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Geisinger Clinic Physician Group Practice Demonstration

Site Visit Final Report

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EXECUTIVE SUMMARY

The Centers for Medicare & Medicaid Services (CMS) initiated The Physician Group Practice (PGP) demonstration in April 2005. This 3-year demonstration offers participating PGPs the opportunity to earn bonuses for improving the efficiency and quality of care delivered to Medicare fee-for-service (FFS) beneficiaries. Ten large PGPs are participating in the demonstration.

CMS contracted with RTI International, an independent, nonprofit research organization, to evaluate the PGP Demonstration. As part of its evaluation, RTI is conducting site visits at each of the 10 PGPs participating in the demonstration in the winter of 2005-2006. The purpose of these site visits is to understand the decisions of the PGPs to participate in the demonstration and their early implementation and operational experience with the demonstration. This report contains findings for Geisinger Clinic.

Geisinger Clinic is an integrated multi-specialty group practice that is a not-for-profit corporation. The clinic consists of 41 practice sites in a 33-county service area that covers over one third of the state of Pennsylvania. Geisinger employs over 640 physicians, 95 percent of whom are full-time employees. Approximately 36 percent of the physicians employed by Geisinger Clinic are primary care physicians. Geisinger Health System also includes the 367-bed Geisinger Medical Center, two community hospitals, two ASCs, a large health plan, a home health agency, and a home infusion company. The group practice consists of 41 outpatient community practices that provide primary care, specialty care, and ancillary services. In the fiscal year 2004, over 1.5 million outpatient visits were seen at Geisinger Clinic.

Demonstration Participation and Strategy. The primary driving force behind Geisinger's participation is its mission to continually improve the quality of care and extend its disease/care management programs to additional patients (in the case of the PGP Demonstration, Medicare FFS service patients). Geisinger is also participating in the PGP Demonstration for the following reasons: (1) Geisinger had disease management (DM) programs already developed and in place through its health plan, and demonstration bonus payments could be used to finance the redesign of these programs for Medicare FFS beneficiaries, thereby spreading the administrative costs over more payers while improving the quality of care; (2) the high occupancy rates in its hospitals eased concerns that reduced Medicare hospitalizations resulting from the DM programs would reduce hospital revenues; and (3) *successfully* reducing program expenditures while improving quality outcomes could aid the marketing of their own provider-based DM programs (as opposed to those run by contracted disease management companies such as Health Dialog) to other payers.

Their major concern about participating in the demonstration is whether they will recoup their startup and maintenance costs, which are estimated at about one and a half to two million dollars per year. Since a two percent threshold must be exceeded and the savings are based on performance relative to a comparison group whose composition is defined retrospectively, Geisinger is uncertain whether the eventual savings will be enough to recoup these costs. Despite these uncertainties, Geisinger decided to participate.

Geisinger's primary strategy for successfully meeting the Medicare expenditure and quality targets is through reducing inpatient utilization by using its disease management programs and also extensive use of the GHS electronic health record (EHR) system. Geisinger felt that the best approach to reducing *overall* Medicare expenditures is through disease management—focusing on patients with particularly high Medicare costs. Avoiding a hospitalization, or rehospitalization, for such patients could produce substantial savings. Patients who were recently hospitalized with, for example, diabetes, later-stage congestive heart failure (CHF) or chronic obstructive pulmonary disease (COPD) would be identified and targeted for disease management.

The second component of Geisinger's demonstration strategy is ensuring that all substantiated patient diagnoses are recorded on Medicare claims. The reasons are both clinical and financial. First, reporting all substantiated diagnoses, including those not necessarily relevant for payment of the claim, will help ensure that the diabetes, CHF, COPD, and asthma disease registries are populated correctly. If the disease registries are incomplete, there may be patients who would benefit from participating in a DM program who go unidentified. The second reason for making sure all appropriate diagnoses are reported on their Medicare claims is to ensure that measured risk-adjusted expenditure growth for Geisinger Medicare FFS beneficiaries reflects as much as possible the patients' true case mix. For these reasons, improved reporting of substantiated diagnoses on Medicare claims should help improve Geisinger's measured Medicare savings relative to their comparison group

Patient Care Interventions. Prior to the PGP Demonstration, Geisinger instituted the following NCQA-accredited disease management programs through its managed care plan Geisinger Health Plan (GHP): (1) Asthma; (2) Chronic Kidney Disease; (3) Chronic Obstructive Pulmonary Disease; (4) Heart Failure; (5) Diabetes; (6) Hypertension; and (7) Osteoporosis. An eighth disease management program, Tobacco Cessation, is not accredited. Several components of many of these programs are being incorporated into a high intensity post-discharge case management (CM) program (targeting FFS beneficiaries with specific clinical conditions) as well as a disease management program for CHF. In general, the basic design of these programs is to use an RN case manager to educate patients on effective self-management, including proper use of their medications. The case managers will work largely with patients to improve the self-management of care including symptom monitoring and early recognition of acute exacerbations. In addition, the case managers interact with physicians when their patients' conditions decompensate or when patients' care falls outside of agreed-upon protocol guidelines—since the physicians have already-established relationships with the Geisinger case managers (unlike those working for third party DM companies), they trust when the case managers reinforce the treatment guidelines. A total of 50 RN care coordinators from GHP have expanded their scope of work to include PGP Demonstration-related DM programs.

The relative need for each program, and the initial identification of patients for these programs, was made through a survey of all 29,000 Medicare beneficiaries seen by Geisinger physicians recently. Survey responses, recent discharge information, and baseline medical record data are being used to target approximately 1,800 beneficiaries for enrollment in a DM/CM program.

Geisinger's ownership of a managed care plan was critical for being able to create significant DM/CM programs in a relatively short period of time. Also important is the electronic health record (EHR) system used by Geisinger Health System physicians and providers. The clinical data collected in this system enable Geisinger to more efficiently target DM programs for patients who would most likely benefit.

Provider Participation and Relations. Prior to the start of the demonstration, physicians were notified about the demonstration through various electronic means, including e-mail and Geisinger's intranet. In addition, physicians were given information about the quality measures, and the incentive payments based on those measures, through various meetings and e-mails. Because Geisinger's physicians were already familiar with DM/CM programs, collecting quality measures and receiving incentive payments based on various quality measures, Geisinger's participation in the demonstration was relatively well accepted by its physicians. Although Geisinger has some criticism about the thresholds for several of the measures, they feel the measures as a whole are generally sound. Initially, Geisinger is focusing on 11 measures. In the second and third years, this focus will be expanded to all 32 measures.

The Geisinger physician incentive program is primarily focused on site-based (e.g., physicians practicing in a particular office) rather than individual incentives. Geisinger gave three reasons for this focus: (1) most quality measures are more statistically unreliable (very small sample sizes) if used on individual physicians rather than when multiple physicians' patients are grouped together; (2) site-based accountability encourages physician peers to identify, generalize, and adopt each other's "best practices;" (3) process reliability is largely a function of "accountable systems" (e.g. EHR-based decision support) not just well-trained physicians.

The incentive payments are relatively small (about three percent of total cash compensation), meant mostly as tangible recognition for maintaining and improving quality of care. Geisinger's current quality-based incentive compensation plan is based on meeting or exceeding the performance standards of all of its payers—including CMS. Of particular note is that, instead of recognizing component measures, the Geisinger incentive compensation plan requires that each of a physician's eligible patients receive all components of necessary care (i.e. an "all or none" methodology).

Demonstration Quality Indicators. As noted earlier, Geisinger has some criticism about some of the measure thresholds. However, they feel the measures, taken as a whole, are generally sound. Geisinger remarked that the three conditions targeted by the demonstration (diabetes, congestive heart failure, and coronary artery disease) make sense since these patients are quite costly to treat if their conditions are not managed properly.

Geisinger's strategies for maintaining and improving their quality measures are fourfold. First, Geisinger has been collecting all 32 quality measures since the beginning of the demonstration and reporting some of the results back to physicians. Second, Geisinger is expanding and creating DM/CM programs for Medicare FFS patients. Third, Geisinger is enhancing its EHR-based decision support capability (so as to make the care highly reliable and to increase/improve patient involvement).

Information Technology. Geisinger is using its extensive EHR to collect the information needed to compute the quality measures. Geisinger physicians can input information on clinical data, test administration, etc., into the EHR, although some information can only be entered as free-form text, not in a pre-defined field. There are also limitations to what is currently possible with its EHR (data from providers outside of the Geisinger network must be scanned in, severely limiting its searchability). The EHR system is also one of the pillars on which their disease management programs stand.

Geisinger is not using the claims data from the NCH taps provided by RTI/CMS on a quarterly basis, and, if the content of these data do not change, they do not intend to put much effort into mining it. Geisinger feels these files have serious limitations on their usefulness. First, these data are not sufficiently timely for use by their DM programs. Second, these data do not contain clinical measures (e.g., quality measure data), so their use in patient management and benchmarking is minimal. However, Geisinger might see value in quarterly summaries of these data—scarce resources wouldn't need to be put into working with the data, and the summaries would be sufficient for basic comparisons with likely non-assigned beneficiaries.

SECTION 1 INTRODUCTION

1.1 Background

The Centers for Medicare & Medicaid Services (CMS) initiated The Physician Group Practice (PGP) demonstration in April 2005. This three-year demonstration offers participating PGPs the opportunity to earn bonuses for improving the efficiency and quality of care delivered to Medicare fee-for-service (FFS) beneficiaries. Ten large PGPs are participating in the demonstration.

CMS contracted with RTI International, an independent, nonprofit research organization, to evaluate the demonstration. As part of its evaluation, RTI is conducting site visits at each of the 10 participating PGPs in the winter of 2005-2006. The purpose of these site visits is to understand the decisions of the PGPs to participate in the demonstration and their early implementation and operational experience with the demonstration. RTI is producing a site visit report for each of the 10 demonstration PGPs. Material from the site visit reports will be included in CMS' Report to Congress on the PGP Demonstration, due at the end of 2006. This report is for Geisinger Clinic.

1.2 Sources and Methods

The primary source for the site visit reports is the one-day, on-site interviews conducted by RTI staff. The Geisinger Clinic site visit took place on February 22, 2006 at Geisinger offices in Danville, Pennsylvania. The interviews were divided into multiple sessions by the following topic areas:

1. Demonstration Participation and Strategy—The purpose of this session was to understand Geisinger's motivation for participating in the demonstration and to understand how the demonstration relates to the PGP's overall strategy and operational goals.
2. Patient Care Interventions—The purpose of this session was to gather information on programs that have been implemented by Geisinger due to the demonstration to improve disease management and coordination of care and to understand how these interventions have improved efficiency.
3. Provider Participation and Relations—The purpose of this session was to determine the extent of provider participation in demonstration activities and to understand the financial and non-financial incentives that may exist for providers due to the demonstration.
4. Quality Improvement and Measurement—The purpose of this session was to determine whether programs that specifically target quality of care have been implemented as part of the demonstration and also to gather information on how those interventions were implemented.

5. Information Technology—The purpose of this session was to gather information on how the demonstration may have changed health care reporting and data collection systems for any interventions such as patient care activities or quality interventions.

Some participants varied by session based on their area of expertise. The agenda for the Geisinger site visit is attached as Appendix A. Geisinger participants included one of its Chief Financial Officers, Director of Performance Innovation, Director of Quality and Performance Improvement, one of its Chief Medical Officers, Director of Care Coordination, Vice President of Operations, Chief Medical Information Officer and other information technology, clinical and quality assurance personnel.

In addition to the interviews, this report draws on written materials provided by Geisinger during or after the site visit, or as part of the demonstration project. These materials include Geisinger's demonstration implementation protocol and its demonstration baseline report. Also, Geisinger's web site was consulted for background information. Finally, we drew some information on Geisinger's Medicare assigned beneficiary population from RTI's analysis of Medicare claims and enrollment data for the demonstration.

Statistics cited in this report occasionally varied slightly among alternative sources. For example, the reported number of physicians employed by Geisinger might differ slightly among the Geisinger web site, demonstration reports, and RTI's site visit interview notes. Generally these differences are not consequential, and could arise from different time frames, inclusion criteria, definitions, etc. In this report, we cited numbers from written demonstration reports or materials submitted by Geisinger or published sources (e.g., Geisinger's web site) rather than our site visit notes, where possible. We also preferred statistics that were reported consistently across multiple sources. If a statistic seemed anomalous, or we were unsure of it or could not verify a precise magnitude, we indicated a general order of magnitude in this report, but did not cite a precise number. However, even if some statistics are subject to slight variation or uncertainty, we felt it was important to cite some specific numbers to adequately characterize Geisinger and its demonstration participation. We submitted this report to Geisinger staff for their review of its factual accuracy.

1.3 Overview of the Report

The next section describes Geisinger as an organization and the environment in which it operates. The third report section discusses why Geisinger chose to participate in the PGP Demonstration and how doing so fits into its overall strategy. The fourth section describes patient care coordination initiatives, and the fifth section includes initiatives in provider education, feedback and incentives. The sixth section discusses demonstration quality measures and reporting, and the seventh the role of information technology in the demonstration.

SECTION 2

ORGANIZATIONAL STRUCTURE, ENVIRONMENT AND STRATEGY

2.1 Organizational structure

Geisinger Clinic is a not-for-profit integrated multi-specialty group practice. The Clinic consists of 41 practice sites in a 33-county service area that cover over one third of the state of Pennsylvania. Geisinger employs over 640 physicians, 95 percent of whom are full-time employees. Approximately 36 percent of the physicians employed by Geisinger are primary care physicians.

Geisinger Clinic is affiliated with all institutional providers in the Geisinger Health System, which consists of the Geisinger Health System Foundation (the parent organization) and its subsidiary providers and other entities. These providers include one tertiary care hospital, two community hospitals, two ASCs, a home health agency, and a home infusion company. The group practice consists of 41 outpatient community practices that provide primary care, specialty care, and ancillary services. In fiscal year 2004, over 1.5 million outpatient visits were seen at Geisinger.

2.2 Environment

2.2.1 Service Area

Figure 1 shows the Geisinger Medicare service area for 2004 based on patient residence data. Counties where at least one percent of Medicare FFS beneficiaries assigned¹ to Geisinger reside are included in this service area map. Geisinger's PGP Demonstration service area generally corresponds to its self-described service area in its 2004 annual report, though is somewhat smaller.

2.2.2 Patients

Table 1 shows selected characteristics of Geisinger's assigned Medicare patients available from Medicare administrative files. Geisinger provided an office or other outpatient evaluation and management visit to 40,316 Medicare patients. Of these, 25,767, or 64 percent, received the plurality of their evaluation and management services from Geisinger and so were assigned to Geisinger for the PGP Demonstration. Assigned beneficiaries received 5.04 evaluation and management visits on average from all providers, with 84 percent of the associated Medicare allowed charges provided by Geisinger on average. Geisinger feels that the PGP Demonstration beneficiary assignment algorithm worked well for Geisinger since their Medicare patients tend to stay within the system.

Eighty percent of Geisinger's assigned Medicare patients are eligible for Medicare by age, 20 percent by disability (under age 65) and less than one percent by end stage renal disease.

¹ A beneficiary was assigned to Geisinger Clinic if the plurality of its office and other outpatient evaluation and management allowed charges were incurred at Geisinger Clinic.

Seventeen percent had at least one month of Medicaid eligibility in 2004. Ninety-eight percent were white.

2.2.3 Payers

Approximately 37 percent of Geisinger's patients are Medicare beneficiaries. The majority of these patients are enrolled in traditional FFS Medicare.

The Geisinger Health Plan (GHP) insures commercial members and Medicare Advantage members. All of the GHP members are eligible to receive risk-stratified disease management services.

2.2.4 Competitors

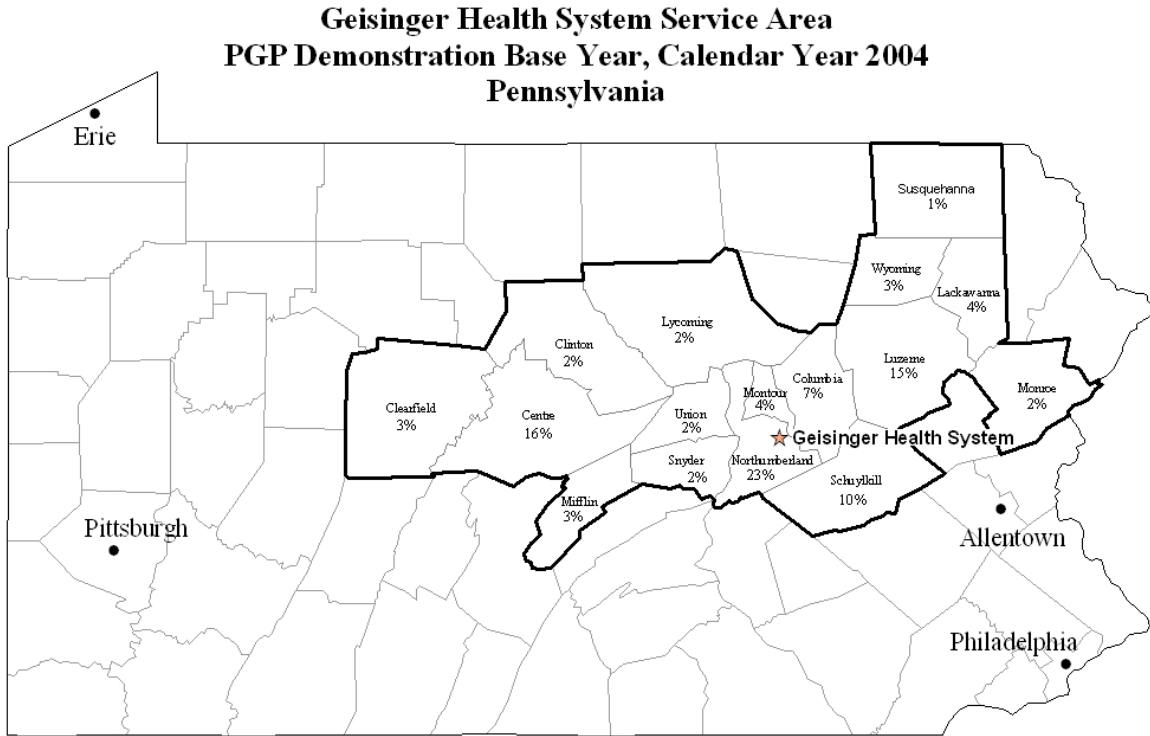
In the center of its service area, where Geisinger Medical Center (the tertiary care hospital in the system) is located, Geisinger has a dominant market share. However, in the areas to the east (where Geisinger's community hospitals are based) and west of the central area, Geisinger has a smaller market share and faces more competition from smaller physician practices and from larger hospitals in those communities. Acquiring a second community hospital was a way to increase their market.

2.3 Major Strategic Initiatives

Geisinger's major strategic initiatives include expanding their clinical market, integrating multi-specialty clinical services into their service lines, expanding education and research and advocacy, and developing entrepreneurial products. The acquisition of the two community hospitals in Wilkes-Barre was intended to (and has) increased Geisinger's service area. Owning hospitals enables Geisinger physicians to have more control over the quality of their patients' care and their utilization.

Geisinger has also long had quality improvement, and demonstrating the ability of a provider group to improve quality of care in a cost-efficient manner, as a major strategic initiative. Because the system owns a managed care plan, encouraging cost-efficient care by its physicians is important. However, because the plan is a part of the Geisinger Health System, maintaining high quality of care is a goal, which is also one of the plan's competitive advantages. Even prior to the PGP Demonstration, Geisinger has used physician performance on selected quality measures to determine annual bonus awards for physicians (the amounts are not large relative to total physician compensation and intended to be tangible recognition for physicians' quality improvement efforts).

Figure 1
Geisinger Clinic Medicare Service Area for 2004



Notes:

- 1) Counties with at least 1% of assigned beneficiaries are in the service area.
- 2) Numbers in service area counties are percentages of service area assigned beneficiaries residing in the county. These percentages are used to weight comparison group county expenditure growth rates.
- 3) Due to rounding the percentage of assigned beneficiaries residing in the service area counties may not sum to 100%.

Source: RTI International

Table 1
Selected characteristics of Medicare patients, Geisinger Clinic, 2004

	No. of Beneficiaries	Percentage or Amount
Medicare Patients		
Total ¹	40,316	100%
Assigned Beneficiaries ²	25,767	63.9%
Characteristics of Assigned Beneficiaries		
Average Number of Evaluation and Management Visits ³	25,767	5.04
Average Percentage of Evaluation and Management Care provided by Geisinger ⁴	25,767	84%
Distribution of Assigned Beneficiaries		
Total	25,767	100%
Medicare Eligibility		
Aged	20,498	79.6
ESRD	230	0.9
Disabled	5,039	19.6
Medicaid Eligibility		
Not Medicaid Eligible for any months in 2004	21,376	83.0
Medicaid Eligible at least 1 month in 2004	4,391	17.0
Age		
Age < 65	5,231	20.3
Age 65 – 74	9,980	38.7
Age 75 – 84	8,085	31.4
Age 85 +	2,471	9.6
Race		
White	25,373	98.5
Black	176	0.7
Unknown	33	0.1
Asian	44	0.2
Hispanic	42	0.2
North American Natives	8	0.0
Other	91	0.4

NOTES:

¹Beneficiaries provided at least one office or other outpatient evaluation and management visit by Geisinger.

² Beneficiaries who received the plurality of their office or other outpatient evaluation and management allowed charges at Geisinger.

³ Percentage of all office and other outpatient evaluation and management Medicare allowed charges provided to the beneficiary that were provided by Geisinger.

⁴ Office or other outpatient evaluation and management visits.

SOURCE: RTI Analysis of Calendar Year 2004, 100% Medicare Claims Files and Enrollment Datasets

SECTION 3 DEMONSTRATION PARTICIPATION AND STRATEGY

3.1 Reasons for Participating

The primary driving force behind Geisinger's participation in the PGP Demonstration is their mission to continually improve quality of care and their desire to extend their disease and care management programs to additional patients (Medicare FFS beneficiaries in this case). GHP had developed care management programs designed to reduce the cost, while maintaining the quality, of care. These programs, however, were only being used for their GHP patients because of the need to receive payment to support these services. As a result, Geisinger already had an infrastructure in place that could be levered for use in the demonstration; if Geisinger had not had such systems in place, their participation would have been much less likely. Geisinger viewed the demonstration as being aligned with their overall strategic plans and enabled administrative costs to be spread over a larger number of payers. Also, the quality level and improvement thresholds were thought helpful for focusing their physicians' attention on improving quality of care for Medicare patients.

Geisinger also pointed to the relatively high occupancy rates in its hospitals, particularly its main facility (Geisinger Medical Center) as the main reason why a potential deterrent to participating (reducing its own revenues through lower utilization) was less of a deterrent than it otherwise would have been. In fact, Geisinger officials felt that there was "unmet demand" at their hospitals—they felt confident that any reduced Medicare volume in their hospitals resulting from successful care management could be replaced by other insured patients. Thus the overall financial impact, excluding any demonstration bonus payments, of reduced Medicare volume was thought to be likely minimal.

In addition, Geisinger is interested in demonstrating that provider-based disease management programs (as opposed to those run by contracted disease management companies such as Health Dialog, which is participating in another CMS demonstration in the Pittsburgh area) can be successful, which may aid future marketing to CMS and other payers. Geisinger's ability to market its participation in the PGP Demonstration is contingent on its success in the demonstration, which at this point is uncertain.

3.2 Demonstration Strategy

Geisinger's primary strategy for successfully meeting the Medicare expenditure and quality targets is through impacting patients' utilization with its disease management programs and extensive use of the GHS electronic health record (EHR) system. Geisinger feels that the best approach to reducing *overall* Medicare expenditures is to focus attention on patients with particularly high Medicare costs, who generally have one or more hospital admissions in any given year. Avoiding a hospitalization, or rehospitalization, for such patients could produce substantial savings. Patients who were recently hospitalized with, for example, diabetes, later-stage congestive heart failure (CHF) or chronic obstructive pulmonary disease (COPD) would be identified and targeted for disease management. Frail elderly patients, who typically have multiple comorbid conditions, would be targeted for CM programs at earlier/less severe stages of their illness. If Geisinger feels its DM/CM programs are working well for the initially-targeted

FFS populations, it will expand enrollment to other, somewhat lower-cost patients with elevated likelihood of readmission.

The second component of Geisinger's demonstration strategy is ensuring that all substantiated patient diagnoses are recorded on Medicare claims. The reasons are both clinical and financial. First, reporting all substantiated diagnoses, including those not necessarily relevant for payment of the claim, will help ensure that the diabetes, CHF, COPD, and asthma disease registries are populated correctly. If the disease registries are incomplete, there may be patients who would benefit from participating in a DM program who go unidentified. The second reason for making sure all appropriate diagnoses are reported on their Medicare claims is to ensure that measured risk-adjusted expenditure growth for Geisinger Medicare FFS beneficiaries reflects as much as possible the patients' true case mix. For these reasons, improved reporting of substantiated diagnoses on Medicare claims should help improve Geisinger's measured Medicare savings relative to their comparison group

3.3 Relationship to Group Practice Strategy

As noted in Section 2 of this report, Geisinger management has for a while been interested in internal pay-for-performance programs that give incentives (small monetary incentives as well as recognition of high, and low, quality) to physicians based on measured quality measures. Geisinger aims for high quality not only because they feel it is best for patients, but also because high quality is a good marketing strategy (a "win-win"). Participating in the demonstration is helping the management develop stronger incentive programs (e.g., financial incentives contingent on meeting thresholds for *all* demonstration quality measures). Also, if Geisinger's participation is successful, they may consider using their participation in marketing efforts for other payers in the future.

3.4 Leadership and Implementation Team

Geisinger's participation in this demonstration is led by their Associate Chief Medical Officer of the Division of Clinical Effectiveness (an internal group overseeing Geisinger Health System's quality and efficiency initiatives). The Associate Chief Medical Officer is being supported by a small research staff to assist in quality measure data. In addition, approximately 50 members of Geisinger Health Plan's disease management programs' staff have expanded their scope of work for the duration of the demonstration to provide DM/CM services for the Medicare FFS beneficiaries who have enrolled in the programs.

3.5 Implementation and Operational Challenges

Geisinger identified several challenges in implementing the demonstration. First, Geisinger feels that there is great uncertainty about the composition of, and cost trends in, their demonstration comparison group. Although CMS and RTI have provided the group with claims data on a combined set of beneficiaries likely to be in either the assigned group or the control group, the lack of assignment identification reduces the usefulness of these data relative to the costs of using it—they would have preferred more summarized volume and expenditure data instead. Not knowing the identity of the control group makes targeted outreach for DM program participation less efficient—if Geisinger includes patients who will be assigned to the control group for a particular year in one of its DM programs, the measured reduction in Medicare

program expenditure growth or quality improvements would be attenuated. The likelihood of this occurring is probably small because patients with office or other outpatient evaluation and management visits at Geisinger during a performance year are not eligible to be included in Geisinger's comparison group for that performance year—but Geisinger is concerned about the possibility.

The second challenge relates to the benefits and costs of using the DM programs for this participation. The demonstration runs for three years, but the benefits of the DM programs may be greater in the long run than in the short run (particularly for diabetic patients). However, since the demonstration runs only three years, Geisinger will not be able to share in long-run benefits that the Medicare program and beneficiaries will receive. Furthermore, it is costly (a few million dollars) to expand and operate the DM programs, but CMS, unlike most clients of Geisinger Health Plan, is not providing any “up front” money for this investment. Instead, the system must self-finance these programs, with only a possibility of being able to recoup anything a few years after the fact. This makes funding future interventions that may help the demonstration much more difficult.

SECTION 4

PATIENT CARE INTERVENTIONS

Prior to the PGP Demonstration, Geisinger instituted the following NCQA-accredited disease management programs through its managed care plan Geisinger Health Plan. These included: (1) Asthma; (2) Chronic Kidney Disease; (3) Chronic Obstructive Pulmonary Disease; (4) Heart Failure; (5) Diabetes; (6) Hypertension; and (7) Osteoporosis. An eighth DM program, Tobacco Cessation, is not NCQA-accredited. Several components of these programs are being incorporated in to a high-intensity post-discharge CM program (targeting Medicare FFS beneficiaries with specific clinical conditions) as well as a disease management program for CHF patients. The relative need for each program, and the initial identification of patients for these programs, was made through a survey of all 29,000 Medicare beneficiaries seen by Geisinger physicians recently. Survey responses, recent discharge information, and baseline medical record data are being used to target approximately 1,800 beneficiaries for enrollment in a DM/CM program. In general, the basic design of these programs is to use an RN case manager to educate patients on effective self-management, including proper use of their medications and, for patients with heart failure, to educate those patients regarding how to use the phone-based daily monitoring system.

Geisinger's affiliation with a managed care plan was critical for creating significant DM/CM programs relatively quickly. Also important is the EHR used by Geisinger Health System physicians and providers. The clinical data collected in this system enable Geisinger to more efficiently target DM programs for patients who would most likely benefit.

4.1 Diabetes Disease Management

Geisinger is enhancing its Outpatient Diabetes Education Self Management Training Program, which is used for patients in its managed care plan with Medicare FFS patients. The purpose of this program is to reduce the average number of diabetic patients' hospitalizations and emergency department visits for diabetes-related complications and other related cardiovascular problems. For patients enrolled in this program, Geisinger case managers work with these patients to educate them on lifestyle changes, glucose monitoring, risk factor reduction (blood pressure and lipids) as well as ensuring that important clinical data are tracked in (at least nearly) real time. The Geisinger case managers in this program also work with the patients' primary care physicians, endocrinologists, ophthalmologists, and podiatrists to be sure that uniform, evidence-based protocols for treating these patients are followed.

4.2 COPD Disease Management

Geisinger is enhancing its disease management program for COPD for Medicare patients. The purpose of this program is to reduce hospitalizations and emergency department visits for patients who have been admitted recently and frequently for COPD-related conditions. Upon entry into the program, patients will be contacted as determined by the level of disease severity to assess fluctuations in their functional status (particularly fatigue, shortness of breath, cough, sputum production, etc.). After the initial daily monitoring period, case managers will reassess the contact frequency depending on the patient's needs. The case managers will also work closely with the patients' physicians to ensure that the physicians are aware of changes in their patients' condition and to encourage patients to visit their physician when necessary.

4.3 CHF Disease Management

Geisinger is enhancing the Heart Failure program for Medicare patients with CHF, particularly those with chronic, but not end-stage, disease (Stage C). This program is combining educating and assisting patients with self-management (fluid management and self-monitoring) with daily monitoring of patients' clinical indicators. Candidate patients for this program will be identified on the basis of the all-Medicare patient survey, analysis of Geisinger's EHR for patients with CHF or other heart patients who have increased likelihood of readmission, and who met various positive test screen thresholds. Thresholds for frail elderly patients are set lower because of their increased other medical comorbidities. Initially, 300 patients were identified to contact for participation in this program. However, Geisinger is in the process of expanding the group to contact for participation to nearly 2,000 patients (out of the total of 29,000 Medicare patients).

4.4 Case Management

Geisinger is providing high intensity post-acute care management to Medicare beneficiaries with targeted conditions: heart failure, diabetes, COPD, anterior myocardial infarction, CAD, pneumonia, stroke, cancer, hospital-acquired infections, hip fracture, frail without social support. Geisinger has also identified beneficiaries with a history of at least two non-elective admissions in the past twelve months. Geisinger is assessing the reasons for these patients' previous hospitalizations and is providing moderate intensity case management to this population in order to address and reduce risk factors for a subsequent admission.

SECTION 5

PROVIDER PARTICIPATION AND RELATIONS

5.1 Provider Education

Prior to the start of the demonstration, physicians were notified about the demonstration through various electronic means, including e-mail and Geisinger's intranet. In addition, physicians were given information about the quality measures through various meetings and e-mails. Since Geisinger's physicians were already familiar with collecting quality measures, and receiving incentive payments based on quality measures, the demonstration was relatively well accepted by Geisinger physicians.

Geisinger's physicians' familiarity with the disease management programs and case managers in its health plan also eased the demonstration education process. Since physicians had already been working with the DM program case managers (who occasionally worked in the physicians' offices) for Geisinger Health Plan patients, the physicians were already familiar with the programs and staff Geisinger is using to implement the demonstration.

5.2 Provider Performance Support and Feedback

From the perspective of Geisinger's physicians, participating in the PGP Demonstration imposes some additional burdens. These include making sure to record, in pre-defined fields (e.g., blood pressure or HbA1c tests) or in free-text notes (e.g., foot exams), clinical measurements and whether tests have been administered and also encouragement to code "completely" when submitting bills. However, most of the burden to Geisinger of collecting the quality measures for the demonstration falls on the few demonstration implementation staff. The implementation staff use data recorded in the EHR to compute the quality measures, but some of the relevant data must be manually abstracted (i.e., not using software to automate the process) into the CMS quality data collection system. This is particularly time-consuming for information that must be derived from free-text notes. In addition, there are some parts of the Geisinger network that rely on non-Geisinger specialists—quality data for patients of these physicians must be extracted from their paper records.

As part of the incentives provided to physicians, they are given non-pecuniary incentives in the form of quality indicator reports for their subgroup (e.g., an office of primary care physicians). Although some financial incentives are tied to these measures, Geisinger leadership feels that physicians in individual subgroups can more effectively discipline poorly-performing physicians than can leadership using the quality measures. Physician-specific quality measures would be too noisy to be useful, and physicians in the subgroup can better assess quality performance using observable, but not necessarily measurable or verifiable, information.

5.3 Provider Compensation and Incentives

Prior to the PGP Demonstration, Geisinger had been using a financial incentive system for all physicians based on patient satisfaction, appointment accessibility and selected quality measures. The Geisinger physician incentive program is primarily focused on site-based (e.g., physicians practicing in a particular office) rather than individual incentives. The reasons are threefold. First, Geisinger management feels that most quality measures are more statistically

unreliable (very small sample sizes) if used on individual physicians rather than when multiple physicians' patients are grouped together. Second, site-based accountability encourages physician peers to identify, generalize, and adopt each other's "best practices." Third, it recognizes that process reliability is largely a function of "accountable systems" (e.g. EHR-based decision support) not just well trained physicians. Although Geisinger has some criticism about the thresholds for several of the measures, they feel the measures as a whole are generally sound. Initially, Geisinger is focusing on 11 measures. In the second and third years, this focus will be expanded to all 32 measures.

The incentive payments are relatively small (about three percent of total cash compensation), meant mostly as tangible recognition for maintaining and improving quality of care. Geisinger's current quality-based incentive compensation plan is based on meeting or exceeding the performance standards of all of its payers—including CMS. Of particular note is that, instead of recognizing component measures, the Geisinger incentive compensation plan requires that each of a physician's eligible patients receive all components of necessary care (i.e. an "all or none" methodology).

Any bonus payments received from the demonstration will first be used to cover any incremental administrative and operational costs associated with the demonstration. These initial startup and maintenance costs of the disease management programs are nontrivial, about two million dollars per year. Any surplus remaining once these costs are repaid to the system will be used to sustain or expand the most effective disease specific or population health programs.

SECTION 6

DEMONSTRATION QUALITY INDICATORS

6.1 Appropriateness

Although Geisinger had some criticisms about some of the measure thresholds, they feel the measures as a whole are generally sound. The three conditions targeted by the demonstration (diabetes, congestive heart failure, and coronary artery disease) make sense since these patients are quite costly to treat if their conditions are not managed properly. However, one potential drawback about the measures in general is that fixing the thresholds could result in measures that are somewhat at variance with best clinical practice. For example, they believe that the HbA1c threshold (greater than 9.0 percent indicating poor control) is “already out of date,” and they are in fact evaluating physicians on whether their patients have HbA1c levels less than or equal to 7.0 percent.

6.2 Improvement Strategy

Geisinger’s strategies for maintaining and improving their quality measures are fourfold. First, Geisinger has been collecting all 32 quality measures since the beginning of the demonstration and reporting some of the results back to the physicians. Geisinger leadership feels that these non-pecuniary incentives can be as effective as financial incentives in improving system-level performance. Second, Geisinger is tying performance on the PGP Demonstration quality measures to modest physician monetary incentives to provide additional recognition of the efforts of their physicians to improve quality. Third, Geisinger is expanding and creating disease/case management programs for Medicare FFS patients. The DM and CM programs provide an important extension to care provided by physicians in their offices and assist physicians with tracking their patients’ clinical status and utilization of health care services. Fourth, Geisinger is enhancing its EHR-based decision support capability (so as to make the care highly reliable and to increase/improve patient involvement). Geisinger feels that improving the infrastructure that physicians use to provide care is key to improving quality. The more easily and quickly physicians can access information on their patients, the more effectively they can use it.

6.3 Collection and Reporting

Geisinger is using its extensive EHR to collect the information needed to compute the quality measures. The physicians can input information on clinical data, test administration, etc., into the EHR, although some information (e.g., whether a foot exam was performed) can only be entered as free-form text, not in a pre-defined field. Also, if a patient receives services at a non-Geisinger physician or provider, those parts of the medical record must be scanned into the EHR. However, when the quality measures are computed, Geisinger demonstration implementation staff must manually abstract scanned or free-text data in order to complete the tabulation of the measures from the EHR. Geisinger has not yet created an application that can create all of the measures automatically from the EHR—part of the reason is that the EHR does not have pre-defined fields for tests such as foot exams.

For care provided by non-Geisinger physicians, the relevant sections of these medical records must be transmitted to the demonstration implementation staff, and the data in these records must all be extracted manually from hard copy.

SECTION 7 INFORMATION TECHNOLOGY

7.1 Strategy

Geisinger is using its extensive EHR to collect the information needed to compute the quality measures. Geisinger physicians can input information such as clinical data and test administration into the EHR, although some information can only be entered as free-form text, not in a pre-defined field. Although there are limitations to what is currently possible with its EHR (data from providers outside of the Geisinger network must be scanned in, severely limiting its searchability; and information cannot be transferred directly into the PGP Demonstration data collection tool but rather must be manually entered by demonstration staff). Also, Geisinger is continually making improvements that enable automatic generation of quality measures from the EHR.

Geisinger's EHR is also one of the pillars on which their disease management programs stand. The EHR lets disease management program staff easily identify potential patient clients in nearly real time. Also, the DM program staff can use the EHR to determine the course of their patients' disease.

Geisinger is not currently using the claims data from the NCH taps provided by RTI/CMS on a quarterly basis, and, if the content of these data do not change, they do not intend to put much effort into mining it. Although Geisinger sees value in the comprehensive nature of these data (the files contain data on potential control group members as well as potential assigned group members), Geisinger feels these files have serious limitations on their usefulness. First, these data are not sufficiently timely for use by their DM programs. Data lags on the order of one week might be tolerable, but not of two to three months—for a DM program to be effective, a patient must be enrolled as soon as possible (e.g., within a few days of a hospital discharge). Also, these data do not contain clinical measures (e.g., quality measure data), so their use in patient management and benchmarking is minimal. However, Geisinger might see value in quarterly summaries of these data—scarce resources wouldn't need to be put into working with the data, and the summaries would be sufficient for basic comparisons with likely non-assigned beneficiaries.

7.2 Systems and Initiatives

7.2.1 Geisinger's Electronic Health Record (EHR)

Geisinger's EHR enables all Geisinger physicians to run "paperless offices." The system contains all clinical, drug, lab, radiology, and consultant information for patients seen in the clinics. DM program case managers can also "push" notes (send alerts that appear in a highlighted area on the screen when the EHR is accessed) to physicians to alert them to their patients' needs and changes in their condition. The care coordinators also access the EHR to collect information on patients without having to burden the physicians' offices.

7.2.2 MyChart

Geisinger offers a novel service to its patients called MyChart. MyChart allows patients limited access to parts of their electronic medical record (EMR), aiding patients' self-management of their disease, particularly those with chronic conditions. This service is accessed via a secure web site, and patients can access it from any computer with Internet access. In addition to giving patients access to medical record information (including lab test results), patients can also renew prescriptions, make office appointments, and ask non-urgent questions of their physicians.

APPENDIX A
AGENDA FOR GEISINGER SITE VISIT

Site Visit Agenda for Geisinger Clinic
PGP Demonstration Evaluation by RTI

February 22, 2006

9:30–10:00 a.m.	Overview of the role of the site visit
10:00–11:00 a.m.	Presentation of PGP’s history, organization structure, and DP strategy
10:00 a.m.–12:00 p.m.	Discussion regarding associated reporting & data gathering systems
12:00–1:00 p.m.	Lunch
1:00–2:00 p.m.	Discussion regarding PGP’s efficiency-focused interventions
2:00–3:00 p.m.	Discussion regarding provider participation and incentives
3:00–4:00 p.m.	Discussion regarding PGP’s quality-focused interventions
4:00–4:30 p.m.	Wrap-up