

Facilitating Long-Term Care Providers' Participation in Accountable Care Organizations through Health Information Exchange

Save to myBoK

by Rebecca A. Meehan, PhD, and Jennifer Staley, MLIS

Abstract

This article reviews the potential for increased involvement of long-term post-acute care (LTPAC) providers in accountable care organizations (ACOs) facilitated by health information exchange (HIE). As ACOs aim to offer coordinated, high-quality care while managing costs, visibility of patient data is critical to inform decision making and manage outcomes across the entire spectrum of care. HIE can provide this visibility. The relationship between LTPAC and ACOs is mutually beneficial because it is important to improve the quality of care for patients as they transition from acute care hospital settings, and to keep costs down by preventing duplicate testing, avoiding medication errors, improving diagnoses, and avoiding unnecessary hospital readmissions. Although a limited number of studies have evaluated the outcomes of HIE for LTPAC, research is showing some benefit through reduced costs and more accurate billing data. A review of known outcomes, practical considerations, and next steps are discussed.

Keywords: long-term care; accountable care organization; health information exchange

Introduction

Health information technology (IT) is integral to advancing innovative methods of managed care, such as accountable care organizations (ACOs), which seek to integrate care across all healthcare providers, including long-term post-acute care (LTPAC) settings. Driven in part by the federal financial incentives for meaningful use (MU), eligible hospitals and providers were early adopters of electronic health records (EHRs) and later health information exchange (HIE).¹ However, LTPAC settings were not eligible for MU incentives and still lag behind in adoption of health IT.² Yet, it is critical to consider the entire spectrum of care when establishing ACOs or other provider models based on integrated services, and to take into account the associated costs and quality measures for older patients, who often move from the hospital to short-term rehabilitation care, home health, or skilled nursing facilities. LTPAC financial and regulatory needs also motivate greater synchronization among healthcare stakeholders. LTPAC facilities need to meet census goals, and to do so, they require hospital partners to refer patients. At the same time, hospitals also need LTPAC referral partners that are working to improve health IT sophistication and quality outcomes for patients. Beginning in 2015, hospitals have begun to be financially penalized (2 percent of reimbursement by the Centers for Medicare and Medicaid Services [CMS]) for patients who are readmitted within 30 days of discharge.³ Currently LTPAC facilities are not penalized directly for these readmissions; however, this will change by 2018.^{4,5} Additionally, the US Department of Health and Human Services (HHS) is also proposing a new rule (CMS and HHS, 2015, 80 *Federal Register* 42176) encouraging HIE among all health providers, including long-term care facilities and nursing homes, to improve care delivery and coordination across the entire care spectrum. Under this policy, long-term care facilities would be required to transmit clinical information electronically to the receiving hospital or facility during patient discharges or care transitions.⁶

Improved communication about patient health information during transitions of care is among the most important factors in achieving the quality, satisfaction, and cost goals of the new alternative payment arrangements, including ACOs.⁷ And, though barriers may exist, ACOs cannot realistically address quality and health outcomes for a growing number of Medicare patients if LTPAC is only marginally involved in these care models, as some early reflections on ACOs have suggested.^{8,9} Full LTPAC participation in ACOs is critical for success in monitoring and addressing the health concerns of older adults needing extended

or long-term care. This article discusses how HIE can be a useful tool to prepare LTPAC providers to more fully participate in ACOs.

Current Role of Long-Term Care in ACOs

The ACO provides an efficient financial model for helping to meet cost-containment goals, which are becoming increasingly more important because of decreasing rates of reimbursement and continued pressure for LTPAC organizations to rein in costs. LTPAC facilities offer ACOs the potential to both improve outcomes and control costs through better alignment of the specific post-acute care services needed by patients.¹⁰ Tu and colleagues (2014) identify several types of LTPAC “engagement” with ACOs, starting with minimal commitment and then moving into partnership (in which patient data is shared), to financial and data integration (in which EHR access and other health information technologies are shared), and finally to full integration and ownership.¹¹ Other clues to how these arrangements may work can be found in a recent report by Lage and colleagues (2015), who described the process undertaken at Partners HealthCare to identify a network of skilled nursing facilities to provide care for their ACO patients.¹² Regarding HIE, among the criteria used in their process, applicants that were selected were more likely to have an EHR system that was integrated with the acute care hospital than those who met the minimum criteria but were not selected, though many other quality and organizational characteristics were also considered.¹³

Given the focus of recent CMS moves and anecdotal reports, such as the one by Lage and colleagues, it could be expected that LTPAC involvement in ACOs will continue to grow. However, as of 2014, reports of incorporation of LTPAC providers into ACO networks were still relatively low.¹⁴ While the potential for care improvement and cost savings are promising, difficulties have been noted in data sharing between care providers. One recent study, for example, reports that although the majority of ACOs (67 percent) would “most like” to integrate data from LTPAC settings, these data were among the types often said to be harder to integrate than those originating from other settings.¹⁵

How HIE Can Be a Solution

One, perhaps overlooked, catalyst for fostering LTPAC providers' participation in ACOs is HIE. The Office of the National Coordinator for Health Information Technology (ONC) defines HIE as a technological process by which healthcare providers and stakeholders can electronically access and securely share pertinent medical data, enabling providers to follow patient information across organizational, vendor, and geographic boundaries.¹⁶ Participation in an ACO increases the need for open communication channels among all care settings,¹⁷ and HIE facilitates this because some LTPAC providers are already using HIE. ACOs can then leverage this existing technical infrastructure that is already embedded in some administrative agreements and clinical workflows.¹⁸ And, although HIE use is less common in LTPAC facilities than it is in hospitals, its adoption rates continue to grow.¹⁹ For example, research shows that ACO participation by hospitals has been associated with shared HIE contact between hospitals and LTPAC providers, suggesting that ACOs are increasing the demand for HIE among LTPAC providers, albeit perhaps more often incentivizing the exchange of data between select LTPAC facilities and hospitals rather than encouraging adoption among a broad base of LTPAC facilities.²⁰ Other studies have found that LTPAC providers' patterns of HIE use are related to funding sources or facility characteristics. For example, research shows that most LTPAC providers actively using HIE are recipients of federal or state funds and were part of innovative pilot projects to improve care and communication strategies.²¹ HIE use is also more common among for-profit facilities than among nonprofit facilities, and even when it is in use, it may still not practically increase data sharing outside the organization, as was found in one study examining LTPAC providers' use of HIE in the state of Minnesota.²²

What Are the Benefits of HIE in LTPAC?

Sharing patient health information through HIE with approved care providers, both inside and outside the organization, holds promise for enabling improvements in both quality and cost outcomes through reductions in duplicate testing, medical complications, avoidable hospitalizations, and readmissions. One study examining the use of electronic HIE in an ambulatory setting, for example, found that it was associated with a lower rate of 30-day readmissions.²³ Rudin and colleagues (2014), however, reported that very few HIEs have been evaluated for evidence of effects on quality, costs, efficiency, and usage.²⁴ Other research has found a lack of generalizable evidence on how HIE organizations are affecting the cost and quality of care.²⁵ Regarding the effects of HIE in LTPAC specifically, a review by Filipova (2015) found that the most common benefits

of using HIE, as reported by skilled nursing facilities, included faster and more accurate billing when using HIE to communicate with nonaffiliated providers, improved care planning within affiliated organizations, and improved quality of documentation within individual facilities.²⁶ Beyond providing an opportunity to improve care, however, HIE also has the potential to help reduce costs associated with duplicate testing through access to pertinent lab work, x-rays, and other test results run on a patient in the recent past. In the systematic review by Rudin and colleagues (2014), for example, their findings indicated that HIE can reduce emergency room costs in some cases.²⁷

Finally, beyond the immediate benefits of HIE in LTPAC, the use of HIE positions LTPAC providers to share information with care team members in other settings who may be part of an ACO or other integrated care arrangement. MacTaggart and Thorpe (2013), for example, advocate that LTPAC providers need to strategize and use health IT not only to achieve quality outcomes but to be considered a part of new payment methodologies, such as ACOs.²⁸ As methods of information exchange evolve, and as LTPAC organizations become more adept at using HIE and other data sharing models, they will be better prepared to participate in new value-based payment models. ACOs can then also use data generated by LTPAC facilities to aid in managing patient populations and controlling costs through data analytics. According to the 2015 eHealth Initiative ACO survey, although data analytics were used by nearly all respondents in the survey to identify gaps in care (86 percent), 79 percent reported that getting access to data outside the ACO was the “biggest challenge facing ACOs.”²⁹ In sum, not only the services of LTPAC providers but also the accompanying patient-level data that they generate will be required for the ACO model to succeed. While ensuring data interoperability is an important step, facilitating information exchange through HIE organizations could help to lessen hardships on the road to full interoperability.

What Is Holding HIE Back?

Despite its benefits, ubiquitous HIE is still hampered by challenges. The current state of HIE in nursing homes has been described as very basic.³⁰ Fueled by the advantages of HIE and public pressure, policy, and regulations, Alexander and colleagues (2016) posit that nursing homes will need to change rapidly to meet growing expectations for communicating patient needs more efficiently.³¹ Research shows a high level of interest in HIE among all healthcare stakeholders, yet it is still not widely used in LTPAC facilities for exchange of patient health information.³² At the same time, HIE efforts have been reported to be diminishing.³³ Recent research has reported a reduction in overall community and state operational HIE efforts nationally, declining from 119 HIE systems in operation in 2012 to 106 in 2014.³⁴ This finding could be indicative of the ongoing adjustments in community and regional HIE services. Several complementary alternatives that may also offer an effective way to share patient data are emerging. For example, many EHR vendors have portals in place for data sharing. Other options include independent health data exchange mechanisms, such as Commonwell Health Alliance (<http://www.commonwellalliance.org>), which allows for standards-based sharing beyond read-only files. Moreover, initiatives such as the Sequoia Project (<http://sequoiaproject.org>) are expanding a national network of HIE partners to securely share clinical information across the United States using a standardized approach. Whether LTPAC uses the many private or public HIE services or whether it leverages alternative or complementary solutions from an EHR vendor or alliance, the electronic data exchange capability will provide greater visibility of health data.

Future Directions

This article reviewed the current status and future potential for increased involvement of LTPAC providers in ACO models, as facilitated by HIE. Recognizing that LTPAC organizations are currently not leading the coordination of ACOs, a collaboration with a hospital or group of hospitals using a convening agent may enable LTPAC providers to participate in ACOs sooner. Additionally, ACOs may have more success in enrolling LTPAC partners if they demonstrate the potential for positive census effects or other value for LTPAC organizations through better relationships with hospitals or resources from a teaching perspective.³⁵ If HIE is to be successful in LTPAC, it needs to move from subsidized or sponsored use to a permanent budget allocation for LTPAC organizations. Although the process will almost certainly include challenges, leveraging existing workflows and the HIE services already in place at a state or local level, or using compatible electronic exchange options, will create opportunities for ACOs to innovate in care delivery for a fast-growing segment of patients using LTPAC in an ever-changing payment environment.

Rebecca A. Meehan, PhD, is an assistant professor of health informatics at Kent State University in Kent, OH. Jennifer Staley, MLIS, is a doctoral student at Kent State University in Kent, OH.

Notes

- [1] US Department of Health and Human Services. "[HITECH Act Enforcement Interim Final Rule](#)." 2009.
- [2] Office of the National Coordinator for Health Information Technology (ONC). [Health IT in Long-Term and Post-Acute Care: Issue Brief](#). Washington, DC: ONC, 2013.
- [3] Centers for Medicare and Medicaid Services. "[Readmissions Reduction Program \(HRRP\)](#)." 2012.
- [4] Centers for Medicare and Medicaid Services. "[PAMA Regulations](#)." 2014.
- [5] Carnahan, Jennifer L., Kathleen T. Unroe, and Alexia M. Torke. "Hospital Readmission Penalties: Coming Soon to a Nursing Home Near You!" *Journal of the American Geriatrics Society* 64, no. 3 (2016): 614–18.
- [6] Bresnick, Jennifer. "[CMS to Require Health Information Exchange for Long-Term Care](#)." *HealthIT Analytics*. 2015.
- [7] Berwick, D. M., T. W. Nolan, and J. Whittington. "The Triple Aim: Care, Health, and Cost. *Health Affairs* 27, no. 3 (2008): 759–69.
- [8] Crecelius, C. "Accountable Care Organizations and the Long Term Care Physician." *Caring for the Ages* 14, no. 7 (2013): 16–17.
- [9] Byrne, C., and M. Dougherty. [Long-Term and Post-Acute Care Providers Engaged in Health Information Exchange: Final Report](#). Washington, DC: US Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation, Office of Disability, Aging, and Long-Term Care Policy, 2013.
- [10] Tu, Tianna, Ike Bennion, and Michelle Templin. [The Right Care for the Right Cost: Post-Acute Care and the Triple Aim](#). Florham Park, NJ: Managed Health Care Associates & Leavitt Partners, 2014.
- [11] Ibid.
- [12] Lage, D. E., D. Rusinak, D. Carr, D. C. Grabowski, and D. C. Ackerly. "Creating a Network of High-Quality Skilled Nursing Facilities: Preliminary Data on the Postacute Care Quality Improvement Experiences of an Accountable Care Organization." *Journal of the American Geriatrics Society* 63, no. 4 (2015): 804–8.
- [13] Ibid.
- [14] eHealth Initiative and Premier Inc. [The Landscape of Accountable Care and Connected Health: Results from the 2014 National Survey of Accountable Care Organizations](#). Washington, DC: eHealth Initiative, 2014.
- [15] eHealth Initiative & Premier. [The Evolving Nature of Accountable Care: Results from the 2015 ACO Survey](#). 2015.
- [16] HealthIT.gov. "[Health Information Exchange \(HIE\): What Is HIE?](#)" 2014.
- [17] Dullabh, Prashila, Lauren Hovey, and Petry Ubri. [Provider Experiences with HIE: Key Findings from a Six-State Review](#). Bethesda, MD: NORC at the University of Chicago, 2015.
- [18] Dullabh, P., P. Ubri, and L. Hovey. [The State HIE Program Four Years Later: Key Findings on Grantees' Experiences from a Six-State Review](#). Bethesda, MD: NORC at the University of Chicago, 2014.
- [19] Hersh, W., A. Totten, K. Eden, et al. [Health Information Exchange \(AHRQ Publication No. 15\(16\)-E002-EF\). Evidence Report/Technology Assessment No. 220](#). Portland, OR: Pacific Northwest Evidence-based Practice Center, 2015.
- [20] Cross, J. A., and J. Adler-Milstein. "Investing in Post-Acute Care Transitions: Electronic Information Exchange between Hospitals and Long-Term Care Facilities." *Journal of the American Medical Directors Association* 18, no. 1 (2017): 30–34.

[21] Byrne, C., and M. Dougherty. *Long-Term and Post-Acute Care Providers Engaged in Health Information Exchange: Final Report*.

[22] Filipova, A. A. "Health Information Exchange Capabilities in Skilled Nursing Facilities." *CIN: Computers, Informatics, Nursing* 33, no. 8 (2015): 346–58.

[23] Vest, J., L. Kern, M. Silvre, and R. Kaushal. "The Potential for Community-based Health Information Exchange Systems to Reduce Hospital Readmissions." *Journal of the American Medical Informatics Association* 22 (2015): 435–42.

[24] Rudin, R. S., A. Motala, C. L. Goldzweig, and P. G. Shekelle. "Usage and Effect of Health Information Exchange: A Systematic Review." *Annals of Internal Medicine* 161 no. 11 (2014): 803–11.

[25] Rahrkar, S., J. R. Vest, and N. Menachemi. "Despite the Spread of Health Information Exchange, There is Little Evidence of Its Impact on Cost, Use, and Quality of Care." *Health Affairs (Project Hope)* 34, no. 3 (2015): 477–83.

[26] Filipova, A. A. "Health Information Exchange Capabilities in Skilled Nursing Facilities."

[27] Rudin, R. S., A. Motala, C. L. Goldzweig, and P. G. Shekelle. "Usage and Effect of Health Information Exchange: A Systematic Review."

[28] MacTaggart, P., and J. H. Thorpe. "Long-Term Care and Health Information Technology: Opportunities and Responsibilities for Long-Term and Post-Acute Care Providers." *Perspectives in Health Information Management* (Fall 2013): 1–10.

[29] eHealth Initiative & Premier. *The Evolving Nature of Accountable Care: Results from the 2015 ACO Survey*, p. 8.

[30] Alexander, Gregory L., Lori Popejoy, Vanessa Lyons, Sue Shumate, Jessica Mueller, Colleen Galambos, Amy Vogelmeier, Marilyn Rantz, and Marcia Flesner. "Exploring Health Information Exchange Implementation Using Qualitative Assessments of Nursing Home Leaders." *Perspectives in Health Information Management* (Fall 2016).

[31] Ibid.

[32] Hassol, Andrea, Laura Goodman, Jim Younkin, Mary Honicker, Kimberly Chaundy, and James M. Walker. "Survey of State Health Information Exchanges Regarding Inclusion of Continuity of Care Documents for Long-Term Post-Acute Care (LTPAC) Patient Assessment." *Perspectives in Health Information Management* (Fall 2014).

[33] Adler-Milstein, J., S. C. Lin, and A. K. Jha. "The Number of Health Information Exchange Efforts Is Declining, Leaving the Viability of Broad Clinical Data Exchange Uncertain." *Health Affairs (Project Hope)* 35, no. 7 (2016): 1287–85.

[34] Ibid.

[35] Personal communication, Ann Conn, October 2016.

Article citation:

Meehan, Rebecca A; Staley, Jennifer. "Facilitating Long-Term Care Providers' Participation in Accountable Care Organizations through Health Information Exchange" *Perspectives in Health Information Management* (Summer, July 2017).
