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The utility of the medical home: a survey on patient perspectives

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BACKGROUND: Many articles exist outlining the possible benefits of the medical home model on enhanced patient care and reduced over-utilization of the medical system. So far, these articles have focused mainly on the viewpoint of physicians and their perceptions of what patients prefer, with relatively few addressing solely the patient perspectives. Some articles have addressed patient perspectives as a component of a larger study. This study attempts to put into words and data actual patient preferences for a medical home model. In addition, the study aimed to determine whether patients understand their health conditions, what they thought about having multiple doctors, whether they want their primary physician to complete an initial workup before referral to a specialist, and other issues important to patient satisfaction and perceptions of their care.

METHODS: Fifty-six nonhospitalized English-speaking adults between 18 and 85 years of age and of any ethnic background were surveyed. They responded to a 10-question survey and were asked to rank items—their understanding of their medical problems; the explanation of their problems by their primary care physician (PCP) vs. their specialists; the importance of having their medical information in one place, of obtaining tests before being referred, of seeing a specialist when they had multiple medical conditions, of the PCP's role as a gatekeeper, and of understanding compliance; as well as the necessity of having their PCP clarify treatment plans developed by their specialist—from 1 to 5 based on preference. Results were tabulated and graphed. The study was reviewed by Nova Southeastern University College of Osteopathic Medicine Institutional Review Board.

RESULTS: The majority of patients admitted to having good to very good understanding of their medical conditions. In their opinion, this understanding is attributable more so to their PCP than to their specialist. Fifty-three percent of patients stated that they need further clarification of plans developed by their specialist. Of the patients surveyed, 57% preferred one doctor, as opposed to 39% who preferred more than one doctor, and 4% who had no preference. In addition, patients also had a strong preference for having initial tests done before being sent to a specialist. However, they did want to be sent to specialists if needed. Patients acknowledged that compliance with treatment plans is linked to a thorough understanding of their medical problems.

INTERPRETATION AND CONCLUSION: The data show that the medical home is of benefit to not only the patients, as evidenced by their preferences, but also to the physician because of better understanding of medical conditions leading to better compliance with treatment plans.

Introduction

The concept of the "Medical Home" was introduced by the American Academy of Pediatrics in 1967.[1] This was updated by the American Academy of Family Practitioners

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(AAFP) in 2006 to include, according to their joint statement, "a personal physician, physician directed medical practice, whole person orientation, coordinated care, quality and safety, enhanced access and adequate payment."[1,2] In their report to Congress in 2008, the Medicare Payment Advisory Commission (MedPAC) recommended the Primary Care Medical Home (PCMH) as a practice model to relieve some of the inefficiencies in the current medical system. In addition to the care management and personal physician recommended by the AAFP, MedPAC recognized the need to have health information technology (HIT) and quality improvement programs as an integral part of the medical home and a formal declaration by patients naming their medical home. Like AAFP, they also recommended quicker access to physicians and round the clock patient communication ability.[3]

The PCMH seeks to make the primary care physician (PCP) a central point for patients to organize their health care, taking into account their needs and priorities. The medical home model revolves around the patient having one PCP to coordinate their health care, including referral to specialists, laboratory tests, and prescription of medications. It aims to reduce over-utilization of resources and promote better management of chronic medical illnesses,[4] in addition to enabling the most informed, collaborative decisions for the individual patient.

In 2001, the Institute of Medicine (IOM) laid out 10 rules for transitioning to the medical home model of care. These rules broadly addressed the continuity of care needed for healing relationships, the ability of care to adapt to different patient needs, maintaining the patient as the controller of health care decisions, patients having open access to their health care information, relying on evidence-based medicine to make decisions to minimize variation of health care, minimizing health care–related errors, providing enough information for informed decisions by the patients, anticipating patient needs and responding rather than reacting, minimization of waste in the system, and, finally, open communication among health care providers to achieve the best care for the patient.[5] Recent efforts by the AAFP via TransforMED,[6] the Patient-Centered Primary Care Collaborative (PCPCC), and the National Committee for Quality Assurance (NCQA),[1] among others, have sought to develop guidelines, partly based on the IOM's recommendations, through which physicians can start to develop medical homes to implement in daily practice. The NCQA has developed 10 priority criteria, which include written standards for patient access and communication, increased use of pertinent data to track tests, referrals, and important diagnoses and conditions, and last, self-assessment by physicians to ensure continued improvement and development of the implemented medical home.[9]

An example of a successfully implemented medical home is evident by the Community Care of North Carolina (CCNC) program, begun in 1998. According to one study, CCNC saved Medicaid $60 million in 2003 and $120 million in 2004, further elucidating the longer-term financial benefits of such a plan.[6,7] A more recent report showed that CCNC saved the state $154 to $170 million in 2006. These savings were attributed to the reduced cost of unnecessary hospitalizations and reduced number of repeat visits to physician offices.[8] The savings serve as a marker for improved patient care. Studies have shown that primary care, with the continuity it provides, serves to reduce unnecessary spending while improving health outcomes for patients.[9,10]

In 2008, Geisenger Health System published results of a PCMH pilot project. Using the aforementioned described components of the PCMH, hospital admissions were reduced by 20% and the savings from medical costs were 7%. In addition, quality indicators for their coronary artery bypass graft (CABG) tracking system improved from 59% to 100% through the utilization of HIT.[11]

Furthermore, the medical home represents an organized forum for patients, where they can freely discuss their health care concerns without the confusion potentially encountered when having to interact with multiple health care personnel. Both patient and PCP can then make informed, joint decisions in regards to pursuing specialist care. Another function of the medical home is to provide patients with needed ancillary services such as nutrition, physical therapy, home health, and mental health facilities, in a streamlined, organized manner.

Enabling patients to have a more thorough understanding of their health care by having easy access to all information leads to a more compliant relationship between patient and physician. Reid et al.[12] evaluated patient experience of care after implementation of a PCMH model in a health care system and demonstrated improvements in the patients' experience. The study was a limited evaluation involving assessment of only the primary care experience and did not evaluate the patients' perception of care received by their specialist physicians.

The purpose of this study was to determine the patients' perspectives on several components of the medical home concept, namely the assumptions that a PCP provides better explanations of patients' health conditions than specialists, understanding leads to improved compliance with treatment goals, and patients prefer to have their health information in one place and one doctor that has access to all of that information.

Material and methods

Subject selection, recruitment, and eligibility requirements

Investigators personally recruited a convenience sample of patients at a family practice residency clinic in North Miami Beach, Florida. Subjects were asked on a voluntary basis to fill out a 10-question survey on patient perspectives on components of the medical home model of care. Each volunteer was then taken to a private room and given time

to finish the survey on their own. The investigators were available at all times to answer any questions presented by the participants regarding the survey.

Survey questions were developed by the authors using some components of the medical home and graded according to a Likert scale. Specifically, the authors used the AAFP joint statement as a guide to address the centralization of medical information, the access to specialist/specialty care and coordinated care, and the presence/quality of a personal physician. Working with the assumption that these components would improve patient health via compliance, the authors directly surveyed participants to determine whether they agreed with the statement that better understanding leads to better compliance.

Adult participants between the ages of 18 and 85 years who spoke English were eligible to participate. No exclusions were made based solely on gender, ethnicity, insurance, or employment. All patients were given the right to refuse participation in the study. No information or explanation of the PCMH concept was given to the participants before participation in an effort to obtain unbiased responses. Upon conclusion of the survey, participants were given the opportunity to ask questions or seek clarification from the study investigators. Patients who needed emergent clinical care from the office were not asked to participate. This project was approved by the University Institutional Review Board.

Sample size and composition

Fifty-six English-speaking men and women of varying ethnic backgrounds were surveyed. Demographic information collected included gender, age, insurance status, and employment status. The respondents were also asked to indicate whether they used a PCP.

Data analysis

Descriptive statistics are provided in Tables 1 and 2. No inferential statistical analyses were performed because of the pilot nature of the survey and small sample size. The descriptive data obtained provide initial information to develop additional hypotheses about the patient perspective of the PCMH.

Results

Table 1 lists the demographics of the population surveyed. A total of 56 participants completed the survey. Participants were an average age of 41, were 57% female and 43% male, had on average seen one specialist recently, and all had a PCP. The youngest participant was 19, and the oldest 68. As seen in Table 1, most participants were employed and had health care insurance.

Table 1 Demographics

	n (%)
PCP	
Yes	56 (100%)
No	0 (0%)
Insurance	
Yes	48 (86%)
No	8 (14%)
Employed	
Yes	44 (79%)
No	12 (21%)
Gender	
Male	24 (43%)
Female	32 (57%)
Age	
Mean	41
Range	19-68
Preference for number of doctors	
1	32 (57%)
>1	22 (39%)
No preference	2 (4%)

The majority of participants (85%) admitted to having good to very good understanding of their medical conditions (Fig. 1). In their opinion, this understanding is attributable more so to their PCP than to their specialist, although the numbers were not vastly different. Figure 2 shows that 86% of participants believed that their PCP explains their medical condition very good to good, whereas only 71% say their specialist did the same. Fifty-three percent of participants stated that they needed further clarification of plans developed by their specialist (Table 2). Of the participants surveyed, 57% preferred one doctor, as opposed to 39% who preferred more than one doctor, and 4% who had no preference (Table 1). In addition to the those statistics, 67% of participants also had a strong preference for having initial tests done before being sent to a specialist (Table 2). However, they did want to be sent to specialists if needed (Table 2). Participants overwhelmingly acknowledged that compliance with treatment plans is strongly linked to a thorough understanding of their medical problems. Table 2 shows this, with 86% of participants stating that they strongly agree/agree with the previous statement. Lastly, 86% of participants surveyed stated that having all of their medical information in one place is important.

Discussion

The benefits to the patient and the physician

Recent efforts to revitalize Family Medicine as a specialty and ensure a future for primary care in the United States have centered on the creation and implementation of the medical home. A medical home serves as an efficient

Table 2 Patient survey results

$N = 56$	Very good *n* (%)	Good *n* (%)	Fair *n* (%)	Poor *n* (%)	Very poor *n* (%)	N/A *n* (%)
Understanding of medical problems	40 (71)	8 (14)	2 (4)	4 (7)	2 (4)	0 (0)
Explanation of health condition by PCP	46 (82)	2 (4)	2 (4)	2 (4)	4 (7)	0 (0)
Explanation of health condition by specialist	36 (64)	4 (7)	2 (4)	4 (7)	0 (0)	10 (18)

$N = 56$	Very important *n* (%)	Important *n* (%)	Moderately important *n* (%)	Of little importance *n* (%)	No importance *n* (%)	N/A *n* (%)
Importance of medical information being in one place	46 (82)	2 (4)	0 (0)	2 (4)	4 (7)	2 (4)
Obtaining initial tests before referral to specialist	30 (54)	8 (14)	2 (4)	6 (11)	2 (4)	8 (14)
PCP's role as gatekeeper	42 (75)	4 (7)	2 (4)	2 (4)	4 (7)	2 (4)
Importance of seeing a specialist when there are multiple medical conditions	40 (71)	8 (14)	2 (4)	0 (0)	4 (7)	2 (4)
Importance of understanding to compliance	42 (75)	6 (11)	4 (7)	0 (0)	4 (7)	0 (0)

$N = 56$	Always *n* (%)	Very often *n* (%)	Sometimes *n* (%)	Rarely *n* (%)	Never *n* (%)	N/A *n* (%)
Necessity of clarification by PCP of treatment plans developed by specialist	18 (32)	12 (21)	6 (11)	2 (4)	8 (14)	10 (18)

means to an end for the physician and the patient. It is a focal point in a melée of specialists, health care facilities, and ancillary staff. The results showed that the participants surveyed understood their health condition. It must be noted that the selection bias that existed in this study (i.e., the location of a Family Practice Residency training clinic) may have resulted in higher numbers of participants stating they had very good to good understanding of their health and all patients stating they had a primary care physician. The time limit that many physicians in private practice face may adversely affect these numbers.

In spite of potential biases, this understanding is of importance because to be a full partner in their care, it is imperative that patients understand their medical problems. As shown by the data, most participants surveyed (86%) stated that understanding their medical condition led to better adherence to medication regimens and treatment plans (Fig. 3). When patient compliance is high, each patient takes an active role in maintaining excellent health.

Improved compliance leads to better health outcomes. The CCNC effectively demonstrated this with their multi-million dollar savings in health care costs through timely case manager support to the patient and physician.[7] Studies on lipid-lowering therapy, as an example, show that patients who took their medications a majority of the time had lower incidences of adverse events.[13] This also yields better attainment of quality of care goals. These goals are set to better prevent advanced stages of diseases and reduce the burden on the health care system that is then incurred. Once the patient is healthy, the goal of the physician and the patient can then turn to prevention.

This improved patient cooperation also leads to physician satisfaction by enabling the physician to feel successful in providing the best health care possible. Consequently, a successful, growing relationship enables trust to flourish and a strong physician-patient relationship to develop, which is the core of Family Practice and primary care in general.

Providing patients with specialists to suit their unique situation constitutes a standard of care in today's practice of medicine. There is ample evidence, however, that having a single physician as a starting and ending point for patient

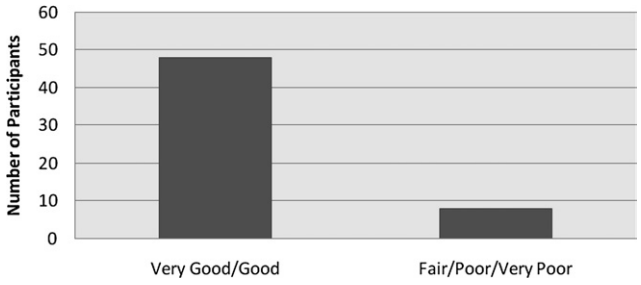

Figure 1 Patient understanding of medical problems.

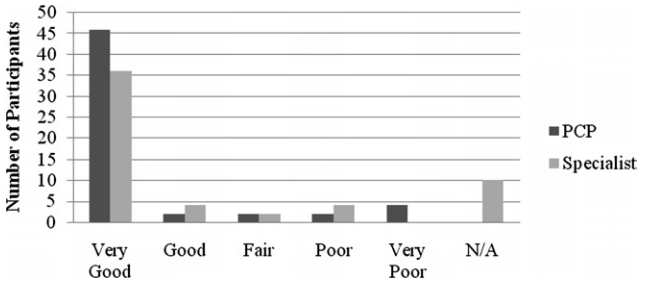

Figure 2 Explanation of health condition by PCP vs. specialist.

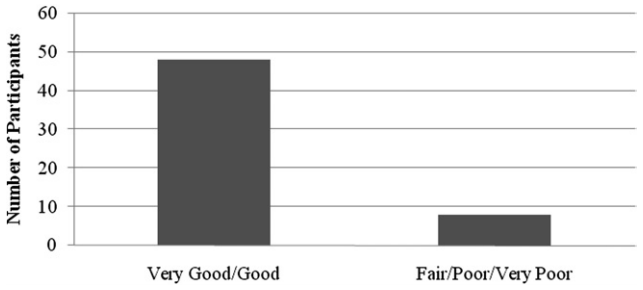

Figure 3 Importance of patient understanding of treatment plans to compliance with treatments.

care improves the likelihood that patients will receive the appropriate care.[9,14] According to a meta-analysis conducted by Starfield et al., "primary care improves health by showing, first, that health is better in areas with more primary care physicians; second, that people who receive care from primary care physicians are healthier; and, third, that the characteristics of primary care are associated with better health."[21] The participants in this survey recognized the likelihood of receiving better care from one central physician, and 86% preferred to have all of their medical information in one place. Such a place is logically the primary care physician's office and the patient's medical home. This facilitates the faster recognition of abnormal tests, the appropriate use of specialty care, and the reduction and, it is hoped, elimination of repetitive tests and procedures.

The benefits of a central physician to the patient are immense, including reducing the risks of unnecessary surgery and the provision of better preventive care. It has been shown that there are better outcomes for patients who are referred for surgery by their primary care physician than for those who go directly to the specialist.[15]

In addition to improved health outcomes for the patients, the medical system as a whole stands to benefit from the medical home concept. The current financial crisis faced by the health care industry and the recognition that payment reform needs to be enacted are conditions ripe for the implementation of a system that, at its core, seeks to eliminate waste and improve quality. Previous articles have explored the disparities in payment to primary care vs. specialist care and shown that fee for service (which favors specialist care) leads to an inefficient health care system.[16] The PCMH concept focuses on the necessity of adequate primary and preventive care, and would redirect the payment reform debate to outcomes rather than numbers.

Health care has traditionally been a partnership between a physician and a patient. The seemingly limitless expansion of medicine over the last century has provided new discoveries and advancements, leading to numerous specialties and subspecialties. Consequently, the partnership between the physician and patient has flourished to include multiple providers, which can often lead to diverging and confusing paths in patient care.

With a cohesive mentality, the medical home represents a place where physician, patient, and the health care system as a whole congregate to allow the most thorough and understandable care for the patient. This in turn provides the physician with the most powerful tools with which to fulfill the goals of achieving patient trust and compliance. In the ongoing conflict physicians encounter in the United States with politics and insurance companies, the fundamental purpose of a physician's identity remains unchanged: the provision of superior health care to each individual. This purpose becomes fortified by a deeper understanding of patients' desires.

The medical home represents more than a blueprint for an office set-up. It incorporates profound fundamental tenets central to the core of a successful health care system in a society. Its tangible existence provides a cohesive information center from which decisions stem and information returns. It is a meeting place where a patient can learn about their health from each person involved in the attainment of that health, where one physician can analyze various aspects of a patient's health and solidify multiple diagnoses into one understandable plan, and a place where each patient and their physician can make the most informed decisions regarding all aspects of health care.

Osteopathic philosophy has always worked against fragmented, episodic care and attempted to address patient health by looking at the whole person. This also applies to the delivery of care, from before the patient's visit to the office up to and including care needed at home and the hospital. The PCMH's approach of using ancillary staff, information technology, and multiple modalities of access to care is in keeping with this philosophy and is a model that osteopathic physicians as a whole should be the first to adopt.

Without taking into account the patient's preferences, the reformation of primary care cannot be successful. Without patient buy-in to the proposed changes, the medical home will go empty. Fortunately, this study seems to indicate that patients are ready to support the ideas being proposed.

Conclusion

This study shows the support patients have for the medical home concept and will lead to better understanding of what is important to them. Patients understand the importance of having their medical information in a centralized location and that a PCP in the medical home model provides for a better appreciation of their health problems. This then leads to increased willingness of patients to acquiesce to treatment plans developed in conjunction with their PCP. Further research needs to be done in this area, with more specific attention paid to the parts of the medical home concept as proposed by the various organizations involved in its implementation. By combining patient preferences with physician needs, a better system can be developed that will improve the care provided to the patients and ensure the vitality of the health care system for generations to come.

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