

Luther Midelfort – Mayo Health System: Planned Care for Chronic Disease

Part 1: Chronic Disease and Evidence-Based Care

BY JOHN ROZICH, M.D., PH.D., M.B.A.

The privilege of attending the recent American Medical Group Association (AMGA) Institute for Quality Leadership Annual Meeting in Chicago afforded an excellent opportunity to identify current trends in health care among this nation's top group practices. The 2005 AMGA Acclaim Award was presented and rewards medical groups who are transforming their organizations to incorporate the Six Institute of Medicine Aims for the 21st Century in their delivery of health care. The top selections this year were all, in various ways, related to the care of patients with chronic illness.

MANY ORGANIZATIONS HAVE EMBARKED UPON AN ESSENTIAL RECONFIGURATION OF SERVICES THAT FUNDAMENTALLY CHANGED THE MOST BASIC MECHANISMS IN CARING FOR PATIENTS WITH CHRONIC ILLNESSES.

This year's recipient Luther Midelfort – Mayo Health System focused on the development and implementation of a comprehensive care system for patients with chronic illness in accordance with the IOM's stated aims. A similar theme was noted in the projects of the honorees: Virginia Mason Medical Center (VMMC) successfully streamlined operations and enhanced the personal experiences of patients within their

busy oncology practice. Providence Health System and the Cleveland Clinic Foundation focused on implementing technology that assisted in reducing medication errors and educating patients on use of medications required for chronic conditions.

Why the Emphasis on Chronic Disease?

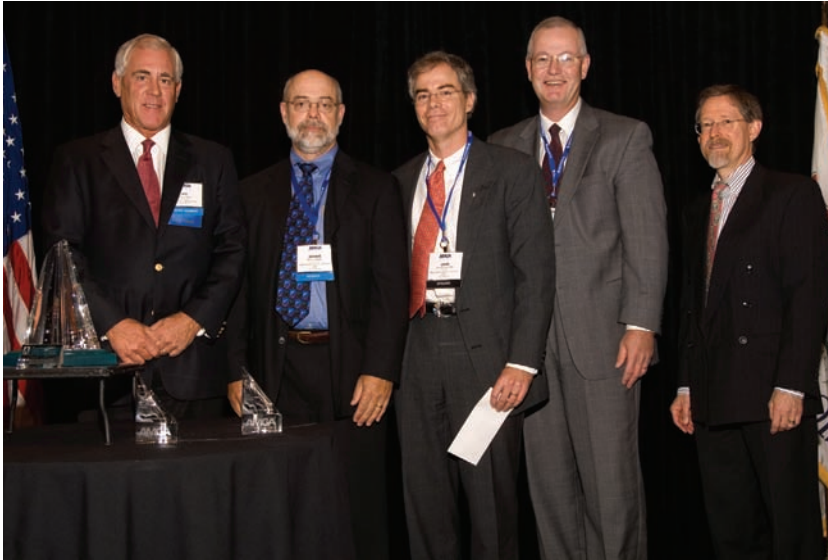
There is growing recognition that our current healthcare system is in desperate need of change to meet the challenges of an expanding and aging population with complex chronic medical conditions. The current system is a holdover from an era that primarily treated communicable diseases requiring intensive but episodic care. This system worked well in conquering many of these infectious illnesses but is poorly designed to provide effective outcomes for many chronic illnesses. Currently more than 125 million people in the U.S. suffer from chronic medical conditions.¹ These numbers are expected to increase to 157 million by 2020 as baby boomers come of age.² Additional estimates place 75 percent of all U.S. healthcare expenditures for treatment of chronic disease.³ Finally, numerous studies have shown that care rendered for chronic illnesses such as diabetes and heart failure is often fragmented, that it is not within recommended guidelines or evidence-based, and thus

comprehensive care is often consistently below acceptable standards.⁴ These facts require a fundamental change in our healthcare delivery system. CMS has also voiced support and encouraged healthcare system participants to endorse this needed change in focus.

Innovative Strategies Take Root

In response to this challenge, many organizations have embarked upon an essential reconfiguration of services that fundamentally changed the most basic mechanisms in caring for patients with chronic illnesses. VMMC's success in streamlining services in the busy oncology practice exemplifies this theme. They made direct and critical inquiries into what patients experience having to navigate complex hospital or clinic geography in pursuit of testing and therapy. Their efforts represent the underpinnings of needed change in our systems of care and exemplify how organizations can respond to the six aims of the IOM. Their focus resulted in time-saving measures and reduced physical effort by decreasing walking distances between laboratory services and treatment areas. They also reduced waiting times for their patients and concentrated resources where patients most need them.

Additional honorees, Providence Medical Group and the Cleveland



*American Medical Group Foundation Chair **Carleton T. Rider**, Mayo Clinic-Jacksonville (left) and AMGA Board Chair **Kenneth P. Brin, M.D., Ph.D.**, Geisinger Health System (right) present the 2005 Acclaim Award to (from left) **Dennis Pope, M.S., John Rozich, M.D., Ph.D., M.B.A.**, and **Randall L. Linton, M.D.**, Luther Midelfort – Mayo Health System, at the Institute for Quality Leadership Annual Meeting, Chicago, Illinois.*

Clinic Foundation, also directed efforts toward those with chronic illnesses by developing innovative Web-based software systems and technology that enabled more efficient and effective population-based approaches to the prevention and management of chronic conditions. Their collective efforts served as a call to action and raised the bar for excellence and the pursuit of quality in the treatment of chronic illnesses.

Luther Midelfort's initiative further underscores the commitment to caring for patients afflicted with chronic illness. Robust outpatient services directed toward diabetes, asthma, depression, and heart failure were linked to inpatient services requiring a comprehensive reconfiguration of an entire healthcare system. The pivotal challenge identified at the medical center is the necessity to develop and implement a system-wide Planned Care/Chronic Disease model that enables optimal therapy for patients with different chronic illnesses.

This is more than a theoretical discussion, as it has fundamentally restructured the practice patterns of specialists and primary care in the multispecialty practice of the medical center and its geographically remote satellites. Specific changes have occurred:

1. Primary care has had to develop new skill sets that are different from the traditional model for care delivered to patients with diseases such as heart failure and diabetes. As an example, instead of the physician being responsible for all aspects of diabetic care, including the science of evidence-based care, coordinating teaching with diabetic educational resources, and inquiring into community support for his/her patients, there is a new paradigm.
2. There is now a more "horizontal," fully integrated healthcare delivery team with sharing of critical responsibilities; including physicians, nurses, diabetic educators, physical therapists, and information technologists who collectively have input into a patient's data set and thus therapy for their diabetes (or other chronic illness). Each group has worked closely together, providing the environment to foster patients who are capable of self-management of their disease state, i.e., Wagner's "self-activated" patient. It is not just education about their individual disease; it is instruction and assistance in managing their specific disease state. The care received by each patient has been supported by advanced information technology including a registry, DocSite, that is linked to laboratories, clinics and hospitals.
3. Local "Expert Teams" exist for each disease entity and are composed of relevant specialists and primary care. Each of these "Expert Teams" has reviewed existing published guidelines to summarize concise strategies for evidence-based care.
4. Physicians' practice patterns are changing from an individual approach to a standardized methodology in their care for diabetes and heart failure (the two disease states with the most data thus far) and the system is now integrating depression and asthma and in the planning stages for hypertension.

Gone are the days when one physician stated that his/her guideline adherence was great, and his/her use of evidence-based drug therapy for heart failure patients was superb. Now there is a team approach that tracks the use of heart failure medications and ordering of HbA1c levels in accordance with guidelines published by the American Heart Association and the American Diabetes Association, respectively. This ensures a uniformity of care for each patient across a large geographic

area with multiple associated clinics and practices. This has led to significant improvements in the numbers of patients receiving appropriate medical therapeutics and testing.

It has become apparent that efforts to improve the care of patients with chronic illnesses require a fundamental change in the paradigm of care if we are to be successful with our growing elderly population. Continuous monitoring of patients with evidence-based strategies suggests a greater need for protocol-driven interaction between patients and members of their health-care delivery system. Physicians, nurses, mid-level providers, educators, and administrators are responding by linking their activities with innovative strategies that eliminate waste and

improve safety for patients. As our baby boomers come of age, these same strategies may also serve as the critical turning point in our collective ability to successfully deliver cost-effective care to the fastest growing population of elderly patients seen in our history.

References

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Luther Midelfort – Mayo Health System: Planned Care for Chronic Disease

Part 2: The Planned Care for Chronic Disease Initiative

On September 14, 2005, the American Medical Group Association presented the annual AMGA Acclaim Award to Luther Midelfort – Mayo Health System at AMGA's Institute for Quality Leadership, held in Chicago, Illinois. Granted through AMGA's philanthropic arm, the American Medical Group Foundation, the Acclaim Award recognizes excellence in quality improvement efforts—led by physician-directed organizations—that measurably improve health outcomes and quality of life for patient populations. In addition to the recipient, three other medical groups were honored at the event. Since 2004, the applicant criteria have been structured around the six Institute of Medicine (IOM) Aims for the 21st Century and place a heavy emphasis on leadership involvement. Applicants are asked to measurably demonstrate progress toward achieving the six aims and transforming their organizations to provide health care that is (1) safe, (2) effective, (3) patient-centered, (4) timely, (5) efficient, and (6) equitable. The recipient receives a \$50,000 educational grant and a Steuben Crystal which is produced specifically for the award. Three honorees each receive a \$10,000 educational grant.

Luther Midelfort – Mayo Health System's project, "Planned Care for Chronic Disease," is modeled after the work of Edward H. Wagner, M.D.,

M.P.H., FACP, the developer of the Chronic Care Model and the national program director, Improving Chronic Illness Care (ICIC) funded by the Robert Wood Johnson Foundation.¹ It also contains numerous innovations that translate theory into practical changes in clinical practice patterns and optimize clinical outcomes. Luther Midelfort was also an Acclaim Award honoree in 2000 and 2004.

THE CENTRAL GOAL WAS THE DEVELOPMENT AND IMPLEMENTATION OF A COMPREHENSIVE PROGRAM FOR ALL PATIENTS SUFFERING FROM SPECIFIC CHRONIC ILLNESSES TO RECEIVE EVIDENCE-BASED PLANNED CARE.

Planned Care/Chronic Disease Program

Luther Midelfort – Mayo Health System's initiative has fundamentally altered the delivery of care to patients suffering from chronic illnesses. These efforts followed a mandate from the Board of Directors and were incorporated into the Strategic Plan to provide all patients with state-of-the-art care for multiple chronic diseases consistent with the six aims of the Institute of Medicine (IOM). Responsibility for development was directed to a multidisciplinary committee (Planned Care committee) that met on a weekly basis until the project was implemented. Infrastructural changes in the Planned Care/Chronic Disease program included: (1) an emphasis on interdependent linkage between primary and specialty care, thus reduc-

ing "silo-related" costs, (2) a persistent awareness of fiscal viability in a fee for service environment, and (3) an uncompromising commitment that multiple chronic diseases could be successfully accommodated and distinguished by care of compassion and quality. Specific clinical tools were developed to promote patient self-management, goal setting, and teaching. Other innovations, such as the DocSite Visit Planner, enabled standardization and tracking of provider practice patterns and enhanced compliance with nationally endorsed guidelines. The multidisciplinary committee worked with a national registry vendor to further develop and customize the vendor's product and move it inside the organization's firewall. The resulting registry is password-protected and available at all sites through the organization's intranet. The registry is interfaced with key computer systems to automatically create a registry record on all existing and new patients. Each record is automatically populated with gender-, age-, and disease-specific clinical elements. In addition, the Visit Planner contains prompts to obtain information on specified chronic disease conditions, tracks preventative health variables, facilitates coordination of educational data, and compiles JACHO-requisite Functional Health Assessment data. Another innovation, Expert Teams—composed of primary care and specialist physicians, nurses, and allied health staff—determine the clinical requirements for specific disease conditions. A major component in the Planned Care process is patient coaching and thus significant resources were directed toward developing and maintaining coaching skills for providers and staff. Data is collected on the number of Planned Visits per month, the percent of patients with a specific diagnosis who are enrolled in a formal Planned Care model, and provider-specific involvement. Data reflecting clinical and

fiscal outcomes have also been collected and published.

Project Goals and Objectives

Goal

The central goal was the development and implementation of a comprehensive program for all patients suffering from specific chronic illnesses to receive evidence-based Planned Care. These patients are to receive evidence-based Planned Care in a manner consistent with the six aims of the IOM.

Objectives

1. Create an environment where patients receive evidence-based medical care for chronic disease illnesses.
2. Incorporate Planned Care as the basic infrastructure for all chronic disease states.
3. Optimize patient involvement and understanding of chronic illness.
4. Provide access for all patients with chronic illness.
5. Deploy evidence-based care through an intranet-based registry.
6. Make Planned Visit care available to all patients regardless of demographics or payer group.

IOM Aims

Luther Midelfort embarked upon a radical redesign of outpatient services that fundamentally changed the most basic mechanisms in caring for patients with chronic illnesses. These services were linked to inpatient services requiring a comprehensive reconfiguration of an entire healthcare system. The pivotal challenge that has been met at the medical center has been to develop and implement a system-wide Planned Care/Chronic Disease

model that enables optimal therapy for patients with different chronic illnesses. This is more than a theoretical discussion as it has fundamentally restructured the practice patterns of specialists and primary care in the multispecialty practice of the medical center and its geographically remote satellites. Specific changes have occurred as noted:

1. Primary care had to develop new skill sets that are different from the traditional model for care delivered to patients with diseases such as heart failure and diabetes.
2. There is now a more "horizontal," fully integrated healthcare delivery team with sharing of critical responsibilities, including physicians, nurses, diabetic educators, physical therapists, and information technologists who collectively have input into a patient's data set and thus therapy for their diabetes (or other chronic illness).
3. Local Expert Teams exist for each disease entity and are composed of relevant specialists and primary care.
4. Physician's practice patterns are changing from an individual approach to a standardized methodology in their care for diabetes and heart failure (the two disease states with the most data thus far) and they are now integrating depression and asthma and are in the planning stages for hypertension.

There is a team approach that tracks the use of heart failure medications and ordering of HbA1c levels in accordance with guidelines published by the American Heart Association and the American Diabetic Association, respectively. This ensures a uniformity of care for each patient across a large geographic area with multiple associated clinics and practices. It has led to significant improvements in the

numbers of patients receiving appropriate medical therapeutics and testing. Outcomes (clinical and fiscal) for heart failure and diabetes are also tracked and have been published.²

Other aspects of the organization's Planned Care/Chronic Disease program deserve specific comments:

1. As a multispecialty integrated group practice using a common medical record, the medical center has experienced advantages in being able to implement programs that truly optimize integrated care between specialty and primary providers.³ These include the sharing of data and the reduction of duplicative testing with its associated expenses.⁴
2. Further, Planned Care at the medical center is not the restricted domain of primary care. Patients may need input from specialists in a timely and economically reasonable fashion and the infrastructure of this program was designed to incorporate specialty involvement from its inception. The goal is to reduce costs associated with "silo-based" care.
3. In addition, the organization operates in a fee-for-service environment and thus any program must be grounded in the reality of fiscal viability.
4. Finally, many programs across the country are often very adept at treating a single disease entity, such as diabetes. However, Luther Midelfort's efforts have been focused upon building the infrastructure that would support several chronic illness states that inherently may involve very different disciplines and strategies for success. The medical group has built a system delivered across

a large geographic area, working with physicians of highly disparate backgrounds, to support using Planned Care to optimize and standardize chronic illness outcomes.

Global Action Steps Taken to Achieve Goals

The strategy to achieve these goals involved concurrent action at several levels. Direct meetings were arranged between the two co-directors of the Planned Care/Chronic Disease program with each primary care provider in the health system. At these initial meetings, the basic philosophy of the program, the practical justification for the effort based on empiric evidence of provider compliance with nationally recommended guidelines, and the imperative for assisting patients to better understand and participate in their own care was discussed.

Simultaneous efforts by the Medical Director and the CEO used the forum of monthly health system meetings to advocate the fundamental change that was needed to improve patients' clinical outcomes by altering the system of care delivered. In addition, the basic requisite infrastructure was initiated to pull together the resources needed to fundamentally transform care for chronic illness.

THE TRANSFORMATION IN THE PHILOSOPHY OF CARE COUPLED WITH THE REQUIRED INFRA-STRUCTURE TO "MAKE IT HAPPEN" HAS BEEN MONUMENTAL.

The transformation in the philosophy of care coupled with the required infrastructure to "make it happen" has been monumental. Every aspect of care—including traditional office visits, relationships between providers and staff, educational commitments to patients, use of community resources, as well as

the relative roles of specialists and primary care in the treatment of chronic illness—has been explored. The task of reconfiguring was profound, given that most providers have been educated in a tradition-bound atmosphere with nearly stereotypic roles assigned to physicians, nurses, and staff and that the transformation has fundamentally altered these roles. Further, within the "hallowed ground" of the actual provider examination room, the roles, responsibilities, and the practice patterns of physicians throughout the organization have changed.

Implementation Plan

The Planned Care committee began its work on April 2, 2002. It met weekly through February 2004. An initial pilot study involving approximately 9 practices, across several locations was conducted for 6 weeks beginning April 2003. Following the pilot, program changes were designed and implementation of the full program began in October 2003 and ended in February 2004. During this time 6 sessions of a full-day training program were held, and more than 200 physicians and nurses were trained.

The committee that designed the plan was responsible for implementing it. This committee consisted of physicians, nurses, administration, behavioral health, information technology, health information management, education, and support staff.

The Planned Care/Chronic Disease initiative was based on a directive from the Board of Directors. The strategic plan and its initiatives are published documents that have been reviewed and discussed in system-wide information meetings for staff and physicians. As the plan for implementation progressed, and before the first pilot, the administrative and physician leader of the

committee met on a one-to-one basis with every primary care department in the health system. These meetings involved site visits in all locations. The intent of these meetings was to explain the basic philosophy of the program and the primary care physician's role.

The single most challenging issue in implementation of the Planned Care/Chronic Disease program has proven to be the culture of the organization. Providers and staff were not trained to approach care through a team model. Physicians are educated and trained in a "pyramid model" where all decisions are passed through them. Consequently, many providers were very resistant to any initiative that attempts to alter or direct their approach to patient care. Luther Midelfort felt that for a successful Planned Care/Chronic Disease program to be developed and implemented, leadership must be aware that their efforts may be viewed with suspicion, thus potentially opposed.

The operational nursing workflow within the offices and provider practices was also a major obstacle. The genesis of this problem was in the "uncharted waters" of sharing clinical responsibility for the Planned Care visits. This more "horizontal" work environment, unlike the traditional pyramid structure, was equally disruptive for nursing and other support staff as it was for physicians. Without an aggressive and detailed articulation of workflow redesign as to how nurses and staff function in PC office visits, the program would have failed.

The need to find a registry and configure it to fit the health system was also a major challenge. Part of the problem was an insistence on procuring a product flexible enough to handle several chronic disease states simultaneously. This led to a close working relationship with a company in order to develop a prod-

uct capable of tracking clinical data from several disease states. Further, it highlighted the need for the stewards of this program to more fully understand its diverse and unique requirements. There are currently no financial incentives or disincentives for participation in the program.

Results

Comprehensive metrics were used to objectively evaluate the Planned Care/Chronic Disease program. Each disease condition has had published consensus guidelines in peer review periodicals. This formed the basis of efforts to track evidence-based data that would be longitudinally followed and linked to clinical outcomes. In addition to accepted national data, Luther Midelfort wanted internal data that allowed them to track individual providers to assess their involvement and compliance with the chronic disease program. Finally, one of the additional concerns examined the fiscal outcomes in heart failure by looking at length of stays, and associated inpatient and outpatient costs (see Table 1).

THE SINGLE MOST CHALLENGING ISSUE IN IMPLEMENTATION OF THE PLANNED CARE/CHRONIC DISEASE PROGRAM HAS PROVEN TO BE THE CULTURE OF THE ORGANIZATION.

Heart Disease, Diabetes, and Cholesterol

Figure 1 demonstrates the reduction in LDL cholesterol from the national goal that existed at 100mg% with an internal reference to be less than 90mg%, which has just been advocated to be below 70 mg%. A favorable decrease has occurred within the 8 different geographic sites. In the first quarter of 2003, there were 56% of the patients with LDL cholesterols exceeding the national goal of 100 mg%. By the first quarter of 2005, only 40 % of

Figure 1

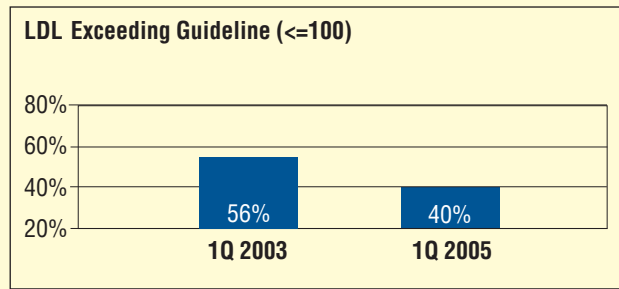


Figure 2

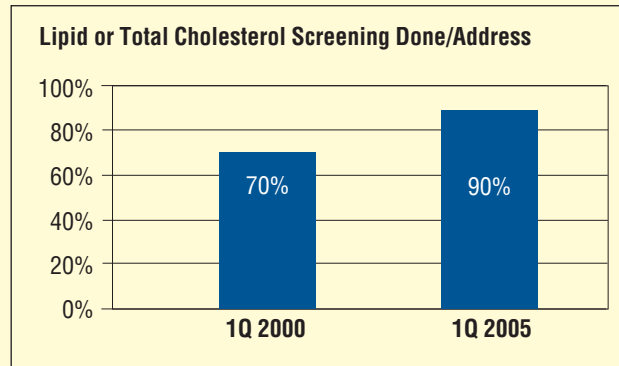


Table 1

Variable	Group 1	Group 2
Average Age 2003	67	75
Number of Inpatient Admits	12	43
Total Patient Days/ALOS	47/3.9	206/4.8
Number of Other Inpatient Admits	35	68
Patient Days/ALOS	199/5.7	351/5.2
Outpatient Visits	697	1,701
Variable Costs HF Inpatient (total)	\$24,649	\$126,278
Non-HF Variable Costs Inpatient (total)	\$262,016	\$343,289
Outpatient Variable Costs	\$63,059	\$228,489

(ALOS = average length of stay)

patients were out of compliance. Perhaps even more impressive is the comparison to diabetes-lipid or total cholesterol screening rates done between the conventional office visit and the Planned Care visit.

Figure 2 indicates that for the first quarter of 2000, 70% of patients were

screened, compared to 90% by the first quarter of 2005. Again, and importantly, not all of these changes can be attributed to the Planned Care/Chronic Disease program, but substantial improvement reflects the system-wide changes associated with the implementation of this program.

Luther Midelfort – Mayo Health System: Planned Care and the IOM Aims

IOM Aim	Objectives	Results
Safe	<p>Create an environment where patients receive evidence-based medical care for chronic disease illnesses.</p> <ul style="list-style-type: none"> • Create a clear imperative from leadership that supports the Planned Visit model. • Train all providers and nurses on the Planned Care model. • Treat each disease state according to evidence-based principles. • Utilize a registry to optimize management of clinical variables. • Incorporate safe and consistent prescribing practices to eliminate variances in clinical care. • Standardize provider practices based on recommendations by national expert groups through use of Planned Visits. • Assure that all new staff understand and use the Planned Care approach. 	<p>Create an environment where patients receive evidence based medical care for chronic disease illnesses.</p> <ul style="list-style-type: none"> • Over 200 doctors and nurses received 8 hours of training. • Expert teams exist for each disease. • A registry has been purchased and configured to support the program. It will manage multiple chronic conditions as well as prevention. • Expert teams review and publish their guidelines on an annual basis. These are intranet-based and populate the registry to standardize therapy. • A separate type of office visit, the Planned Visit (PV), was created and is monitored for activity and compliance. • All new providers and nurses receive 4 hours of orientation and training on the program. • All nursing staff attends an annual refresher focusing on new disease conditions and coaching skills.
Effective	<p>Incorporate Planned Care as the basic infrastructure for all chronic disease states</p> <ul style="list-style-type: none"> • Assure that Planned Care is occurring at all sites. • Develop Expert Teams to delineate and monitor clinical parameters of each disease state. • Embed evidence-based guidelines and prompts into the registry. • Implement dictation templates and electronic triggered prompts that facilitate evidence-based care recommendations. • Continually use Expert Teams to monitor each disease state, i.e., diabetes, heart failure, depression, etc. 	<p>Incorporate Planned Care as the basic infrastructure for all chronic disease states</p> <ul style="list-style-type: none"> • Monthly volume data, sorted by provider is published. • This data is a factor in each department’s annual review with the Clinical Practice Committee. • 12 Expert Teams have been created. Each develops a package of standardized “deliverables.” These groups report to the Clinical Process Management Team chaired by the Medical Director. • The registry has been configured with prompts and follow-up letters. • Expert Teams review system performance on their disease and report to the Clinical Process Management Team. • Dictation and coding are part of all provider training for the program.
Patient Centered	<p>Optimize patient involvement and understanding of chronic illness.</p> <ul style="list-style-type: none"> • Develop staff competency in coaching. • Develop ongoing training and support of staff coaching skills. • Utilize one-on-one coaching to assist patients in realistic goal setting. • Create incentives to promote patient autonomy with providers. • Create systems to prompt and notify patients of pending needs and results. • Develop individualized patient learning tools based on their level of comprehension. • Reorganize workflow to accommodate extended time requirements to accommodate coaching and goal setting. 	<p>Optimize patient involvement and understanding of chronic illness.</p> <ul style="list-style-type: none"> • Coaching was half of the initial eight-hour training. • Coaching is a major component of the annual refresher course for nurses. • Coaching is built into the Planned Visit and Subsequent Planned Visit model. • Providers are given positive recognition from medical leadership when they are producing Planned Visits. • The program developed the Basic Knowledge Assessment, Zones for Management, and the Healthy Choices tools. All are designed to teach and help patients set goals. • Nursing units redesigned themselves to accommodate new workload demands without adding FTEs. • Redundant and non-productive work was replaced with activities related to Planned Care.

IOM Aim	Objectives	Results
Timely	<p>Provide access to all patients with chronic illness.</p> <ul style="list-style-type: none"> Restructure clinic scheduling to recognize both acute (traditional) visits and Planned Visits. Restructure workflow to assure prompt availability of Planned Visits. Develop patient centered tools to rapidly identify change in clinical conditions, thereby placing the patient in greater charge of their own care. 	<p>Provide access to all patients with chronic illness.</p> <ul style="list-style-type: none"> A separate type of office visit, the Planned Visit (PV), was created and is monitored for activity and compliance. Workflow for nursing was redesigned to facilitate Planned Visits for all patients. Planned Visit process was designed to use no more physician time than an acute visit. Departments designed systems to balance both Planned Care and open access. Expert Teams built disease-specific Zones for Management tools that instruct patients on a continuum of interventions tailored to their symptoms.
Efficient	<p>Deploy evidence-based care through an intranet-based registry.</p> <ul style="list-style-type: none"> Create a registry that is available to all providers, at all sites, at all times. Interface clinic scheduling, billing, and lab systems to load all registries with demographics as well as gender- and disease-specific clinical measurements. Create Prevention as clinical condition to be tracked with all patients. Print a Visit Planner to guide and prompt care for every visit, regardless of the existence of a chronic condition. Utilize the Visit Planner, which is printed at every visit, to incorporate JCAHO-required Functional Health and prevention data. Maximize linkage between specialists and primary care colleagues in developing clinical pathways for management of chronic disease. 	<p>Deploy evidence-based care through an intranet-based registry.</p> <ul style="list-style-type: none"> Negotiated with a national vendor to move registry product within the organization's firewall. It is available through the intranet. Built interfaces to scheduling, billing, and lab systems. These now automatically create a registry and visit planner for all new patients. Each is loaded with measures appropriate to their diagnosis, age, and gender. Measured lab results flow directly into the registry. Created an Expert Team for Prevention. Build prevention condition into registry. Added elements to the registry to gather information needed to comply with the Joint Commission. Built data regarding therapeutics into the registry to eliminate paper and force its use with every patient.
Equitable	<p>Make Planned Visit care available to all patients regardless demographics or payer group.</p> <ul style="list-style-type: none"> Embrace and collaborate with community groups addressing diabetes, heart failure, and depression. Develop community-specific manuals listing support resources for specific disease conditions. Develop and promote volunteer-driven Living Well program, modeled after a service developed at Stanford. Hold charge structure for Planned Visits to the same fee level as an acute visit, in spite of their larger time commitment. Assure that Planned Care is available in all sites. 	<p>Make Planned Visit care available to all patients regardless demographics or payer group.</p> <ul style="list-style-type: none"> Provide space for community groups to promote services to patients. Developed and maintained a directory of community-based services for each geographic location. Trained multiple volunteers to lead community-based Living Well program. Provide space for Living Well program. Used professional coders to analyze Planned Care activities and train providers. Track volume of Planned Visits. Track penetration of Planned Visit into each department's panel with that diagnosis.

Figure 3

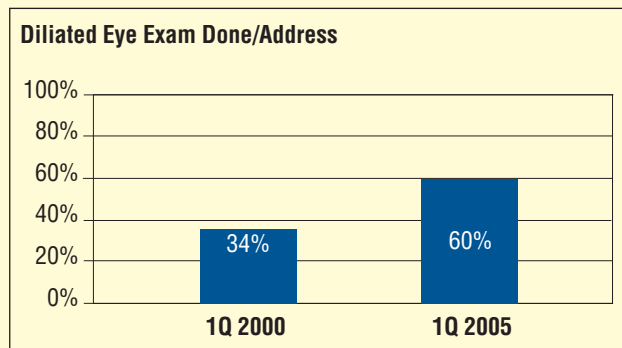


Figure 4

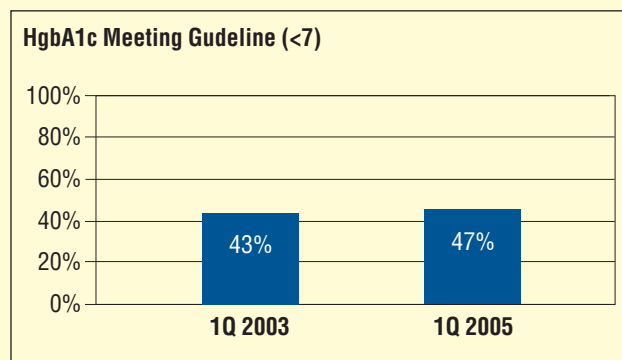


Table 1 shows the metrics for heart failure costs associated with enrollment in a heart failure clinic compared to those receiving conventional follow-up and therapy.⁵

These data show that Group 1, those participating in the Planned Care/Chronic Disease program for heart failure, have lower lengths of stay, and lower inpatient and outpatient costs than patients in Group 2, who were randomly chosen patients receiving conventional care. These data represent randomly chosen patients with heart failure, and they are not age-matched and may not be equivalent in other important variables. But it was not the intent of the effort to perform a scientific randomized trial, but to compare patients in the “real world” who receive their care in one of two ways, either the Planned Care/Chronic

Disease-based office visit or the conventional office visit. Further, these data reveal that the attempt to preemptively treat patients with heart failure—integrating their therapy, coaching them in their self-management skills, and educating them—is importantly linked to Luther Midelfort’s philosophy of timely specialty care integrated with primary care.

Additional screening and preventative care was also measured. This included the evaluation of dilated eye exams done (or addressed) in patients with diabetes prior to when the Planned Care/Chronic Disease program was implemented and after it had begun. Figure 3 shows that the average number of exams done for diabetics was 34% in the first quarter of 2000 and subsequently rose to 60% by the first quarter of 2005

(after the program was implemented).

Figure 4 shows the gradual improvement in the number of patients meeting the guideline of having a HgbA1c level of less than 7mg% comparing the first quarters of 2003 against 2005. The improvements in percentages that are below 7mg% are not as high as desired, but these are values that are obtained for nearly all diabetics (96% of total) in the organization. Thus, effective screening is being accomplished.

While the metrics focused on national consensus guidelines, internal metrics were used to ensure that all participants in the organization were actively engaged in this comprehensive program. Data on the number of scheduled Planned Visits by region within the health system and for each provider is generated each month and is used to address program compliance. Analysis of this data has led us to the conclusion that, similar to many new innovations, Luther Midelfort is in the phase of the “early adapters” and now must continue to enable the mainstream providers, nurses, and staff to more fully embrace the program.

An additional internal evaluation was performed comparing a total of 100 randomly chosen patients. Half of these patients were examined in the traditional office visit (n=50) and half seen in the Planned Visit (n=50) and then compared with respect to multiple variables. Data show that for multiple measures, there may be minor improvements in some variables for patients in the Planned Care/Chronic Disease program, but overall continued effort is needed, as percentages between the two groups are very similar. However, the ability to track these data longitudinally and use this information as a means to effectively intervene in the program is an important advancement.

In summary, Luther Midelfort

Applying for the AMGA Acclaim Award

To apply for the Acclaim Award, your organization must be a current member of the American Medical Group Association and not the recipient of the 2005 Acclaim Award. We are looking for applications from organizations that are successfully integrating the IOM Aims into their strategy for improving ambulatory care. Groups that have not fully implemented their improvement strategies, but are in the pilot stages, are also encouraged to apply.

Important Dates

Feb. 1, 2006	Applications available
May 15, 2006	Applications due
July 3, 2006	Applicants notified which group has been selected to receive the Acclaim Award and which have been selected as honorees
Sept. 18, 2006	Acclaim Award recipient and honorees present projects at Institute for Quality Leadership Meeting in Minneapolis, MN
Sept. 19, 2006	Event honoring Acclaim Award recipient and honorees AMGA's Institute for Quality Leadership Meeting in Minneapolis, MN

For more information, visit AMGA's Web site at <www.amga.org> or contact Stephanie Jones, Program Manager, at (703) 838-0033, ext. 322 or <sjones@amga.org>.

Focus on Chronic Illness at AMGA's Annual Conference



The next meeting of the Institute for Quality Leadership will occur at AMGA's 2006 Annual Conference, Thursday, March 16 in San Antonio Texas. It will focus on "Building a Better Health Care System for the Chronically Ill."

Chronic illness touches nearly every American either directly or through loved ones or friends, and the prevalence of chronic illness will grow exponentially amid the aging of our population. What statistics mask is the amount of human suffering that chronic illness causes—particularly under the nation's current model of episodic, crisis-driven care. Despite the best efforts and intentions

of healthcare providers, the existing medical delivery system is not designed to effectively treat chronically ill patients. The current delivery system is geared toward "fixing" patients when they develop a problem, and this episodic care often results in fragmentation rather than coordination of necessary services.

Forward-thinking medical groups have realized that there is a better way to meet the needs of this ever-growing population. During this daylong program, leading healthcare organizations will discuss how they were able to fundamentally change the way chronically ill patients are cared for. Their approaches, while customized to their communities of patients, all required dramatic system changes, new roles for their physicians and staff, and an understanding that implementing a chronic care model is as much about changing cultures as it is about clinical work.

Learn about the tools that support daily management and reinforcement of patients' self-care behaviors; proactive monitoring and early detection of problems; and coordination of and collaboration among healthcare providers. An outstanding faculty will discuss how the use of planned visits and prepared practice teams, patient activation measures, group visits, and information therapy can become your keys to consistent quality of care for your most vulnerable patients.

The faculty for this program includes leading organizations in chronic care management such as HealthPartners, Luther Midelfort - Mayo Health System, Sutter Health, the Center for Information Therapy, and Health Hero Network, as well as Dr. Ed Noffsinger, an innovator in the area of group visits, and leading researcher and author on patient activation Dr. Judith Hibbard from the University of Oregon.

For more information on the Institute for Quality Leadership and AMGA's 2006 Annual Conference, visit <www.amga.org>.

continues to comprehensively assess the impact of the Planned Care/Chronic Disease program. These outcomes data are essential if further successful growth of this program is to occur. The program is being further expanded and developed, as leadership is convinced that outcomes linked to reduced costs are achievable through an integrated, fully developed Planned Care/Chronic Disease initiative.

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