

Research article

Open Access

Explaining the de-prioritization of primary prevention: Physicians' perceptions of their role in the delivery of primary care

Amy L Mirand*¹, Gregory P Beehler², Christina L Kuo³ and Martin C Mahoney^{1,4}

Address: ¹Department of Cancer Prevention and Population Sciences, Roswell Park Cancer Institute, Buffalo, New York, USA, ²Department of Counseling, School, and Educational Psychology, State University of New York at Buffalo, Buffalo, New York, USA, ³Department of Pediatrics, School of Medicine and Biomedical Sciences, State University of New York at Buffalo, Buffalo, New York, USA and ⁴Department of Family Medicine, School of Medicine and Biomedical Sciences, State University of New York at Buffalo, Buffalo, New York, USA

Email: Amy L Mirand* - Amy.Mirand@roswellpark.org; Gregory P Beehler - gbeehler@buffalo.edu; Christina L Kuo - clkuo@buffalo.edu; Martin C Mahoney - martin.mahoney@roswellpark.org

* Corresponding author

Published: 2 May 2003

Received: 17 December 2002

BMC Public Health 2003, 3:15

Accepted: 2 May 2003

This article is available from: <http://www.biomedcentral.com/1471-2458/3/15>

© 2003 Mirand et al; licensee BioMed Central Ltd. This is an Open Access article: verbatim copying and redistribution of this article are permitted in all media for any purpose, provided this notice is preserved along with the article's original URL.

Abstract

Background: While physicians are key to primary preventive care, their delivery rate is sub-optimal. Assessment of physician beliefs is integral to understanding current behavior and the conceptualization of strategies to increase delivery.

Methods: A focus group with regional primary care physician (PCP) Opinion Leaders was conducted as a formative step towards regional assessment of attitudes and barriers regarding preventive care delivery in primary care. Following the PRECEDE-PROCEED model, the focus group aim was to identify conceptual themes that characterize PCP beliefs and practices regarding preventive care. Seven male and five female PCPs (family medicine, internal medicine) participated in the audiotaped discussion of their perceptions and behaviors in delivery of primary preventive care. The transcribed audiotape was qualitatively analyzed using grounded theory methodology.

Results: The PCPs' own perceived role in daily practice was a significant barrier to primary preventive care. The prevailing PCP model was the "one-stop-shop" physician who could provide anything from primary to tertiary care, but whose provision was dominated by the delivery of immediate diagnoses and treatments, namely secondary care.

Conclusions: The secondary-tertiary prevention PCP model sustained the expectation of immediacy of corrective action, cure, and satisfaction sought by patients and physicians alike, and, thereby, de-prioritized primary prevention in practice. Multiple barriers beyond the immediate control of PCP must be surmounted for the full integration of primary prevention in primary care practice. However, independent of other barriers, physician cognitive value of primary prevention in practice, a base mediator of physician behavior, will need to be increased to frame the likelihood of such integration.

Background

Primary care providers are the most direct controllers and deliverers of preventive care, and, therefore, are integral to the fruition of the Healthy People 2000 and 2010 Clinical Preventive Services Objectives [1,2]. The majority of primary care physicians concur with the preventive care guidelines issued by the 1996 United States Preventive Services Task Force, and agree that it is their responsibility to deliver preventive care services [3]. However, actual adoption of the guidelines into practice has been slow and inadequate [4]. For example, despite the recommendation that preventive services be a part of every medical visit that was issued by the United States Preventive Services Task Force (1989 and 1996), studies report a compliance rate of only 20% to 60% [5-7]. Consequently, the lack of preventive care delivery translates to lost opportunities to decrease morbidity and mortality via primary and secondary prevention [8]. For instance, 1990 estimates showed tobacco to be associated with 400,000 US total deaths. In addition, 300,000 deaths were related to diet and low physical activity patterns [9].

Approximately seventy percent of adults in the United States have at least one contact a year with a physician and the average American goes to the doctor about 3 times per year [10]. This frequency of contact provides physicians and other health professionals with a significant opportunity and responsibility to be an educator, facilitator, and/or counselor [11]. The potential impact of this role is heightened by a) the general public's perception of physicians as the best and most credible source of health information [11] and b) the report that a majority of people would be more likely to engage in health-promoting behavior if the recommendations came from their physician compared to any other source [12]. Despite the possible benefits, physician-delivered health behavior counseling is not a routine part of typical clinic visits [7]. In addition, a comparison of the NYS Behavioral Risk Factor Surveillance System (BRFSS) 1997 Data and Healthy People 2000 and 2010 Objectives reveals that "counseling reliant" objectives (e.g., tobacco cessation, physical activity) lag behind in realization compared to preventive care delivered predominantly via technical skills (e.g., Pap smear). In other words, primary prevention lags behind secondary prevention in clinical practice.

This report presents some qualitative physician-offered insights into why primary prevention is de-prioritized. The qualitative results are derived from a focus group of peer-identified primary care physician Opinion Leaders. The focus group was a formative step towards the characterization of primary care physician attitudes, needs, and practice obstacles regarding primary prevention. The characterization will provide the conceptual framework for future strategies to facilitate routine delivery of primary

preventive care in clinical practice, plans for which are described in a previous paper [13].

Methods

Focus Group Methods

The Primary Care Advisory Board of Western New York (WNY) represents over 500 physicians throughout WNY. The State University of New York at Buffalo School of Medicine and Biomedical Sciences, Department of Family Medicine (DFM) is a leading provider of medical care to the underserved and underrepresented populations in WNY. Members of the Advisory Board and DFM applied their knowledge of the regional physician community and assisted in the identification of 19 Opinion Leaders among Family Practice, Internal Medicine, or General Practice primary care physicians (PCP) to be invited to participate in a semi-directed audiotaped focus group discussion. Opinion Leader sampling was used to obtain the sought significant conceptual variation derived from the Opinion Leaders' experience and influence [14,15]. To increase the likelihood of variation among the identified Opinion Leaders, the Advisory Board and DFM were asked to provide names of physicians from a range of practice locations (i.e., urban, suburban, rural), patient population characteristics (e.g., age, insurance status), primary care specialty, and both genders, in addition to considering the physicians' perceived stature among peers. The Opinion Leaders were mailed invitational letters that provided a brief overview of the study and focus group. Specific aims were deliberately not offered so as not to bias the physicians' future responses and interactions. The letter was followed-up with a telephone call to the physician office to answer any questions and determine physician availability. Subsequently, 12 physician Opinion Leaders participated in the single focus group. Each physician received either an honorarium or a personal digital assistant (PDA) at the conclusion of the focus group. The 2-hour audiotaped focus group was conducted in March 2001 at a focus group research facility in Buffalo, New York. The seven male and five female physician participants represented family medicine (n = 7) and internal medicine (n = 5) specialties. To avoid biasing the group's response, the research team did not conduct the focus group. Instead, an experienced professional moderator was utilized. The moderator had no contact with the PCP prior to the session. The moderator used a semi-structured interview guide developed by the researchers. The participants were asked about their views on the definition, goals, and clinical delivery of preventive care in the region. The Roswell Park Cancer Institute Institutional Review Board approved this research protocol.

Analysis

Primary data analysis was based on grounded theory methodology [14,15]. The focus group audiotape was

transcribed verbatim. Transcripts were analyzed line-by-line, coding the text with labels that summarized the substantive meaning of the participants' discussion. Similar codes were clustered to rebuild the data into conceptual categories within the data. Initial categories were then subsumed into more encompassing categories. Theoretical memos were written throughout the analysis, which provided a record of the analytic process as themes were developed. The researchers discussed the development of the themes throughout the analysis, and reached consensus on the final emergent themes. The themes presented in this report regard the physicians' perception of their role and their impact on primary preventive care in typical daily practice.

Results

Perceived Role of the Doctor

The prevailing model of physician role was as one who diagnosed and/or provided an immediate answer to a patient's problem before moving on to the next case.

"I would venture to say that doctors see themselves, ... as saviors and if you have a certain amount of time that you're going to spend with a patient you want to be able to save them. And so you run in, you do what you do, you order the tests, you prescribe the medications and you run out.... You know we run into the fray and we work our magic, and that's who we are."

The physicians suggested that the main negative outcome associated with this role behavior was the de-prioritization of primary preventive care in favor of the immediate benefits of secondary care.

In addition, physicians have traditionally assumed the role as lead (and, sometimes, sole) dispenser of care. The physicians criticized themselves as not necessarily being team players, and stated this as being a barrier to preventive care:

"So, in our mindset we think that, you know, it is a one-stop-shop, it's all up to us, and that's how we operate. I think that creates a big barrier to getting into a lot of things that were kind of hinted at. We're not comfortable being part of a team. We're comfortable being the one in charge, and I think that's a big barrier."

In this circumstance, primary prevention delivery is then limited and de-prioritized by the operational mode of the lead dispenser of care.

Delegation of Primary Prevention

Spending time to discuss prevention with a patient was perceived by some physicians as not being a prominent element in the role of doctor nor an effective use of physi-

cian time. This view, compounded by the practice emphasis on diagnosis and treatment, lessened the likelihood of PCP delivery of primary prevention. However, the task of prevention could be delegated to other members of the medical team. Delegating the task of primary prevention counseling and education to nutritionists, nurse-educators, health-educators, or other trained medical staff was a viable alternative. A clinical practice that used a team approach was a conceptually different practice, one in which this specific aspect of care was delegated to others with positive results:

"We remove the majority of prevention from the physicians, we put it down to health educators.... [Patients are] sat down and they are given an opportunity to say 'what do you want to change?'. "

Delegation of primary prevention freed physicians from carrying the full burden of preventive care, given that their time was at a premium. However, the expense of additional medical staff was prohibitive for some practices:

"I wish we all had the money to hire nurse educators. I couldn't do that. I couldn't possibly do that in my office right now."

Prioritization of Clinical Visit Issues

A multitude of conditions and related prevention and wellness behaviors (e.g., diet, smoking, alcohol consumption, exercise, immunization, screening) could be discussed at any given time of interaction with patients. However, to best deliver care within the context and constraints of the typical clinic visit, prioritization of issues was deemed essential. It was necessary to "pick your battles", and decide what issues to discuss given clinic visit time limitations. Typically, prioritizing meant dealing with the presenting health complaint first, usually a secondary care issue, and then addressing primary prevention issues during the remaining visit time:

"And you just can't do it in an allotted time period, [and] address their main complaint for which they came. Yet, you're trying to handle a basket full of issues."

Behavior Change

Throughout the focus group, behavior change was often cited as a central issue for the promotion of primary prevention. Behavior change was a difficult task for both patient and physician, though one that primary prevention was thought dependent upon. Physicians believed that implementing patient behavior change required changing the patient's mindset, including leading patients to accept more personal responsibility for their wellness. Yet, significant barriers to behavior change were related to physicians themselves. They acknowledged their lack of

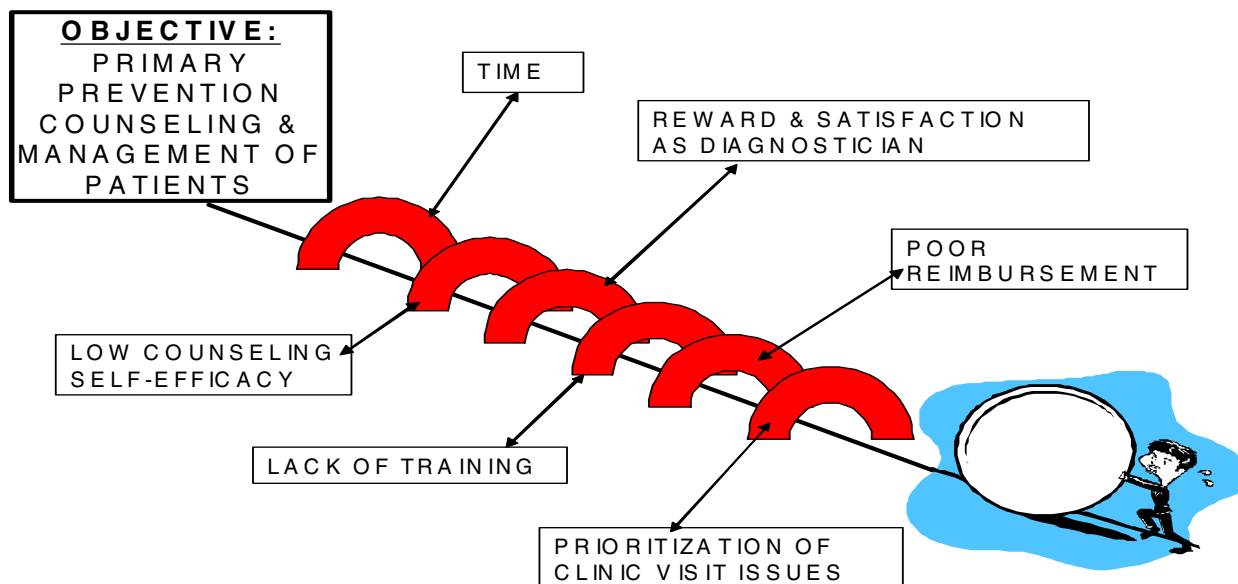


Figure 1
Physician-Reported Barriers to the Delivery of Primary Prevention

training, knowledge, and skill in behavior change process and recommendation conveyance.

"So there's a lot that we have to learn that we weren't adequately trained for in terms of those difficult ways of motivating patients to stop smoking, lose weight, all that kind of thing."

Discussion
Limitation

The sample pool of regional PCP Opinion Leaders was inherently limited in size and non-random, two features that in traditional focus groups could thwart the applicability of findings. However, representativeness in the typical empirical sense was not the goal of having Opinion Leader PCP involved in the formative phase of this study. Opinion Leaders were used to a) establish a communications channel into the existing regional physician social network, b) acknowledge the mediating effects of Opinion Leaders on the diffusion and acceptance of new ideas and emergent practice intervention strategies envisioned in the long-term goal of the study [16], and c) obtain a

conceptual sense of practice realities and beliefs derived from the Opinion Leaders' perspectives and experiences. While the use of multiple focus groups would have enhanced confidence in the characterization and generalizability, the participation of 12 of the 19 peer-identified regional PCP Opinion Leaders was a significant formative step in the PRECEDE-PROCEED model of health promotion planning being followed by this study.

Results

Both the "savior" and "one-stop-shop" physician-reported models sustained the expectation of immediacy of corrective action, cure, and satisfaction sought by patients and physicians alike. Furthermore, the physicians held that effective preventive care required spending extra time with patients, but physician time was an expensive commodity. If financially feasible, primary prevention was delegated to other medical staff. The team approach freed physicians to attend to secondary and tertiary health care issues. If a team approach was not present, the emphasized physician role of diagnostician, lack of physician training in behavioral change, and the economics of prac-

tice contributed further to the de-prioritization of primary prevention. In addition, the physicians unanimously stated that, of the levels of preventive care, secondary preventive care was most stressed in their medical training. Their training focused on the treatment of presenting conditions, which tangentially de-prioritized primary prevention in clinical care. As a result of training that emphasized the curative rather than the preventive, physicians generally felt less skilled to deal with primary prevention than secondary prevention issues.

A more global review of physician-reported reasons for non-delivery of primary preventive care echo many of those reported in the focus group (Figure 1). First, limited time per patient visit necessitated by office organization imposes limitations on the interactive content and duration, type, and intensity of care delivered during the medical encounter [16]. Second, physicians prioritize their health behavior counseling by the type of visit (i.e., acute, chronic, well care) with increased acuity being associated with a lower rate of counseling [17,18]. Third, varying physician attitude and philosophy about preventive care services, ranging from taking no initiative to counsel to providing prevention counseling at every opportunity, are predictors of counseling frequency [19]. Fourth, physicians with a lesser sense of counseling self-efficacy are less likely to administer prevention counseling [20]. Fifth, physicians who reportedly feel less adequate in their knowledge of prevention are less likely to ask and counsel patients compared to physicians with perceived adequate knowledge [21]. Sixth, lack of or poor reimbursement deters physicians from delivering less tangible types of preventive care (e.g., counseling about high risk sexual behavior) compared to more easily documented and validated preventive care (e.g., Pap smear).

The physicians intellectually supported the worth of primary prevention, but could not easily insert and/or rationalize it into the culture and expectations of clinical practice. Therefore, a persistent public health objective is to develop and implement strategies to overcome the barriers that deter provision of primary preventive services. A necessary goal of such strategies would be to raise the perceived worth and priority of primary prevention within the PCP community. In large part, this effort would require system-wide changes (e.g., payers, practice organization) to increase the value and reward for the delivery of primary prevention in primary care, likely a protracted process. In the interim, patients report that physicians remain one of their most trusted and influential sources of health-related information and health behavior strategies [22,23]. Notwithstanding the external barriers, physicians need to expand their self-perceived clinical role to take fuller advantage of their unique position to deliver primary preventive care.

Competing Interests

None declared.

Authors' contributions

ALM designed the study, participated in the analysis, and drafted the manuscript. GPB performed the analysis and participated in manuscript preparation. CK participated in the study coordination and manuscript preparation. MCM participated in the study coordination and manuscript preparation.

All authors read and approved the final manuscript.

Acknowledgements

The authors are indebted to the physician participants whose insights and forthright discussion advanced this study. This study was supported by a grant from the National Cancer Institute (No. CA90154-02), and partially supported by shared resources of the Roswell Park Cancer Center support grant P30 CA16056.

References

1. **Public Health Service. Healthy People 2000: National Health Promotion and Disease Prevention Objectives.** *Book Public Health Service. Healthy People 2000: National Health Promotion and Disease Prevention Objectives U.S. Department of Health and Human Services* 1990,
2. **Healthy People 2010** *Book Healthy People 2010 U.S. Department of Health and Human Services* 2000,
3. Wechsler H, Levine S, Idelson RK, Schor EL and Coakley E **The physician's role in health promotion revisited--a survey of primary care practitioners** *N Engl J Med* 1996, **334**:996-998
4. Grol R and Grimshaw J **Evidence-based implementation of evidence-based medicine** *Jt Comm J Qual Improv* 1999, **25**:503-513
5. Hahn DL and Berger MG **Implementation of a systematic health maintenance protocol in a private practice** *J Fam Pract* 1990, **31**:492-502; discussion 502-4
6. Pommerenke FA and Weed DL **Physician compliance: improving skills in preventive medicine practices** *Am Fam Physician* 1991, **43**:560-568
7. Flocke SA, Stange KC and Goodwin MA **Patient and visit characteristics associated with opportunistic preventive services delivery** *J Fam Pract* 1998, **47**:202-208
8. Carruthers SG **Assimilating New Therapeutic Interventions into Clinical Practice: How Does Hypertension Compare with Other Therapeutic Areas?** *American Heart Journal* 1999, **138**:256-260
9. McGinnis JM and Foege WH **Actual causes of death in the United States** *Jama* 1993, **270**:2207-2212
10. Cherry DK and Woodwell DA **National Ambulatory Medical Care Survey: 2000 summary** *Adv Data* 2002, **1**-32
11. Ockene JK, Ockene IS, Kabat-Zinn J, Greene HL and Frid D **Teaching risk-factor counseling skills to medical students, house staff, and fellows** *Am J Prev Med* 1990, **6**:35-42
12. Harris SS, Caspersen CJ, DeFries GH and Estes E. H., Jr. **Physical activity counseling for healthy adults as a primary preventive intervention in the clinical setting. Report for the US Preventive Services Task Force** *Jama* 1989, **261**:3588-3598
13. Mirand AL, Beehler GP, Kuo CL and Mahoney MC **Physician perceptions of primary prevention: qualitative base for the conceptual shaping of a practice intervention tool** *BMC Public Health* 2002, **2**:16
14. Glaser B **Theoretical Sensitivity** *Mill Valley, CA, The Sociology Press* 1978,
15. Corbin ASJ **Basics of Qualitative Research** *Newbury Park, CA, Sage Publications* 1990,
16. Rogers EM **Diffusion of Innovations** *New York, Free Press of Glencoe* 1983,
17. Chernof BA, Sherman SE, Lanto AB, Lee ML, Yano EM and Rubenstein LV **Health habit counseling amidst competing demands:**

effects of patient health habits and visit characteristics *Med Care* 1999, **37**:738-747

18. Jaen CR, Stange KC and Nutting PA **Competing demands of primary care: a model for the delivery of clinical preventive services** *J Fam Pract* 1994, **38**:166-171
19. Rebelsky MS, Sox CH, Dietrich AJ, Schwab BR, Labaree CE and Brown-McKinney N **Physician preventive care philosophy and the five year durability of a preventive services office system** *Soc Sci Med* 1996, **43**:1073-1081
20. Thompson SC, Schwankovsky L and Pitts J **Counselling patients to make lifestyle changes: the role of physician self-efficacy, training and beliefs about causes** *Fam Pract* 1993, **10**:70-75
21. Walsh JM, Swangard DM, Davis T and McPhee SJ **Exercise counseling by primary care physicians in the era of managed care** *Am J Prev Med* 1999, **16**:307-313
22. Pennbridge J, Moya R and Rodrigues L **Questionnaire survey of California consumers' use and rating of sources of health care information including the Internet** *West J Med* 1999, **171**:302-305
23. Fletcher GF, Balady G, Blair SN, Blumenthal J, Caspersen C, Chaitman B, Epstein S, Sivarajan Froelicher ES, Froelicher VF, Pina IL and Pollock ML **Statement on exercise: benefits and recommendations for physical activity programs for all Americans. A statement for health professionals by the Committee on Exercise and Cardiac Rehabilitation of the Council on Clinical Cardiology, American Heart Association** *Circulation* 1996, **94**:857-862

Pre-publication history

The pre-publication history for this paper can be accessed here:

<http://www.biomedcentral.com/1471-2458/3/15/prepub>

Publish with **BioMed Central** and every scientist can read your work free of charge

"BioMed Central will be the most significant development for disseminating the results of biomedical research in our lifetime."

Sir Paul Nurse, Cancer Research UK

Your research papers will be:

- available free of charge to the entire biomedical community
- peer reviewed and published immediately upon acceptance
- cited in PubMed and archived on PubMed Central
- yours — you keep the copyright

Submit your manuscript here:
http://www.biomedcentral.com/info/publishing_adv.asp

