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US ARMY-BAYLOR PROGRAM IN HEALTH CARE ADMINISTRATION

DEFINITION OF ROLES AND RESPONSIBILITIES

OF HEALTH CARE TEAM MEMBERS

IN A POPULATION-BASED MODEL OF PRIMARY HEALTH CARE DELIVERY

AT SOUTH REGION, GROUP HEALTH COOPERATIVE OF PUGET SOUND

A GRADUATE MANAGEMENT PROJECT

SUBMITTED TO THE FACULTY OF BAYLOR UNIVERSITY

IN PARTIAL FULFILLMENT

FOR THE DEGREE OF

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BY

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ABSTRACT

Group Health Cooperative of Puget Sound is currently designed to provide episodic care to patients in the primary care setting. In order to meet the preventative, self-limiting, episodic, and chronic care needs of its enrollees, the Cooperative has decided to take a population-based approach to delivering care. The challenge is to integrate the population-based approach into practices of Group Health's primary care clinical-practice teams. Reengineering patient care delivery models requires fundamental changes in the jobs and work lives of care providers. The population-based approach to medicine and the fundamental changes in roles and responsibilities that are needed to support a population-based approach to health care delivery are described.

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CHAPTER 1

INTRODUCTION

Group Health Cooperative of Puget Sound is a large, not-for-profit, consumer-governed, mixed-model¹ health maintenance organization (HMO) that was established in 1947. As one of the nation's oldest and largest HMOs, it operates hospitals, specialty medical centers, family health centers, and other health care services throughout the state of Washington (Thompson et al. 1995). As of October 1996, Group Health Cooperative boasted an enrollment of over 679,000 in the Washington area (Crowley 1996).

The demographics of Group Health's market are changing. The Washington population is currently about 5.6 million, and is expected to increase to 6.3 million by the year 2005. In the Puget Sound area, the percentage of the population over fifty-five years of age is growing faster than other age groups. Presently over 600,000 people, or 12 percent of the population, are eligible for Medicare. Most of these are not enrolled in managed care organizations, hence, there is an attractive Medicare market. About 85 percent of the Puget Sound population is white, however there are large concentrations of Asians and of black citizens (Elser 1996).

The Cooperative has been recognized as a national leader in efforts to improve quality of care and service. It is contributing significantly to improvement in the health

of its members by pioneering the use of evidence-based and population-based medicine.

Purchasers have recognized Group Health for outstanding data reporting in the areas of membership, member access and satisfaction, quality of care, finance, and health plan management. The Health Plan Employer Data and Information Set (HEDIS) report documents this purchaser recognition, as well as data analysis in the areas of clinical quality of care, member access, patient satisfaction, and finance and health plan management. In 1995, Group Health received a three-year accreditation from the National Committee for Quality Assurance (HEDIS report 1995).

Conditions Which Prompted the Study

The current health care marketplace is volatile and in a constant state of flux. As a result of fierce competition, purchasers have come to expect dramatic improvements in cost, clinical quality, access, and patient satisfaction. Given the instability of the environment, Group Health Cooperative has extensively evaluated how it delivers patient care in the primary care setting. It has thoroughly assessed patient care team structures, support systems, patient access to care, enrollment trends, clinical quality of care provided, cost of health care, and patient and provider satisfaction (Crissman 1996). Results of the analyses have convinced members of the Group Health leadership that they must improve performance in order to remain competitive in the health care market in the state of Washington. The Cooperative has searched for ways to improve the care provided to patients and the efficiency of clinical-practice teams.

Several conditions have led Group Health to realize the compelling need to redesign its existing primary care clinical teams to a more efficient and cost effective delivery model. First, the existing model of primary care delivery at Group Health is designed to react to patients with acute illness and urgent health care needs. Currently, about 60 percent of a physician's time is spent caring for patients with episodic or temporary conditions. However, care for people with long-lasting, chronic diseases like diabetes, asthma, and depression accounts for over 70 percent of Group Health's costs. Since the demographic trend is toward the enrollment of older, more chronically ill patients, Group Health leadership believes that the Cooperative will not survive financially if it continues to use the current model of primary care delivery (DISC report 1995).

Second, some primary care physicians² have experienced an increase in panel size, and since there was little decrease in the number of visits per patient, this required them to provide more clinic visits (McCreery et al. 1996). With the existing team model of primary care delivery, physicians are having difficulty in accommodating a demand for more visits (McCreery et al. 1996). This higher visit demand could result in patients spending less time with providers, reduced access to care, and a greater chance the patient would not see his or her provider of choice (McCreery et al. 1996). In addition, a recent survey revealed a noticeable decrease in provider satisfaction (Andriesen 1996). Physicians reported feeling overworked, stressed, and unable to control the decisions relating to the systems that affect their work. Consequently, physicians expressed a

desire for assistance in redesigning primary care practice teams. Their hope is that the redesigned team will allow them the ability to effectively manage patient demands as well as the ability to improve the quality of their work life (Andriesen 1996).

Finally, primary care practice teams do not have uniform staffing levels. A primary care practice team, the basic unit of work performance, delivers health care to the Group Health enrollee. A primary care practice team at Group Health can range from (1) a full-time physician and a full-time registered nurse, with part-time support from licensed practical nurses, medical assistants, and patient care representatives, to (2) a team of as many as nine physicians, two physicians assistants, four registered nurses, and full support from licensed practical nurses, medical assistants, and patient care representatives (Crissman 1996). Although practice team configurations have always varied somewhat due to demographic differences of enrolled populations, the lack of a template has resulted in staffing variations that are inefficient and difficult to manage. This high degree of variability prohibits direct transfer of some lessons learned by one team to other teams within the delivery system (McCreery et al. 1996).

Consequently, Group Health Cooperative realized that primary care team structures and team member roles and responsibilities must change. A committee at Group Health responded to this need and developed a proposed model of practice for primary care. The committee's charge was to guide staffing levels of primary care practice teams and to design work environments in order to deliver episodic, chronic, and preventative care. The proposed model of primary care practice recognizes and

incorporates elements of population-based medicine, an approach to health care that manages patients' needs based on their specific health conditions (McCreery et al. 1996).

Considering the work of this Group Health Cooperative committee, leadership in the South Region of the Cooperative assembled a Regional Redesign Consulting Team (RRCT). South Region's leadership charged this consultative team with redesigning primary care delivery for each of the three districts within the South Region. While an overall plan was to be developed by the RRCT, final accountability for redesigning the teams was given to district leadership.

The RRCT used the process shown in Figure 1 to redesign clinical-practice teams.

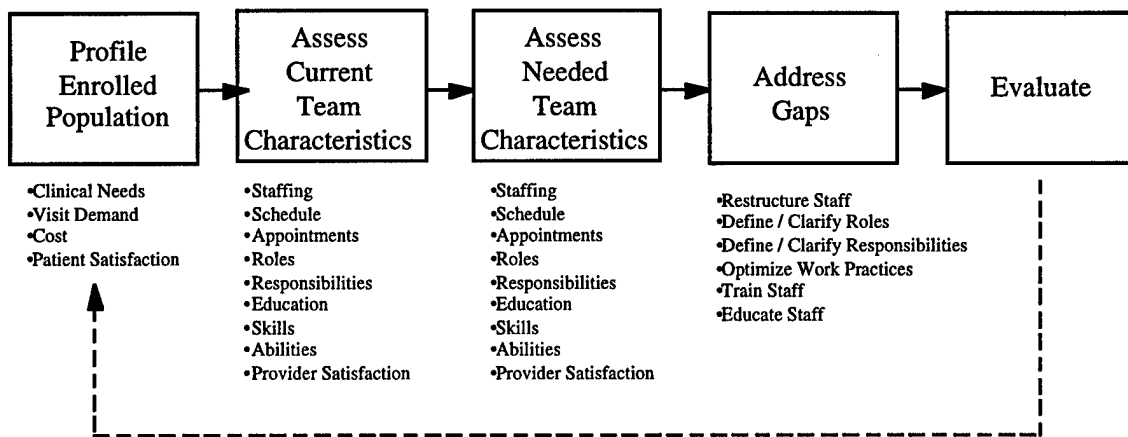


Figure 1. The Process of Redesigning Primary Care Clinical-Practice Teams.

First, the RRCT developed a profile of each clinical-practice team's panel. Clinical-practice teams could analyze their enrolled population's needs, based on

historical data of the panel's size, stratification of diagnoses, distribution of risk, visit demand, cost of primary care, clinical quality results, and satisfaction survey results. Much of this information is now communicated to clinical-practice teams in a new clinical-practice report, which is a tool that provides data to individual providers and practice teams to support their effort in practice improvement and performance accountability. Since Group Health has committed to maintaining a delicate balance between clinical quality, cost maintenance, adequate access, and patient satisfaction, this new clinical practice report serves as a cornerstone for assessing team performance.

Second, the RRCT assessed the characteristics of the clinical-practice teams. The characteristics assessed included current staffing ratios, provider appointment availability for primary care, roles and responsibilities of team members, and skills and abilities of team members. Results indicated great variability among clinical-practice teams with regard to availability of appointments and to staffing ratios (Helling et al. 1996). Roles and responsibilities, and, skills and abilities of team members also varied among clinical-practice teams and were used to determine a teams educational needs. The above characteristics were measured because the RRCT believed they would affect the team's ability to meet cost, clinical quality, and access targets. The RRCT also believed these characteristics could affect professional satisfaction of the team members, and the desire to increase professional satisfaction was one of the reasons that led Group Health to redesign its clinical-practice teams.

Finally, the RRCT compared clinical-practice teams' current characteristics to those characteristics it believed were needed to provide care in a population-based model of health care delivery. For example, the RRCT looked at whether a team's capacity could handle the demand of enrolled panel members for visits and whether team members were working to the maximum limits of their licensure. Results of the analyses and the profile of the teams' panel provided a basis for deciding which clinical-practice teams would be redesigned first.

Two staffing structure models were selected as templates for clinical-practice teams. Either model can be tailored to a particular team's panel or to a special, local need (Crissman 1996). One staffing-structure model was developed and implemented by Kaiser-Permanente of Colorado, a not-for-profit HMO with organizational values and quality goals similar to those of Group Health Cooperative (Kaiser-Permanente Document 1996). The other was developed by a physician at Group Health, based on his personal experience and primary care practice (Hummel 1996). After much review and discussion of the two models, the South Region leadership of Group Health decided that the exact staffing structure can be determined at the district level. However, (1) all delivery teams will be staffed with no more than eight to twelve people to ensure that communication involving daily work is effective, (2) affiliate, nursing, and support staff will be adequate for preventative and chronic care programs, (3) the primary care team will be physician-led, and (4) the roles and responsibilities of team members will be realigned to ensure that the appropriate caregiver will provide the care for patients

(Crissman 1996).

The proposed model for primary care broadly describes team members' roles and responsibilities. The committee that developed the model emphasized that the definition of roles and responsibilities of team members is fundamental to the process of redesigning primary care (McCreery et al. 1996). However, since the proposed model for primary care is still a work-in-progress, roles and responsibilities are even now being defined and translated into tasks for individuals at the level of the care-delivery team. It is this definition of the roles and responsibilities of health care team members, in a population-based model of primary care delivery, that is the subject of this research effort.

Statement of the Problem or Question

This research examines the question: Given a specified level of staffing for primary care delivery teams, what are the individual roles and responsibilities that will enable team members to support a population-based approach to health care. Since the current model of health care delivery is designed to provide episodic care to Group Health enrollees, the challenge is to change the existing model of health care delivery by designing roles and responsibilities that will enable teams to adequately address not only the episodic needs of Group Health patients, but all needs of the *entire* enrolled population, which includes individuals requiring preventative, episodic, and chronic care.

Literature Review

This literature review develops and describes the elements of population-based medicine. It then specifies barriers to providing care to patient populations and presents strategies to improve clinical outcomes in the primary care setting. Particular emphasis is given to consideration of those strategies that will affect the design of roles and responsibilities of primary care team members.

Population-based medicine³ is an approach to health care that requires a primary care clinical-practice team to look at its patients in the context of other patients with the same medical condition (McCreery et al. 1996). Also called disease management, population-based medicine seeks to produce the best clinical outcomes in the most cost effective manner (Peterson 1995). It requires that providers think beyond the unique, specific needs of a single patient, and, instead, consider the collective needs of an entire group of patients presenting similar clinical features.

Population-based initiatives often target costly conditions such as diabetes, asthma, and hypertension, where planned intervention can prevent hospitalizations and acute episodes of illness. Using a population-based framework, Wagner, Austin, and VonKorff describe a conceptual model of an integrated approach for chronically ill populations that helps to improve clinical outcomes. Wagner and colleagues believe that effective interventions for population-based, evidence-based, planned care are affected by five main areas, which include: (1) the use of a protocol, (2) greater availability to clinical information, (3) improved patient education, (4) increased access to medical

expertise, and (5) reorganization of practice systems and provider roles (Wagner, Austin and VonKorff 1996). Group Health Cooperative of Puget Sound has developed a population-based model that is similar to the areas Wagner and colleagues believe to be effective (Price 1996). See Figure 2.

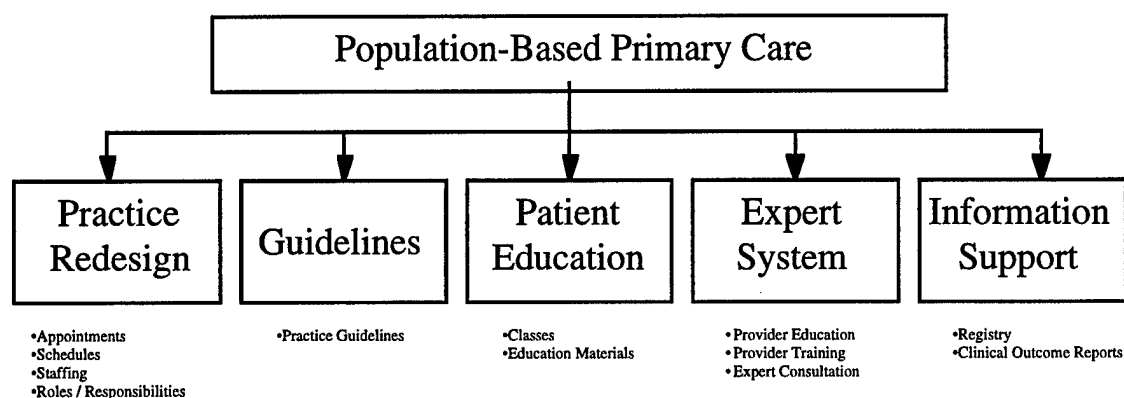


Figure 2. Group Health Cooperative's Model of Population-Based Primary Care.

The first element in the population-based model of Wagner, Austin, and VonKorff is the use of a protocol. Wagner and colleagues note that most practitioners resent the notion that medicine should be standardized through the use of protocols or practice guidelines (1996). However, many sources report that systematic approaches to implementing preventative services have resulted in improved health outcomes (Thompson et al. 1996, Gottlieb, Margolis, and Schoenbaum 1990, Peterson 1995).

Group Health Cooperative has ratified the use of evidence-based medicine⁴ as a systematic approach in developing clinical-practice guidelines. David Sackett defines

evidence-based medicine as “the conscientious, explicit and judicious use of current best evidence in making decisions about the care of individual patients” (Sackett et al. 1996). Clinical guidelines, as defined by Dr. Michael Stuart at Group Health Cooperative, are “systematically developed statements that assist practitioners and patients in choosing appropriate health care for specific conditions.” These guidelines can appear as advice to providers with regard to precertification, utilization review, and credentialing (Stuart 1995).

A second element in the population-based model of Wagner and colleagues is that providers should have adequate availability to clinical information (1996). In a population-based model of health care, the patient population must be divided into subgroups according to some criterion, such as a particular disease or diagnosis. Sophisticated information support systems are required to collect the type of data needed for planned, clinical, preventative services for these subgroups. Voelker substantiates that practicing population-based medicine requires the aid of computer algorithms that analyze the patient database and determine which patients need specific services (Voelker 1994). Group Health Cooperative has developed computerized registries for significant subgroups, such as patients who have diabetes or heart disease (Price 1996).

The ability to tell whether clinical interventions have worked is as important as being able to identify the patients with specific clinical needs. Therefore, information support systems should have the capability to measure clinical outcomes so

organizations know how to design improvements (Peterson 1995). In October 1996, Group Health distributed its first provider-specific clinical-practice reports to physicians, providing them feedback on the clinical outcomes of individuals in their enrolled panels (Liu, Brown, and Helphrey 1996). The intent of the report was to identify provider-specific clinical outcome data so physicians could develop strategies to improve their clinical performance (Straley, Spee, and Vidrine 1996).

A third element of the population-based model for primary care is that providers must have increased access to clinical expertise. Wagner and colleagues argue that interventions that increase the expertise of generalist-providers may lead to better clinical outcomes for their patients. Certainly, the one of the most common approaches to increasing physicians' clinical expertise has been some form of continuing medical education (1996). Additionally, increasing access to specialized clinical knowledge through provider-to-provider consultations, or referrals of patients to specialists, may also lead to better clinical outcomes for patients. At Group Health, conventional referrals to specialists remain the dominant form of expert assistance. However, the organization has developed innovative strategies to provide specialized clinical knowledge to the primary care teams. For example, a diabetes improvement program was formed that relies on an "expert team" consisting of a diabetologist⁵ and a nurse specialist. This team spends most of its time in the primary care setting (1) educating generalist providers and (2) seeing difficult patients in conjunction with primary care teams (Price 1996). Other successful strategies for increasing clinical expertise include

hands-on training, provider-to-provider consultation, tutorials, and use of information support systems (Wagner, Austin, and VonKorff 1996). Group Health Cooperative has employed all of these strategies in varying degrees. Of particular note is that each physician has been provided with a desktop computer which provides him or her access to diagnostic and therapeutic decision support programs. Physicians, thus, have immediate access to clinical-practice guidelines and patient registries, and the ability to do medical literature searches (Crissman 1996).

Improved patient education is the fourth element in the population-based model of primary care delivery. Patient education can take place in a variety of ways, through patient and provider encounters, in scheduled classes, and from individual study of educational brochures and handbooks. Wagner and colleagues believe that the actual method of intervention may be less important than the provider's ability to identify the needs of the patient (1996).

The final element of population-based medicine is "practice redesign." "Practice redesign" can be defined as planned improvements made in the organization of clinical-practice to better meet the needs of a population (Wagner, Austin, and VonKorff 1996). Within practice redesign, improvements may be planned in the areas of availability of appointments, scheduling, staffing ratios and mix of staff, and roles and responsibilities of providers (McCreery et al. 1996).

At Group Health Cooperative, the staffing configurations of the primary care practice teams have affected the role of individual team members. Prior to the initiative

to redesign the delivery of primary care at Group Health, acute care, follow-up care, and chronic care needs had typically been worked out between the provider and the patient, on a one-to-one basis, during patient visits. Other members of the clinical-practice team played important, albeit variable, roles in delivering primary care to patients. The concept of population-based medicine has required clinical-practice teams to carefully review the roles and responsibilities of all team members (Straley, Spee, and Vidrine 1997).

The medical literature describes numerous barriers to population-based approaches for health care delivery. One barrier, according to Kotte, Brekke, and Solberg, is that there appears to be little difference in the clinical approach to delivering primary care to patients with episodic and chronic illness. Priority is given to urgent problems on a day-by-day basis, while little energy is given to managing predictable health care needs of patients with chronic conditions. They believe that by addressing the predictable health care needs of chronic conditions, future episodes of illness can be prevented (1993). Thompson and colleagues substantiate the assertion that priority is given to the urgent problems of patients. They explain that the demands of patients and the constraints of time make the physician's job "one of responding to complaints and not one of initiating action" (Thompson et al. 1995).

Another problem with population-based medicine deals with the complexity of its interrelated components. Implementing a population-based program requires accessing and evaluating data, determining best practices, securing cooperation from

practitioners and patients, and maintaining ongoing assessment and improvement efforts.

Buy-in from the medical staff is easier to achieve if physicians have a systematic process by which to determine best practices and if the physicians are easily accessible (Peterson 1995).

Many strategies have been shown to improve clinical outcomes of patient populations. Litzelman and colleagues found that the use of computer-generated reminders to physicians increased physician-initiated preventative care (Litzelman et al. 1993). Others have found that the use of telephone follow-up reduced utilization of medical services, improved patients' health status, and reduced the mortality rate of severely ill patients (Wasson et al. 1992).

A problem unique to a team-based approach to delivering population-based primary care is that there is often a lack of clarity about the aspects of an individual's role that make him or her a primary health care clinical-practice team member. Pearson concludes that only after the teams have been well defined can they function at their best (Pearson 1992). McCreery and colleagues also emphasize that the roles and responsibilities of care providers in clinical-practice teams must be clearly defined in order for the team to function well and improve performance (McCreery et al. 1996).

If caregiver roles and responsibilities must change substantially, Schweikhart warns that the change must be supported by organizational and cultural change (Schweikhart 1996). Lawler believes that in order to achieve high performance through cultural change, the organizational must figure out not only how to articulate people's

roles and the nature of their jobs, but it must also figure out how to change business strategies, reward systems, workforce skills and knowledge, and management processes (Lawler 1996). The goal at Group Health Cooperative is to provide health care that optimizes patient health outcomes, at a reasonable cost, while satisfying both patients and care providers (Crissman 1996). Defining roles and responsibilities of clinical-practice team members is clearly only one component of the cultural change needed in leading the organization to achieve these goals (Rahn et al. 1996).

Purpose

The purpose of this case study is to describe the roles and responsibilities of individual team members in a new population-based model of delivering primary care. It is my thesis that primary care delivery team members' roles and responsibilities must fundamentally change from those in the current model of primary care delivery in order to provide effective population-based health care to meet the prevention, self-limiting, episodic, and chronic care needs of patients. At Group Health Cooperative of Puget Sound, the determination as to the effectiveness of population-based health care is based on clinical outcomes, patient satisfaction, cost of care, and patient and provider satisfaction.

CHAPTER 2

METHODS AND PROCEDURES

This graduate management project is a case study which qualitatively analyzes and describes the roles and responsibilities of individuals on future primary care delivery teams at Group Health Cooperative of Puget Sound. It was conducted through a thorough review and analysis of the medical literature and documents and work generated by various individuals and committees at Group Health. In addition, primary care teams were observed to determine the optimal roles and responsibilities of team members within the new population-based, primary care delivery model. Although the process of redesigning primary care has already begun in the South Region of Group Health, completion is not expected until December 1997. Therefore, this case study focuses on a description of a *future* clinical-practice team model of primary care, rather than describing the implementation or results of practicing within a new model.

Four clinical-practice teams were observed in order to determine current roles and responsibilities of individual team members. This sample represents 28 percent of all primary care clinical-practice teams in the South Region of Group Health Cooperative. Team members were fully informed of the nature of the observation, and they received written feedback of the observed results. In addition, the researcher was given tours of

the Group Health facilities where primary care clinical-practice teams were, and still are, undergoing the process of redesign. The tours, although not specifically given to inform the researcher of the roles and responsibilities of the primary care team members, provided baseline knowledge of the kind and type of work clinical-practice team members perform.

No ethical concerns arose as a result of the research design and investigation used in this graduate management project. Although the research involved observations, the observations were used only to provide background information for the researcher.

Results of the observations were not recorded in any way that would permit identification of the clinical-practice team observed or of any members of the team. This research also involved the collection and study of existing literature, data, and documents.

Although some of the documents are proprietary to Group Health Cooperative and are not available to the public, the information was generalized in this document in such a way that the proprietary information was not disclosed.

Since this case study involved a qualitative description, validity was obtained through expert opinion. The predictions of Group Health physicians and administrators involved in this work were relied upon as to whether the new roles and responsibilities will bring about true changes in the delivery of primary care in a population-based model of health care delivery. Their predictions and opinions were expressed in a variety of forums, including meetings, workgroups, and seminars.

CHAPTER 3

RESULTS

As the redesigning of clinical-practice teams at Group Health Cooperative proceeds, the exact staffing mix of team membership will be allowed to vary according to geographical location and patient demographics. However, the South Region leadership agreed that (1) all delivery teams will be staffed with no more than eight to twelve people, to ensure that communication involving daily work is effective, (2) affiliate, nursing, and support staff must be adequate for preventative and chronic care programs, (3) the primary care team will be physician-led, and (4) the roles and responsibilities of team members will be realigned to ensure that the appropriate caregiver will provide the care for patients.

Individuals that will be selected for new primary care clinical-practice team membership will include physicians, affiliate-staff (physician assistants and nurse practitioners), registered nurses, licensed practical nurses, medical assistants, and patient care representatives (receptionists). Although adjunct team members from other disciplines, such as consulting nurses, pharmacists, dietitians, community health specialists, physical therapists, occupational therapists, and mental health specialists will work collaboratively with the primary care clinical-practice team and have an impact

on the ability of delivering population-based care, their roles and responsibilities are not described or included in this document.

The principles guiding the development of team roles and responsibilities at Group Health are: (1) all providers will work to the maximum limits of their licensure, (2) the appropriate care giver will provide the care for patients, and (3) teams will develop practices that emphasize teamwork (Rahn et al. 1996).

Because the proposed roles and responsibilities represent a fundamental change in the way primary care is currently delivered, the Regional Redesign Consultant Team (RRCT) felt it necessary to recommend practices that emphasize teamwork as it relates to the team member's roles, responsibilities, and work performance. For example, Rahn and colleagues recommend that time be made available for team meetings, because team meetings present opportunities for developing relationships. Development of this relationship will help to enhance the team members' understanding of their roles. In addition, use of effective communication will strengthen team members' understanding of their daily working relationships. Team members should discuss and clarify who does what work, and how and when it should be performed. Both in every day work and in team meetings, conflict should be addressed as it arises. Team members that work together to maximize the use of their skills and abilities will enhance their sense of satisfaction in practicing their profession. As a result, patients will receive quality care and better service (Rahn et al. 1996).

While developing new roles and responsibilities for the clinical-practice team members at Group Health Cooperative, Rahn and colleagues defined a role as “the position that each team member holds in the primary care team” and a responsibility as “what each team member does to carry out his or her role” (Rahn et al. 1996). A description of current and recommended roles by team member of the clinical-practice team follows.

Physicians -- Currently, physicians deliver care to patients in their panels, with varying support from nurse practitioners, physician assistants, registered nurses, licensed practical nurses, medical assistants, and receptionists. In general, physicians deliver care to patients on a one-to-one basis during patient visits. Physicians are responsible for establishing a relationship with their patients and for dealing with their expected, and unexpected, clinical problems.

In the current model of primary care delivery, physicians do not have the responsibility for overseeing the activities of the other care providers. The primary role change in the new model of health care delivery is that the physician will become the clinical leader of the clinical-practice team. Although the physician will not necessarily provide a performance appraisal for each of the team members, he or she will be expected to advise other team members in order to help them perform to their full potential.

Physicians will continue to have overall responsibility for the clinical management of patient care. They may manage the patient care directly, or indirectly by mentoring, consulting, and providing the clinical supervision of other team members.

The physician will remain accountable for clinical outcomes of patient care rendered, regardless of which team member has had the encounter, or encounters, with the patient.

To carry out their own patient care role, physicians will provide direct care to patients in one-on-one interactions, whether those occur face-to-face or over the telephone. Physicians will develop a care plan for patients and will identify the components of the patient care plan that can be carried out by others. It is expected that physicians will delegate components of patient care to other team members within the scope of the licensure of these other members. As a result of this delegation, it is expected that physicians will see patients who have higher acuity levels⁶.

Physicians will also oversee the development of care plans by other team members and will ultimately be responsible for the coordination of patient care and for the appropriateness of referrals. In addition, physicians will provide guidance and direction to other clinical-practice team members, taking advantage of teaching opportunities through shared visits, brief consultative visits, planned or ad hoc case conferences, and team meetings. Clinical supervision by physicians will include precepting, reviewing charts, providing feedback, and evaluating outcomes.

In addition to the clinical responsibilities physicians will have, they must also assume a new leadership role. Crucial to the success of team-based care at Group Health Cooperative is the ability of its physicians to foster an atmosphere where teamwork can thrive. Team building and teamwork skills are important to the establishment of clear aims and objectives.

Affiliate-staff (nurse practitioners and physician assistants) -- Under the current model of primary care delivery, affiliate-staff, called physician extenders or auxiliary providers in some systems, primarily provide primary care for patients with episodic illness. Some cover shifts in urgent care clinics, while a few have specialized positions in areas such as orthopedics.

The professions of nurse practitioner and physicians assistant require education and skills, albeit different for each, that at Group Health Cooperative, are matched to the needs of the patient populations they serve. Nurse practitioners and physicians assistants treat minor injuries, sore throats, and upper respiratory infections, and do health counseling, pelvic exams, pap smears, and physical exams. They counsel patients about general health and the management of stable, chronic conditions. And, this list is not all inclusive.

With the new model of primary care delivery, the principal role change for affiliate-staff is that they will be expected to provide more planned care for healthy patients and patients with chronic illness, as well as episodic care for patients suffering from certain specified conditions. Physicians assistants and nurse practitioners must exploit the potential for health promotion and chronic illness care through an analysis of enrolled panel demographics and the development of work plans for selected sub-populations.

In the new model of primary care delivery, physicians assistants and nurse practitioners will be precepted and clinically supervised by physicians. Like physicians,

physicians assistants and nurse practitioners will carry out their patient care roles by providing direct care to patients through one-on-one interactions, whether those occur face-to-face or over the telephone. Affiliate-providers will also independently develop care plans for selected patients, within their scope of practice, and will identify components of those care plans that can be carried out by others. They will be expected to accept instruction from a team's physician, and will be required to appropriately request consultation from the physician regarding the care of selected patients.

Physicians assistants and nurse practitioners will be required to communicate and collaborate with other team members in providing care for patients, and will delegate selected components of that care to registered nurses and other team members.

Registered Nurses -- The role of registered nurses is to perform nursing practices that include observing, assessing, and caring and counseling of patients. They are also responsible for health teaching of the injured or infirm, or in the maintenance of health or prevention of illness. Although registered nurses at Group Health Cooperative currently serve as case managers for patient populations, care itself is fragmented. In some cases, this is due to irregular staffing or failure to have a registered nurse on the clinical-practice team.

Registered nurses most appropriately focus on chronic illness or complex clinical situations, and delegate selected nursing care tasks to other team members. In the new population-based model of health care delivery, there will be sufficient registered nurses to support adequate preventative and chronic care programs. The primary role of

registered nurses will be to manage care for populations and provide case management⁷ focused on wellness, the prevention of illness and injury, and the management of chronic illness for selected patients.

Registered nurses will carry out their role by providing direct care to patients individually (face-to-face or by telephone) and in group settings. They must communicate and collaborate with other team members in order to identify specific patients or populations that need case management. As patients and populations needing case management are identified, registered nurses will act as liaisons between personnel representing or providing other services, ensuring that the patients have progressed through the health care delivery system appropriately. Registered nurses will develop and implement plans of care, will teach and educate patients about the maintenance of health or the prevention of illness, and will receive instructions from physicians. Although registered nurses will delegate tasks to other primary care team members, they will not delegate their responsibility or accountability for the assessment, planning, and evaluation of nursing care. Most delegation will occur in the area of implementation of the medical and nursing plan of care.

Licensed Practical Nurses -- In the current model of primary care delivery, the licensed practical nurse determines the purpose of each patient's visit and collects relevant data relevant to it. He or she is primarily responsible for ensuring effective and efficient patient flow within the primary care clinic.

In the new model of population-based primary care delivery, licensed practical nurses will continue to organize the patient flow in the office. They will also continue their role as liaison between other clinical-practice team members and patients. Under the direction of physicians, affiliate-staff, and registered nurses, licensed practical nurses will assist in the nursing tasks associated with episodic illness and preventative care, such as performing injections or ear irrigations. Licensed practical nurses will be capable of answering many telephonic inquiries regarding the management of on-going clinical problems. They will also be expected to perform many of the database maintenance tasks associated with chronic disease management. Within their scope of practice, licensed practical nurses will accept the delegation of selected components of administrative work and patient care from other clinical-practice team members.

Medical Assistants -- In the current and proposed model of primary care delivery, the role of the medical assistant is similar to that of the licensed practical nurse. Like the licensed practical nurse, the medical assistant manages patient flow in the clinic, performs selected components of patient care within the context of established treatment plans, and performs administrative tasks.

In the proposed model of health care delivery, medical assistants may be given administrative support roles, such as entering data in a computerized database or assisting patients in obtaining additional health care services. Medical assistants may be asked to review a chart, or data maintained in another form, prior to a patient's visit in order to identify preventative tests and procedures. Medical assistants will manage

some telephonic inquiries from patients, if the inquiries fall within their scope of practice. Medical assistants will accept, from other team members, taskings concerning selected components of patient care and administrative work that fall within their scope of practice.

Patient Care Representatives -- In the current model of primary care delivery, patient care representatives are considered support to the clinical-practice team, not as clinical-practice team members. Some clinics have combined reception and appointment setting roles with business office roles. Other clinics have divided the roles among different patient care representatives. In general, the specific sets of responsibilities of patient care representatives include scheduling appointments, checking patients into the clinic, serving as cashiers and collecting co-payments for services, and entering data into automated systems for billing functions.

In the proposed model of population-based primary care delivery, patient care representatives will become integral members of the clinical-practice team. The patient care representative's primary role will be to provide administrative support to the clinical-practice team by managing telephone calls (i.e., obtaining accurate information from patients, directing calls to appropriate team members, and ensuring adequate telephone call coverage with other patient care representatives), scheduling patient visits according to established guidelines, and greeting patients upon their arrival to the clinic. In addition, patient care representatives will act as liaison between patients and clinical-practice team members. In some cases, the appointment making and registration roles

may continue to be combined with some billing and money collection roles. Preferably, they will be separated. If the roles are separated, patient care representatives responsible for billing and collecting payments will report to a business operations manager and patient care representatives responsible for scheduling and receiving patients will report to a designated nursing member of the clinical-practice team. If the patient care representative's roles are combined, he or she will report to one person, either the business operations manager or a member of the nursing staff. In this case, the business operations manager and nursing staff will be required to work closely to provide necessary direction and support.

CHAPTER 4

DISCUSSION

The definition of roles and responsibilities in this model depicts a fundamental change for members of primary care practice teams at Group Health Cooperative. The changes in roles and responsibilities represent a shift in focus from treatment for a single episode of illness to the management of preventative, chronic, acute, and episodic health care needs of the entire enrolled population.

Team-based care may be more efficient than care by individual providers in managing the continuity of care in a population-based model of primary health care delivery. However, team-based care requires considerable collaboration and communication among team members. Collaboration requires that team members trust one another and requires identification of team members' strengths and abilities. Also, providers who formerly worked in isolation may be required to acquire new team-building and communication skills.

The proposed model of delivering primary health care assumes that physicians will lead the other members of the clinical-practice teams. This is a new leadership role that many Group Health physicians may not have experienced. Consequently, physicians may need leadership and team-building training in order to obtain the skills needed to motivate other team members to work and perform to their full potential.

The model being proposed allows for the delegation of tasks, and the role of nurses and affiliate-providers can be seen in this light. Caregivers and patients may express concern that the move toward delegating some tasks to “lesser trained” caregivers could compromise the clinical quality of care. If roles, responsibilities, and scope of practice are clearly articulated and followed, this argument is simply not valid. In fact, it could be argued that affiliate-providers and nurses may play a more significant role and provide better care than the primary care physician in managing the chronic care and preventative needs of patients. This is because the training of affiliate professionals and nurses stresses teaching and counseling in the areas of prevention of illness, promotion of wellness, and management of chronic disease. On the other hand, physicians’ medical training emphasizes the diagnosis and management of disease processes. Having a team member perform a role for which he or she is not as skilled as another team member, results in less efficient and more costly care, whether that role is managing the patient flow in the clinic or giving a patient an injection.

Absolutely critical to the success of Group Health’s proposed model of primary care delivery is a clear understanding of tasks and roles which each team member is capable of carrying out. All team members need to be trained for specific tasks and roles that they can carry out very well, given their training and licensure. In addition, all providers must be clear about their legal scope of practice and must communicate this to other clinical-practice team members.

Many of the telephone calls currently being handled by the registered nurses in the clinical-practice team are administrative in nature and can be handled by the patient care representative or licensed practical nurse. Some of those that are clinical in nature could be handled by the licensed practical nurse. The redefinition of how telephone calls are managed allows registered nurses to spend more of their time planning care and serving as case managers for selected patients from the entire enrolled population, roles that are both critical for the success of population management. However, it could be more effective in the long run to have a more skilled clinician (e.g., a registered nurse) respond to clinical questions on the telephone, if the advice given results in an appropriately avoided scheduled appointment. Group Health may well want to test the efficiency of each method.

In addition to the above strategies for managing telephone calls in the clinical-practice team, the Cooperative has approved funding to establish a centralized advice line. It is expected that this service will defray many telephone calls similar to those now being received by the clinical-practice team, and will therefore allow its members more time for patient population management. A centralized advice line will also permit the collection of operational data, which can be used to monitor and improve service quality.

Team-based care and delegation of certain roles and tasks to provide population-based care presents a challenge for caregivers: they have to cause patients to form new and different expectations of their visits and other encounters. For example, patients

currently enrolled at Group Health expect that they will always be seen by a physician. This expectation may be a result of years of making patients' appointments for care only with physicians. It is also a product of how staff members "set the stage" for *what* care will be provided at the appointment, as well as *how* the care will be delivered. If, in the new model of delivering care, the kind of appointment provided to the patient is not in alignment with his or her expectations, the patient will not be satisfied.

Because the Cooperative recognizes that seeing the provider of choice is correlated with a high degree of patient satisfaction, it has planned an educational campaign directed to both employees and patients to help shape patient expectations regarding team-based and population-based care. The patient's opinion of the appointment is shaped by his or her interaction with every practice team member. For example, if while scheduling a patient appointment the patient care representative gives the patient the impression that he or she can't get in to see the physician, and will have to "settle" for a "less skilled" affiliate-provider, the patient will be left with a negative impression, whereas, if the patient care representative tells the patient that the affiliate-provider has "specialized expertise" in the type of care he or she needs, a positive impression will be created. This argument clearly reveals the need for each clinical-practice team member to understand the scope of practice, and skills and abilities, of all team members.

Group Health believes that carefully scripting messages for team members regarding how to direct patients to the appropriate providers will significantly affect the

patients level of satisfaction. The challenge for Group Health is to train practice team members to consistently and effectively communicate the desired messages to patients regarding what kind of care they will receive. Other strategies to educate patients may include producing and distributing brochures marketing the skills and abilities of affiliate-staff and the advantages of being treated by an entire team rather than by a single provider.

Group Health Cooperative has conducted surveys asking patients whether they would be satisfied seeing a caregiver other than a physician, depending, of course, on the reason for the visit. Most patients did not object to seeing an affiliate-staff member or a nurse, provided the designated individual was qualified to render the necessary care. The survey revealed that some patients did not understand the difference in skills and abilities of physicians and affiliate-providers. Although survey results were poor as to provider specialty recognition, patients were extremely satisfied with the care they received. In a team-based health care delivery approach, it is important that the patient recognize the value of all clinical-practice team members. The importance of each, but also the differences among them, must be acknowledged by all team members. They should readily, but always pleasantly, correct mis-identification by patients, and be ready to explain the different roles of team members.

As nursing staff and affiliate-providers begin to assume more of the care for preventative, episodic, and chronic care needs of patients, physicians may see their caseloads increasingly devoted to high-needs patients. This shift in the level of care that

physicians provide has implications in terms of the length of time allotted per appointment, the number of individuals making up a panel (i.e., panel size), and the physicians' level of professional satisfaction. As this shift occurs, Group Health will need to make appropriate adjustments across the system.

Some physicians have already expressed concern that with a team-based approach to delivering health care, the rapport and relationships they have built with their patients will suffer. Strategies can be built into this team-based model to help physicians maintain excellent physician-patient relationships. For example, a physician may keep abreast of a patient's medical condition through his or her precepting and mentoring of other staff members on the clinical-practice team. Moreover, although adoption of this model of health care delivery may mean that physicians will have fewer face-to-face visits with some patients, physicians can maintain a relationship with those patients by "checking-in" on them during their visits with other providers and by increased use of telephonic consultations.

Through the process of redesigning providers' roles to better meet the needs of patients, Group Health recognized a need to incorporate more affiliate-staff, especially physicians assistants, into its team structure. This change will increase the number of appointments available and permit both chronic care and preventative needs to be addressed appropriately. However, the Cooperative discovered that the salary it offers physicians assistants is not competitive with the local economy. To attract experienced physicians assistants, and to become competitive with the local economy, Group Health

had to increase its offered compensation. If the Cooperative is not able to recruit and hire physicians assistants in the short-term, other team members may need to carry out their roles and tasks until such time that the organization can recruit and hire enough physicians assistants to meet its staffing needs.

CHAPTER 5

CONCLUSIONS AND RECOMMENDATIONS

This study has provided insight into the incompletely charted, yet clearly significant, territory of population-based care. As managed care grows and evolves, corporate health care executives and administrators need a better understanding of how to take care of entire populations while balancing the factors of cost, access, patient satisfaction, and clinical quality of care.

This case study has described how primary care practice teams at Group Health Cooperative are redefining their roles and their responsibilities as a means to providing better, more effective, and more efficient primary care in a population-based delivery model. This study demonstrates the importance of role, of responsibility, and of the individual's understanding of that role and responsibility for each team member, the team as a whole, and the team's enrolled population. It shows that while flexibility must be built into roles of all team members, significant variation within professional positions should be minimized.

The immediate utility of this research is to give clinical-practice teams in the South Region of Group Health Cooperative a supplementary reference that will help them to clarify their roles and responsibilities as they adapt to the new staffing model. This research also identifies some areas needing additional attention, such as the

recruiting and hiring actions required of the human resource department, educational campaigns needed to help patients identify the roles of team members, and adjustments required to physicians' appointment schedules and panel size as their caseloads are devoted to higher-needs patients. Results of this study will also help clinical-practice teams identify training and educational requirements needed for them to perform well in their new roles.

This study may be of value to health care administrators of other managed care organizations who may wish to redesign the delivery of primary care to better meet the needs of enrolled populations. This effort to clarify work roles and responsibilities is an essential element in moving toward a useful model of population-based care to meet the preventative, self-limiting, episodic, and chronic care needs of enrollees. By following this clinical approach to primary care delivery, clinical outcomes in all sub-populations should improve.

A logical next step for research in this area would be the evaluation of the actual implementation of the change in roles and responsibilities of Group Health's primary care team members, and, then, the measurement of changes that occur in clinical quality, patient satisfaction, cost, and access.

NOTES

1. Although Group Health Cooperative is a mixed-model HMO, physician networks make up only about 15 percent of its business. The primary care clinical-practice teams being studied in this research are the staff-model portion of Group Health's business. In a staff-model, physicians who serve the covered beneficiaries are employees of the organization.

2. A primary care physician is the medical or osteopathic doctor with responsibility for coordinating the ongoing care of an enrollee. At Group Health, primary care is provided by pediatricians, family practice physicians, primary care internal medicine physicians, and occupational medicine physicians.

3. Population-based medicine is the framework in which health care providers deliver clinical care. Within this framework, health care providers look at a patient in the context of other patients with the same condition, thus giving a systematic approach to prevention and treatment.

4. Evidence-based medicine is the foundation for treatment and care. It requires practice or treatment guidelines that are based on solid, scientific research, not medical tradition or marketing campaigns. With evidence-based medicine, the best available evidence with which to answer a medical question is critically appraised for validity and clinical applicability. A practice or treatment guideline is then created to assist providers in their professional decision-making. These guidelines are applied to clinical-practice, after which, improvements in clinical outcomes are evaluated. At Group Health Cooperative, evidence-based, clinical-practice guidelines have been developed for conditions ranging from diabetic retinopathy to breast cancer screening.

5. A diabetologist specializes in treating patients with diabetes mellitus. A diabetologist must be certified in internal medicine with a two-year fellowship in endocrinology. During the two-year fellowship, an emphasis is placed on developing particular expertise in the diagnosis and management of diabetes mellitus.

6. Acuity levels reflect the complexity of the medical condition of the patient as determined by the physical and psycho-social assessment. Since affiliate-staff are able to treat less complex illnesses, such as upper respiratory infections, sore throats, ear infections, and lower back strain, it is expected that physicians will treat patients with more extensive medical problems.

7. Case management is a clinical system that focuses on the achievement of patient outcomes within effective and appropriate time frames and resources. Case management focuses on the entire episode of illness, crossing all settings in which the patient receives care.

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