HIT Policy Committee Certification and Adoption Workgroup FINAL Summary of the Certification for Long-Term and Post-Acute Care Virtual Hearing December 12, 2013

Attendance

Members attended:

- John Derr
- Paul Egerman
- Joseph Heyman
- Jennie Harvell
- George Hripcsak
- Stanley Huff
- Marc Probst
- Martin Rice
- Paul Tang
- Larry Wolf

Members absent:

- Joan Ash
- Maureen Boyle
- Carl Dvorak
- Elizabeth Johnson
- Mike Lardieri
- Martin Rice
- Donald Rucker
- Micky Tripathi

Call to Order and Roll Call

Michelle Consolazio, ONC, welcomed participants to the virtual hearing. She reminded the group that this was a Federal Advisory Committee (FACA) meeting being conducted with an opportunity for public comment and that a transcript will be posted on the ONC website. She called the roll and instructed members and others to identify themselves for the transcript before speaking.

Opening Remarks: Meeting Objectives and Expected Outcomes

Workgroup Co-chairperson Larry Wolf announced that this was an opportunity for workgroup members to listen, ask questions, and learn from the panelists. ONC intends to design a voluntary certification program for LTPAC providers. How are LTPAC settings similar to and different from the EH and EP settings that have been the focus of the workgroup? How would this affect the certification criteria? The workgroup has broad agreement on the value of information exchange, interoperability, and privacy and security. How do these functions play out in LTPAC settings? The Base EHR is a common set of core criteria for EH and EP settings. Are they also right for these settings? What setting-specific criteria are

needed? Members have discussed unintended consequences of the existing meaningful use and certification programs. How can they be addressed in LTPAC settings?

Panel 1: Clinical Perspective

Medication Management: Shelly Spiro, Pharmacy HIT Collaborative, informed the group that consultant pharmacists are federally mandated to perform monthly medication regimen review (MRR) in nursing facilities. This MRR process is defined as a thorough evaluation of the medication regimen of a resident by a pharmacist. The review includes preventing, identifying, reporting, and resolving medication-related problems, medication errors, or other irregularities, and collaborating with other members of the interdisciplinary team. In some cases these services are adopted by BH facilities. Pharmacists electronically accessing and exchanging clinical information in these settings are vital to meeting institutional quality and safety medication management processes. Pharmacists are highly trained as medication management experts. The Pharmacy HIT Collaborative has been working with National Council for Prescription Drug Programs (NCPDP) and HL7 on standards that will assist pharmacists in standard structured documentation of these patient care services such as MRR and Medication Therapy Management (MTM) as required by the Part D program, some Medicaid programs, and private insurers. One such standard is a joint project between NCPDP and HL7 for a CCDA structured document to meet the CMS required Part D patient "take away" document after an annual Comprehensive Medication Review (CMR). This structured document contains a pharmacist-provided reconciled active medication list, allergy list, indication for each active medication, and special instructions for the patient in easily understandable language. The electronic structured document supports RxNorm and SMOMED CT.

Spiro said that a LTPAC- and behavioral health-voluntary EHR certification program can assist with improving medication management. ONC support for pharmacist and pharmacy EHR adoption in these settings is needed.

Clinical Decision Support: Steve Handler, University of Pittsburgh, did not submit written testimony. He talked about findings from medication safety research. The nursing home provides an excellent environment for testing and implementing CDS. Polypharmacy, which is common for LTPAC patients, is a primary contributor to adverse events. Nursing homes currently lack the informatics to manage medications. Polypharmacy events are difficult to predict. Unlike other medical care settings, adverse events in LTPAC settings are more frequently due to inadequate monitoring of drugs rather than their prescribing. Handler indicated his support of a voluntary certification program using the Base 2014 Edition. He also agreed with the workgroup's five-factor framework. CDS should be a part of certification because is aligns with regulatory requirements. Existing standards are sufficient for lab support, but rules engines do not have standards.

Diagnostic Tests: Brian Yeaman, NRHS Findlay Family Medicine, reported on findings from a challenge grant in Oklahoma, which started with five nursing homes, expanded to 20, and is currently working with referring hospitals and an established regional health information exchange to implement key interventions to improve transitions. The focus is on improving information transfer in the transition to and from nursing homes and emergency departments (ED). The nursing homes have implemented a clinical documentation tool that includes the collection of change in condition documentation. At the time of a transition a "need-to-know message," based on a nursing document referred to as SBAR (Situation/Background/Assessment/Recommendation), is sent via Direct from the nursing home to the hospital. This provides the immediate information the ED needs. Once completed, a universal transfer document will follow with a more complete account of the patient. The hospital can query the regional HIE for information on the patient, including labs, imaging reports, other results, and provider reports. A similar information flow is able to follow the patient back to the nursing home upon discharge from the hospital. Sharing more information during encounters in the ED results in reduced acute hospital

admissions and more thorough evaluations by targeting the indication for transfer more clearly. This also results in the safe return to the LTPAC setting with expanded care plans based on the ED evaluation. In addition to the implementation of the technology to support electronic exchange of patient-specific information, the Oklahoma project is focusing on improving the workflow and processes associated with care transitions. He reported that implementation of a scaled down Universal Transfer Form has not resulted in any significant change due to poor adoption, complexity of the form, and duplication with the simplified SBAR. To date, through the "need-to-know message" via the SBAR and Direct and key ADLs being transmitted from LTC facilities via the HIE have resulted in a 30 percent reduction in readmissions and a 40 percent reduction in return to ED only.

Public Health: Nimalie Stone, CDC, submitted a slide presentation intended to answer two questions: How would the implementation of an EHR certification process for LTPAC providers address public health goals? Which clinical data should be prioritized during the development of health IT standards to meet public health goals? The national HAI reporting structure has expanded beyond acute care hospitals. CMS requires reporting for certain payments. Certification of LTPAC EHRs would support efforts toward infection control in facilities reported through the National Healthcare Safety Network. Reporting began January 2013. The priorities are medication and lab data. Standardized data submission would enhance the quality of the information and reduce the burden of data collection. Another example is standardized data on immunizations.

Q&A

Paul Egerman referred to Handler's comment that monitoring errors were more prevalent than prescribing errors and wondered whether e-prescribing was therefore less important in the LTPAC setting. Handler indicated that no conclusions should be drawn about relative importance. He did not intend to ignore prescribing. The study that he conducted focused on monitoring. More research is needed. CDS should include both monitoring and prescribing.

Wolf observed that the more the meds the more difficult the monitoring and the greater the opportunity for adverse events. Handler said that at admits to nursing homes, staff often does not even know why a patient is on meds. Stone said that the opportunity to use CDS at the time of prescribing is one of most powerful ways to influence provider decision making in all settings.

Spiro emphasized the importance of monitoring and of connecting pharmacists with other members of the team in real time. Real-time information is essential to the reduction of adverse events. Regarding structured documents, she indicated that pharmacists have done as much as they can. There is more communication with EHs because of the incentives. Her organization is working on adoption of the CCDA. CMS has promoted use of the CCDA for Part D. Yeaman reported working on use of the CCDA for communication between EHs and nursing homes in order to have lab reports at the time of prescriptions. The complete compliment of tools is needed in the LTPAC setting.

John Derr asked Stone about monitoring infectious diseases in EHs. He was told by two industry representatives at a conference that EHs do not transfer monitoring data to others providers. Stone said that the transfer of information across systems is important. The CDC National Health Care Reporting System receives information on lab-identified drug resistant infections, and the information is very important for receiving organizations as well. She agreed that effective communication with LTC is lacking. CDC is working to improve communication. This is an example of an area in which standards for documentation could help. Another panelist talked about an infection surveillance system across settings implemented without EHRs. There are other systems and mechanisms to transmit this information. Derr expressed surprise at the lack of cooperation in transmittal of information across settings.

Would criteria in the 2014 Edition support the needs in transitions of care? Yeaman indicated that the standards for EPs and EHs would apply. A subset of the criteria rules, such as e-prescribing, labs and other diagnostic data, and activities of daily living, could apply. Handler said that the 2014 Edition applies, but the degree of prescription around CDS could be a problem. He referred to a forthcoming report of the Office of the Inspector General that concludes that CDS should be limited to the most frequent adverse events. Spiro talked about e-prescribing for controlled substance issues; DEA regulations do not meet the needs of LTPAC settings. The payment model is missing for LTC.

Panel 2: Clinical Perspective

Care Planning: Terry O'Malley, Partners HealthCare, reported that as the population ages and individuals accumulate an increasing burden of chronic conditions, more and more individuals have, and will have, episodes of acute illness superimposed on chronic conditions. The result is more complex care, provided in multiple sites by many clinicians across longer episodes of care. These individuals increasingly encounter two fundamental health care processes. The first is the transition of clinical responsibility from one clinician or team to another with the information required to safely and efficiently exercise that responsibility. Each exchange from site to site or team to team is a transition. Each level of increasing clinical complexity generates additional transitions as acute conditions are superimposed on more and more chronic conditions with each combination requiring more participants and more sites of care. Failed transitions are a leading cause of adverse events. The second process is the exchange of a longitudinal care plan to align care across multiple sites and providers and thereby reduce the risks of omissions and duplications. Poor transitions of care and failures to coordinate care result in frequent, avoidable, adverse events and billions of dollars a year of avoidable health care costs. LTPAC EHR certification would set the foundation for these two essential processes. Both transitions and care coordination require the exchange of essential clinical information, but very few LTPAC providers share a common EHR platform with their acute care partners. It is far more likely that LTPAC providers will share care with several acute care partners all using different IT platforms. The electronic exchange of standardized, interoperable clinical information between different IT platforms becomes the essential tool for care integration between and among acute and LTPAC providers. And the importance of this cross platform exchange is not limited to LTPAC but applies as well to the management of any complex patient receiving care from multiple sites. There are data elements that can serve as a national standard for transitions of care and longitudinal coordination of care. The HL7 Domain Analysis Work Group, the ONC Longitudinal Coordination of Care Work Group, ASPE and others have nearly completed the final stages of HL7 ballot reconciliation for these data elements, which will be available for reference as certification standards early in 2014. At a minimum, EHR certification for both EP and LTPAC sites should include the capacity to send and receive these standardized data elements to support transitions and care coordination. There are no incentives for acquiring these systems. It may take CMS to build off the increasing focus by NQF, TJC and other quality standards organizations on transitions and longitudinal care. Were CMS to adopt a quality standard requiring the electronic exchange of these essential clinical data elements, that standard alone would create the business case for the adoption of certified LTPAC EHRs. And if adoption were tied to quality incentives that provided the opportunity to partially defray the cost of implementation, these new quality metrics would accelerate the adoption. LTPAC EHR certification is a necessary next step.

Nursing: Laura Tubbs, Southwest LTC Management Services, described some of the documentation requirements imposed by federal and state regulations on LTPAC facilities. These include, to name only a few, information for CMS surveys, ICD-9 coding, charting guidelines, medication administration, and care plans. Often when new regulations and guidelines are announced, there is not sufficient time for IT vendors to integrate these changes. Lack of interoperability affects all settings of care. Consistent formatting for documentation and coding would help ensure that IT systems are ready for integration.

CMS should work toward consistent standards and guidelines, and ensure that EHRs can exchange basic information.

Nursing: Lauri Harris, Avalon Healthcare, talked about integration of clinical, billing, therapy, and pharmacy programs to share information and to build quality and cost-effective care in the post-acute care setting. The need for integration is unique to post-acute care. EH and EP platforms do not work for the post-acute environment. The entry of patient information into the software allows for readable records that are accessible to multiple departments within the facility concurrently. Compliance with company guidelines is improved with the adoption of the EHR because uniform structure is provided for staff in the completion of daily tasks. This is augmented by the ability to create notifications and alerts that provide system-generated information to supervisory staff regarding patient conditions that allow interventions. The EHR can be instrumental to reducing preventable re-hospitalizations through reduction of medication errors. The prescriber entering orders electronically into the EHR will decrease the chance for errors in the interpretation of the orders. Today, a significant number of orders are obtained verbally or via telephone which results in the SNF staff entering the order into the software. Key stroke errors are frequently identified as contributions to adverse events. The provision of care paths and industryapproved, evidence based standardized tools allows staff to implement interventions earlier and contribute to timely notification as changes in condition occur. Embedding the INTERACT III system for staff to utilize in the identification of changes in patient behavior, appetite and/or routine can reduce the need to transfer to the hospital.

Q&A

Derr asked O'Malley about e-quality measures. He responded by saying that information exchange facilitates both care and measurement. Quality metrics could drive EHR adoption as well as improve care. Derr said that many quality measures are used as penalties rather than to improve care.

Paul Tang inquired about a business driver to voluntary certification that makes a difference. What would motivate vendors to certify? O'Mally acknowledged the lack of a strong business case. LTPAC providers know that their care is inefficient in terms of information collection and exchange. These inefficiencies are incorporated into their business case. If change is to happen, there must be opportunity to make more of a margin. Spiro said that since EPs are required to use e-prescribing, this can drive adoption in the LTPAC setting. O'Mally pointed out that Spiro's statement does not apply to EPs who work primarily in LTPAC settings. They may find that this work undercuts meaningful use attestation with the e-prescribing items. The LTPAC facility may not have an EHR with e-prescribing functions. As a result, many of these EPs obtain exemptions. Some LTPAC facilities have electronic orders systems, which are an intermediate step to e-prescribing. The process of getting the order to the pharmacy vendor is different.

Egerman asked about reasons for the lack of impact of CCHIT certification. Harris responded that her company uses a CCHIT-certified EHR. The problem is differences in the components of the EHRs used across settings. Providers are reluctant to learn about yet another EHR. ONC certification could be more successful, because customers would see it as similar to and allowing more integration with EP and EH environments.

Wolf pointed out that CCHIT certification criteria were developed prior to HITECH and have not been revised since the establishment of the ONC certification. Derr said that trust is important for privacy and security. To Tang, he said that harmonization of CMS criteria is important. Harmonization could relieve some of the administrative burden, reduce costs, and, therefore, act as a business incentive.

What data in LTPAC records would facilitate exchange with other levels of care? According to O'Mally, the 2013 revised CCDA, which was recently balloted, is an excellent start.

Tang said that most documentation is reportedly done by non-professional workers. Would ONC certification push LTPAC providers to make investments in HIT? Harris that said her organization made the investments to introduce efficiencies, make strategic partnerships, and to be more competitive in the marketplace. O'Mally indicated that some LTPAC providers are supported by their EH partners, but smaller organization will need incentives. Derr reported that Golden Living was motivated to invest in HIT in order to become the preferred provider in its networks.

Panel 3: Provider Perspective

Lisa Harvey McPherson, Eastern Maine Homecare, did not submit written testimony. Her organization is both a Pioneer and a member of a Beacon community and has always relied on technology to serve its rural area. Telehealth is used as a part of home care. The organization uses an EHR across its footprint. It interfaces with the tertiary care center. There is a RIO which through home health, hospice, and PCMHs share data. HealthInfoNet is used for real-time notifications for ED presentations. Care coordinators and community care workers are used. In year one, ED admissions were reduced by 64 percent and hospital readmissions by 74 percent.

Steve Chies, Benedictine Health System, did not submit written testimony. He said that he welcomes anything to bring LTPAC into the health care mainstream. LTPAC providers lag in HIT adoption. Their exclusion from some funding and grants programs has served to isolate them from other settings. He described his efforts to use Epic to transfer CCDs from acute care to his information system, an effort that was grant supported and is the first step to interoperability. The project has yet to roll out. He stated that he would probably support voluntary certification. LTPAC providers will need to assess the business case. EHs are seeking partners to support their businesses. Medicaid and Medicare payment policies have yet to realize and support interoperability efforts. He expects his vendor to adopt voluntary and other certifications. He eventually wants an enterprise-wide EHR.

Scott Ranson, Brookdale Living, referred to a white paper on behalf of the CIO Consortium and Nurse Executive Council (June 27, 2013). LTPAC organizations need to incorporate context, service, and setting-specific EMR systems and clinical tools within the broader context of a common integrated, longitudinal person-centered electronic health record repository and platform supporting coordination across internal and external settings and services. A "one and done" philosophy is essential to eliminate redundant and inconsistent information. Based on this common record, setting- and encounter-specific systems should optimize and enrich a frictionless real-time engagement between caregiver and patient that is proactively supportive of the appropriate care delivery process. When system and clinical processes are misaligned, quality, care, and documentation are disrupted with myriad unintended consequences undermining the effectiveness of care. Emerging technologies are enhancing ability to remain nonintrusive while enhancing care outcomes and productivity with intelligent decision support. A robust EMR specific to the industry is required. He said that he supported certification. In addition to patient safety, patients' financial and health information must be protected. Most LTPAC providers are small and do not have the resources to evaluate software. Some of the products on the market repeatedly violate HIPAA and cannot generate required reports. Certification should include security regulation compliance, interoperability, third party integration, coding standards, and other functions. Vendors should be willing to certify and bear the costs. Providers should train their workers to ensure accurate information. The LTPAC industry is in the best position to reduce admissions and associated costs.

Terry Leonard, Life Care Centers of America, described his organization's internally developed application, which is Stage 1 certified. The organization recently transitioned to staff physicians. Their integration has resulted in better outcomes. He works with several state HIEs, some of which are Challenge grantees, and, therefore, had a better starting point. Life care centers are pressured by receiving EHs for better information. EHs want the physicians to directly log into hospital systems, which does not

benefit the long term care facility. Stage 1 certification benefitted interoperability. He has not pursued CCHIT certification. Some of the costs of certification were offset by savings. The typical nursing home does not employ physicians, so the experience of his organization cannot be generalized. One of the challenges of certification was that many of the requirements simply did not apply (growth charts).

Q&A

In response to a question about Stage 2 certification, Leonard said that he was evaluating whether to proceed. He is not sure what the Medicare penalties will be. Egerman wondered about the practicality of a certification process across the great diversity of LTPAC settings. Leonard responded that it is possible but difficult. Nevertheless, certification must be pursued. Scott agreed, saying that certification should be mandatory. Certification should be overarching for privacy and security, with perhaps sub-criteria for functionalities specific to settings like hospice and home health. According to Derr, the CCHIT certification did accommodate specific settings. He asked Chies whether standards helped in his pilot with Epic. Chies indicated that it was important to agree on the format of the CDA as a starting point. The goal was to create a bridge and an agreement upon which to build.

Tang inquired about standards helping an organization's standing with other levels and settings of care. Chies explained that hiring staff physicians has resulted in getting higher acuity patients, which helps the business case. Another panelist talked about the ability to standardize internal processes contributing to improvements in quality. The ability to compile data more accurately and to describe patients' ADLs allows the provider to increase charges and revenues. It also helps with regulation compliance.

Stan Huff asked about the relative value of standard setting and certification for interoperability versus other meaningful use requirements for common measures and sharing information. Leonard said that they are equally important. He sees more coordination across doctors, therapists and nursing. There are some work flow issues regarding who inputs data. His organization had to build two prescription systems, one for meaningful use and one for internal use. Interoperability will help to resolve the need for two systems. Chies declared that whatever gets LTPAC providers to the mainstream must be done. They are getting pressure from EHs to be part of the system.

Panel 4: Vendor Perspective

John Damgaard, MDI Achieve, said that his company's product is ONC 2014 Edition-certified and is widely adopted. LTPAC providers are savvy enough to adopt technology, not because they are told to, but because it contributes to their profit. The focus of certification should be to support transitions of care. Attestation is insufficient. Proof in a controlled environment should be required. He acknowledged that some vendors make promises they cannot keep and some intentionally misrepresent their products. He said that a focus on transitions can head off different state requirements. By limiting certifications to transitions, innovation will not be affected. Certification based on active verification will be a value for all.

Doc DeVore, Answers on Demand, indicated that his comments were very similar to those of the other panelists. Customers understand the benefits of HIT. Exchange of information reduces transitions and readmissions. He is in favor of certification to support transitions. His organization took risks to be certified. He found that his customers value certification, but their meaningful use partners are not always ready. A national HIE infrastructure is lacking. Efforts are duplicative. Voluntary certification with the 2014 Edition would allow LTPAC providers to interoperate with partners. He acknowledged that certification would have to be adapted for LTPAC settings.

Karen Utterback, McKesson, said that adoption rates of EHR technology among LTPAC providers, particularly home health providers, are amongst the highest in health care. McKesson Home Health and

Hospice ConnectTM was made available to customers to enable the publishing and consumption of a CCD/CCDA via standards based exchange protocols. The ability to move these products into use has been limited by the slow adoption of data exchange capabilities by EHs and EPs as they strive to meet the requirements of Stages 1 and 2. She said that based on these experiences, McKesson is opposed to the requirement for an ONC approved certification process for software products prior to Stage 3. Continued delays, such as the one announced on December 6, prevent McKesson from realizing the benefit of the already existing and available data from LTPAC providers that could be used to improve care, particularly in the frail populations. McKesson believes that ONC approved certification for LTPAC providers prior to Stage 3 is likely to result in an additional and unnecessary burden and cost and would have little value. A certification program, required or voluntary, cannot be successful without industry and provider commitment and without participation from providers. Although an ONC-approved certification program for LTPAC providers is currently unnecessary, she said that the standards used in meaningful use, such as CCDA, SNOMED, LOINC, and RxNorm, can be and are supported within the EHR products to help obtain greater parity in the exchange of information regardless of formal certification. She recommended that the transmission of CCDA standards adopted for certified EHR technology using standard messaging protocols such as Direct Messaging Protocols or publishing and consuming messages through standards-based HIE be considered. LTPAC EHR vendors support a variety of transport standards: Point to Point, X509, Https, Secure FTP, SMTP, S/MIME and XDR; however, not all of these standards are made available through vendors to home health care and hospice providers. Therefore, she recommended that the workgroup and ONC consider a more flexible approach to prescribing the abstract layer for transport and leave the selection of transport protocols to local exchanges. This alternative would accelerate data exchange to support transitions of care and care coordination.

Cheryl Hertel, Cerner, explained that in Cerner's success with certification is related to clear guidelines and functional requirements that benefit patients and clinicians. Certification should support public policy objectives, as in the example of meaningful use interoperability. Certification for e-prescribing, sharing of lab and diagnostic test results, and other functions has pushed the industry forward. Making certification mandatory means uniformity. Voluntary certification serves as a market differentiator. It can be helpful to the extent that it reflects capabilities to support care in specific environments. The LTPAC sector needs standards to support quality of care and to exchange information. She indicated that Cerner would support certification if it truly supports transitions. However, she questioned whether voluntary certification would really result in improved care.

Q&A

Derr asked DeVore about his experience with integration across community care retirement centers and settings: Was improvement in quality observed? DeVore said that CCHIT certification was beneficial. It was a learning experience in what is required in sharing information across settings and organizations. Since the patient population moves across settings, there must be a way to exchange their information.

Egerman observed that the panelists agreed on the importance of consistency around transitions of care. Are there alternatives to certification as a means of standardization? What about something such as a test kit for a purchaser to validate software? Damgaard responded that the focus must be on active verification in a simulated environment or via test kit. A test kit could be a mechanism for certification. Egerman said that government certification must be totally objective. Is certification the best vehicle? What about test kits for each of several functionalities? DeVore talked about the importance of flexible standards. The test kits concept is a good one, but would require a certification authority. Hertel advocated tackling transitions first and, hopefully, to learn from success stories. Utterback wanted to use existing standards for the plan of care for transitions. Existing standards can be used without the burden of full certification.

She declared that she is not opposed to certification in principle, but due to the immaturity of existing standards and low adoption, certification will not work at this time.

A member pointed out that providers testified that they wanted certification of basic functionalities such as e-prescribing, receipt of lab reports, medication management, and public health surveillance. Should there be EHRs certification criteria to support basic functionality and what would be the impact of the use of certified products for LTPAC, EPs, and EHs? DeVore cautioned against over-reaching. If certification were too expensive, adoption by vendors and by providers would be low. The common need is the ability to exchange data important to another setting. Damgaard agreed and added that a fully integrated system is costly for LTPAC providers. To impose that menu of functional items would have unanticipated consequences. They have not received stimulus money or subsidies. Hertel commented that the needs of LTPAC providers may be less sophisticated than for hospitals. It may be useful to think about two pieces—the use of EHRs within LTPAC facilities and their use for transitions to other organizations. Although some CDS is needed, it may be less demanding than what is used in EHs.

Tang explained to Utterback the rationale for the 10 percent threshold of electronic transmissions; when facilities can receive and transmit, they will do so. He asked for vendor buy-in to offer products that can send and receive information. Utterback assured him that she understood and that is why she wants to wait for Stage 3. The market must be built and that is challenging for vendors. DeVore said that the recent announcement of the extension of Stage 2 is an example of why it is difficult to engage the LTPAC community.

Derr asked Damgaard about his small, independent customers: Would voluntary certification help them to remain in the care spectrum? Damgaard said that although it could offer some guidance in selection of technology, their trading partners are the real hammer.

Wolf asked whether he was hearing correctly that information exchange depends on the type of information, for instance, that e-prescribing is different from labs, and that standards must reflex these differences. Another point is that something stronger than attestation is necessary. So what would be required to make the exchange work? And are CDS and other functions necessary? Damgaard agreed that these are separate but related categories. CDS may not be a certification issue, but one of competitive advantage. Utterback agreed. DeVore responded that is important to delineate the two uses. Nevertheless, without a way to incentivize, adoption will be low.

Panel 5: Regulatory and Quality Improvement Perspective

Karen Tritz, CMS, described the federal nursing home inspection process as it is and how it could be affected by the use of EMRs. Unannounced surveys are conducted by three-to four-person teams that are on site for several days. They are increasing encountering EMRs. A team recently encountered a situation in which an EMR was malfunctioning on medication, resulting in a loss of trust of staff and, subsequently, discontinuation of its use. That experience raises the question of how should an on-site inspection follow up on disclosure of problems with a product. How would an inspection finding relate to certification or loss of certification? She went on to describe several EMR functions that are important to surveyors. One is access and navigation. Surveyors need read-only access; otherwise, their on-site time is delayed while they wait for staff to provide access. Portability and physical access is important. Surveyors need to have access by laptop is order to maximize their efficiency. They also often need to access the federal QIS in order to interface with a national data set. Were a certification program put into effect, this interface should be a functionality for consideration. Another function is comprehensiveness; surveyors need to be able to look across modules to understand times of incidents and interventions.

Stella Mandel, CMS, Center for Clinical Standards and Quality Representative, indicated that CMS supports certification of LTPAC EHRs as part of its data standardization efforts. She began by citing the

sequence of many legislative actions, beginning with Section 1819 of the 1983 Social Security Act (42 U.S.C. 1302 and 1395hh), which provide the authority for these efforts. Data standardization is expected to result in: the use of uniform and standardized items; harmonization at the data element level; public access to standards; easily available data elements with national standards to support PAC health information technology and care communication; transfer of care documents able to incorporate uniform data elements; quality outcomes across multiple settings; and measures that follow the person.

Crystal Kallem, Lantana Group, suggested leveraging the meaningful use program to improve LTPAC HIT capabilities and patient-centered care. LTPAC EHRs must be included as part of the broader HIT interoperability strategy to support coordination of care. Information required for LTPAC quality measurement should leverage clinical information recorded in the patient record. This same clinical information must be made available for transitions of care. Public and private payers should agree on and promote consistent and efficient methods for electronic reporting of quality and health status measures across settings of care. These goals are achievable when LTPAC reporting requirements are harmonized with clinical data required for patient care.

Darrell Shreve, Aging Services of Minnesota, described developments in his state. Effective January 2015, nearly all health care providers located in Minnesota will be required to use an ONC-certified EHR. However, the enabling legislation did not include enforcement or penalties, making the requirement entirely voluntary. State-wide surveys revealed rapid uptake of adoption; in 2011, 69 percent of skilled nursing homes reported (83 percent response rate) use of an EHR. This voluntary adoption occurred without incentives and during a period in which reimbursement rates were frozen.

Q&A

In response to questions from Derr, Mandel said that standards are essential for harmonization and transmittal of information across transitions. CARE is composed of data elements from many different settings and includes six quality measures based on patient function. CMS is exploring the use of uniform, consistent data elements in different settings. Lantana is the contractor. Kallem said that Lantana is working with HL7 to implement standards for quality measures, some of which are required in Stage 2 and some are expected in Stage 3. The first step is for LTPAC providers to be able to use a structured document with minimum metadata for transmissions, and then to be able to use some of its elements internally for quality measures. Efforts are also underway to facilitate the data quality model. Derr said that he is concerned about adding to the burden of LTPAC workers and detracting from direct care; harmonization should reduce the burden.

Regarding adoption in Minnesota, which vendors or products are being used by LTPAC providers? Are they using 2014 Edition certified products? Shreve responded that according to the 2011 survey results, the great majority of LTPAC providers were using PointClickCare and MDI Achieve, neither of which is ONC-certified. Several CCHIT certified EHRs were infrequently used. The Minnesota guidance says "qualified" EHR if not a certified EHR. The providers had their own reasons for adoption. The cost was approximately \$ 40,000 to \$50,000 per facility. The adaptation rate demonstrated commitment to the industry. Certification was not a major factor in adoption.

Wolf asked about the functionalities providers are using in Minnesota. Shreve said that the primary use is for internal purposes. Some providers would like to transmit data, but the infrastructure within the state is not sufficiently developed, except for e-prescribing. Wolf went on to ask about reporting of pressure point ulcers. In order to comply with CMS requirements, his organization had to purchase new software and add staff. Even so, the information generated in not useful at the facility level. This situation permeates all LTPAC requirements. Requirements are only useful for reporting out. Solutions to this problem must be found before going into certification. Mandel responded that CMS did not require hiring additional staff. Wolf explained that although not required by CMS, addition staff was necessary to meet the reporting

requirements. Mandel said that the incidence of pressure ulcers is an important indicator of nursing care. It is critical to look at natural patient flow to identify factors in patient care. She suggested that Wolf submit comments to the quality reporting mailbox. She indicated that she was glad to hear that greater specificity is desirable at the local level. Crystal said that processes must evolve. An incremental approach will be used. Clinical quality measures have to be transformed for the electronic environment.

Derr announced that he serves on a Minnesota committee with Shreve. There are some questions about the validity of the survey data reported. The reported adoption rate may be overbroad. The committee on which he serves is concerned with the lack of EH cooperation, although state officials are working to improve transfer of information. He said that he will circulate the survey report to the workgroup.

Panel 6: Patient and Caregiver Perspective

Leslie Kelly Hall, Healthwise, showed slides to describe principles intended to promote patient engagement as a care team member. Kelly Hall also made other comments. Structured data advances all systems. Standards should be expanded and harmonized across systems. The patient is the sole source of adherence data and data reconciliation must include the patient. Patient-generated data should be interoperable.

Sandy Atkins, Partners in Care Foundation, also showed slides and talked about practice changes in community services and health care to improve health and quality of life for adults with chronic conditions. When dual eligibles go to managed care, the emphasis will be on lower-cost home and community-based services in lieu of nursing homes. Hands-on oversight is less in the home, so technology needs to enable consumers, caregivers and social service agencies to maximize health and safety. Standardization, e.g., prescription barcodes, would help speed accurate data collection. Certification standards need to connect software used in home and community to health care providers' EHRs and vice versa. Collecting medication information should be a zap of the smart phone barcode reader. It could be done by patients, caregivers, or community health workers. She described HomeMeds as a high-level evidence-based intervention to enable social workers to use software for medication reconciliation and risk screening in the home. HomeMeds and other evidence-based algorithms enable real time reconciliation and risk screening, alerting patient, caregiver, and providers. Downloads from discharge records and EHRs would eliminate 60 percent of data entry. Uploads to EHRs would likewise increase efficiency. Certification needs to drive improvements. Consumer app/widget back-end needs to be current and evidence based. Much hospital-based med reconciliation would have missed what social workers found with HomeMeds.

Joanne Lynn, Altarum, recommended establishment of standards and incentives to help long-term services providers adapt their existing EHR system or purchase a new one that meets requirements for interoperability, transfer of information, and enabling of monitoring for quality. All substantial providers of services across the continuum need to provide interoperable records or to have access to a system operated by another entity that serves the same function. That goal may require a few years, but it should be articulated as a goal. Additional elements should be included in longitudinal records for persons with long-term care needs, such as the content of advance directives, the services needed for the caregiver, social and environmental supports provided or needed, the likely course, the time set for re-evaluation of the care plan, and the care plan itself. Standard elements should replace any non-standard items in MDS, OASIS, and other reporting systems. Demonstrations of in the cloud shared systems, health information exchanges, or interoperability of records in a geographical area to provide transmission of important historical data along with care plans, prognosis, and advance directives (designation of a surrogate or specific instructions) should be supported. A negotiated care plan in a layered record with appropriate presentation layers for different users, including the patient, should be made available.

Q&A

Derr declared that certified senior geriatric pharmacists are a resource. How would voluntary certification help the involvement of the family? Lynch responded that through small funded demonstrations on transfer of records in a defined geographical area, the industry could learn what families most value and use. Something that all parties can tap into is needed. That something is more than an EHR; it would include a care plan and advance directive. She said that regarding advance directives, it is dangerous to have only yes or no. POLST can be included. She referred to the VA model. Atkins observed that a transition or care plan without an advance directive should prompt the LTPAC provider to obtain one. Consolazio informed the group that The HITPC had convened a hearing on advance directives. She will send a link to the information.

Public Comment

None

Meeting Materials

Bios
Questions
Agenda
Written testimonies and presentations