Abstract

Long-term and post-acute care providers (LTPAC) need to understand the multiple aspects of health information technology (HIT) in the context of health systems transformation in order to be a viable participant. The issues with moving to HIT are not just technical and funding, but include legal and policy, technical and business operations, and very significantly, governance. There are many unanswered questions. However, changes in payment methodologies, service delivery models, consumer expectations, and regulatory requirements necessitate that LTPAC providers begin their journey.

Keywords: Long-term and post-acute care; health information technology; health information exchange; electronic health records

Introduction

The US healthcare system is rapidly transforming to a patient-centric, value-based system to rein in unsustainable cost growth and improve the quality of healthcare delivery. This transformation includes (1) an expansion of “healthcare” to include well care; (2) new “patient-centric” and accountable care delivery models; (3) new reimbursement models that reward quality and value; and (4) the development and implementation of more efficient administrative processes that reduce fraud and waste. Fundamental to these transformational changes is the availability of real-time clinical and administrative data that can be shared at the point of care and across settings of care with providers, payers, consumers, and other related stakeholders through interoperable HIT systems.

HIT is not a goal, but a means to a goal of better health, better care, and lower costs.¹ The Health Information Technology for Economic and Clinical Health (HITECH) Act, part of the American Recovery and Reinvestment Act of 2009 (ARRA), includes funding for health information exchanges (HIEs), workforce development, regional extension centers (RECs), and Beacon Communities, as well as Medicare and Medicaid incentive payments for the meaningful use of certified electronic health records (EHRs).²

Eligible acute care (including children’s) hospitals (EHs) and eligible providers (EPs) were the initial targeted institutional and individual providers for the funding, policy, and standards for using certified EHRs that were established on the basis of the HITECH Act and implemented through the Centers for Medicare & Medicaid Services (CMS) and the Office of the National Coordinator for Health Information Technology (ONC).³ Providers who deliver care to individuals who use LTPAC services are not excluded
from being EPs (EPs include physicians, nurse practitioners, dentists, certified nurse midwives, and physician assistants [PAs] practicing in Federally Qualified Health Centers [FQHCs] or Rural Health Clinics [RHCs] led by a PA),

However, EHs and EPs cannot operate a patient-centric system or create an effective healthcare delivery infrastructure if they are not connected to and able to communicate with the other providers. With "35 percent of Medicare beneficiaries discharged from short-term acute hospitals receiv[ing] post-acute care," electronic information system capability in LTPAC facilities needs to vastly expand from the use for MDS, OASIS, and billing to medication and physician orders, medical records, laboratory, and daily care. "Research indicates that while HIT adoption in nursing homes for MDS and billing was above 90 percent, the use of HIT for physician orders, medical records, laboratory, medication administration, and daily care by certified nursing assistants was less than 50 percent. Furthermore, there is no direct funding for HIT to support medication management, alerts, continuity of care records, and communication with individuals and their families through a patient web portal.

Despite these challenges, opportunities for financial and quality improvements for LTPAC providers exist. In many ways, this is the new “game” in which LTPAC providers can sit out and be left behind, or become star players that consumer “fans” can engage with and support. In order to be “winners,” all providers, including those providing LTPAC services, need to fully utilize the benefits of the new electronic environment and evolving mobile health environment that is transforming how care is delivered, purchased, and overseen. LTPAC providers need to (1) understand the privacy and security rules of engagement, (2) maximize the use of EHRs, electronic registries, and telehealth tools, (3) communicate in a more timely fashion (ideally in real time) with hospitals and physicians to meet provider, patient, and family expectations, (4) operate more effectively and efficiently to participate in new payment and service delivery options, and (5) validate their value to purchasers and regulators.

As stated by the National Coordinator for Health Information Technology, Farzad Mostashari, success requires keeping an “eye on the prize” in terms of reduced medical errors and avoidance of unnecessary duplication and improvement in the coordination of care, and “feet on the ground” so that HIT supports clinical, administrative, and consumer needs.

What LTPAC Providers Need To Know

Terminology

Basic “e” terms include e-signature, e-prescribing, and e-health records, and the “e” is for electronic—not paper. LTPAC providers need to understand not only the terms, but also the legal and regulatory requirements that determine the parameters for use. For instance, e-signature capability is at the core of the ability to eliminate paper; however, there are multiple levels of digital signatures, and the requirements for use and retention are significant.

“E” terms are quickly being replaced with “m-health” terms as consumers and providers turn to mobile devices for management and monitoring. Near real-time communication techniques include the use of multimedia mechanisms and applications that work on iPhones, iPads, and laptops. If these devices are used as medical devices, Food and Drug Administration (FDA) oversight and regulatory requirements may apply. In July 2011, the FDA published draft guidance related to mobile medical applications, and in July 2012 the Food and Drug Administration Safety and Innovation Act was signed into law.

New terms, such as HIT, have different meanings to different constituents. Importantly, HIT always includes more than EHRs. It includes state and national health information exchanges (HIEs) and state and federal health insurance exchanges or marketplaces, with the former funded through HITECH and the latter through the Patient Protection and Affordable Care Act (ACA). HIEs are designed to provide the infrastructure for the exchange of clinical and administrative information for the delivery and oversight of healthcare, while marketplaces are designed to provide the technology support for “one-stop shopping”
for affordable health insurance coverage. LTPAC providers will potentially need to interface with both, requiring them to ensure compliance in their business agreements, develop the capacity to electronically receive and send information in the formats required, accommodate patient and provider identify management coding, and utilize the data that will be available to them as participants in these HIT systems.

Furthermore, old terms have acquired new meanings and present new opportunities, but existing regulatory and payment challenges require attention. Telemedicine has been expanded to telehealth including videoconferencing, telemonitoring, store-and-forward imaging, streaming media, and wireless communications. For example, if a physician is able to connect with patients electronically from the office, it may also make operational sense to enable the physician to connect with a nursing home to more effectively care for nursing home residents. However, the physician and the nursing home must address payment and regulatory issues to ensure compliance with relevant laws, regulations, and other relevant requirements.

**Technology**

It is critical that LTPAC providers understand what types of electronic and mobile services they are purchasing. To do this, they need to know what to ask. Vendors will answer questions that are asked, but may not answer the questions that should have been asked. For example, if a vendor indicates that an EHR system is certified, the questions that need to be asked include, but are not limited to the following:

- Is it certified by ONC for 2014 or pre-2014?
- Is it interoperable with other vendors’ technology and software without additional upgrades?
- Are interfaces the responsibility of the vendor or the provider?
- Are the upgrades to Stage 2 from Stage 1 and to future Stages of Meaningful Use included in the cost or an additional cost?
- Are all privacy and security requirements, including federal and applicable state laws and regulations, and procedures integrated into the system?
- Does the system have sufficient segmentation capability for purposes of privacy and security?

Modularity and standardization mean that providers can avoid buying technology more than once. “One-off” purchases are not a good thing. Purchasing does not equal meaningful use; meaningful use requires actually using the EHR in a meaningful way, which requires workflow considerations and training of clinical and administrative staff. Training should not be equated with classroom training and should not come after the system has been installed. Ongoing technical assistance is required.

LTPAC providers also need to think about the technology they already have that can be used differently. For example, rather than leaving telephone messages for patients, texting or sending a secure message may be patients’ preferred mode of communication. For education purposes, providers may consider using Skype, blogs, or Twitter. However, issues of privacy, security, source credibility, and validity must be addressed.

All providers, including those providing LTPAC services, should also use any HIE-enabling functionality that exists in their community. For instance, all State Health Information Exchange Cooperative Agreement Programs are required to provide secure messaging so that information can be pushed from one provider to another for referrals, discharge planning, and so forth. Other potential functionalities include provider directories, HL7 messaging, and Health Information Service Provider (HISP) services. As the HIEs become fully operational, they will also have the functionality to provide query services that allow providers to pull information. However, query services require further definition of user roles for access, authentication, and authorization; the inclusion of a master patient index; privacy and consent models; a record locator service; audit trails; single sign-on functionality; and connectivity to other HIEs and remote monitoring. If any HIE functionality is operational in a LTPAC provider’s area, it becomes a valuable tool for potential use.
Financial Opportunities and Responsibilities

*Medicare and Medicaid “Meaningful Use”*

With financial opportunities come a responsibility for “meaningful use” of EHRs. LTPAC providers are seeking funding for EHRs, but in doing so must understand the requirements for the funding. Medicaid EHR Incentive Program payments include funding to adopt, implement, or upgrade an EHR system; however, a Medicaid population threshold must be met and the EHR system must be certified by ONC. For Medicare payment, EPs and EHs must attest that the certified EHR has been used in a meaningful way. Medicare and Medicaid EPs must meet 15 core objectives and 5 of 10 menu objectives for a total of 20 objectives for Stage 1, while EHs and critical access hospitals (CAHs) must meet 14 core objectives and 5 of 10 menu objectives for a total of 19 objectives for Stage 1. As EPs advance to Meaningful Use Stage 2, they must meet 17 core objectives and three of six menu objectives, while EHs and CAHs must meet 16 core objectives and three of six menu objectives.

Even without direct Medicare or Medicaid funding, LTPAC providers need to determine if and how they can help EPs and EHs meet their objectives in order to bring value to the EPs and EHs so that they may be in a position for possible shared savings or other beneficial arrangements. While LTPAC providers bring more significant value in Stage 2, which has a broader focus on transitions of care, they may offer an opportunity for secure messaging connectivity and/or query capability for discharge planning and continuity of care documents.

LTPAC providers need to have a certified EHR that meets the current and 2014 certification criteria required to satisfy the definition of a base EHR, such as the capacity to capture and query information relevant to healthcare quality and exchange e-health information with and integrate such information from other sources. Even though they are not eligible for EHR meaningful use incentive payments, LTPAC providers may be able to enter into arrangements or partnerships with EPs and EHs to better position themselves to be viable partners of managed care plans, accountable care organizations (ACOs), home health care providers, and other providers.

**New Care Delivery and Reimbursement Methodologies**

To survive, let alone thrive, LTPAC providers must adjust to the transforming service delivery and payment environments. By 2014, 26 states are expected to provide Medicaid Long-Term Services and Supports (MLTSS), which may or may not include acute care and/or behavioral health, through capitated managed care programs with MLTSS contractors held accountable through performance measurement. Eligible enrollees, which will be determined by each state, will vary by state and may include individuals eligible for Medicaid only or may include individuals eligible for both Medicare and Medicaid who may or may not be institutionalized. Payment may be full or partial risk. These multiple variables will require integration of data sources to provide access to accurate, timely data that can be synthesized into actionable information, which will require suitable HIT capability and the human capacity to make effective cultural and management changes to effectively use the knowledge gained.

**Potential Additional Financing Options**

Although the ACA authorized National Demonstration Projects on Culture Change and Use of Information Technology in Nursing Homes (Section 6114) and Programs to Promote Elder Justice (Section 2041), funding was not provided for these programs. New funding from Congress seems unlikely as well. However, if HIT purchases and uses are considered in context of healthcare delivery and administration transformation, there are potential financing options for LTPAC providers, particularly if they are Medicaid-enrolled LTPAC providers. For example, states have the requirement to fully utilize HIT in their Medicaid Health Home State Plan amendments and to include reimbursement arrangements that accommodate HIT cost implications. Some states have received approval to use their ONC HIE funding to connect with and provide IT infrastructure to behavioral health providers who need to interface with EPs and EHs, which may be a possibility for LTPAC providers to pursue. States have already provided access to tools created for “meaningful use” providers to other providers, such as use of secure messaging, provider directories, and so forth. States may also use state funds for loans, such as was done.
in North Dakota. In addition, LTPAC providers also may be the recipients of donated software and technology to support the use of EHRs provided that certain requirements are met.

What LTPAC Providers Need to Do to Succeed

LTPAC providers need to engage in local, state, and national activities to the degree that their resources and capacity allow. Concrete opportunities include:

- Participating in state HIEs;
- Assuring internal HIT capacity to obtain, retain, and use care summaries (continuity of care documents);
- Contributing expertise in the development of consistent electronic measures for LTPAC settings;
- Ensuring board and staff (clinical and administrative) understanding of the clinical and business value of HIT and effective use of HIT;
- Expanding patients’ access to their own information; and
- Using the new technology to better engage and inform patients.

LTPAC providers need to understand the national e-health exchange “vision” and the major operational requirements for participation, including financial, governance, policy/legal, technical, and business operations (see Figure 1). For patient-centric care to be realized, each LTPAC provider must seek to be a part of the equation. The patient’s care cycle includes preventive, ambulatory, acute, and long-term care, whether he or she resides at home or in an assisted living facility, nursing home, ICF/DD, hospice, long-term acute care hospital, or inpatient rehabilitation facility.

To be effective, LTPAC providers must also be realistic. The transition from paper to electronic records, from provider-focused to patient-centric care, and from HIT as an “unknown” to a support tool integrated into the workflow, is a journey, and not a cheap one. LTPAC providers must be prepared for initial and ongoing costs related to software, hardware, upgrades, maintenance, support, and training, as is true for any information technology infrastructure change. Transitions are not easy, and work will initially be slowed.

Some costs and staff frustrations can be limited, though, if the HIT system is designed to meet the needs of the staff rather than the staff having to adapt to the needs of the HIT system, and if the vendor is responsive to and supportive to the LTPAC provider rather than keeping the LTPAC provider totally dependent on the vendor. However, eliminating paper and keeping old business processes does not make the work environment more efficient. Adjustments will be required to gain the benefits of an electronic environment, such as the use of smartphones for interactions with patients and family; the use of Wii or Kinect for well care; or the use of home computers, sensors, and devices for home monitoring.

Business decisions will need to be made regarding the use of HIT:

- Is the HIT a management tool, performance reporting tool, or both?
- What level of access is needed to clinical, administrative, community, and patient-generated data in an electronic form across time?
- How standardized must the data be to be useful?
- Who should have access to the internal and/or external data?
- How will the information provided from the data collected from the various data sources be used: to assess quality, cost, and patient experience performance, or for quality improvement, internal monitoring, and external oversight?
- Where will the HIT reside: in the “cloud” or at the LTPAC provider’s location?
- Should the LTPAC provider buy a service or simply purchase the hardware and/or software?
While most of the business decisions will be made by informed LTPAC providers, some actions are required related to protected health information (PHI). LTPAC providers must comply with the HIPAA (Health Insurance Portability and Accountability Act) rules as well as other federal and state laws and regulations, including

- HIPAA privacy and security requirements for covered entities and business associates and liability for violations, including breach notification requirements;\textsuperscript{26}
- State privacy and confidentiality laws and regulations; and
- Variations in disclosure/redisclosure requirements based on 42 CFR Part 2 (substance abuse confidentiality regulations).\textsuperscript{27}

In addition, financial and other arrangements between providers, including LTPAC providers, will need to be carefully analyzed and implemented to ensure compliance with the federal healthcare program anti-kickback law and the physician self-referral (Stark) law.\textsuperscript{28} These arrangements might include ACOs, bundled payment arrangements, or other arrangements involving use or donation of EHR software and/or technical assistance.

**Conclusion**

To be successful, the question is not *if or when*, but *how* to move forward on a journey to maximize the benefits of HIT for the LTPAC community. Providers will have many concerns, including (1) whether purchased technology will work the way it needs to; (2) what the initial and ongoing costs will be (3) how these costs will paid; and (4) whether the risks, rewards, and regulation requirements can be balanced. Many unanswered questions remain. However, changes in payment methodologies, service delivery models, consumer expectations, and regulatory requirements necessitate that LTPAC providers begin their journey toward effective use of HIT.

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Notes


6. Ibid.


8. Ibid.


21. 42 CFR § 411.357(w) and § 1001.952(y).


Figure 1

Exchange of Health Information

[Diagram: Exchange of Health Information]

Adapted from CIVC Diagram