Vol. 1, No. 1, 2014

JOURNAL of MANAGED CARE NURSING

Educating Nurses in Case, Utilization and Quality Management

THE OFFICIAL JOURNAL OF
THE AMERICAN ASSOCIATION OF MANAGED CARE NURSES

JMCN

JOURNAL OF
MANAGED CARE NURSING

4435 Waterfront Drive, Suite 101
Glen Allen, VA 23060

EDITOR-IN-CHIEF
Jacquelyn Smith

PUBLISHER
Katie Eads

DIRECTOR OF COMMUNICATIONS
Jeremy Williams

JOURNAL MANAGEMENT
American Association of
Managed Care Nurses
4435 Waterfront Drive, Suite 101
Glen Allen, VA 23060
(804) 527-1905
fax(804) 747-5316

MANAGING EDITOR
Lauren Skrobacz
lskrobacz@aamcn.org

GRAPHIC DESIGN
Jeremy Williams
jwilliams@aamcn.org

The Journal of Managed Care Medicine is published by Association Services Inc. Corporate and Circulation offices: 4435 Waterfront Drive, Suite 101, Glen Allen, VA 23060; Tel (804) 527-1905; Fax (804) 527-1905. Advertising Offices: Lauren Skrobacz, 4435 Waterfront Drive, Suite 101, Glen Allen, VA 23060 lskrobacz@aamcn.org; Tel (804) 747-9698.

Journal of Managed Care Nursing

The Official Journal of the
AMERICAN ASSOCIATION OF MANAGED CARE NURSES

A Peer-Reviewed Publication Vol. 1, No. 1, 2014

TABLE OF CONTENTS

Transition to eMeasures

Barbara Doyle, MSN

Summary

Electronic measures (eMeasures) are standardized performance measures in an electronic format; they help to ensure that measures are consistently defined and implemented, thereby promoting higher quality and more appropriate care delivery for safer, more affordable, and better coordinated care. The transition to eMeasures will take years, and during that transition period, the quality abstractor role will be a hybrid. Abstraction will still be required for measures not yet defined as an eMeasure, but quality teams will have growing responsibility to proactively intervene with clinical teams for inpatients that qualify for eMeasures reporting.

Key Points

- The transition to electronic measures will take several years
- eMeasures promote higher quality and more appropriate care delivery for safer, more affordable, and better coordinated care

QUALITY MEASURES ARE TRANSITIONING FROM PURE manual data abstraction to electronic data collection and calculation. Electronic measures (eMeasures) are standardized performance measures in an electronic format; they help to ensure that measures are consistently defined and implemented, thereby promoting higher quality and more appropriate care delivery for safer, more affordable, and better coordinated care[1].

The onus of measure data collection and calculations is transitioning from dedicated Core Measures products -- where an end user enters data manually collected from a paper chart -- to now having data captured in certified electronic health record technology (CEHRT). The CEHRT then calculates the measure based on data contained discretely within the CEHRT itself. The new "eMeasures," or electronic clinical quality measures (eCQMS), are often labeled with the same names and with the same intent to track improvement for specific disease groups. However, they have inherent differences in data definitions, calculations, inclusions, and exclusions. Consequently, results for what is apparently the same measure will change, and remediation to reconcile and manage the differences will be necessary.

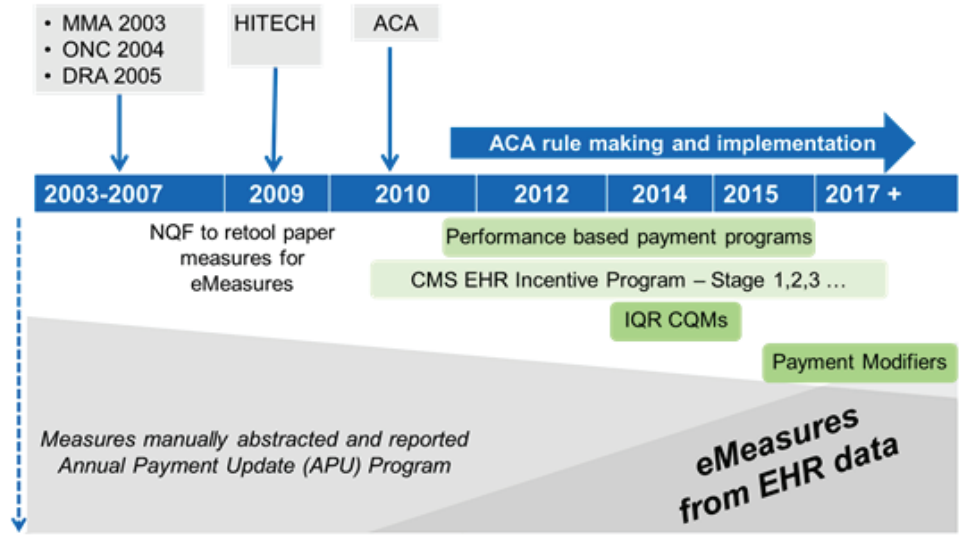
The transition to eMeasures will take years, and during that transition period, the quality abstractor role will be a hybrid. Abstraction will still be required for measures not yet defined as an eMeasure, but quality teams will have growing responsibility to proactively intervene with clinical teams for inpatients that qualify for eMeasures reporting. This will ensure that all expected care has been delivered and appropriately documented in the CEHRT. Interdisciplinary teams will have to work together to ensure that quality measures documentation is embedded in the workflow of CEHRT documentation.

In 2001, the Center for Medicare and Medicaid Services (CMS) worked with The Joint Commission (TJC) to align measure specifications for measures common to both organizations in their 7th Scope of Work[2]. By 2003, CMS and TJC began working to completely align common measures so that they would be identical, which led to the National Hospital Inpatient Quality Measures (NHIQM) used by both organizations[3].

As the need for continued measures alignment and standardization grew beyond just NHIQM, the National Quality Forum (NQF) contracted with the Department of Health and Human Services (HHS) in 2010 to provide a consensus-based entity to prioritize, endorse, and maintain valid quality performance measures. The project was intended to more closely align performance-measure development and endorsement as well as to serve as a bridge to measure applications to meet the goals of the National Quality Strategy, including NHIQM measures. The presence of a single governing body to endorse all measures continued to drive alignment across different measurement organizations[4].

In 2011, to support implementation of the Health Information Technology for Economic and Clinical Health (HITECH) Act, the HHS again reached out to the NQF to "retool" 113 quality measures for eligible providers from a paper-based (i.e., abstracted) format to an eMeasure[5] format. Retooled measures allow clinical data to be captured routinely during patient-care documentation, reducing ambiguity within measures and enabling the implementation of clinical decision support to improve care. In July 2010, 44

Exhibit 1: Progression of Healthcare Changes Starting with the Medicare Modernization Action



© Encore Health Resources

of these 113 measures were published in the Centers for Medicare and Medicaid Services' (CMS) Electronic Health Record (EHR) Incentive Program Final Rule. Many of these measures have been updated or revised in anticipation of Meaningful Use Stage 2 (MU2).[6]

With the Affordable Care Act (ACA) in 2013, the focus of healthcare reimbursement has shifted away from fee-for-service and to fee-for-value, where reimbursement is shifting from the volume of services performed to demonstrating improvements and value in patient care provided. Performance in quality measures is increasingly used to identify improvements through the CMS value-based purchasing program, where payment is tied directly to value proven by quality measures performance.[7]

Eligible hospitals must submit sixteen clinical quality measures via an electronic format as one of the requirements to achieve CMS EHR Incentive Program requirements for Meaningful Use in 2014 and beyond. These eMeasures can be used to meet conditions for both Meaningful Use and Inpatient Quality Reporting (IQR) if hospitals opt to submit their IQR data electronically.

Exhibit 1 above shows the progression of healthcare changes starting with the Medicare Modernization Action (MMA) in 2003 that expanded prescription drug coverage for seniors; the establishment of the Office of the National Coordinator (ONC) in 2004 to coordinate national efforts related to healthcare technology; and the Deficit Reduction Act (DRA) in 2005, allowing states to pursue innovative ideas in healthcare. It illustrates the progression to the current state and beyond as well as the interplay of national healthcare programs and the growing use of eMeasures, with overlap to manually abstracted measures.

To analyze and report eCQMS from a certified electronic health record technology, electronic specifications must be developed in such a way that the data elements, logic, and definitions for that measure are in a format that can be captured and stored in the EHR, This allows the data to be analyzed and shared electronically with other entities in a structured, standardized format.

When comparing the data collection and calculations between manually abstracted quality measures and eCQMs, a number of thematic differences emerged whereby the spirit of the measure is maintained but the exact data sources and calculations are different.

A study conducted by the American Hospital Association (AHA) evaluated four hospitals, each with significant experience with EHRs, and their experiences with implementation of the Medicare Electronic Health Record Incentive Program's Meaningful Use Stage 1 eCQMs. Although committed to the implementation of eCQMs as part of their overall quality improvement goals, they found that eCQM results were often underreported and "inaccurate" [8].

The transition to eMeasures will ultimately allow members of Quality departments to move away from dedicated chart abstraction and enable them to proactively intervene with clinicians, ensuring that all proper care is delivered and documented during inpatient stays to help improve patient outcomes. But the transition must be well planned across the organization.

While designing eCQM data capture, facilities will either have to design clinical documentation – especially physician documentation – so that all eCQM data is captured. This must be accomplished hand-in-hand with physician champions. It is estimated that facilities will contribute about 80% of the effort to update clinical workflows against 20% effort from the CEHRT vendors to support eCQM data capture[9]. An easy workflow solution may seem to be to "make the documentation required," or "create an alert," or "make it so the clinical provider can't do any more in the chart until 'x' is documented." The reality will be different: implementing required fields and hard stops during CEHRT workflow will impair usability for the clinical providers and their satisfaction. Many facilities are feeling that pain now with "alert fatigue."

Facilities should create an interdisciplinary team that includes

Exhibit 2: Thematic differences: Manual abstracted measures and eCQMs

Theme	Manually Abstracted Quality Measures	eCQM
Data Source	Manual data collection from different areas of documentation in patient chart	Data captured from documentation in EHR
eCQM Exclusions	Similar to "Group X – Case will be rejected"	Conditions that exclude patient from all calculations
eCQM Exceptions	Similar to "Group B – not in measure population"	Conditions that will remove a patient from the denominator only if the numerator criteria are not met
Calculations	Algorithm calculated in Core Measures product	Algorithm calculated in CEHRT
Data capture	Historical from discharged patients	Real Time
Population	Sampling takes place	No sampling
Reporting	Publicly reported on Hospital Compare	Timing unknown if/when these measures will go to Hospital

the Quality team, physicians, nursing, and the Informatics team responsible for EHR implementation to plan and develop required documentation. Sometimes an alert or required field will be the right solution, while at other times it may be education or a check-and-balance workflow. For example, the CEHRT may be set up to send alerts to the Quality team when certain items are not documented, and the Quality team can then intervene with the Clinical team to ensure that everything has been done for the patient during his/her stay to meet measure requirements.

Lastly, as facilities migrate from manual abstraction to eMeasures, measure results will change. There are inherent differences between how the measure algorithms are defined and calculated, and sampling is no longer required, Therefore results will be different. Stakeholders within facilities will have to be aware that results could improve, but they must also recognize that results could drop if all information is not documented within the system. If facilities use Core Measures results to track improvements or drive incentive programs, then their baselines will have to be recalculated as they transition to eMeasures.

CMS has stated that they "will make electronically reported data public on Hospital Compare if we deem that the data are accurate enough to be publically reported." Hospitals should be prepared that eMeasures will be publicly reported at some point in the future -- but that it likely will not be before FY 2016.

eMeasures will continue to grow, and they will likely replace manually collected quality measures as they promote standardization and consistency of measurement. This transition will take years to complete, allowing Quality Departments to adequately prepare and transition their roles and processes to better support pro-active patient intervention and improved patient care.

Barbara Doyle, MSN is a Senior Consultant at Encore Health Resources.

References

1. eMeasures Fact Sheet (December 2011). National Quality Forum.
2. The Joint Commission Website/Core Measure Sets: http://www.jointcommission.org/core_measure_sets.aspx
3. The Joint Commission Website/Core Measure Sets: http://www.jointcommission.org/core_measure_sets.aspx
4. Measure Development & Endorsement Agenda Project. (January 2011) National Quality Forum.
5. National Quality Forum website/Electronic Quality Measures (eMeasures): http://www.qualityforum.org/Projects/e-g/eMeasures/Electronic_Quality_Measures.aspx
6. National Quality Forum website/Electronic Quality Measures (eMeasures): http://www.qualityforum.org/Projects/e-g/eMeasures/Electronic_Quality_Measures.aspx
7. CMS.gov website/Hospital Quality Initiative/Hospital Value-based Purchasing program: http://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/HospitalQualityInits/index.html?redirect=/HospitalQUALITYINITS/30_HOSPITALHCAHPS.ASP
8. Eisenberg, F et al. (2013)A Study of the Impact of Meaningful Use Clinical Quality Measures. American Hospital Association and iparsimony, LLC. http://www.aha.org/content/13/13ehrchallenges-report.pdf
9. Eisenberg, F et al. (2013)A Study of the Impact of Meaningful Use Clinical Quality Measures. American Hospital Association and iparsimony, LLC. http://www.aha.org/content/13/13ehrchallenges-report.pdf

Selecting a New Medical Management Software

Deborah Keller, RN, BSN

Summary

In order to offer effective medical management programs, case managers need to be aware of key health care trends, features, and functions. It is difficult to keep up with the expanding symbiotic interface between technology and care management workflow processes, but it is essential to try to do so. This article will examine the steps involved to make an informed medical management software purchase for your organization

Key Points

- Identifying the need for a new system—the Gap Analysis
- Finding available systems—the RFP or RFI
- Product Demonstration
- Cost Negotiation

SELECTING A MEDICAL MANAGEMENT SOFTWARE SYSTEM is not simple. Evolving healthcare trends coupled with a slew of new features and functions to consider can overwhelm anyone charged with the task. Case managers typically have not been involved in the selection process, but that seems to be changing as organizations realize the input of a case manager can be useful when it comes to selecting the most effective and efficient system.

Case managers who do get this opportunity can be prepared by staying up-to-date on the latest healthcare trends and technology that impact medical management functionality. While it is difficult to keep up with the expanding symbiotic interface between technology and care management workflow processes, case managers must understand how technology solutions can improve processes and patient outcomes.

Do You Need a New System?

Identifying the need for a new medical management software system is often the easiest step in the implementation process for clinical leadership.

Gap analysis is a useful way to compare your organization's current situation with its future goals resulting from new software. Conducting a gap analysis allows a company to re-examine goals and determine whether it is heading in the right direction. This entails listing factors that define the current state, outlining the factors required to reach the target state, and then determining how to fill the "gaps" between the two states.[1]

Clinical leaders use a gap analysis to clearly document the existing current workflow processes and system capabilities, as well as desired processes and capabilities. Examples of "gaps" are the need for increased human resources, regulatory noncompliance, and fragmentary data collection to sustain the current state versus the potential gains of moving to a desired state with a new system.

Finding Available Systems

The next step after deciding to pursue a new medical management software system is the Request for Information (RFI) or a Request for Proposal (RFP) process, which is often produced and managed by an internal or contracted project manager.

An RFI generally includes an overview of the organization seeking the new system, a high-level description of the system needs, and a series of questions to gather details of a vendor's system capabilities. The RFP, however, is typically more extensive and includes all of the above, but in more intensive terms. The RFP often provides a detailed outline of the processes vendors must follow in order to be considered.

In terms of distribution, the RFI is often sent to several vendors while the RFP is distributed after the field of vendors has been preliminarily researched and narrowed down. Upon receiving the responses to the RFI or RFP, the organization will score the vendors' responses to determine which software products best suit their needs.

Product Demonstration

Vendors who successfully respond to the RFI or RFP are typically contacted to provide the organization a software demonstration. The demonstrations are often first executed via a web confer-

ence to further narrow down the choice of vendors. The top two or three are then invited to provide an on-site demonstration.

It's important to understand that vendors have a preferred method of demonstrating their product that highlights the product's strengths while masking the deficiencies. Therefore, those involved in selecting a system should outline for the vendor exactly what workflows they wish to see rather than allowing the vendor to "drive" the demonstration. Written scenarios are useful tools for viewing and comparing the same functionality from multiple vendors.

When it comes to the demonstration, it is important to assemble a group of people from all areas of the organization to evaluate and select the technology. The team should not only include case managers who will be utilizing the product, but also team members from the information technology department, a product marketing representative who understands the service agreement with customers, and also someone who understands the legal/security aspects of the decision to ensure compliance with industry and government regulations.[2]

Cost Negotiation

Once the organization has narrowed the system options down to the top choices, cost becomes a critical factor. Understanding the various charges and how they may be structured is paramount to a successful negotiated price. These costs can include implementation fees, annual licensing costs, and clinical content fees, upgrade fees, and support fees.

The cost comparison between vendors is likely to vary, as vendors structure fees in a variety of ways. A five-year cost analysis is recommended for comparison from vendor to vendor as this approach provides an even playing field in which implementation, support and upgrade costs may be covered in the vendors' pricing structure.

According to Thomas (2011), "When you choose a vendor, review the contract carefully to make sure it contains details on how the company will install the technology, train your staff, and provide support. If possible, negotiate an incremental payment plan with the product vendor to ensure that it provides what is promised in a timely manner."[2]

The Implementation

The implementation phase for a new medical management software system is central to realizing all of the positive goals outlined in the gap analysis. This is when the crystallization of requirements occurs. The clinical leader must have a clear vision of how they want the new software to support their business.

At the most basic level, written workflows should be developed to provide specific direction for the implementation project team. It is better to have project timeline delays while workflows are being planned, than to begin system configuration prematurely and end the project with poorly implemented workflows.

In addition to clearly defined workflows, the clinical leader should perform an honest assessment of available resources for the implementation. All too often, the resources required for an implementation are underestimated and, as a result, the implementation process can be significantly delayed, not to mention frustrating.

Training and Follow-Up

Regardless of how well a system is configured, user training is a must. Adequate training on the new system prevents pitfalls such as poor buy-in, data entry errors, and staff turnover. The clinical leader needs to work with the project manager to identify adequate training space, work with the vendor in the development of training materials, and manage coverage of trainees' daily work to achieve successful training.

After the system has been in use for about three months, the clinical leader should conduct a follow-up gap analysis. This is the time to assess if the system workflows are working as envisioned and then correct areas where they are not. It is also a good time to assess the effectiveness of staff training and to reengage the vendor for potential use of more sophisticated system functionality.

Summary

It's no secret that procuring and successfully implementing a medical management software system is a daunting task. There isn't a shortage of anecdotal tales of epic failures to wondrous successes all rife with challenges. The reality is that with a clear understanding of the process, a successful implementation is attainable.

A successful medical management system is dependent upon choosing the correct system, of course, but also the stewardship of the clinical leader involved in the process. In this new age of technology transformation, monitoring trends is more important than ever. That way, when you get a chance to provide input into the types of systems, features, and functions that are needed for your organization, you will be able to provide sound, innovative suggestions. If you aren't sure a product or feature is available, ask. Put together a "wish list" and make sure the vendor can provide your key, essential functionality or keep looking until you find someone that can.

Deborah Keller, RN, BSN is the Director of Client Services at TCS Healthcare Technologies.

References

1 Gap Analysis. Available at: http://www.investopedia.com/terms/g/gap-analysis.asp. Accessed January 3, 2014.

2 Thomas, MB & Dickinson, JD. Technology is changing the practice of case management. Case Management Advisor. 2011; 22(6): 61-72. Available at: http://connect.curaspan.com/sites/default/files/in_the_news/Technology_is_Changing_the_Practice_of_Case_Management.pdf

Use of Lean Six Sigma in Managed Care to Promote Quality and Collaboration

Janet Treadwell, RN, MSN, PhD, CMCN, CPHQ, CCM, ACM

Summary

Use of Lean Six Sigma, proven effective in improving processes in health care operations, can be a tool for managed care nurses to improve interprofessional collaboration within medical homes and facilitate improvement in patient outcomes. Sharing methodologies of using a team and Lean Six Sigma for quality improvements is supported by literature and well utilizes the skills of a managed care nurse, leaving practices with a sustainable model to address improvement. This article addresses a review of the literature as well as the experience of medical home Six Sigma implementation by managed care nurses from one health plan.

Key Point

- Opportunities for managed care entities to engage practices using Six Sigma has the potential to share knowledge and best practice with medical homes, demonstrating partnership and value to key network providers.

THE AFFORDABLE CARE ACT SPECIFIES A NEED FOR collaborative improvements and emphasizes the healthcare organizations call to decrease cost while balancing issues of quality and access.[1] Interprofessional collaboration, shown to impact quality and financial outcomes, underpins change in healthcare teams.[2] The Institute of Medicine Report, The Future of Nursing, promotes interprofessional collaboration giving nursing a call to action to "expand opportunities for nurses to lead and diffuse collaborative improvement efforts."[3] Managed care nurses are well positioned to initiate collaboration with network providers through case management, quality, and educational initiatives. Managed care nurses, due to their broad knowledge base and trusted profession, are well equipped to share best practices with network providers in a manner that facilitates adoption and improvement. Lean Six Sigma is one vehicle to use when desiring to change processes to maximize satisfaction, cost, quality, speed, and economic return.[4] Lean Six Sigma application in healthcare uses the synergy of role collaboration to gain efficiencies in programs and strategies to improve health service delivery.

This article presents a synthesis of literature and correlation to themes emanating from a focus group and survey of managed care nurses who utilized a Lean Six Sigma methodology in medical homes, enhancing interprofessional collaboration and achieving improved quality outcomes.

Questions guiding the review process were:

1) What are Lean Six Sigma conditional factors that improve healthcare collaboration?

2) Is there a difference in the practice of managed care nurses subsequent to engagement in a Lean Six Sigma project that positively impacts interprofessional collaboration?

The term interprofessional collaboration (IPC) refers to interaction occurring when two or more disciplines focus on achieving improvements in patient-centered clinical and financial outcomes through a practice model of mutual respect, accountability, clear communication and shared problem solving. The term Lean Six Sigma, as presented in this article includes development of a performance improvement infrastructure to reduce unneeded time/actions between value-producing steps resulting in quality improvements.[4] A Lean Six Sigma green belt project is one where an individual uses Lean Six Sigma tools and leads a project through delivery of statistically significant outcomes.

Theory supporting this intervention comes from the caring science theory of Dr. Jean Watson. In her theory, Dr. Watson posits the need for disparate professions to honor what each profession brings to the collective process of health care delivery.[5] Dr. Watson sees an importance of practitioner-practitioner relationships in the areas of knowledge, skills, and values. Watson additionally suggests that a team needs to "work together to promote harmony and healing among themselves" to function most effectively.[6]

Method

A review of current literature using the search terms of 'nursing, 'Lean Six Sigma,' and 'managed care,' was conducted from 1/09-1/13 using CINAHL Plus with Full Text and retrieved nine pertinent articles. Inserting the term 'managed care' did not yield results. A request of articles from the database of HealthSource

Nursing/Academic yielded six articles. An additional article was obtained using the source of Health Reference Center Academic. Seven of those were removed as duplicates or because they did not meet the study focus of Six Sigma project review. Two additional articles obtained through ancestry methods met the study focus. Eleven articles from the science comprised the review. No identified articles addressed managed care application of Six Sigma.

Additional investigation methods employed were survey and focus group. Nurses from one managed care entity who had completed a Lean Six Sigma project within medical home sites and achieved green belt status were the target for both investigative methods. From ten randomly selected participants, eight professionals responded to a survey. The survey was an anonymous tool sent through an e-mail link to participants requesting reply within one week of receipt. A group of ten nurses, five of which were not included in the request for email survey completion, received invitation to a focus group. Eight managed care nurses agreed to participate and discuss their Lean Six Sigma green belt experience.

Exploration of the Literature

The eleven articles reviewed were all hospital-based examples of nurses using Lean Six Sigma methods. Three of the articles were from outside of the United States. Aims of the articles ranged on topic and focus. Reduction of negative outcomes risk was the project focus of two articles.[7,8] Granger et al[9] concentrated on developing teams to shape transformational culture while other research looked at restructure of teams to produce change and cost savings.[10] Johnson and Capasso,[11] as well as Burmahl[12] used interprofessional collaboration to impact effective discharge planning processes. Additional aims included implementation of best practice processes, departmental workflow interdependence improvement, and cycle time improvement.[13,14,15,16,17] In each instance, nurses were involved as members of the interprofessional team.

Johnson and Capasso remark in their article that efforts to create an improved discharge process required collaboration of internal and external team members from physicians, nurses and case managers to ambulance drivers, outpatient physical therapists, and skilled nursing facility staff.[12] Hwang et al. who attempted an intervention at two distinct facilities found that the success of one organization over another was due to the team variables and communication/training.[16] Likewise, three of the research articles found Six Sigma improvement occurred when they opened their team to additional roles to improve shared decision making.[18, 9, 8, 17]

Burmahl confronted the situation more specifically by describing the Lean Six Sigma process as "breaking down silos" using both promotion of knowledge and communication.[13] Taking that idea of broad teams a step further was the hospital who fostered culture adoption of teams and change by extensive green belt training producing a Lean Six Sigma project result for each staff member undergoing in the program.[15] The logic of involving those who 'do' the work in the collaboration, was also brought out as an important feature in the Lean Six Sigma project for knowledge spread and change adoption.[14]

Medical Home Projects

Managed care nurses conducting embedded care coordination received instruction on Lean Six Sigma tools and methods. Each nurse worked with team members from the medical home to select a project for application of these newly acquired skills. Utilizing medical homes as sites for improvement projects was purposeful as medical homes are a core component of the Affordable Care Act and primary care practices seeking certification as medical homes must engage in quality improvements as a component of that designation. The certified medical home designation is seen as valuable to network practitioners as well as the managed care organization. There was also a recognized need to involve roles across the medical home in working together for a common goal to promote interprofessional collaboration. Project topics ranged from use of asthma action plans, counseling efforts on nutrition and activity, use of special healthcare needs screening, and guideline adherence in patients with a diagnosis of attention deficit hyperactivity disorder. Identification of project champions and involvement of content experts involving all roles within the practice was included. Use of team involvement throughout the structured Define-Measure-Analyze-Implement-Control process occurred across sites using the synergy of interprofessional collaboration. The nurses used a baseline measurement, compared to post intervention data to apply analytics. Statistical significance in the change was a final requirement of the process for the nurses to achieve green belt status.

Survey

Subsequent to completion of the projects, a survey was developed for use with the nurses including questions aimed at understanding the practice benefit of Lean Six Sigma training and project use within primary care medical home practices. Content related to organizational culture and practice changes subsequent to Lean Six Sigma training and project completion in a medical home. Ten managed care nurses, randomly selected from a pool of twenty-five individuals completing the lean Six Sigma greenbelt training, received an email survey invitation. The survey purpose was to gain an understanding of the impact of the Lean Six Sigma green belt training on the nurses' practice. Eight of the individuals emailed a one-time response to the request to complete the anonymous survey of ten online questions:

1. Prior to taking the greenbelt course did you approach issues/ change in a systematic manner? Yes/No Describe.
2. How many roles (job titles) were included in your greenbelt project?
3. What advantages or disadvantages did you find in using a team approach to solve your greenbelt problem?
4. Did the green belt elevator speech help you communicate your project goal effectively with others? Yes/No
5. Did you use a process of shared decision making in your greenbelt project? Describe.
6. The greenbelt process helped to strengthen trust between members on the team. True/False.
7. During the greenbelt process did you learn more about the roles of others of which you were previously unaware? Yes/No
8. An accurate summary statement would be: The process did not work; the process was awkward but we made progress; accountability for team change occurred for most roles; people became engaged in their tasks.
9. As a result of the greenbelt process did you perceive the relationships improvde within the medical home? Yes/No

10. Give an example of a change in your professional practice since your greenbelt.

Survey Results

Survey results, tabulated by the online survey application, indicated complete responses for the eight nurses taking the survey. The majority, 75% of survey respondents, indicated that prior to the green belt course they did not approach change in a systematic manner. Three respondents had four roles on their Lean Six Sigma (LSS) teams in medical homes and three included five roles. Two projects benefitted from involvement of three roles. The requirement to develop a succinct verbal message to communicate the project was effective for 80% of the nurses. All respondents used shared decision making in their projects. Eighty six percent of respondents indicated trust between team members improved during the intervention.

Five of the eight respondents indicated they learned more about the roles of others through the LSS project. One individual had no issues at all and obtained full engagement and one individual found the LSS process to be awkward but achieved progress. Six individuals indicated that accountability for change occurred for most roles.

Advantages of using the LSS process offered by respondents included the "ability to brainstorm with team members." One respondent noted, "If team players have input you will get them to buy-in quicker." Similar advantages expressed were "team involvement was critical," and "using team members involved at different staff levels helped develop." "Knowing the voice of the customer" and "building support for the process change as well as the absence of departmental barriers" completed the advantage listing. The most significant disadvantage of using a collaborative team process across all respondents was finding time to meet with the team. Other disadvantages mentioned were people "wanting to make changes before the systematic process was complete" and team members "drawing quick conclusions."

All but one individual found an outcome of the LSS training to be improved relationships across team members. Examples of changes in practice subsequent to the LSS training were:

1. I now know ways to approach eliminating waste.
2. I know that I now must champion continuously. It is never over.
3. Focus on causes not symptoms and explain your rationale to the team.
4. I am more comfortable in researching causes and creatively approaching solutions
5. I have more confidence in identifying the true problem and solving.
6. I now have skills to coach others to find an approach.
7. I now focus on the process and team solutions.
8. The lean process gives me clear steps to result in better outcomes.

Focus Group

A focus group of eight managed care nurses convened to discuss the green belt process experience in medical homes. Three pre-developed topics opened the meeting:

1) Describe any changes in your practice since your LSS green belt.
2) Describe the level of role understanding during your LSS green belt project and how it impacted the process.
3) Discuss thoughts on communication flow across roles as a factor of project success and sustainability.

The nursing professionals were verbal in their ideas and reactions of changes in their practice. "Knowledge gain" of LSS processes and analytic methods gave an increase in confidence with their practice. Discussion on the benefit of using a defined process to lead people through change in a systematic manner and focus on decreased variation around a shared goal occurred. Comments of "the focus of decreased variation and clarified the whole project for my group," and "now I look at an issue and immediately think of stakeholders and efficiencies and who needs to be on my work team where before I just saw more work" indicate a change in professional outlook.

One nurse explained the level of role understanding as her largest learning curve. The nurse said it was "A pivotal moment for my group when we understood each other's roles." The response to the comment by another participant stated, "I didn't know how it fit together before" and a third opinion of, "I wasn't aware the needs of others being ignored made such a barrier." The projects had resulted in the deliberate collaborative shown to improve efficiency in healthcare. Another participant summed it up by, "We needed to improve our listening skills and our analytic skills." These comments were indicative of the general conversation comparing communication to collaboration pointing out information given without information being exchanged was not helpful to" reaching team goals with ownership."

All of the focus group attendees saw communication and respect across roles as the key to success of any project. During the discussion, nurses revealed that each team had a physician and a nurse on board but the other participants varied in the groups. "The assumptions just need to stop" was the comment of one nurse explaining how she had misjudged an office receptionist as being a roadblock. Participants agreed the projects increased communication and raised the staff perception they could "talk to the physician about ideas on quality." "You should have seen the eyes of the MA's (medical assistants) when they found out the doctor listened to their opinions of why the plans weren't working" was one comment, followed by "that was when things really started moving!" Two other nurses had stories of office staff empowerment as the shared decision making improved communication between physicians and other team members. One nurse expressed external collaboration as difficult to maintain because of changes in staffing. There was an overall expression that, with appropriate planning, the implementations would be sustainable.

Data Synthesis

Correlating themes emerged across literature review, survey and focus group including:
1. Communication to provide clarity and inclusion
2. Shared decision making across roles
3. Collaboration as a culture of practice
4. Promotion of understanding across roles

The literature described communication as essential in supporting and facilitating education.[14] Johnson and Capasso agreed that communication was the core support across all roles to facilitate transformative change.[12] Real time communication, advantaging technologies and expertise, clarified accountabilities according to Hwang et al.[16] The theme of clear communication carried over into the survey and focus group results seen as comments on developing a clear 'el-

evator' speech to convey goals, communication through components of perceptions, and an equal voice in the team setting.

Shared decision making, as the second notable theme in the science, noted financial savings through group solutions.[15] Lean Six Sigma (LSS) projects facilitated a shared participation of multiple roles around a solidified mission and goal.[10] The survey indicated the process of shared decision-making was present in all of the LSS projects and team solutions noted as a practice change. Similarly, focus group participants spoke of reaching team goals and gave an example of accomplishments made when the team worked together to initiate the use of asthma action plans.

Collaboration was evident in articles and the focus group. Yamamoto et al. note it is important to gain a team commitment of time and honesty in interaction.[17] Similarly, Granger et al. reported the importance of shared ethics in team interaction and mutual respect across team members for shared success.[10] Collaboration viewed through the eyes of survey respondents focused on engagement and accountability in teams. Six of the eight respondents had four or more roles represented on their teams. The focus group mentioned collaboration through comments of the "need to listen" and the mentioned insight of role diversity. The survey results indicate 86% experienced a knowledge gain improving practice confidence. The survey and focus group showed an understanding of lean processes. The focus group responses of improved understanding of a need for a process, respect for roles and need for structure were representative of perceived knowledge gain associated with the LSS projects.

Promotion of knowledge share was also a consistent theme seen across the literature. An environment of education and training made a difference in dissemination through use of knowledge gained in pilots.[18] Burmahl specifically indicated that breaking down silos contributed to improved dissemination of knowledge and goal achievement.[13] Identified commonalities supported the theory of Dr. JeanWatson in areas of knowledge gain, communication and role awareness. Congruence with Dr. Watson's transdisciplinary Caring Science of collaboration across practitioners builds on nursing science.

Conclusion

This investigation consisted of eleven research publications exploring the science related to Lean Six Sigma and collaboration in a managed care environment. Included articles reflect the state of the science of lean Six Sigma application in nursing.

In answer to conditional factors necessary for optimal Six Sigma use, the literature, survey and focus group supported communication, collaboration, shared decision-making and promotion of knowledge as important. This brief study has the limitation of a setting of one managed care entity. Using a sample size of eight nurses was too small for generalizing findings across other settings. It is important to conduct further research due to healthcare reform emphasizing the importance of contribution across disciplines and roles and the need to become efficient in care. Health care reform will continue to place more pressure on the need for interprofessional collaboration.[18]

Lean Six Sigma is one route managed care nurses may use to develop effective interprofessional collaboration and improve quality. Opportunities for managed care entities to engage practices using Six Sigma has the potential to share knowledge and best practice with medical homes, demonstrating partnership and value to key network providers.

Janet Treadwell, RN, MSN, PhD, CMCN, CPHQ, CCM, ACM is Director of Care Coordination at Texas Children's Health Plan.

References

1. Fairman J, Rowe J, Hassmiller S, Shalala D. Broadening the scope of nursing practice. New England Journal of Medicine. 2011; 364:193-196. doi: 10.1056/NEJMp1012121.

2. Mitchel, R, Parker V, Giles M, White N. Toward realizing the potential of diversity in composition of interprofessional health care teams. Medical Care Research and Review. 2010;67(1): 3-26. doi: 10.1177/1077558709338478.

3. Institue of Medicine. The future of nursing leading change advancing health. 2011;Washington, D.C.: The National Academies Press.

4. George, M. (2002). Lean Six Sigma: Combining Six Sigma Quality with Lean Speed. New York, NY: McGraw-Hill.

5. Clarke, P., Watson, J., Brewer, B. (2009). From theory to practice: caring science according to Watson and Brewer. Nursing Science Quarterly, 22, 339-345. doi: 10.1177/0894318409344769.

6. Watson, J. (2008). Nursing: the philosophy and science of caring (revised). Boulder, CO: University Press of Colorado.

7. Veluswamy, R., Price, R. (2010). I've fallen and I can't get up: reducing the risk of patient falls. Physician Executive Journal, 50-53. http://www.ncbi.nlm.nih.gov/pubmed/20499522

8. Garza, S., Okere, V., Igbinoba, J., Novosad, K. (2006). Reducing hospital-acquired pressure ulcers. Patient Safety and Quality Healthcare, 1-7. http://www.psqh.com/marapr06/sixsigma.html. Accessed November1. 2013.

9. Granger, B., Prvu-Bettger, J., Aucoin, J., Fuchs, M., Mitchell, R., Holditch-Davis, D., Roth, D., Califf, R., Gillis, C. (2012). An academic-health service partnership in nursing: lessons from the field. Journal of Nursing Scholarship, 44 (1), 71-79. doi: 10. 1111/j.1547-5069.2011.01432.x.

10. Minich, K. (2012, June). Shaping sustainable cost control. Health Leaders, 10-20. http://www.healthleadersmedia.com/content/MAG-280987/Shaping-Sustainable-Cost-Control## Accessed November1, 2013.

11. Johnson, M., Capasso, V. (2012). Improving patient flow through a better discharge process. Journal of HealthcareManagement, 57 (2), 89-93. http://www.ncbi.nlm.nih.gov/pubmed/22530290 Accessed November 1, 2013.

12. Burmahl, B. (2008). Improved discharge planning results in bottom-line savings. Hospitals and Health Networks, 82 (8). http://www.hhnmag.com/hhnmag_app/jsp/articledisplay.jsp?dcrpath=HHNMAG/Article/data/08AUG2008/0808HHN_InBox_PatCare&domain=HHNMAG Accessed November 2, 2013.

13. Santamour, B. (2011). A hospital blends lean Six Sigma to improve quality, save big bucks. Hospitals and Health Networks. http://www.hhnmag.com/hhnmag/features/FiscalFitness/FiscalFitness.shtml Accessed November 2, 2013.

14. Bisgaard, S., Does, R. (2009). Quality quandaries: healthcare quality-reducing the length of stay at a hospital. Quality Engineering, 21, 117-131. http://asq.org/qic/display-item/?item=27544 Accessed November 2, 2013.

15. Hwang, T., Lee, Y., Shin, H., Johnson, R. (2011). Structure-oriented versus process-oriented approach to enhance efficiency for emergency room operations: what lessons can we learn? Journal of Healthcare Management, 56 (4), 255-67. http://web.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=10969012&AN=63884695&h=0YyXD1WVkiM6XWFQ9cp0BT6PWbSbeTs9ID9YkjhynQTaSzxRxKUAne1qA5nzc5hk3MyvCX7t9ST5buxam0CBmw%3d%3d&crl=f Accessed November 2, 2013.

16. Yamamoto, J., Malatestinic, B. Lehman, A., Juneja, R. (2010). Facilitating process changes in meal delivery and radiological testing to improve inpatient insulin timing using Six Sigma method. Quality Management in Healthcare, 19 (3), 189-200. http://www.mdlinx.com/practice-management/print.cfm/3207826/insulin Accessed November 2, 2013.

17. Niemeijer, G., Trip, A., Kees, T., Does, R., Wendt, K. (2010). Quality in trauma care: improving the discharge procedure of patients by means of lean Six Sigma. The Journal of Trauma, 69 (3), 614-619. doi:10.1097/TA.0b013e3181e70f90.

18. Reeves, S., Zwarenstein, M., Goldman, J. (2008). Interprofessional education: effects on professional practice and health care outcomes. Cochrane Database of Systematic Reviews, 1. doi: 10.1002/14651858.CD002213.pub2.

Skilled Nursing Facility Collaborative Project

Martha Paap, MS

Summary

The Skilled Nursing Facility Collaborative Project was initiated by Health Alliance Medical Plans' Medicare Advantage program to reduce readmission rates from members who had been discharged from the acute hospital setting to the skilled nursing facility (SNF). It was discovered that the six highest-volume facilities accounted for 44% of readmissions to acute care from January 2011 through March 2012. In order to improve readmission rates from the SNFs, representatives from the highest-volume SNFs were asked to implement quality improvement projects at their respective facilities and to meet once per month to share best practices and participate in quality improvement projects led by the Health Plan.

Key Points

- The study group lowered readmission rates to the benchmark rate of 17-22% in two out of three quarters of the study period (July 2012 to March 2013)
- The overall readmission rate of all SNFs remained unchanged at 21%

According to recent data, approximately one-fourth of Medicare beneficiaries who are discharged from the hospital to a skilled nursing facility (SNF) are readmitted to the hospital within 30 days at a cost of $4.34 billion to the Medicare program in 2006.[1] Rehospitalizations are not only costly to the health care system financially, but they also negatively impact a patient's health.[2] Due to these costs, staff at Health Alliance Medicare (Health Alliance) decided to address this issue. Health Alliance reached out to high-volume skilled nursing facilities (SNFs) to solicit interest in working collaboratively to reduce readmissions. The six highest-volume facilities accounted for 44% of readmissions to acute care from January 2011 through March 2012. As such, it was determined this incidence/prevalence was sufficient to select as a targeted area to achieve improvement. This is coupled with the fact that the readmission rates at these facilities individually ranged from 0-41%. Not only is this topic/project relevant in that it will improve care outcomes and member satisfaction, it will augment relationships between the health plan, acute care facilities, and SNFs with the end goal of ensuring a coordinated approach to care management at the appropriate level.

Phase I

The Skilled Nursing Facility (SNF) Collaborative is a three-year project that began with Phase I in June, 2012. It was modeled after the Institute for Healthcare Improvement's model, which consisted of monthly meetings with the goal of achieving breakthrough improvement using change concepts to achieve accelerated improvement. Health Alliance employees served as facilitators throughout the project. Each participating SNF used the model of improvement to identify interventions using a storyboard format that was unique to each facility. During the meetings, representatives from each SNF discussed progress with their intervention and shared best practices and readmission rates from their respective facilities. Physician champions from Health Alliance and Carle Physician Group also attended and offered clinical insight, provided feedback on readmission reports, and strategies for improvement.

Phase II

Phase II began in June 2013 with a change in methodology and structure. Instead of each SNF conducting its own project, it was decided that all facilities would participate in the same interventions conducted as a group. In addition, the SNF Collaborative would be expanded to other facilities in the area. Recruitment efforts resulted in six additional facilities joining. Another change was the addition of naviHealth joining as co-sponsors of the SNF Collaborative. As of May 1, 2013, naviHealth was contracted by Health Alliance to manage post-acute care services for all Medicare Advantage members. As such, they employ Care Coordinators to manage the transition from hospital discharge to post-acute care, including the SNFs.

Results and Findings

At the end of Phase I of the SNF Collaborative, an evaluation was completed by the group. Five out of the six facilities completed the survey. A summary of the results indicated that members found the openness to share and discuss issues, networking, and sharing new ideas the most useful aspects. The time commitment and doing sepa-

Exhibit 1: Readmission Rates for Six Participating SNFs[3]

READMISSION RATES FOR HIGHER VOLUME FACILITIES	Study Period				
SNF	Q1/2012	Q2/2012	Q3/2012	Q4/2012	Q1/2013
#1	2/22%	1/13%	4/40%	2/17%	7/50%
#2	7/39%	6/32%	2/13%	4/14%	5/36%
#3	2/33%	0/0%	0/0%	1/14%	0/0%
#4	2/33%	2/40%	1/13%	1/10%	5/29%
#5	0/0%	1/40%	1/20%	0/0%	0/0%
#6	2/19%	3/60%	4/27%	2/29%	0 admits
Average readmissions %	24%	30.8%	18.8%	14%	23%

OVERALL MEDICARE ADVANTAGE READMISSION RATES (All SNFs Combined)					
Quarter	Q1/2012	Q2/2012	Q3/2012	Q4/2012	Q1/2013
Readmit %	25%	20%	17.50%	21.60%	21%
Ratio	38/154	32/162	29/165	36/167	37/175

rate projects during Phase I were reported the least useful. Comments regarding the impact on 30-day all-cause readmissions included it helped them to focus on readmissions and raised awareness.

Analysis of Results and Findings

Our target goal was to reduce 30-day all-cause readmission rates from participating SNFs to 17- 22% on a consistent basis. Baseline readmission rates for participating SNFs ranged from 0-41% and the overall baseline for all SNFs was 21%. Over the study period (Q3 2012 to Q1 2013), readmissions ranged from 0-50%; however, the average readmission rate for all six SNFs was lower as compared to the previous two quarters (see Exhibit 1). Only Q1 2013 was outside of the benchmark by 1%. The overall rate for all SNFs remained a consistent 21%. One of the issues to consider is the wide variability in the data. This is due to the low numbers of members at each facility. In some cases, even having one or two readmissions could result in a high readmission rate if there were few members admitted that quarter. Other reasons for readmissions, as cited by the SNFs, included lack of patient assessment skills of SNF staff, on-call Medical Director directs staff to immediately send member to hospital even though the SNF could have handled the situation, lack of Medical Director trust of facility staff skills, families not trusting the SNF to provide appropriate care during a health event, lack of end-of-life planning, member not ready to be discharged from hospital, lack of trained staff working nights and weekends, and poor communication. Despite these issues, overall, the lower readmission trend is showing that the interventions employed by the SNF Collaborative are having a positive impact. These positive results could be attributed to the renewed focus on lowering readmissions, the activities implemented by each facility using the Plan, Do, Study, Act cycle, and the exchange of ideas and/or feedback from the monthly meetings.

Best Practices

As a result of the monthly discussions and models of improvement implemented at individual SNFs, the activities that showed the most success were the broad use of the Interact II Resident Transfer Form, training and use of Interact II SBAR (Situation, Background, Assessment, and Request), improved staffing on weekends in some facilities, increased use of nurse practitioners to evaluate patients before sending to acute care, adding Social Service staff, restructuring shifts to improve patient management, the development of a flier for all provider/facilities to understand available SNF services, medication reviews prior to discharge, increased end-of-life discussions/planning, and the overall interactive nature of the SNF Collaborative.

Lessons Learned

A key ingredient to make the project's success was buy-in from leadership at the Health Plan and the participating SNFs. One of the ways that Health Alliance showed a strong commitment to the project was by hosting a luncheon at the onset of the project with several prominent Physician Clinic providers and the Medical Directors from the respective facilities attending. In addition, efforts were made to ensure accountability to the process by requiring Commitment Forms to be signed by the facility administrators, visiting the facilities onsite to review their progress on their respective models, sending reminders regarding the monthly meetings, and requesting progress reports at the meetings. On the flip side, Health Alliance facilitators learned that if the effort does not have buy-in from the SNF administrator, then the project will not work with that individual facility.

Conclusion

The SNF Collaborative has been successful in implementing quality improvement changes at participating SNFs; however, the overall readmission rate among all SNFs remains unchanged at 21%. Strategies such as pay-for-performance incentives, improved provider education, and intensive case management of high-risk members may have to be evaluated as other potential efforts to decrease readmissions.

Martha Paap, MS is the Manager of Quality and Clinical Services at Health Alliance Medical Plans.

References

1. Mor V, Intrator O, Feng Z, Grabowski DC. The revolving door of rehospitalization from skilled nursing facilities. Health Affairs. 2010;29(1):57.
2. Herndon L, Bones C, Kurapati S, Rutherford P, Vecchioni N. How-to Guide: Improving Transitions from the Hospital to Skilled Nursing Facilities to Reduce Avoidable Rehospitalizations. Cambridge, MA: Institute for Healthcare Improvement; June 2012.
3. Navihealth, 2013

A Quality Improvement Project to Improve Compliance with Well Child Visit Requirements within a Medicaid Managed Care Plan

Rose Taylor Calhoun, RN, MEd, CPHQ, LSSBB and Angelo P. Giardino, MD, PhD

Summary

Texas Children's Health Plan (TCHP) QI nurses apply Six Sigma methodology to assist Primary Care Physicians to improve efficiency, compliance with well child care standards and patient satisfaction. The program aimed to improve adherence with well child care Healthcare Effectiveness Data and Information Set (HEDIS®) standards in one Medicaid and Children's Health Insurance Program (CHIP) health plan. The study was done by partnering with Physicians QI initiative provided by QI Nurses to primary care physicians with pre- and post- evaluation. Texas Children's Health Plan (TCHP) contracted 1,100 Primary Care Physicians caring for Medicaid and CHIP enrolled children in Harris and Jefferson Counties and contiguous counties.

Key Points

- Statistically significant increase in the following well child HEDIS® measures: six visits in first 15 months, annual visits age 3 to 6 and annual visits for adolescents.
- There was statistically significant improvement in compliance with well child documentation standards

FOR A HEALTH PLAN TO IMPROVE COMPLIANCE WITH clinical practice guidelines and documentation standards require more than collaboration with contracted physicians; it requires a true partnership. Texas Children's Health Plan (TCHP) initiated the Partnering with Physicians Quality Improvement (QI) Initiative in 2007 with a clearly defined structure of clinical and quality support. This structure continues to be refined and expanded.

Texas Children's Health Plan (TCHP) serves an indigent and low-income population through the Medicaid and Children's Insurance Health Plan (CHIP) programs. The members are 51% female and 49% male. Fifty-nine percent of members are between the ages of 2 and 11 years. The majority of members are Hispanic (52.3%) with African American representing that second largest group (18.5%) and Caucasian third with 13.7% of membership. Language is not reported in the state enrollment files to the health plans but utilization of the interpreter line service suggests that Spanish represents 90% of the non-English primary language with 17 other languages accounting for the remaining 10%.

TCHP serves this membership through a diverse network of primary care physicians; the majority of whom are in independent practice. Sixty-one percent of TCHP network primary care physicians graduated from a U.S. medical school. The primary care physicians are 52% female; 48% male; and, 45.3% have been in practice more than 25 years since graduation from medical school.

Baseline

TCHP 2006 baseline well child care Healthcare Effectiveness Data and Information Set (HEDIS®) results were as follows:

- Well child six visits by age fifteen months were 45.7% for Medicaid and 46.2% for CHIP.
- Well child visits for children age three through six was 65.4% for Medicaid and 60.7% for CHIP.
- Adolescent well child visits was 42.8% for Medicaid and 42.1% for CHIP.

The 2007 baseline assessment of well child care documentation of: health history, mental development, physical development, physical exam, immunizations, recommended labs, and health education / anticipatory guidance revealed an overall compliance rate of 78.1% for the first 10,000 charts. The component with the highest compliance was physical exam at 96.4%. The component with the lowest compliance was recommended lab screenings at 54.5%. See Exhibit 1.

Staff Requirements and Training

Driving change to ensure effective interventions to improve quality of care and service in primary care settings requires that the presenter be perceived as credible and collaborative. TCHP hires nurses with both clinical and quality experience. During the interview process, applicants are presented with scenarios similar to what they will encounter in the primary care offices. Their ability to apply Six Sigma methodology in a culturally competent manner carries the same weight as clinical expertise in selection for hire.

TCHP provides intensive training for Quality Improvement (QI)

Exhibit 1: Review of first 10,000 charts

EPSDT Required Component	Compliance Rate
Health History	88.63%
Mental Development	72.98%
Physical Development	78.79%
Physical Exam	96.44%
Immunizations	88.80%
Lab	54.49%
Health Education / Anticipatory Guidance	78.94%

nurses that include cultural competency, pediatric and obstetric clinical outcomes, measurement, national standards such as HEDIS®, Agency for Healthcare Research & Quality's Pediatric Quality Indicators (PDI) and Prevention Quality Indicators (PQI), Consumer Assess-ment of Healthcare Providers and Systems (CAHPS), and National Committee for Quality Assurance (NCQA) Health Plan Accreditation Standards. The training begins with an assessment of the members served, physicians and other providers in the network, and the community within which the service occurs. The training ends with intensive sales training.

Training in cultural competency is based on Ruth Lindeck Forman's book, *Communication is Connection: 10 Steps to Create Your Own Positive Communication Environment*. As a team, the QI nurses explore topics such as which cultures are more or less demonstrative and verbal; which cultures require more or less personal space; which cultures make more or less eye contact; and which cultures allow authority figures to be challenged. Understanding the culture of origin as well as the degree of acculturation into America determines how physicians and their staff should be approached most effectively. Each QI nurse maintains a field binder of reference materials, including several documents on cultural preferences for communication.

Intervention

This QI initiative reaches all primary care physicians in the TCHP network. To impact overall compliance rates as quickly as possible, this initiative began with a pareto analysis to determine the physicians accounting for the majority of non-compliances with well child care. The QI nurse assesses the primary care practice and uses Six Sigma methodology to improve 1) patient satisfaction, 2) efficiency, 3) procedures, and 4) documentation.

1) **Patient Satisfaction:** the TCHP QI nurse educates each practice with one key message; "See your practice through the patient's eyes." The QI nurse effectively explains how processes that lend efficiency to a clinical practice may be misinterpreted by a lay person. Training is provided to office staff based on the QI nurse's assessment. It may include cultural differences: problem-solving skills; systems to identify needed care; how to explain procedures; and, always includes how to verify patient understanding of instructions for home care.

2) **Efficiency:** The QI nurse assists the office staff to streamline workflows, methods for stocking supplies, and required equipment monitoring. This begins with a patient flow diagram and includes all intersections of staff, supplies or equipment. The patient flow diagram is reviewed to assess ease of complying with clinical practice guidelines applicable to the patient population. Supply storage and equipment maintenance (including calibration) is reviewed for adequacy and efficiency. The QI nurse collaborates with office staff to modify patient flow, supply storage and stocking, and equipment storage, cleaning and calibration schedules if needed.

3) **Procedures:** The QI nurse conducts a barrier analysis to determine system issues preventing compliance with well child care. The scheduling process is reviewed to determine if preventive screenings are identified when due and if mothers are reminded to bring immunization records with them. Children receive immunization at health fairs and other community functions as well as from a variety of health care providers. While the primary care physician may deem the child current with immunizations; TCHP requires that the documentation supporting this determination be included in the medical record.

The QI nurse assesses the medical record for flags or reminders of preventive care due this visit and tools to facilitate required documentation. The final step of the procedures review is the communication of the care provided to the billing department and the accuracy of claims.

4) **Documentation:** The QI nurse conducts a medical record review based on the patient population. A pediatric population sample will include children who received a well child exam, and children who were seen during the time when a well child exam was due but did not receive the exam. The medical record is reviewed for completeness of the required components of a well child exam. HEDIS ® Technical Specifications require 1) health and developmental history (physical and mental) 2) physical exam, and 3) health education or anticipatory guidance. The QI nurse will assist the primary care practice with modifications to the paper or electronic medical record system if necessary. The modifications may include addition of fields to the electronic medical record or adoption of new forms for the paper medical record. Scores for key components of the medical record review are stored in TCHP's provider data base.

The QI nurse determines if a follow up call or visit will be required based on the complexity and severity of required change.

Exhibit 2: Member Satisfaction Survey Questions by Primary Care Providers

5 is most satisfied and 1 is least satisfied
Ratings based on whether PCP is Participates in Partnering with Physicians QI Project
(66 of 90 PCPs whose members were surveyed)

Question	Overall Physician Average	Physicians with QI Nurse Outreach	Physicians with No QI Nurse Outreach	Probability Different by Chance
How quickly appointment available	4.01	4.09	3.80	.000
Doctor's Courtesy and Friendliness	4.36	4.43	4.15	.000
How well doctor listened to questions	4.27	4.35	4.06	.000
How well doctor explained things	4.23	4.31	4.00	.000
How quickly calls returned during office hours	3.92	3.96	3.80	.000
How quickly calls returned after office hours	3.78	3.82	3.64	.003
Courtesy and friendliness of receptionist	3.99	4.03	3.85	.000
Satisfaction with length of time in office waiting room	3.61	3.70	3.33	.000
Satisfaction with length of time waiting in exam room	3.80	3.87	3.60	.000
Doctor and staff communication with each other	4.18	4.24	4.02	.000
Explanation of tests or treatment	4.18	4.24	3.99	.000
How well prepared by doctor or staff to care for child after the appointment	4.14	4.21	3.93	.000
Likelihood of recommending	4.71	4.75	4.57	.000
Number of minutes spent waiting in office waiting room to see doctor	39.28	35.11	51.63	.000
Doctor told you what to do if you need care after hours?	71.8%	74.5%	64.0%	.000

If necessary, the QI nurse will complete a corrective action plan that requires an acknowledgement signature by the physician. The formal corrective action plan includes space for documentation when the noncompliances have been resolved. Follow up discussions and review demonstrates TCHP's level of commitment to quality of care and compliance with clinical practice guidelines.

Results

It has been TCHP's experience that primary care physicians appreciate assistance in improving patient satisfaction and efficiency. The improvements in efficiency are quickly obvious and increase physician receptiveness to future visits from the QI nurse. The other improvements are not as obvious and physicians rely on TCHP reports for evaluation.

At one year post-implementation, an analysis of member satisfaction by primary care physicians was conducted based on participation in QI nurse partnering with physicians intervention. The satisfaction scores for 90 high volume physicians were evaluated based on 21 measures of satisfaction. The physicians participating in QI nurse Partnering with Physicians intervention scored better than the overall plan average and the non-intervention group at a statistically significant level. For 20 measures the p value was 0.000. For one measure the p value was 0.003. See Exhibit 2 above.

The External Quality Review Organization for the Texas Medicaid Program publishes annual HEDIS® reports for each health plan. The 2012 TCHP HEDIS® scores from this report were compared to TCHP's 2006 HEDIS® scores. HEDIS® reports meet NCQA external vendor and auditor requirements. Medicaid well child six visits by age 15 months increased by 23.1 percentage points. Well child annual visits age 3 to 6 years increased by 11.1 percentage points. Adolescent annual well child visits increased by 20.3 percentage points. See Exhibit 3 on the following page.

Exhibit 3: Comparison of TCHP Medicaid HEDIS® Well Child Scores for 2006 to 2012

HEDIS® MEASURE	2006	2012
Six Visits in first 15 Months	45.7%	68.8%
Well Visits age 3 – 6 Years	65.37%	76.47%
Adolescent Well Child Visits	42.76%	63.09%

Improvements for all three age groups are highly significant at p<0.0001***

Exhibit 4: Comparison of Well Child Care documentation 2007 to 2012 based on medical record reviews

	2007 (1st 10K charts)	2012 June - Dec
Preventive Care Average	78.1%	91.6%
Recommended Labs	54.5%	97.2%
Education / Anticipatory Guidance	78.9%	92.6%

Improvements in Well Child documentation is highly significant at p<0.0001***
Improvement in PCPs scoring 100% compliance is significant at p<0.015

Compliance with documentation of required components of well child care from audits conducted in calendar year 2012 were compared to the 2007 baseline results. Compliance with documentation of all required components increased from 78% to 91.6%. Documentation of health education or anticipatory guidance increased from 78.9% to 92.6%. Provision of recommended labs increased from 54.5% to 97.2%. Physicians achieving 100% compliance with well child documentation compliance increased from 23.9% to 36% during this time. See Exhibit 4.

Summary

The Partnering with Physicians QI initiative continues to yield improvement in clinical practice guideline compliance, documentation and member satisfaction. TCHP has multiple QI initiatives in place many with overlapping influences. TCHP's current QI initiatives include treatment of: asthma; pharyngitis and upper respiratory infection; attention deficient hyperactive disorder; and skin and soft tissue infections. The QI nurse audits compliance with the physicians and educates them regarding each of these initiatives during each visit. QI initiatives have a member education component, for example, the need for timely well child care. Postcards, phone calls and newsletters deliver the timely message to obtain well child care.

Next Steps

In 2012, TCHP added asthma care to the list of items that may result in a formal corrective action plan. The medical record audit tool was enhanced to include three required components for children with asthma. With each visit the primary care physician is expected to assess asthma control, asthma triggers, and update the asthma action plan. The results of asthma care educational outreach will be included in a future paper.

Rose Taylor Calhoun, RN, MEd, CPHQ, LSSBB is the Director, Quality and Outcomes Management.

Angelo P. Giardino, MD, PhD is the Vice President/Chief Medical Officer at Texas Children's Health Plan.

References

1. Valence Health Analytics Reporting Health Plan Member Demographics 062713
2. Forman, Ruth Lindeck, Communication is More Than Just Talking…10 Steps to Successful Personal and Multicultural Communication for the Medical Professional, Communication Enhancement, Inc. Woodland Hills, CA, http://www.positivecommunication.com/

One of the Many Faces of Oncology Care Management

Sheryl A Riley RN, OCN, CMCN and Cortney C Riley PT, DPT, CSCS

Summary

Employers seem to be in a constant predicament over the value of oncology care managers and do not immediately see the Return on Investment that they possess. Much of this problem and the surrounding confusion stems from current compensation models. Oncology nurses that are knowledgeable in the electronic care management software and electronic medical records as well as managed care will greatly be able to assist in this process. They will need to become center stage if the practice or organizations are to succeed.

Key Points

- Employers need to be educated on the value of oncology care managers
- Practice operations and profitability take flight with oncology care managers

AS ONCOLOGY CARE MANAGERS WE ARE IN A CONSTANT struggle to prove our value to our employers. The industry in general admires the role we play as part of the patient care model and knows the value of our participation, yet they are startled at our requests for worthwhile compensation. Employers seem to be in a constant quandary over our value and do not immediately see the Return on Investment (ROI) that we inherently know we possess.

Much of this confusion is driven by the current compensation models facing the medical profession. Over the past 10 years I have seen the value of physician practices, hospital and managed care plans as well as the vendors that serve them being squeezed financially by governmental regulation and price cuts for services rendered. This type of environment is not patient friendly or focused as regulators would lead you to believe. Regulators want the public to believe that these changes and new rules are for the consumers benefit so they do not get over charged however it forces practices to have to make a choice between staying profitable and remaining open or providing patients with the most efficacy and appropriate care for their condition(s). This forces care giving institutions and physician practices to make decisions for their patients driven solely by the dollar and not by quality. This is not a direction that is beneficial for the providers or patients. Unfortunately, these new policies create a type of dis-incentive which in turn leads to poor quality of care and limited access to care for our oncology patients and their families.

One thing that has remained universal over the years in healthcare is "…good care follows the dollar not the other way around". The start of Accountable Care Organization's and the Patient Centered Medical Home (PCMH) back in the mid 2000's was the start of a new era in patient care and one that we as oncology care managers applauded and embraced. These models place the patient care back into the hands of the physicians which ultimately are the people that have the proper training to direct patient care. Though these models were ideal for placing physicians again in charge of their patient's care rather than third party payors it required that their practices make significant changes to their daily operations.

Due to the fact that the current governmental regulations and the above mentioned model are at odds with one another it makes it all that more difficult for nurses to show physicians their need for appropriate compensation. Physician's will need to obtain the highest STAR rating and reimbursement level possible to be able to support well qualified and highly trained oncology nurses and supportive staff that are required to run and manage a PCMH. The demands are high and budgets are tight. The decisions that need to be made for their practices demands that physicians exercise excellent technology, operational and business savvy. Oncology nurses that are knowledgeable in the electronic care management software and electronic medical records as well as managed care will greatly be able to assist in this process. They will need to become center stage if the practice or organizations are to succeed.

Knowledgeable oncology care managers not only coordinate and assist in the management of patients and families but can create and develop the key components needed for a successful practice. Those items include:

• Electronic medical record and care coordination software; this will be the key to the quality and financial success of each organization
• Patient identification and stratification – identifying the patients in the practice or institution that can benefit most from the PCMH. Those that are the sickest and have the highest risk of failure in the community
• Big Data- the collection of as much patient data as possible to identify, engage and retain patients in the program
• Operational efficiency- utilizing innovative IT systems and support to assist the practice and organization in moving from paper to electronic records. Finding ways to improve patient touches, patient self management and decrease failure rate and re-admissions
• Actionable data- reporting that helps the physician and oncology care manager improve treatment and manage patients' side effects to improve care
• Highly educated and trained subset of oncology care managers with IT and managed care expertise
• Key supportive staff such as social workers and intake office staff to engage and manage resources and services
• Quality metrics for achieving a STAR rating of 5

Physicians and care giving institutions need to stop contemplating and get started, which they can do by hiring well- qualified oncology care managers and watch your practice take flight.

Sheryl Riley RN, OCN, CMCN is Managing Partner/Oncology Care Manager/Patient Advocate with Clarion LLC

Vol. 1, No. 1, 2014

THE OFFICIAL JOURNAL OF
THE AMERICAN ASSOCIATION OF MANAGED CARE NURSES