Geisinger’s ProvenCare Methodology
Driving Performance Improvement Within a Shared Governance Structure

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Many performance improvement projects fail because they occur in parallel to the organization’s shared governance structure. Leveraging the full potential of its nursing shared governance structure, Geisinger Health System’s ProvenCare methodology harnessed the full potential of its staff nurses to create truly reliable workflows that benefit patients and that the team finds professionally satisfying. Using ProvenCare Perinatal and its smoking cessation education intervention and outcomes as an example, the authors describe the ProvenCare methodology.

Shared governance is the foundation of practice regarding nursing involvement in decision making of patient care delivery.1,2 The process promotes the engagement of nurses at all levels in the organization in decisions regarding practice or policy changes that impact patient care outcomes. It promotes the encul-turation of teamwork and evidence-based practice while leveraging nursing accountability toward successful outcomes for patient care.

Shared governance is a tenet of Geisinger Health System’s (GHS’s) ProvenCare (PC) structure and outcomes, an improvement methodology by which evidence-based medicine and current practice guidelines are embedded into the patient-clinician flow so the right care is delivered to each patient at every encounter.3 Unlike many healthcare-related performance improvement processes that function in parallel with the nursing shared governance model rather than truly embracing the power it creates, PC strives to create the most efficient processes that deliver high-quality care in a reliable manner by focusing on practice, education, and quality. A dedicated, multi-disciplinary team is needed to improve or redesign the process and ensure its sustainability. Engagement at the right time by nurses, physicians, midlevel providers, management, information technology, and other staff is critical to PC initiatives.

The Women’s Health Service Line developed a PC initiative for obstetrical patients, called PC Perinatal, where nurses and the nursing shared governance structure played an instrumental role throughout the process. Nurses from the clinic, advanced practice (AP) positions, midlevel management, service-line leadership roles, and information technology were all a part of the improvement team. PC Perinatal set out to redesign care processes such that unwarranted variation across obstetrical sites was eliminated, and efficient, patient-centered processes were implemented. Obstetrical care is offered at 22 clinic sites spanning nearly 200 miles east to west across rural Pennsylvania. Approximately 4,000 patients deliver each year at 4 hospitals, 2 of which are GHS tertiary care centers and 2 are non-GHS community hospitals.

Methodology
A collaborative communication model was developed to include frontline staff across all 22 clinic sites

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as well as external departments. This interdisciplinary model worked in a shared governance capacity, giving equal voice to frontline staff, nursing and administrative leadership, and representatives from the Division of Quality and Safety and Information Technology.

In alignment with our shared governance structure to involve direct care staff at all levels, the first step in the redesign process was to engage a process improvement team composed of nursing practice members with physicians (the PC team) to discuss actual practices occurring in the clinics. Going beyond what the policy and procedure manual states, the team was asked to describe actual workflows. Once trust in the intentions surrounding the discussion was achieved, the group effectively outlined both the best practices and the barriers driving workarounds and inconsistencies. Next, team members were sent to observe day-to-day functions in the various clinical settings. Direct observation provided clarification of the issues and identification of additional opportunities to eliminate waste and redundancy in the process. The information gathered was then combined to identify 3 predominant themes: identify the work, delineate roles, and support meaningful communication.

Identify the Work
During the preliminary discussions, the nursing team expressed frustration with their workflow at the initial prenatal visit: many intake questions were asked to each patient, and some information seemed to be of little utility. The nurses perceived that the entire team, including physicians, AP nurses and staff nurses, did not value the assessment performed. However, everyone described copious nursing notes presented in predominantly a text format that made it difficult to find clinical data or answers to regulatory questions. The PC team agreed to file the answers to the regulatory questions, code status, and history of falls in a flow sheet and organize standard assessment items in tables for ease of viewing. Furthermore, the team conducted a critical evaluation of the first prenatal visit interview questionnaire. If the data collected did not inform clinical decision making, the question was removed. The outcome was a condensed, concise nurse’s note composed of exclusively value adding information. Furthermore, it reinforced the shared governance value that direct care nurses have a voice in the process of change.

Delineate Roles
The team reviewed the best practice elements associated with both new and return prenatal visits and identified the appropriate team member for performing each component of care. Items identified as the nursing staff’s responsibility were built into their workflow under the advisement of the nursing practice members. Similarly, the physician and AP nurse’s workflows include the elements of care they are expected to address. The team members were educated on the processes of each member of the care team so that they had a clear understanding of the patient’s overall care plan. For instance, in the area of patient education, it was determined that the nursing team would be responsible for teaching patients how to correctly perform a “kick count” and when to notify the team of a concern. The physicians and AP nurses would be accountable for educating the patient regarding the risks and benefits associated with the influenza vaccine.

Support Meaningful Communication
Another solution the team developed was a methodology to link the workflows of the nurses with those of the physicians and AP nurses by presenting all of the pertinent positive responses and/or assessment findings identified by the nurse as a routine part of their workflow. With this system, all findings considered to be critical to the care of the patient could be identified, and notes made by the nurse would be presented automatically in the physician’s or AP nurse’s workflow. For example, if the nurse indicates that the patient reports a family history of thalassemia on the intake assessment, the response generates an electronic trigger to place the order for the appropriate laboratory tests. When the physician or AP nurse sees the patient, they will be automatically presented with the order for them to sign. The nurses expressed significant satisfaction knowing their work was contributing to the care of the patient, and the physicians and AP nurses were happy to receive the information in an actionable format.

A similar multidisciplinary team (PC education team) that included nursing education representation and physicians was given the task to list the patient education that was currently being performed, identify best practice in terms of both educational content and timing, and make suggestions regarding how to make that happen. Both the PC patient education and the healthcare delivery team education were developed by this team. Through shared governance of equal voice and responsibility, the workflow construction took shape, and standardized patient education became a reality across 22 obstetrics clinic sites, with different locations, cultures, and practices.

A subset of the practice and education teams, made up of physicians with AP and staff nurses representing those 22 sites met weekly to share the suggestions of the broader teams and to incorporate evidence- and guideline-based literature designing an inclusive draft workflow. A smaller subgroup
composed of 3 physicians and 4 nurses (including a nurse informaticist and a nursing administrative leader) met twice weekly with the computer programmer to work through the technical issues. The work products of both subgroups were then vetted through the larger PC team prior to adoption.

**Methodology Applied: Smoking Cessation**

One example of this methodology applied is that of smoking cessation education and intervention. This was part of a larger education focus where the PC team identified 21 essential patient education topics across the 3 trimesters of pregnancy. Four topics were to be addressed at every appointment: smoking cessation, medication review, domestic violence inquiry, and drug/alcohol review. The following illustrates the rewards of incorporating the shared governance structure into the improvement of smoking cessation education and intervention.

The PC team began the process by reviewing the literature related to smoking cessation in pregnancy. As evidence suggests, repeated brief intervention during pregnancy is most effective, the team reached consensus on a process that incorporated the 5 A’s Methodology at every prenatal visit. The 5 A’s (assess, advise, agree, assist, arrange) is a proven methodology first used in smoking cessation. This methodology provides a framework for physicians and nurses to develop a mutual understanding with the patient of the behavior change that is needed, establish goals, and together work on a realistic action plan. Once the team agreed on the best practice, the work to be completed was clear.

The next step in redesign was to understand the smoking cessation education currently executed at each of the 22 clinic sites. The PC education team explored the unique aspects and local nuances of each clinic. A core team of nurses was charged with developing a process that would be reliably performed each and every time. Consistent with the shared governance philosophy of decentralized decision making, nurses from each obstetrics clinic site were polled and asked for approval prior to moving ahead.

Frontline nurses were also encouraged to share barriers preventing them from providing the smoking cessation intervention with 100% reliability within their current process. Two common barriers surfaced: a lack of efficient documentation of each component and a lack of an efficient way to review intervention components completed at prior visits. Prior to the proven care flow, nurses were required to remember to exit the visit navigator during a patient’s appointment and enter information in the social history section of the electronic record, which was housed outside the workflow for that visit. The post PC workflow embedded the review and documentation into the encounter. Nurses would no longer need to remember to exit the workspace to review and document smoking cessation. Rather, the navigator guides the nurse through each section to be completed, facilitating a more reliable process.

The new workflow also facilitated a more efficient review of prior smoking cessation intervention education at the point of documentation. This was a key to successful execution of the 5 A’s model. The intervention requires the nurse to build on the previous appointment's smoking cessation intervention. The pre-PC model required the nurses to document in a text format and was mixed in with other social information. The frontline nurses presented this documentation as a barrier to efficiently and accurately understand what had occurred and what needed to be done moving forward. The new documentation uses radio buttons, facilitating quick documentation. The new module also displays the radio buttons in a consistent location in the record, allowing nurses to quickly ascertain where the patient is on the continuum of care.

Beta testing of the new smoking cessation workflow was completed with frontline staff, and no technical flaws surfaced. An implementation plan was developed by the core nursing education team that included Just-in-Time education for every physician and AP and staff nurse. On the day of “go-live” implementation, on-site experts were available to troubleshoot functionality problems and coach team members with the new process.

**Measurement**

Cycle time for the initial prenatal intake visit decreased for most clinic sites (Figure 1). Our largest site had an average reduction of 13 minutes from each intake visit, whereas some of the smaller sites realized a 30-minute average reduction in cycle time. A few sites experienced no reduction, or in some cases an increase, in length of cycle time. Further review into these situations demonstrated that a more reliable, comprehensive process was consistently being followed after implementation.

One clinic hired a new physician immediately after implementation. The workflow improved to such an extent that current nursing staff were able to accommodate the new provider with only a slight increase in the cycle time. Nurses at another site commented on how much extra time they were able to spend educating the patient because the workflow was more efficient.

Specific to smoking cessation education, reliability data are tracked indicating whether each component
of the assessment and intervention was completed at each clinic visit. The all-or-none measure is tracked as well as individual opportunities for all visits (the total of individual components). As a baseline, 20 charts were randomly pulled and reviewed for documentation of smoking cessation. Although this number is too small to test for statistical significance, 20 charts provide sufficient baseline for reliability purposes. Our baseline data indicated that 6 of the 20 patients were smokers. The all-or-none measure for each patient encounter was 32.4% (11/34), and the total percentage of opportunities was 43.4% (53/122) at baseline.

After implementation, 492 patient charts were reviewed, 85 of which were documented smokers. There were 613 clinic visits for the 85 smokers and a total of 2,400 total opportunities to document compliance to the smoking cessation intervention. The all-or-none measure for each encounter was 89.9% (551/613) and 97.1% (2,331/2,400) compliance for total number of opportunities (Table 1).

Surveys assessing staff satisfaction were also conducted before and after implementation. These surveys were sent to all clinicians (nurses, midlevel providers, and physicians) and assessed the entire PC initiative, not just the education components. The ease of workflow and ease of documentation increased after implementation (Figures 2 and 3).

### Conclusion

The GHS PC methodology is a multidisciplinary process improvement framework structured to not merely coexist beside, but to respect, support and encourage the nursing shared governance process. Through successful inclusion of the shared governance committees, the nurses were highly engaged in the improvement process and incorporated best practices in a manner that facilitated the desired behavior becoming the default. They developed care processes that identified the work to be done and who was responsible to

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<th>Table 1. Smoking Cessation Intervention Compliance</th>
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<td><strong>Best Practice Measures and/or Process Steps</strong></td>
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<td>Smoking cessation intervention—all components of intervention documentedc</td>
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<td>Smoking cessation intervention (no. of individual opportunities documented)d</td>
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*Pre-PC patients delivered prior to April 2009.
bPostimplementation patients delivered from April 2009 to Feb 2010.
cFor each visit a smoker attended, were all components of smoking cessation addressed?
dThe total number of discrete opportunities that make up the smoking cessation intervention. There are 4 components for the first visit and 3 components for each follow-up visit.

Figure 1. Cycle time difference for first prenatal clinic visits, before and after PC.
perform it and clearly communicated where the patient is on the continuum of care at all times.

Performance improvement work can be successfully incorporated into the nursing shared governance model. Because the PC Perinatal initiative embraced the philosophy and structure of the shared governance environment currently in place in Geisinger, the output addressed the observations and preferences of the professional nurses. The benefits of creating such a model include sustainable practice improvements, staff satisfaction, and further elevation of the professional practice model.

References