proactivity, *n* (%)				
Asks for Referrals to a Specialist				
Yes	65 (65.0)	35 (35.0)	53 (83.9)	10 (16.1)
No	131 (45.5)	157 (54.5) **	115 (68.5)	52 (31.5) *
Advocates for Self or Family Members				
Yes	102 (59.6)	69 (40.4)	85 (77.3)	25 (22.7)
No	94 (43.3)	123 (56.7) **	82 (68.3)	38 (31.7)
Seeks Health Information from Magazines or Books				
Yes	154 (52.0)	142 (48.0)	143 (74.5)	49 (25.5)
No	42 (45.6)	50 (54.4)	24 (63.2)	14 (36.8)
Seeks Health Information from Radio or Television				
Yes	110 (56.4)	85 (43.6)	95 (74.2)	33 (25.8)
No	86 (44.5)	107 (55.4) *	72 (70.6)	30 (29.4)

**p<.01; *p<.05; Significant differences tested with chi-square for nominal and ordinal variables and t-test for continuous variables. (%) = row percentages.

Table 3.   Results from Multivariate Logistic Regression of Physician Recommendation for Each Screening Test

Main Effects	Colonoscopy (N = 388)	Mammogram (N = 230)
	OR (CI)	OR (CI)
Demographics		
Age	0.95 (0.91 - 0.99)**	0.92 (0.87 - 0.97)**
Gender		
Males	1.00	--
Females	0.86 (0.52 - 1.44)	--
Education	1.10 (0.93 - 1.29)	1.01 (0.77 - 1.31)
Marital Status		
Not Married	1.05 (0.60 - 1.85)	0.56 (0.26 – 1.19)
Married	1.00	1.00
Geographic Location		
Cleveland	1.00	1.00
Clearwater	0.25 (0.13 – 0.45)**	0.81 (0.34 - 1.94)
Health Characteristics		
Chronic Illnesses	1.12 (1.01 – .22)*	1.20 (1.03 – 1.40)*
Functional Limitations		
No Functional Limitations	1.00	1.00
One or More Functional Limitation(s)	0.78 (0.45 - 1.34)	0.41 (0.19 - 0.89)*
Hospitalizations		
No Hospitalizations	1.00	1.00
One or More Hospitalization	0.97 (0.53 – 1.73)	1.53 (0.63 – 3.70)
Health Care Consumer Proactivity		
Asks for Referrals to a Specialist (ARS)		
Yes	1.00	1.00
No	0.49 (0.29 - 0.85)*	0.41 (0.17 - 0.95)*
Advocates for Self or Family Members		
Yes	1.00	1.00
No	0.97 (0.59 - 1.61)	1.17 (0.54 - 2.53)
Seeks Health Information from Magazines or Books		
Yes	1.00	1.00
No	0.91 (0.49 - 1.66)	0.54 (0.20 - 1.42)
Seeks Health Information from Radio or Television		
Yes	1.00	1.00
No	0.78 (0.46 - 1.30)	1.65 (0.77 - 3.54)

**p<.01; *p<.05. Notation: OR = Odds Ratio; CI = Confidence Interval.

Health care consumer proactivity was a significant predictor of physicians' recommendations for both cancer screening tests. Patients who did not ask for referrals were 51% less likely to be sent for colonoscopy/sigmoidoscopy and 59% less likely to have a mammogram recommended by their physician than their counterparts with more consumer

initiative (reference category: patients who ask for referrals to a specialist).

Chronic illness proved to be positively related to cancer screening recommendations for both screening tests considered. Among the indicators of health acuity, hospitalizations did not show an association with cancer screening recommendations. For mammogram screening, women with at least one functional limitation were less likely to be recommended by their physician for mammogram when compared to their counterparts without any functional limitations (reference category).

Analyses reveal that residence made a difference in being referred for colonoscopy/sigmoidoscopy, with respondents in Cleveland more likely to be referred. In supplemental analyses, we tested two potential interactions (study site by age and study site by consumer proactivity in asking for referrals). Neither of the interactions was significant nor yielded a better model fit. This suggests that the relationship of key explanatory variables and cancer screening did not vary by site.

DISCUSSION

Results of our research demonstrate that in this community sample of older adults, cancer screening recommendations by doctors were based primarily on the age of the patient and were done in spite of comorbidities that may be life-limiting. In fact, both types of screening considered were more likely to be recommended to patients with more chronic illnesses. This practice is contrary to recommendations to tailor screening toward patients with greater life expectancy [13]. We speculate that this may occur because patients with more chronic illnesses have more doctor visits and thus have more opportunities for receiving screening recommendations. Our findings about the deterrent value of functional impairment on physicians' recommendations for mammograms may point to the influence of social capital, reflected in being fit and ambulatory, on physicians' decision making regarding preventive health care [41].

Our data confirm expectations that age bias in preventive care exists [3], and raise additional concerns that sicker patients may have more opportunities for obtaining screening based on their frequent encounters with the health care system. These results confirm observations by Walter, Lindquist & Covinsky [14] that mammogram recommendations were not hindered by poor health of elderly patients [14]. Our study found high adherence rates for screening tests among elderly patients, indicating that referrals in this group are likely to yield good screening adherence [42]. Our results are also consistent with findings of prior studies regarding high levels of interest expressed by older adults in cancer screenings [43, 44]. These findings run counter to the rationale for withholding screening due to lack of interest or poor adherence among older adults.

A key finding of our study relates to support for the anticipated role of consumer advocacy and proactivity in facilitating receipt of screening recommendations. It is useful to recognize that such consumer proactivity is multidimensional. Elderly health care consumers derive separate benefits in terms of physicians' recommendations from seeking health information and from assertiveness in communication

with physicians [45]. These findings lend support to expectations articulated in the Healthcare Partnership Model [11].

The low levels of health care consumer advocacy in late life observed in our study may be associated both with early socialization to trust and obey physicians [46] and with diminished self efficacy beliefs in late life [47]. While today's older patients may be less proactive than their younger counterparts, future cohorts of more highly educated older adults are likely to assume more active orientations to communication as health care consumers [4, 34]. Furthermore, patients who are more assertive and involved in communication with their physicians are also likely to be more adherent to cancer screening recommendations [48].

Patient self-advocacy involves a willingness and ability to speak up to express preferences and concerns during the medical visit [24]. Our Health Care Partnership model of patient-physician communication [11] posits patient consumerism as a facilitator of partnerships with physicians. This collaborative model diverges from early sociological work on consumerism that was based on a conflict model of doctor-patient interaction [26]. We recognize that models of patient-physician interaction have evolved from paternalism to partnership [49]. Accordingly, we anticipate that older patient proactivity in communication would improve teamwork between patients and physicians regarding appropriate cancer prevention and screening. There is evidence that this would be welcomed by most physicians [1, 50]. Active discussion between patients and physicians should result in tailored screening recommendations that take into account patients' health status, values and preferences. Recognition that elderly consumers can enhance their preventive care through advocacy points to the value of patient education as a means of increasing access to preventive health care [51, 52].

The present study takes a first step toward testing one key component of the Health Care Partnership Model of Patient-Physician Communication we developed by linking patient proactivity and responsive physician communication [11, 16]. A more comprehensive test in a longitudinal framework is yet to be conducted. Respondents in our study were independent dwelling older adults in two selected regions of the US. We also acknowledge that our data are based on patient self reports about advocacy. Such reports are personally salient but do not have the accuracy of behavioral observations. Nevertheless, our data make it clear that patient proactivity in communication can play a facilitative role in obtaining preventive care, and in ensuring subsequent adherence to prevention.

CONCLUSION

In order to improve preventive care of the aged, increased attention to enhancing self-advocacy among older adults holds distinct promise [53]. Our findings add support to the recognition that medical practices regarding cancer prevention do not currently conform to recommended guidelines for considering age in the context of life limiting illness [14]. They also point to the value of proactive health care consumerism for reducing adverse effects of age based rationing of preventive health care. This call for greater consumer involvement on the individual level complements the broader consumer movement at the grass roots level for facilitating appropriate cancer screening in late life [54]. Addi-

tional physician education is also needed to target screening tests toward patients with sufficient life expectancy, in order to gain the benefits and minimize the risks of early detection and treatment [14].

Results of our study call attention to the value of enhancing communication skills and consumer advocacy for older adults [53]. Better advocacy skills and confidence in communication can contribute to enhanced cancer prevention for older adults. Interventions for enhancing communication competence, self care, self-advocacy, and consumer initiative may be useful mechanisms for achieving these goals.

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