BACKGROUND
In 2013, Lehigh Valley Health Network (LVHN) began strategically developing the infrastructure and capabilities to assume risk under value-based contracting. These preparatory efforts included two major health IT investments – transitioning to Epic as an enterprise electronic health record (EHR), and partnering with Optum to tie the clinical record with claims data to allow the network to make informed, tactical decisions about the deployment of resources. LVHN decided to leverage its technology to increase engagement, drive patient satisfaction, and support the triple aim. Utilizing an important infrastructure investment, the MyLVHN patient portal component of the Epic platform was a critical strategy for success. The following brief describes how LVHN’s patient portal became the vehicle through which the network has deployed multiple successful patient engagement strategies.

APPROACH
Rather than treating the patient portal as a simple add-on to the medical record, LVHN designed a comprehensive patient engagement strategy that would optimize the portal’s many capabilities. From the outset, LVHN convened a steering committee to oversee the design and implementation of the portal, which worked in close collaboration with the medical group’s Operations Team, the network’s IT Team, and Epic staff. Understanding the capabilities of the portal and the priorities of the network, the committee laid out a two-year roadmap for testing and scaling various initiatives. First, the committee selected 14 practices across medical disciplines to pilot the portal in order to define roles, develop workflows, and understand the impact of the portal on practice workloads. Following the initial pilot, LVHN established modest, system-wide portal engagement goals as part of its annual goal setting.

Undoubtedly, the most important step in rolling out the patient portal throughout the network was to engage patients to sign up for MyLVHN. LVHN made patient enrollment and activations on the portal a network-wide goal, and providers were required to regularly report the number of activations in their practice. This ensured accountability and transparency throughout the network. To drive portal enrollment, LVHN designed internal and external campaigns to educate and engage providers and patients about the portal’s capabilities. LVHN providers were shown a video tutorial on how to enroll—so they could benefit themselves and their families as well as help their patients—and were reminded about the importance of enrollment in email blasts, leader-to-leader presentations, and department meetings. The practices were asked to include information about MyLVHN in their regular communications with patients. In December 2015 and January 2016, LVHN launched a mass media campaign complete with billboards, TV and radio commercials, flyers, and social media postings to alert the public about MyLVHN’s capabilities. For example, one such advertisement read, “What was the name of that hard-to-pronounce medicine I was taking?” See your medical record at MyLVHN.org.” Because of these combined efforts, LVHN reached 100,000 activations in the shortest amount of time of any Epic users, and has currently more than 175,000 patients activated on the portal.

About Lehigh Valley Health Network
Lehigh Valley Health Network encompasses eight hospital campuses with a medical staff of over 2,000 physicians and 18,000 employees. The Lehigh Valley Physician Group includes 1,500 providers across 200 practice sites across Pennsylvania.

Location: Pennsylvania
Website: www.lvhn.org
VBP Activity:
- MSSP Track 1 since 2015 (~40K lives)
- MA contracts (~25K lives)
- Commercial contracts (~100K lives)
- Self-insured health plan for employees (~25K lives)
Over the past two years, LVHN’s patient portal has evolved to provide much more than lab results, appointment and screening reminders, and refill requests. LVHN’s portal, MyLVHN, allows patients to engage in a variety of activities, including patient self-scheduling, patient-entered questionnaires, e-visits, video visits, e-check-ins, and more. Notably, the patient-entered questionnaires—which can be completed through the portal or in the office using a Welcome Tablet—allow patients to provide important info to supplement the medical record, and allow providers to start each visit with more information, reducing encounter times and increasing patient satisfaction. Other benefits of the patient engagement strategies offered through the MyLVHN portal include improved efficiency, reduced phone calls, increased communication between patients and providers, and increased patient access to personal health information. LVHN’s portal use is still evolving, as the system is beginning to study portal utilization of sub-populations such as Medicare patients.

**RESULTS TO DATE**

Not only have patients activated their MyLVHN accounts, but more than 70% of patients are using the services available on the portal. For example, between February 2015 to March 2017, 2,359 appointments were scheduled through MyLVHN, 302,062 patient medication renewal requests were submitted, and 297,285 e-check-ins were completed. As a result of this patient engagement, patient throughput has improved, with some practices experiencing a 20–40% decrease in average encounter time from check-in to check-out. LVHN has also experienced an increased annual wellness visit capture rate, which increased from 12% to 54% in the past two years.

**TOOLS & VENDOR PARTNERS**

When determining which EHR and patient portal platform to use, LVHN used KLAS assessments to pick vendors for demonstrations. LVHN chose an EHR based on the functionality of the platform and the satisfaction ratings from other large health systems. LVHN has enjoyed that Epic provides a robust, integrated, single platform, and that the patient portal already had the capabilities to perform the functions described in this case study brief.

**CHALLENGES WITH IMPLEMENTATION**

LVHN acknowledges that, while the patient portal has successfully increased patient engagement, it is important to remember that there are pros and cons to using a portal. Some providers can find system EHR transitions overwhelming, and they may not like the subsequent changes to their workflows. For example, the portal changes the primary method of communication between the patient and provider from phone calls to emails. LVHN found it necessary to support providers throughout the change to avoid provider burnout, especially due to the aggressive implementation pace LVHN pursued.

LVHN leadership also notices that they invested a lot of time in ensuring that the technology worked correctly, but less time was spent planning how the technology would impact workflows and the delivery of care. The 14-practice pilot was helpful but not sufficient, as LVHN found there was still much to learn when the portal was expanded throughout the network. LVHN recommends that others going through a similar transition consider these aspects of implementation at the same time as preparing the technology.

**KEY LEARNINGS**

- **Begin with intentional objectives** – Create network-wide goals to foster accountability and transparency.
- **Technology must be more than its features** – Understand how to incorporate tools into workflows, and which aspects provide the greatest value to patients.
- **Iterate as you scale** – Small-scale pilots are informative but expect to make additional changes when implementing across the network.

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