

Clinical Microsystems Series

Clinical Microsystems, Part 4. Building Innovative Population-Specific Mesosystems

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What would it be like “if medical care came with a 90-day warranty?”¹ In 2005, executive leadership of the Geisinger Health System (Danville, Pennsylvania) challenged clinical and improvement leaders to explore innovative provider-driven quality improvement (QI) programs designed to promote reliable delivery of evidence-based best practices so that they could guarantee their work. The focus was to be not only on delivering the best patient outcomes but also on changing health care’s piecemeal reimbursement paradigm, in which hospitals charge for complications, to one based on a flat fee and that includes 90 days of follow-up treatment. If complications arose, Geisinger would not be sending the patient or the insurer a bill.

For several reasons, elective heart bypass surgery—coronary artery bypass graft (CABG)—emerged as an appropriate first target for the development of this program, which began in February 2006 and became known as ProvenCare® CABG.² CABG is performed at two of the three Geisinger hospitals, and all the cardiac surgeons are employed by the system. These surgeons function cohesively (despite geography), are actively involved in QI programs, and are supported by a team of experienced physician extenders. The team also has a history of excellent outcomes. Nevertheless, there were still idiosyncratic processes of care within this group of surgeons.

This article describes how adaptation of the microsystem framework led to a novel model of care delivery for patients requiring elective coronary artery bypass surgery. A new mesosystem is created for each ProvenCare model, integrating the care delivery process between contributing microsystems and defining new mesosystem leadership for each patient population. The model has been expanded to many patient populations, including percutaneous coronary intervention (PCI), as discussed in this article.

Developing a Novel Model of Care Delivery

This system-based approach to redesign involved engagement

Article-at-a-Glance

Background: In 2005, the Geisinger Health System (Danville, Pennsylvania) developed ProvenCare, first applied to coronary artery bypass graft (CABG), as an innovative provider-driven quality improvement program to promote reliable delivery of evidence-based best practices. A new mesosystem is created for each ProvenCare model, integrating the care delivery process between contributing microsystems and defining new mesosystem leadership. The approach has been expanded to many patient populations, including percutaneous coronary intervention (PCI).

A New PCI Mesosystem: In 2007 clinical microsystem thinking was applied to PCI: understanding the current processes and patterns, assembling the frontline professionals to redesign the processes, and using a beta-test phase to measure the changes and adjust accordingly, until the best process was established. A new mesosystem team was created to ensure that the right care is delivered at the right time.

Refining Implementation: In the course of developing the CABG initiative, Geisinger established role definitions to keep teams on track; a comprehensive plan from design through execution and follow-up; and guiding principles established for the teams engaged in designing, developing, and implementing ProvenCare programs.

Preliminary Experience: For the 40 measurable process elements in the PCI mesosystem pathway, as of month seven (July 2008) of the beta-test phase, 55% of the patients received 100% of the identified process elements.

Conclusion: Geisinger Health System has joined different microsystems to form an innovative mesosystem capable of producing reliable, evidence-based care for patient subpopulations. This approach to embedding evidence-based care into routine care delivery can be adapted by others.

A Framework for Execution

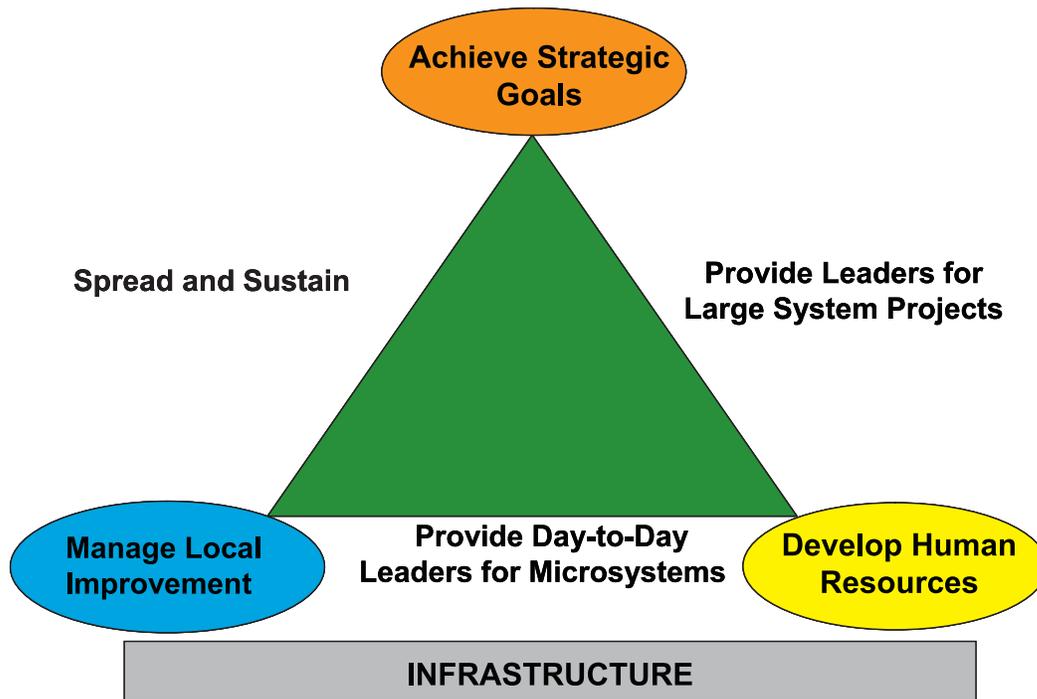


Figure 1. The framework specifies three key areas of focus for organizations to achieve system-level results: system-level aims, local management and supervision, and workforce development. Reprinted with permission from Nolan T.W.: Execution of Strategic Improvement Initiatives to Produce System-Level Results. IHI Innovation Series white paper. Cambridge, MA: Institute for Healthcare Improvement, 2007 (available at <http://www.IHI.org>).

of executive leadership (macrosystem), mesosystem-level clinical leadership, and finally, and perhaps most importantly, the individual microsystems that delivered the patient care. This intentional design was influenced by several quality and safety leaders in health care. Nolan describes an execution framework designed to get results from strategic improvement work.³ Nolan's framework (Figure 1, above) describes three key areas of focus for organizations to achieve system-level results: system-level aims, local management and supervision, and workforce development.

The work of Nelson, Batalden, and Godfrey provided guidance in structuring the leadership accountability for this initiative. They define the work of the mesosystem as "an interrelated set of peer microsystems that provide care to certain patient populations or support the care provided to these populations."^{4(p.203)} At the macrosystem level, leaders and staff work "to improve performance both within and between all the microsystems in the organization and to align all levels of the organization to improve quality, reduce real costs, and engage all staff members in both doing their work and improving their work."^{4(p.204)}

At Geisinger, the Geisinger Quality Institute provided improvement skills and tools for all levels of staff in the organization, including, perhaps most importantly, the leaders. As Donald Berwick has stated:

...just as clarifying organizational aim is the duty and privilege of leaders, so is clarifying and insisting upon major principles of design for the system of work. Leaders must be prepared to assert not only what must be accomplished, but also how it can be accomplished....Leaders have to be able to coach on methods.^{5(p.69)}

Once the ProvenCare methodology was successfully implemented for elective CABG interventions, the leadership team identified several additional diagnoses/procedures for this program and began testing the methodology in a variety of areas, as shown in Figure 2 (page 657). A new mesosystem is created for each ProvenCare model, integrating the care delivery process between contributing microsystems and defining new mesosystem leadership for each patient population.

In early 2007, Geisinger chose PCI for the ProvenCare pro-

ProvenCare Chronology

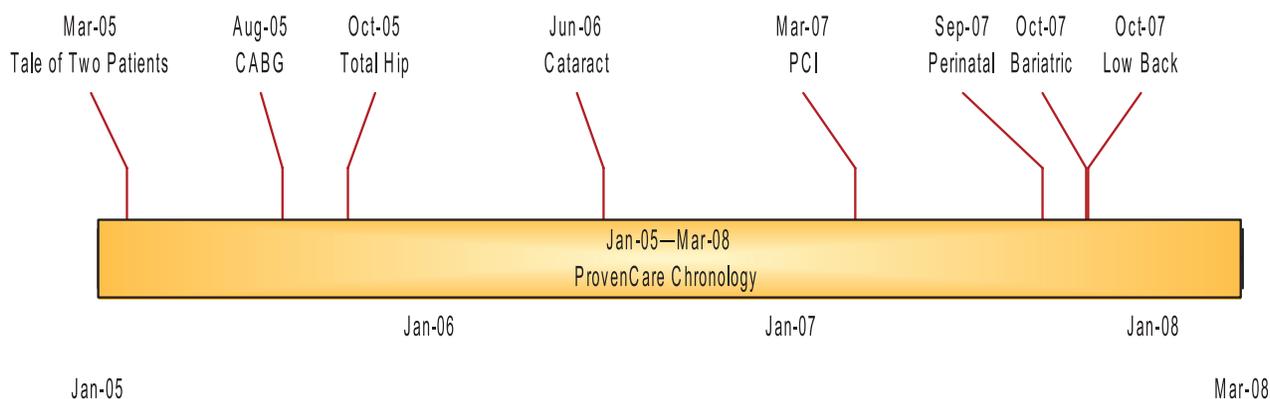


Figure 2. The leadership team identified several additional diagnoses/procedures for the ProvenCare program and began testing the methodology in a variety of areas, with Low Back being the most recent program to begin testing (October 2007). CABG, coronary artery bypass graft; PCI, percutaneous coronary intervention.

gram in view of a committed leadership, interested interventionists, several engaged microsystems, authoritative evidence, significant progress in compliance with the Joint Commission acute myocardial infarction (AMI) core measures,⁶ and the marketing opportunities when paired with ProvenCare CABG. In addition, a senior cardiologist [K.P.B.] had personally observed the potential for successfully integrating different microsystems into a nascent care mesosystem to produce better patient outcomes. His experience is articulated in the following section, “A Tale of Two Patients,” which compares two patient experiences and illustrates the power of a system designed to deliver evidence-based care.

A Tale of Two Patients¹

At the end of one recent and typically busy office session, cardiologist Dr. William Barr paused to reflect on two male patients seen in his clinic that morning: Jim Burke and Tony Lamont were both in their late 50s, and both had suffered AMIs six months earlier. At today’s visits, Dr. Barr was impressed that despite the similarity of these patients’ initial cardiac events, their clinical outcomes were dramatically different.

Jim Burke reported with satisfaction that he felt considerably healthier now than before his AMI. He had lost 20 pounds through a regimen of healthy diet and regular exercise and had experienced no recurrence of anginal symptoms. He had returned to work and play without functional limitation. His blood pressure and serum lipid levels were in optimal range, as specified by evidence-based guidelines. He felt quite free from anxiety and expressed rational optimism regarding his future

health outlook. He voiced pleasure with the cardiac care he had received and bragged that he felt better now than he had in years.

Tony Lamont, on the other hand, was decidedly unhappy with his current clinical status, and for good reason. He had been unable to return to his prior job because of recurrent episodes of shortness of breath and palpitations; his energy and exertional tolerance were poor because of sustained myocardial damage. He had been hospitalized twice after experiencing his initial AMI and was concerned about the large medical expenses and significant co-payments that had depleted his savings. His cardiac risk profile remained suboptimal (hypercholesterolemia, hypertension, overweight, clinical anxiety); he acknowledged feeling “down in the dumps” and expressed genuine concern about his future. Tony had scheduled today’s visit with Dr. Barr for a second opinion. Although he liked his own physician, he also hoped that a new perspective might help him to recover his health and to get his life back on track.

As Dr. Barr reflected on these divergent clinical outcomes, he recognized that the marked differences in clinical care provided to the two patients were a likely contributor to this divergence. Jim’s remarkable recovery made clear what was possible with the provision of modern, evidence-based medical care, but Tony’s unfortunate decline highlighted persistent barriers to reliable delivery of that same optimal care in his own community. Before their myocardial infarctions, Jim and Tony shared more similarities than differences in their premonitory health status. The location of coronary obstruction producing their AMIs was virtually identical, and they presented early to local

hospitals. However, there were striking variations in the content, timing, and coordination of specific interventions that the two received.

Jim received evidenced-based interventions (including aspirin and a beta-blocker) within minutes of electrocardiographic (ECG) demonstration of his acute infarction, and phone contact with an interventional cardiologist (to expedite cardiac catheterization) was initiated simultaneously. Tony's ECG interpretation was delayed, and in the absence of standard orders and protocols, so was the initiation of cardiac medications and specialist consultation. Both men underwent cardiac catheterization (though this occurred more promptly in Jim's case), and both were noted to have significant obstruction of the left anterior descending coronary artery. Both men's vessels were successfully stented (reperfused) in the catheterization lab, and the patients were transferred to their hospitals' cardiac care units for ongoing monitoring. Subsequent to reperfusion, but still within the 24 hours of presentation, Jim was started on two additional medications, an angiotensin-converting enzyme inhibitor and a statin to support cardiac pump function and to lower serum cholesterol. Tony received neither of these medications, although both were clinically indicated. Within 48 hours of the presenting infarction, Jim received education from nursing staff and a hospital nutritionist, and both cardiac rehabilitation and timely follow-up appointments (with a primary care physician and with the outpatient cardiology clinic) were scheduled; specific appointment times were included with Jim's discharge instructions. Tony received some nursing education as well, though in a less thorough and coordinated manner. At discharge he was instructed to contact his primary care physician to arrange for a follow-up appointment. Several weeks later, at that follow-up visit, Tony reported ongoing exertional intolerance. No medications were added, but outpatient referral was made to a general cardiologist.

Notable is Dr. Barr's appreciation that the clinical professionals involved in these two patients' care did not differ significantly in terms of scientific knowledge. Well-trained physicians and staff were employed at the sites where each man received his initial treatment. In one case, however, systemwide strategies had been established to ensure that scientific knowledge was appropriately implemented; in the other case, this same scientific knowledge was not coupled with work processes at the front line of care to support thorough and timely delivery of evidence-based interventions. The consequences of this difference will continue to be felt for some time by not only Jim and Tony, but also by their families, their employers, and the payers of their increasingly divergent health care costs.

A New PCI Mesosystem

As shown in Figure 3 (page 659), the interrelationships of several microsystems come together to provide seamless care to patients requiring PCI. As the senior leaders of Geisinger considered PCI a potential population for the application of ProvenCare, they looked for the conditions that would continue the success of ProvenCare CABG. Identification of each of the involved microsystems was essential to create the conditions for success. The basic framework of clinical microsystem thinking, as applied to CABG, was now applied to PCI: understanding the current processes and patterns, assembling the frontline professionals to redesign the processes, and using a beta-test phase to measure the changes and adjust accordingly, until the best process was established.

The new mesosystem team consisted of the cardiology service-line leaders, interventional cardiologists, generalist cardiologists, catheterization lab techs, nursing (from the catheterization lab, clinic, and cardiology floor), cardiac rehabilitation exercise physiologists, electronic health record (EHR) and information technology (IT) representatives, trained improvement specialists, and data abstractors. This new mesosystem team was created to serve a specific subpopulation of patients and to ensure that the right care is delivered at the right time. The team spans the walls of any single microsystem and incorporates the necessary components of several existing organizational mesosystems—the cardiology service line, nursing, the division of clinical effectiveness, and IT.

Refining Implementation of the ProvenCare Program

In the course of developing the ProvenCare (CABG) initiative, for subsequent initiatives Geisinger established role definitions to keep teams on track; a comprehensive plan from design through execution and follow-up; and guiding principles for the teams engaged in designing, developing, and implementing ProvenCare.

ROLE DEFINITIONS

The role definitions for ProvenCare initiative teams were as follows:

- The team champion is to provide executive leadership and authority to the ProvenCare initiative. This person champions improvement work by removing barriers, ensuring dedicated time for the team leaders and members to work on the project, and holds the team accountable for reaching milestones. The champion is responsible for facilitating communication to the broader mesosystem about the goals and successes of

ProvenCare.

■ Team leaders (there are a minimum of two, including a physician and an administrator) lead the process-redesign implementation of reliable evidence-based care. These leaders commit the time and effort necessary to reach 100% reliability in the ProvenCare process.

■ Frontline microsystem team members actively engage in the work of process redesign, also committing the time and effort necessary to reach 100% reliability in the process.

■ ProvenCare improvement specialists (from the division of clinical effectiveness) actively guide the initiative. They support the application of improvement methods, reliability science, and the creation of robust measurement models. They assist in the process mapping and data analysis and provide data to facilitate the redesign iterations.

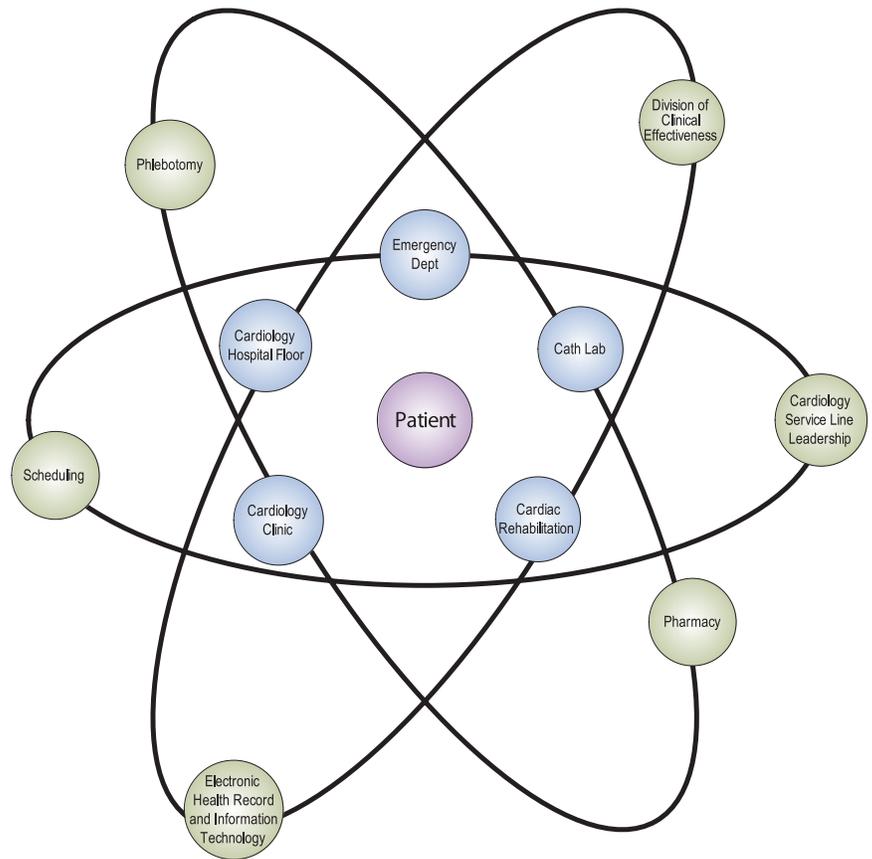
■ The data abstractor (from the division of clinical effectiveness), an EPIC electronic health record team member, and a financial liaison play additional, ancillary roles.

PROVENCARE PLAN

The plan delineates the stages in the ProvenCare process engagement, evidence compilation, agreement on best practices, process redesign, beta testing, and full deployment. Each phase is scheduled (Table 1, page 660) and includes specific objectives that must be met before moving to the next phase. Most of the phases are now briefly described.

Engage Champions. In the first full meeting, improvement specialists, the mesosystem service-line executive, and the administrative leaders discuss the program in detail, set expectations, and make the decision to move forward, with full leadership support. The roles of all team participants are reviewed, physician leads are established, administrative commitment for the time to do redesign work is confirmed, and the service-line leaders accept ownership of their initiative. This phase estab-

New Percutaneous Coronary Intervention (PCI) Mesosystem



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Figure 3. Professionals from many microsystems and supporting hospital services continuously revolve around the patient. Professionals from these various microsystems and services oscillate within a certain proximity of the patient during a given hospital stay. At times, the professionals and services are very close to or occur within the microsystem where the patient is receiving care, and at times the work done for the patient occurs without direct interaction with the patient. The sum of the interactions between the microsystems, hospital services, and professionals revolving around the patient is the newly formed mesosystem at Geisinger.

lishes the corporate “will” to design quality care for the specific subpopulation of patients.

Compile Evidence. In this phase, guided by improvement specialists, the physician group gathers and reviews the current literature and subspecialty’s relevant clinical guidelines.

Establish Best Practices. The physician group then holds regular meetings to decide on components and practices to be included. The improvement specialist helps keep the group focused on *what* ideal care is and not on *how* it can take place in the current system. The *how* is to come in the next phase.

Table 1. Implementation Plan for ProvenCare Initiatives*

- Engagement of ProvenCare Champions: Week 0
- Compile Evidence: Weeks 1–8
- Establish Best Practices—Provider meetings: Weeks 9–19
- Establish Components/Redesign—Team Meetings: Weeks 19–27
- Go Live Beta: Weeks 27–34
- Go Live Production: Week 34
- Financial Modeling: Weeks 34–37
- Packaging and Marketing: Weeks 34–37

* The time line for this standardized implementation plan may vary from initiative to initiative.

The PCI team took longer to complete this phase than the CABG team because of considerable discussion regarding an abundance of new studies. Lengthy discussions addressed not only what measures should be included but also the specificity of the measures. For example, definitive details regarding dosage and/or timing of many medications remain open to interpretation. All patients without a documented contraindication should be discharged on aspirin, but what should be the standard dose? What is the appropriate dosage and timing for the preprocedure administration of the antiplatelet drug clopidogrel (used to prevent strokes and heart attacks). Each week the physicians discussed the issues and gathered more evidence to bring to the table to create the best set of best practices and associated measures. This list was then presented to the service-line meeting for further discussion and approval. This best-practice phase also includes (1) assessment of the current patient, information, and EHR flows; (b) consideration of patient activation; and (c) establishment of the process redesign team (a diverse group of frontline microsystem staff).

Establish Components/Redesign. In this phase, the process redesign team reviews the existing processes and redesigns the work flow to incorporate the best practices. The best practices are divided into 40 individual measurable process elements; 6 of them are shown in Table 2 (page 661). The group is charged with hardwiring (for example, changing history and physical templates, order sets, procedural notes, daily charting notes, discharge summaries) these elements into the process so they occur reliably. The efficiency plan is created and the patient activation tools are established. Unique to PCI is the cardiac catheterization computer program used to document all actions that take place in the catheterization lab. Several components of the best practices needed to be hardwired not only into the EHR but into this specialized system as well.

Go Live Beta. Beta testing begins when approximately 75% of the process redesign has been completed. Data are collected on all patients, quick-time feedback to the team is provided, and any glitches in the redesign are resolved. For example, the team revisited the notification process in which referring providers are to be informed of a patient's procedure. This process was not reliably carried out, so an automated letter was built into the EHR. This required a new work flow for the administrative assistant but has proved to be more reliable than the earlier process. When the redesign is completed and all process elements have proven reliable, the *full deployment phase* is entered.

GUIDING PRINCIPLES FOR PROVENCARE REDESIGN

The guiding principles are provided, with reference to PCI ProvenCare.

1. Each best practice and process step follows the Institute of Medicine's quality aims: patient-centered, safe, equitable, effective, efficient, and timely.⁶ During ProvenCare redesign, the team was presented an example of inequitable care regarding post-PCI education provided by cardiac rehabilitation. Before ProvenCare, this type of education was provided only during the weekdays. A process was created to ensure that all patients received the same education regardless of the day of discharge.

2. Evidence-based practices are to be Class I and Class IIa recommendations published by the subspecialty's national professional body. In the case of PCI, American College of Cardiology, American Heart Association, and the Society for Cardiovascular Angiography and Interventions guidelines were used.

3. Physician consensus-based practices are guided by the subspecialty's national professional body. This means that standards of practice that are not explicitly stated in the Class I and Class IIa recommendations but that are found in current published studies or are a current standard of care can be included among the best practices. The evidence for PCI is rapidly growing. In some cases, this evolving body of literature caused controversy, making it challenging to reach physician consensus. For example, the evidence for the use of bicarbonate drip for patients with a glomerular filtration rate (GFR) < 60 is not definitive, but some physicians feel strongly about its use. The PCI physicians came to consensus on administering bicarbonate for these patients, with the plan to closely follow new studies and remove the measure if the literature changes.

4. All applicable state and national performance measures and established systemwide protocols (if evidence-based) regarding the care of a particular group of patients is automat-

Table 2. Sample Process Elements for ProvenCare Percutaneous Coronary Intervention (PCI)*

Best Practice	Measurable Process Elements		
CIN Surveillance	Physician notified during case when contrast load exceeds 260 ml	Creatinine done day after PCI	If post-PCI creatinine exceeds pre-PCI creatinine by > 0.3 ml/dL, creatinine ordered 48 hrs post-PCI.
Peri-PCI CK-MB Assessment	Obtain immediate pre-PCI CK-MB.	Obtain at least 2 post-PCI CK-MB levels.	If post-PCI CK or MB is 5x greater than pre-PCI levels, place patient on a beta-blocker.
Peri-PCI Groin Access Site Surveillance	Perform femoral angiography during PCI.	Perform and document day of and day after groin exams.	For patients who have post-PCI groin issues, obtain a vascular duplex.
Aspirin Therapy	Patient will be on aspirin therapy prior to PCI.	Patient will be on aspirin therapy (81 mg) post-PCI.	Patient will be discharged on aspirin therapy (81 mg).
Clopidogrel Therapy	Patient will receive clopidogrel 600 mg 24 hrs prior to PCI or while on the cath lab table.	Patient will receive clopidogrel 75 mg post-PCI.	Patient will be discharged on clopidogrel 75 mg.
Saphenous Vein Graph (SVG) Distal Graft Protection	A distal embolic protection device was used for an SVG intervention.	Contraindication of a distal embolic protection device was documented if not used.	N/A

* CIN, contrast-induced nephropathy; CK-MB, creatinine kinase-myocardial bound; cath lab, catheterization laboratory; N/A, not applicable.

ically included in the best practices and process measurement elements. The regulatory requirements included in ProvenCare PCI are measures such as those addressing beta-blocker therapy for periprocedural myocardial infarction and angiotensin-converting enzyme inhibitor (ACE-I) or adrenergic receptor binder (ARB) administered for left ventricular ejection fraction (LVEF) < 40%.^{7,8} For example, the Geisinger Health System Department of Medical Health Physics Protocol includes a measure that specifies that physical exams are scheduled within two weeks of administration of 6 Grays of radiation.

5. One-hundred-percent physician consensus on all best practices is required to move forward with the process redesign. It is critical for all physicians to have a commitment to each best practice. This ensures there will be no fundamental inconsistencies in physician approach as the ProvenCare process moves into the redesign and data collection phases. PCI patients receive a continuum of care from the interventionalists in the cath lab through to the cardiologists on the unit. This is a large group from which to gain consensus, and although providers were initially represented throughout this continuum, the unit cardiologists progressively disengaged to the point that ProvenCare PCI was becoming known as a “cath lab program.” Therefore, it was essential to periodically bring the entire group back together to reestablish the purpose and reinforce the importance of physician consensus and service-line ownership.

6. Each process element implemented is to be measurable and actionable. With EHR implementation, process measurement data must be captured in a structured data field. This provides an avenue for standardized documentation for specific measures of care as well as a reliable method by which to provide feedback. The term *actionable* means that for every process element used, there is an action that follows. For example, if a post-PCI groin Doppler study is ordered, it is to be read, the results documented, and acted on when necessary.

7. At least 15% improvement in efficiency is achieved. This may involve supply standardization, elimination in redundant testing, reduction in a patient’s length of stay, automation efficiency (for example, EHR), eliminating unnecessary steps in the process, or work deployment to the lowest cost competent professional. Improvement specialists worked with the cardiac catheterization team to enhance the computerized system for intra-catheterization documentation by creating automated reminders of best practices.

8. A patient activation plan is incorporated. The practice of medicine has long been viewed as care that *happens* to the patient rather than what happens *with* the patient. Patient activation, which advances patient education to a higher level, invites and encourages patients to be active participants in their care rather than passive observers. ProvenCare PCI incorporated a patient education and cardiac rehabilitation consult, which consists of a one-hour meeting during the patient’s hospitaliza-

Percent of Patients Receiving All 40 Process Elements of the ProvenCare Percutaneous Coronary Intervention (PCI)

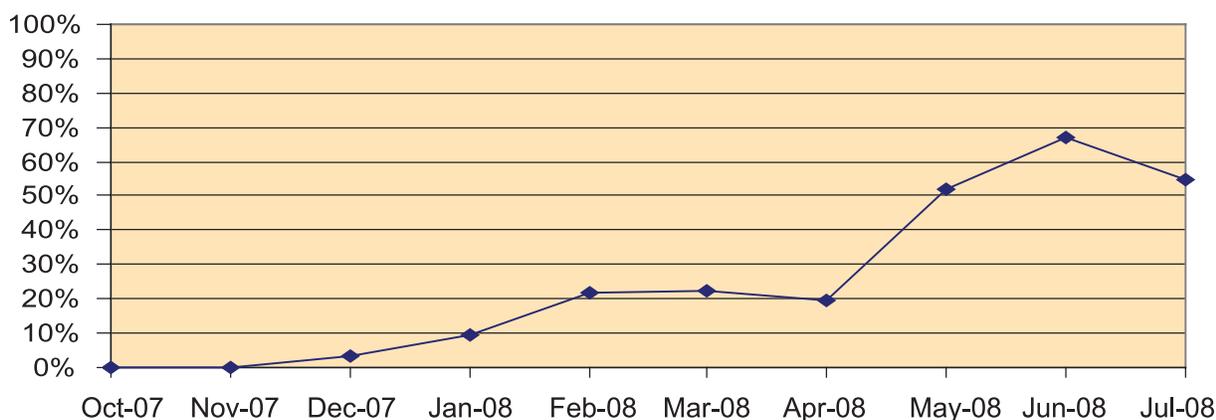


Figure 4. As of month seven (July 2008) of the beta-test phase, 55% of the process elements are being accomplished 100% of the time for every patient.

tion. Standard education is offered, and the patient is provided with goals to attain and maintain better health. A tool is provided to track progression toward these goals and includes logs for weight, blood pressure, glycolated hemoglobin (A1C) if applicable, waist circumference, and cholesterol. This log, designed for the patient to bring to each appointment with their primary care physician as well as the cardiologist, promotes a participatory role for the patient in his or her care.

9. The executive champion of the clinical service line will ensure that physicians and staff have dedicated time and resources, on a consistent basis, to do the work required to achieve the goals of ProvenCare.

10. ProvenCare is a long-term commitment to improving the quality and efficiency of care for the patient. This concept creates the mindset that improvement work is part of daily work; unlike projects with a definitive endpoint, improvement work is a continuous effort. There are various stages to ProvenCare, but the need for periodic evidence review and process updates (typically on a 12-month cycle, unless new breakthroughs are published) is important for the team to appreciate. The PCI physicians are already preparing for this evidence review, as many studies have been published over the past year. With regards to initial engagement and buy-in from these physicians, it was important that they understand the measures of ProvenCare are not set in stone, but are fluid as the literature evolves. This was a salient point for the PCI group more so than any other team.

PRELIMINARY EXPERIENCE

Although only a small number—602—of patients have experienced ProvenCare PCI, the preliminary results are encouraging. For the 40 measurable process elements in the PCI mesosystem pathway, as of month seven (July 2008) of the beta-test phase, 55% of the patients received 100% of the identified process elements (Figure 4, above). Although short of the 100% reliability goal (all patients, all elements), this early progress is similar to the early beta phases of other Proven Care initiatives.

Conclusion

Geisinger Health System has joined different microsystems to form an innovative mesosystem capable of producing reliable, evidence-based care for patients who share a certain health condition. The ProvenCare method is designed to develop seamless, patient-centric, mesosystem care pathways to deliver only the care that the patient needs and wants, every time. Providing resources to the frontline teams that research the evidence and design and deliver the care is a cornerstone in ProvenCare. The ProvenCare approach to embedding evidence-based care into routine care delivery can be adapted by other health care organizations to improve the quality and value of care provided to subpopulations of patients. **J**

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Conclusion to the Clinical Microsystem Series

The four-part Clinical Microsystem series shows leaders working to improve care in whole organizations, population-based groups, and small primary care settings—at the macro-, meso-, and microsystem levels. Bate, Mendel, and Robert have stated that the key to understanding quality “lies not in any one level of the organization, be it the macro or micro (strategic or operational), but in the various and complex ways the different levels combine (or not) and interact with each other.”^{9(p. 7)} The articles in the series have underscored the importance of aligning interactions between all levels of the organization to facilitate innovation. As described by Nelson et al,¹⁰ our challenges are to continue to build the will to excel and improve continuously; master improvement work; and finally, to provide the frontline microsystem teams with necessary resources. Nothing gratifies a team of committed frontline caregivers more than significantly improving the care they deliver to their patients. Working within a microsystem/mesosystem care delivery model that reliably meets health needs builds local “will” that becomes contagious and provides the foundation for patient-“centric” health care.

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