Healthcare executives can’t help but hear the clamor to set population health management (PHM) strategies into motion. Identified as a critical element to achieving healthcare’s Triple Aim, PHM holds great promise for advancing patient care to produce better outcomes at lower costs.

The move from fee-for-service to quality-driven, risk-bearing care delivery models will necessitate that healthcare organizations take a systematic approach to improving population health to avoid high-cost, event-related sick care. Leading research groups and thought leaders agree that adopting health IT that enables clinicians to make the best decisions about a patient’s health proactively and automatically will be critical to any PHM strategy.

As the movement towards accountable care organizations and patient-centered medical homes continues to evolve as a key strategy for integrated delivery networks, decisions regarding infrastructures that support standardization of evidence-based practices at the point of care will be critically important to performance optimization. Solutions that help reduce variation in clinical response and ensure the best decisions are made with each patient encounter must be leveraged to support this strategy.

While standardization is an important component of managing any chronic disease, it becomes even more critical in the case of a public health crisis when time is of the essence for containment. The Ebola outbreak and its entry into the U.S. is a prime example of the need for best-practice guidance to help hospitals and providers make the best decisions.
As healthcare organizations scrambled to be prepared, one of the greatest criticisms was lack of standardized protocols for identifying and treating the disease, as well as protecting healthcare workers.ii

Going forward, healthcare organizations will need to arm clinicians with the best clinical decision support (CDS) and employ forward-looking clinical content management strategies to achieve success with PHM—whether faced with the challenge of a chronic disease or a public health crisis. The Advisory Board has specifically detailed “information-powered clinical decision-making as one of three key elements to successful PHM.”iii In tandem with this assertion, CDS tools, such as evidence-based order sets and care plans, have been identified by a number of leading research groups, including KLAS and The Advisory Board, as the CDS tools of choice for standardizing care practices and promoting evidence-based practices at the point of care.iv,v

While deploying CDS is an important step towards standardization, implementing a clinical content management strategy to support long-term viability should be the overarching strategy for healthcare organizations. This greater strategy ensures not only deployment and implementation of evidence-based content and standardization but also ongoing maintenance and management of an enterprise’s knowledge assets.

Understanding the Risk

A public health crisis can occur at any time. In recent years, the U.S. has witnessed such unexpected regional outbreaks as fungal meningitis and tuberculosis and more serious concerns, such as West Nile virus and Ebola.

The Community Preventive Services Task Force of the Department of Health and Human Services has identified two kinds of community preparedness when responding to a public health crisis:

1. Public health preparedness—the ability of the public health system, community, and individuals to prevent, protect against, quickly respond to, and recover from health emergencies, particularly those in which scale, timing or unpredictability threatens to overwhelm routine capabilities.

2. Medical preparedness—the ability of the healthcare system to prevent, protect against, quickly respond to and recover from health emergencies, particularly those whose scale, timing, or unpredictability threatens to overwhelm routine capabilities.vi

Since early identification and proactive response are key elements to successfully containing an epidemic, the healthcare industry must be equipped and ready to quickly contain a public health crisis. The ongoing evolution of performance-based accountable care models has heightened the need for more proactive response due to narrow performance margins. Because a single gap in care delivery or missed opportunity can dramatically impact performance under such initiatives as Value-Based Purchasing and core measures performance, effective and timely response is the only option.

Consider the challenge faced by Rush-Copley, a health system with a patient population of one million, serving the greater Fox Valley region of Illinois, including the state’s second-largest city, Aurora.vi When the organization uncovered an outbreak of tuberculosis (TB) in late 2009 following two admissions over the course of two months, clinical leaders recognized the urgency in getting one step ahead of the disease’s progression.

In cooperation with the Kane County Health Department, an investigation traced the outbreak back to a homeless shelter, which, in turn, presented a considerable challenge to containing the spread of the disease, given that the population was highly transient. To minimize exposure, Rush-Copley needed a solid clinical content management strategy to enable quick identification of at-risk patients, application of isolation management tactics and effective community collaboration.
The Value of Clinical Content Management

Getting clinicians on the same page and helping them adopt industry best practices in their day-to-day workflows is certainly a key element to bending the quality curve, but ensuring that variations are minimized in a public health crisis is absolutely critical to successful containment.

Having deployed a comprehensive clinical content management strategy to efficiently manage evidence-based order sets, Rush-Copley was able to quickly define new protocols that would equip clinicians with step-by-step guidance during the TB outbreak. This step proved fundamental to the organization’s highly-effective response. A three-fold strategy was devised and implemented that included steps to:

1. **Contain the epidemic**
2. **Provide the highest quality treatment based on best practices**
3. **Avoid duplication of services**

By leveraging a clinical content management system, the clinical team quickly built customized evidence-based order sets to ensure the same screening protocols would be used to identify at-risk patients and move them through appropriate levels of care. These steps included pre-checked diagnostic testing and focused guidance to achieve full compliance with recommended guidelines, and tracking screening within the EHR to eliminate the potential for duplicated services and higher costs.

In recent years, Rush-Copley has leveraged a clinical content management system to deploy a point-of-care strategy in response to outbreaks of pertussis and influenza, achieving the same levels of success. Likewise, Methodist Health System, a large, integrated health delivery system serving the greater Dallas and North Texas regions, leveraged a foundation of evidence-based order sets to respond to a community outbreak of West Nile and Ebola.

Specifically, when Ebola was introduced into the Dallas region in 2014, Methodist Health System responded quickly, leveraging CDS and the organization’s advanced clinical content management infrastructure to prepare for additional cases and adhere to the ever-changing national guidelines and regulations governing the outbreak.

The Critical Role of Technology

Order sets and care plans are some of the industry’s most effective methods of improving quality metrics through better decision-making at the point of care, but these initiatives come with hefty implementation challenges when attempted via manual processes. With a variety of regulatory initiatives competing for IT staff time and budget line items, many hospitals and health systems struggle with allocating the resources needed for these high-level initiatives.

A number of challenges currently exist to implementing effective and sustainable order set and care plan strategies. Hospitals attempting to manage order sets via manual, paper-based processes face ongoing challenges associated with time constraints, low quality and error-prone outcomes. Many organizations moving order sets electronically from one EHR to another invariably face integration challenges. Also, the magnitude of evidence that changes annually makes it difficult for any healthcare organization to stay on top of the latest developments and keep order set content up to date.

To address these challenges, Methodist Health System turned to a third-party clinical content management solution to expedite the order set development process, increase adoption rates and position the organization for the heightened outcomes needed for the risk-bearing healthcare delivery landscape. The solution provided functionality for efficient collaboration and content review during the design and approval process, structured data models that enable integration with the EHR and enhanced reporting.
functionality, and ongoing maintenance of order set and care plan content—all complex pieces of the bigger picture that would otherwise require a significant draw on internal resources.

In the end, the technological infrastructure helped reduce the time associated with development and review of order sets from 18 months to the health system’s current goal of 30 days.x

Conclusion

While effective management of population health is a key strategy to any healthcare organization’s future positioning, it is critical for response in a public health crisis. Never before have the stakes been so high for healthcare organizations to avoid the fallout associated with a wide-spread community outbreak—whether it be Ebola or a deadly strain of the flu.

Proactive response is the only answer, and the best foundation to support this paradigm shift is a technological infrastructure that equips clinicians with the knowledge needed to make the best decisions. Forward-looking healthcare organizations understand that a clinical content management strategy that leverages point-of-care technology, evidence-based decision support and a method for ongoing maintenance will be critical to forward momentum.

References


