Stepping Beyond EMRs to Advance Care and Increase Savings

2012 Acclaim Award Honoree North Texas Specialty Physicians

In September 2012, North Texas Specialty Physicians was named an honoree for the American Medical Group Foundation’s 2012 Acclaim Award for its initiative “Stepping Beyond EMRs to Advance Care and Increase Savings.” Here are some highlights from their achievements.
W. Edwards Deming, Ph.D., concluded that when organizations focus primarily on costs, costs tend to rise and quality declines over time. Conversely, when organizations focus primarily on quality, quality tends to increase and costs fall over time. While his focus was primarily on manufacturing, these principles apply equally to health care. North Texas Specialty Physicians (NTSP) is committed to applying Dr. Deming’s philosophy to achieving the Institute of Medicine’s six aims toward a more ideal health system.

Founded in 1995, NTSP includes more than 600 primary care and specialty physicians who have committed to improve patient outcomes and manage costs. After a decade of success managing Medicare and commercial patients under capitation contracts, in 2005 they embarked on a bold initiative to deliver safer, more cost-effective, patient-centered care. NTSP committed to rapidly increase implementation of electronic health records among their physician practices and to develop a community-based health information exchange.

NTSP created a health information exchange that uses web-based applications to gather data from all points of care.

NTSP physicians understood that they could make better clinical decisions if they had more information available at the point of care. This included real-time patient clinical information from multiple sources and evidence-based decision support tools. In 2006 they created a health information exchange (HIE) that uses web-based applications to gather data from all points of care across the community and directs it into a centralized data repository so it can be accessed by all sites of care as needed.

Overview

Since the launch of the HIE in 2006, NTSP have integrated care for over 2.5 million patients across 7 counties, 12 hospitals, 1700 physician offices, half of all radiology and lab services in the market, 100+ pharmacies, and 350+ inter-operable electronic health records across four platforms. They have plans to expand their HIE offering nationwide and have also begun work to redesign their care model to optimize care transitions and enhance care management for seniors and patients with chronic conditions.

Participating facilities and providers currently include:

- 27 hospitals
- 427 physicians and office staff
- 350+ inter-operable EHRs from 4 systems
- Laboratories representing more than 50% of local lab tests
- Radiology groups representing more than 50% of local radiology scans
- Community preferred providers including:
  - Local pharmacies
  - Home health agencies
  - Rehabilitation facilities
  - Long-term care facilities
  - Skilled nursing facilities
  - Physical therapy providers
  - Outpatient surgery centers
  - Durable medical equipment providers

Prior to the launch of the community HIE, physicians were frustrated by the simple lack of access to health information for patients even within their own group practice. This was a relevant concern because they care for thousands of Medicare patients, and older patients see scores of doctors and are sometimes not able to recall pertinent details about their care, such as whether they received pneumococcal vaccinations or what medications they are currently taking. The physicians recognized that better access to information could lead to safer and more effective care, and ultimately lower costs and higher patient compliance. Based on this premise, NTSP decided to make access to information a foundational element to their practice, including using it to establish operating and clinical measures created from the data they could collect and assess through a centralized system.

In tandem with the development phase of the HIE, NTSP made a concerted effort to increase utilization of EMRs across the group practice. Achieving the critical mass of EMR users to support the new HIE required a multi-faceted approach. For one, they recruited champions from across all sub-specialties and commissioned them to evangelize others, which began to create the foundation of data needed to support the HIE. Based on their targeted outreach and training efforts across the community, they achieved adoption rates nearly twice the national average. And for their
physician group, the adoption rate is greater than 90 percent and 95 percent of patients have opted in.

They also made a significant investment in “gifting” 300 EMR licenses and training support annually, to motivate physicians to make the shift to digital records. As EMR adoption grew and physicians began achieving meaningful use, their appetites for the HIE experience were magnified. More than any external driver, the internal desire to improve patient care by having real-time, comprehensive patient information and clinical decision support tools through the HIE was the key motivator for the group to invest in rapid adoption of the EMR.

Results

The following is an example of how the clinical data in the system directly benefited and improved the outcome of a patient visit: A 64-year-old woman with primary biliary cirrhosis and concurrent alcohol abuse visited her physician group specialist. She was not compliant with office visit follow up for two years and was manifesting jaundice and confusion, which prevented a reliable history. The physician accessed the HIE and was able to view recent emergency room visits, diagnoses, medication lists, and other tests. The clinical information available during the visit proved invaluable in the assessment of the patient’s medical status.

Table 1 illustrates the potential savings incurred as a result of the information being available at the time of visit with her gastroenterologist. The table demonstrates the diagnostic tests that may have potentially been ordered and the costs associated. The columns include the single diagnostic test CPT, the 2012 Medicare Fee schedule, and the commercial insurance reimbursement (assumed at 140% of Medicare) within the community.

NTSP measures the success of their HIE in multiple ways.

The HIE has substantially reduced medical errors, duplicated services, and unnecessary hospital admissions by enhancing physician to patient communication, better disease management, and improved administrative work flow.

Although the benefits of the HIE are maximized for interoperable EMR users, an EMR is not required to benefit from this system. Physician group doctors without an EMR access the HIE through a secure Internet portal and can view summary information, print CCRs, communicate with other physicians via secure messaging, order labs, e-prescribe, and send electronic referrals in a HIPAA-compliant manner.

NTSP measures the success of their HIE in multiple ways, including adoption and utilization rates among providers, achievement of pre-determined quality metrics, cost savings associated with using the tools, and patient satisfaction, which they link to more efficient practice performance. Their goals for 2007 included signing up 100 physicians using a physician-based EMR, connecting two national laboratory companies and 5 hospitals. With this foundation of care providers, they were confident that they could gain momentum for the expansion of the HIE. NTSP accomplished 90 percent of their goals in 2007 and achieved the remaining goals in 2008, when they opened the portal for user access. Upon launch, their HIE included nearly 400,000 patient records. Four years later, they have achieved 5 times their baseline and, on average, they are adding 100,000 patients per month for the HIE (Table 2).

In addition to utilization rates, NTSP tracks quality measures, such as STARS and HEDIS. Using these metrics, they were able to improve their health plan’s colonoscopy statistics from below standard (40.35 percent) to five-star performance levels (78.35). The implementation of the HIE on the populations they serve have been significant.

Not only does their HIE aggregate individual patient data in one usable record to optimize clinical decision making, it also provides physicians with alerts for preventive care and wellness checks; evidence-based care pathways; integrated quality reporting tools for meaningful use and other CMS measures; and comparative data to assess physician or practice outcomes against peer benchmarks.
Because they have implemented a community-based HIE, it benefits all providers associated with a patient’s care. This results in enhanced coordination of care and more effective care transitions. Together, these benefits significantly impact the healthcare cost curve. The significant costs associated with poor care transitions and coordination of patient care across providers and settings are well documented and include medication errors, duplicative tests, and readmissions to the hospital. The HIE fills the communication gaps that contribute directly to these shortfalls in the delivery system.

As NTSP continues to refine their technology platform to support the aggregation and sharing of patient medical information that is easily accessible to physicians, they are also beginning to make changes to their care delivery model to take advantage of the information that is available. For example, they are shifting more staff to physician clinics and the ED to serve as information agents who can access and transmit crucial information to other care team members especially for seniors and patients with chronic disease. To maximize their impact, these HIE experts use the care management tools that are embedded in the HIE. This feature is designed to assist providers across multiple locations to optimize patient care by providing them with a complete medical history, additional educational information, and a care plan that facilitates patient compliance, resulting in better outcomes.

In addition to their plans to expand the regional network of providers that are using the HIE, they have created an implementation model that can be easily replicated by other physician practices, health systems, accountable care organizations, employers, insurers, and states that wish to develop an HIE strategy as a means of improving quality and decreasing cost. Because they believe in the efficiency of the implementation model they have developed, they have made additional investments in staffing and external strategic alignments to support other providers that wish to take advantage of their HIE products, services and experience. They believe they can help other providers more rapidly implement their own HIEs.

**Lessons Learned**

NTSP’s efforts toward safer, more efficient care has resulted in several lessons learned that they can share with other organizations interested in pursuing the IOM aims toward a more ideal health system. These include:

- **Stay focused on the patient.** This stance tends to generate more consensus and agreement than anything else.
- **Bite the investment bullet.** You will need to be prepared to make an up-front investment of time and resources without an immediate return.

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**Table 1**

**Potential Savings from Having Data at the Point of Care**

<table>
<thead>
<tr>
<th>Diagnostic Test (CPT Description)</th>
<th>Medicare Reimbursement</th>
<th>Insurance Reimbursement</th>
</tr>
</thead>
<tbody>
<tr>
<td>71020 – Chest X-Ray</td>
<td>29.36</td>
<td>41.10</td>
</tr>
<tr>
<td>70470 – Cat Scan of the Brain</td>
<td>290.92</td>
<td>407.28</td>
</tr>
<tr>
<td>76700 – Ultrasound of the Abdomen</td>
<td>128.09</td>
<td>179.32</td>
</tr>
<tr>
<td>93000 – EKG</td>
<td>19.30</td>
<td>27.02</td>
</tr>
<tr>
<td>80076 – Hepatic Function Panel</td>
<td>11.70</td>
<td>16.38</td>
</tr>
<tr>
<td>60306 – CBC</td>
<td>11.14</td>
<td>15.59</td>
</tr>
<tr>
<td>85345 – Coagulation Study</td>
<td>6.16</td>
<td>8.62</td>
</tr>
<tr>
<td>99213 – Repeat Office Visit</td>
<td>64.14</td>
<td>89.79</td>
</tr>
<tr>
<td>HOSPITALIZATION - DRG 441 – Hepatic Encephalopathy/Portal Hypertension</td>
<td>14,092.40</td>
<td>22,547.84</td>
</tr>
<tr>
<td>99222- Initial Hospital Visit (Physician)</td>
<td>128.20</td>
<td>179.48</td>
</tr>
<tr>
<td>99232 – Subsequent Hospital Visit (6)</td>
<td>410.04</td>
<td>574.05</td>
</tr>
<tr>
<td>Potential savings realized as a result of the information being available to the physician through the interoperable system</td>
<td>15,191.45</td>
<td>24,086.47</td>
</tr>
</tbody>
</table>
However, the return does come over time. In their case, through risk-sharing on $500 million in care and the capitation arrangements with physicians, the savings more than covered the cost associated with the HIE.

■ **Realize that health information technology is the Holy Grail.** Access to real-time, comprehensive patient information really does facilitate better clinical decision-making by physicians and enhances their ability to provide appropriate time and support to all patients, including their most complex patients. Not only do they enhance quality but they contribute to lower costs of providing care.

■ **Invest the time to communicate.** Though success requires support from the executive level of the organization, the staff is charged with implementation. It is important to spend time to effectively train and communicate across all levels of the organization to create a shared vision and shared goals.

■ **Don't underestimate the value of change management.** It is important to explain to all stakeholders what you are trying to achieve, why you are trying to achieve it, and what it means to them. Intentional investment in change management will facilitate more efficient adoption of the principles that will lead to your desired changes.

**Financial incentives are positive motivation for physicians.** In order to facilitate adoption and affect desired changes in patient care, it is important that physicians see themselves benefiting from using the new tools—versus being mandated to comply with new protocols and being threatened with punitive actions for noncompliance.

■ **Transparency is your friend.** It is difficult for physicians to change without the data to inform them where they are performing compared with benchmarks and expectations. And there is no better motivator than peer-to-peer data performance metrics that are regularly shared with the group.

For NTSP, creating the ideal health system requires continual assessment and innovation. With the HIE, they have the tools to measure their progress and continue to make care delivery safer, more efficient and more patient-centered. They are committed to the vision of sharing a comprehensive patient record across all care providers, as well as equipping physicians with the evidence-based medical guidelines that will enable them to make the best care decisions on behalf of their patients. They are also dedicated to creating tools and resources to measurably improve care transitions and enhance care management for seniors and patients with chronic disease. Not only are they focused on delivering better more cost-effective care for every patient, every time in their own region, but they will continue to invest in efforts to help other physicians and organizations achieve this for their respective communities.

Twenty-first century health care is about doing health care differently—by embracing the power of healthcare technology that allows access to comprehensive, real-time data across all providers, and by collaborating around the common vision of creating the ideal healthcare system as a legacy for future generations to continue to improve.

Adapted from the 2012 Acclaim Award Application of North Texas Specialty Physicians submitted by Chief Marketing Officer Nancy Lecroy.