The Role of Health Information Exchange in Population Health: A Case Study on Supporting a Rural Critical Access Hospital around MIPS Initiative

CRITICAL ROLE OF HIE’S IN POPULATION HEALTH

Healthcare is undergoing a paradigm shift – a transition from volume (fee for service) to value-based care (pay for value). Providers are participating in several different programs like bundled payments, shared risk, capitation and quality incentive programs. According to a recent article, healthcare payments tied to value-based care reached 34 percent in 2017 and this is increasing every year. To perform well in value-based care, providers must identify, measure, track and report improvement in quality, cost and utilization measures that align with payers’ expectations.

Health Information Exchanges (HIEs) are well-positioned and play a critical role in supporting providers and payors in this transition. For example, HIEs can provide Clinically Integrated Networks (CINs), Accountable Care Organizations (ACOs) and Health Systems data from independent practices, long-term post-acute care, labs and several other data sources, which may not be available in their Electronic Medical Records (EMRs), to help them holistically understand how the population is performing across the continuum of care on core metrics that are part of value-based programs.

“If you can’t measure it, you can’t improve it” – Peter Drucker

These organizations need to rely on claims data, in combination with their EMR data, to get the complete picture. One of the weaknesses of claims data is that it is not timely and incomplete with regards to capturing clinical outcomes, therefore stand-alone claims data is not a reliable source for care management and process improvement purposes. As HIEs can connect data across the care continuum, they bring the longitudinal depth of claims and the comprehensiveness and agility of EMR data to support the population health needs of both providers and payors, accelerating the shift to value-based care. HIE data aids in changing the way quality performance is monitored, from fragmented and episodic to comprehensive and real-time.

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The **Nebraska Health Information Initiative** (NEHII), one of the most advanced HIEs in the country, set out on a bold vision to design value-added services that support and accelerate the population health initiatives across the region. With this vision, NEHII applied and became an approved vendor to submit quality data directly to the Centers for Medicare and Medicaid (CMS) to support providers and reduce the burden of Merit-based Incentive Payment System (MIPS) reporting.

**Montgomery County Memorial Hospital** (MCMH), a Critical Access Hospital in western Iowa, was very interested in partnering with NEHII to utilize the Quality Clinical Data Registry (QCDR) services for several reasons:

- Reduce the burden of monitoring and reporting
- Improve the ability to close care gaps
- Successfully report on MIPS
- Improve patient outcomes in their community

To support the population health initiatives, NEHII partnered with **KPI Ninja**, a healthcare technology company primarily focused on data analytics.

NEHII and KPI Ninja worked together to build an advanced analytics infrastructure that assisted MCMH in further developing their data strategy to include HIE and population health analytics applications. Once the scope and goals were established, a structured, exploratory approach was used to investigate the reliability of each data source, as well as the quality and completeness of the many data points that align with the technical specifications of each **electronic clinical quality measure** (eCQM). A total of ten eCQMs were built per measure specifications; the measures were automated and are updated on a weekly basis. With this validated data being updated automatically, the clinical team now has more time to devote to value-added work, like leading quality improvement and providing more direct patient-care, rather than manually locating and aggregating data.
Once a mechanism to automate data reporting was created, NEHII and KPI Ninja worked closely with MCMH to further identify ways to drive internal improvements. A robust population health analytics solution was deployed at MCMH to support this initiative. This includes:

- A comprehensive dashboard and scorecard that allows the administration, the team and providers access to analyze the measure performance throughout the year – at the provider and patient level
- Performance rates compared to CMS benchmarks to identify improvement opportunities
- Care gap reports to discover care management and patient engagement opportunities within each MIPS quality measure – at the provider and patient level
- A reporting dashboard, with API integrations with CMS, that calculates the predicted MIPS score and submits the data for all categories and attestations to CMS with the click of a button

MCMH team utilized the actionable insights and care gap reports from the solution to engage with the patients, close the care gaps and improve the outcomes. Some of the quality measures that had improvements are:

<table>
<thead>
<tr>
<th>CMS Measure ID</th>
<th>Clinical Quality Measure</th>
<th>CY 2017</th>
<th>CY 2018</th>
<th>% Improvement</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMS 127</td>
<td>Pneumococcal vaccination status for older adults</td>
<td>60%</td>
<td>83%</td>
<td>23%</td>
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<tr>
<td>CMS 131</td>
<td>Diabetes: Eye Exam</td>
<td>38%</td>
<td>47%</td>
<td>9%</td>
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<tr>
<td>CMS 039</td>
<td>Screening for Osteoporosis in women aged 65-85 years of age</td>
<td>61%</td>
<td>69%</td>
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<td>CMS 047</td>
<td>Advance Directives</td>
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<td>55%</td>
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<tr>
<td>CMS 125</td>
<td>Breast Cancer Screening</td>
<td>78%</td>
<td>84%</td>
<td>6%</td>
</tr>
<tr>
<td>CMS 130</td>
<td>Colorectal Cancer Screening</td>
<td>60%</td>
<td>65%</td>
<td>5%</td>
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</table>
REFLECTION

Armed with modern technology that fits their needs, MCMH is demonstrating what HIE population health analytics can do for a health system.

- **Clinicians** are receiving near real-time feedback on measures that are validated and feel confident in assessing quality of care they are providing to the community.
- **Teams** are equipped to lead improvement projects with the ability to customize, drill down and have real-time views.
- **Leadership** is thrilled to have positioned the organization better financially through reducing four vendors down to one and being incentive-eligible, as well as having a better sense of operations to drive strategy.

HEAR FROM MCMH LEADERSHIP

"When I first heard about NEHII’s initiative to use the power of their HIE to amplify quality data, I was all in. Having seen the HIE’s positive impact on patient care at our organization, I had no doubt that using HIE data would add strength to our quality submissions. But first, NEHII had to build the infrastructure and mine the quality data from our EMR. They did this with precision. The teams at NEHII and KPI Ninja worked effectively with the team at MCMH to build tools that gave insight into the data contained in our EMR. By using gap reports, dashboards, and other tools, we were able to achieve two very important goals -- improved care for our patients, and achieving a positive MIPS score. MCMH scored 96.69/100 for the 2018 reporting year, including a 90/90 score for the areas that NEHII submitted. Additionally, we were able to reduce the number of vendors we use for reporting, from four vendors in 2017 to just one – NEHII—in 2018. We are excited to continue the journey with NEHII. NEHII knows that proving the “value” of care begins and ends with data… they also understand the power of the data for which they are stewards. I believe the value of HIE data is immeasurable, it must be harnessed to gain wisdom for improving care delivery, reducing healthcare costs, and helping people live healthier lives."