State Perspectives: Leveraging Electronic Prescribing to Improve Healthcare Quality and Outcomes

North Carolina

All across the U.S., a variety of initiatives are underway to encourage the widespread adoption of electronic prescribing (e-prescribing) and health information technology (HIT) as a means to improve healthcare quality and outcomes. The number and diversity of these state and regional initiatives continue to proliferate, given the recent availability of federal funding under the Health Information Technology for Economic and Clinical Health (HITECH) provisions of the American Reinvestment and Recovery Act of 2009 (ARRA). This funding has been established to encourage physicians and hospitals to adopt and meaningfully use electronic health records. E-prescribing is at the core of meaningful use — positioning all stakeholders involved with e-prescribing initiatives to play an important role as the focus on HIT increases. Federal funding will also allow some of these initiatives (if awarded Cooperative Agreements by the federal government) to become ‘Regional Extension Centers’, responsible for helping physicians to become meaningful users of electronic health records. The articles in this “State Perspectives” series aim to showcase a variety of leading programs, initiatives and approaches that are being deployed in different states to advance the cause of HIT across the U.S.

The North Carolina experience

Community Care of North Carolina (CCNC; Raleigh; www.communitycarenc.com) has spearheaded an initiative to improve healthcare quality and outcomes, including broad adoption of electronic prescribing (e-prescribing) among prescribers throughout the state. CCNC, a program of the North Carolina Department of Health and Human Services, consists of an extensive network of private, primary care practices that are organized into 14 regional networks across the state’s 100 counties.

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— Troy Trygstad, PharmD, MBA, PhD

Community Care of North Carolina

- Broad network of primary care practices
- 14 regional networks across 100 counties
- 1,300 primary care practices, representing 4,500 prescribers

Interviewed for this profile:

**Troy Trygstad**
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**Results so far...**

CCNC’s e-prescribing initiative was launched in July 2008, and within the first year (by mid-2009), the volume of prescriptions managed electronically was up by 18% compared to the pre-program volume, with a 23% overall rise projected by the end of 2009. Within the first year, nearly 11,000 unique prescribers had been enabled with e-prescribing technology, more than 6,000 of whom were actively using the technology.

“It’s amazing how quickly the adoption and acumen have grown throughout the state,” says Trygstad. “It’s a testament to how simple and intuitive these systems are to use.”

“We’re on target to have more than a million e-prescriptions being created and transmitted each month by early 2010,” he adds. “By year three, we expect to have 95% of all North Carolina prescribers on board.”

The CCNC initiative has also helped to improve medication management for participants. For instance, the ability for prescribers to access formulary/eligibility information for more than 70% of the patient population and query the patient’s prescription history right at the point of care has allowed prescribers to support a safer and more well-coordinated drug regimen. “This project has started a number of practices down an HIT pathway that will allow them to be better prepared in terms of quality of care and practice improvements that will likely be a requirement under emerging payment methodologies,” says Trygstad.

And while the use of the CCNC membership provided the perfect springboard, the group has since extended its reach so that “about half of all our interactions are now with non-CCNC healthcare practices, as well,” says Trygstad. “We’re looking to bring all healthcare providers in North Carolina along when it comes to e-prescribing.”

**Tech support with a human touch**

“Many other states have been able to move the needle quickly by converting large numbers of prescribers at large medical systems and institutions, but North Carolina’s prescriber base is characterized by large numbers of small private practices, with two to three prescribers on average,” says Neil Williams, PharmD, CPP, Vice President of Clinical Services with Medication Management LLC (Charlotte) and Clinical Pharmacist Coordinator and E-Prescribing Lead Facilitator for CCNC. “Because we routinely work with so many small private practices throughout the state, we’ve been able to realize very impressive gains, converting lots and lots of small, disparate practices over a relatively short time frame. But prescribers in these small care settings do tend to require a lot of hand-holding.”

In general, the training and technical support provided by software vendors tends to be automated, self-directed and relatively impersonal — relying on dense training manuals, webinars, online screen shots and phone-based help desks that often leave the physicians to figure things out on their own. “We’ve found that our prescribers tend to respond much better when somebody visits the practice to show them how to use the tools and navigate the system, and when our facilitators remain readily available to answer questions on an ongoing basis,” says Williams.

**Build strong partnerships**

Any effort to drive the statewide adoption of e-prescribing requires strong partnerships. CCNC’s e-prescribing initiative has benefited from the support of two pivotal partners — Blue Cross Blue Shield of North Carolina (BCBS NC) and Surescripts®, the Nation’s E-Prescription Network™.

In addition to providing $1,000 in seed money to numerous prescribers and pharmacies throughout the state to help offset start-up costs, BCBS NC also carried out a statewide campaign to drive awareness of e-prescribing among all stakeholders — not just prescribers and pharmacists, but patients as well. “This was instrumental in getting everyone’s attention and clarifying the underlying concepts,” says Williams. “Such outreach was invaluable to help get the conversation going as we kicked things off throughout the state.”

Meanwhile, Surescripts “was instrumental since Day 1 in partnering with us to make this happen,” says Trygstad. One of the most important forms of support from Surescripts has been its provision of reports that demonstrate ongoing e-prescribing adoption trends throughout the state. “It’s one thing to tell a prescriber that X% of doctors throughout the country are now e-prescribing; it’s much more compelling to say,
“Here’s what other prescribers in your state and in your county are doing,” says Williams. “That level of data has helped us to foster momentum and motivate individual prescribers. And when prescribers start to see that everyone around them is doing this, they don’t want to feel like they’re falling behind.”

To make best use of the Surescripts data, CCNC program organizers maintain a series of periodically updated gradient maps that display the data according to North Carolina’s 100 counties. “A picture’s worth a thousand words, and these visual displays of the trends have been very helpful to us as we continue to fine-tune and refine the design and allocation of resources,” says Trygstad. “And we’re able to really direct our attention to areas where adoption may be lagging.”

“It’s also been very compelling that we can show that in North Carolina, 98% of all pharmacies are now e-enabled and over 80% are actively using e-prescribing,” adds Williams. “This has helped us to dispel a common myth and misconception among skeptical prescribers, who often worry that nearby pharmacies are not yet equipped to handle their electronic prescriptions.”

**Paint a compelling story**

Paper and fax-based prescribers often assume — incorrectly — that there’s a great financial barrier to e-prescribing and that you need an EMR to be in place to e-prescribe. “The truth is, there are so many incentive programs available today from various vendors, government agencies and other stakeholders that you really can get started with e-prescribing at little or no cost, and numerous standalone e-prescribing systems are available,” says Williams, adding: “You need to address these misperceptions early on in your outreach. Prescribers are often surprised that it can be done as inexpensively and simply as it can.”

While e-prescribing certainly brings its own rewards, its proponents say that the adoption of e-prescribing can also help to open the door for broader technical capabilities among the converted. “We view e-prescribing as an application that can help reluctant prescribers move more effortlessly along the technology pathway,” says Trygstad. “Once doctors are willing to get started with e-prescribing, they tend to be much more amenable to adopting EMR systems and other forms of advanced technologies later to gain even greater healthcare-improvement efficiencies.” In this way, he says: “We view e-prescribing as a means to an end — not an end in itself.”

Outreach efforts should also stress the life cycle cost and time savings that e-prescribing can bring. “I always tell prescribers to imagine what life would be like if they could eliminate the time and aggravation associated with the endless exchange of faxes and phone calls between the pharmacy and the doctor’s office to manage refill requests, and eliminate prior authorization requirements and unnecessary rework by having a patient’s formulary information at their fingertips, right at the point of prescribing,” says Williams. “These kinds of messages really get their heads bobbing up and down when I talk to groups of prescribers.”
Remaining vendor-agnostic
While some states have chosen to promote a small handful of e-prescribing packages from a select number of vendors in order to streamline the selection process for physicians and simplify the technical support requirements, the CCNC program directors in North Carolina opted to remain “vendor agnostic,” allowing prescribers to choose whatever e-prescribing or EMR package suited their needs best, in order to maximize flexibility for participants.

“Most prescribers see the handwriting on the wall — they know that there are incentives available today to get going with e-prescribing, including anticipated funds from the HITECH provisions of the American Reinvestment and Recovery Act (ARRA), and that the specter of penalties is looming for non-adoption in the future — so they’re willing to take advantage of the incentives today,” says Trygstad. “They just need a little encouragement to get started and personal support to get them over the initial hurdles.”

These federal incentives are also affecting the way CCNC is managing this program. “We see HITECH as serving two essential functions: It brings greater visibility to HIT, and it provides both direct and indirect monetary support,” says Trygstad. “We have always viewed our e-prescribing program as a bridge to future HIT adoption. But prior to HITECH, some may have viewed the standalone e-prescribing adoption program as a ‘Bridge to Nowhere;’ Now the adoption of e-prescribing is seen as the first step along a pathway to meaningful use. These federal programs provide both sustainability and long-term validation to the e-prescribing adoption program — which is especially important for small, independent practices.”

**BEST PRACTICES**

Best practices from North Carolina

- **Adopt a ‘train-the-trainer’ approach.** CCNC opted to train a select group of clinical pharmacists to assist physicians and pharmacists as they moved through the adoption, implementation and troubleshooting process. “Every training session (whether one-on-one or in group settings) helps to pass the knowledge on and leaves behind a legion of local experts who are then able to support others nearby,” says Trygstad.

- **Make technical support personal.** Prescribers in small private practices “are often daunted by the prospect of new technology adoption,” says Trygstad. “The ability to provide personal, hands-on support can make all the difference in the world.”

- **Display adoption data using statewide ‘gradient maps.’** Displaying data in this way helps program developers to both track progress and fine-tune outreach and support efforts. And the desire to remain competitive and be seen as “cutting edge” helps to spur many prescribers and pharmacies to finally get going. Williams says, “Don’t be shy about showing stakeholders what others are doing in neighboring communities.”

- **Dispel common myths and misconceptions.** “Physicians often make ill-informed assumptions about the cost and complexity of e-prescribing,” says Williams. Be sure to address common misconceptions during outreach, and to enlist regional “Physician Champions” share their positive experiences and answer questions.

- **Develop strong partnerships.** To support statewide e-prescribing initiatives, seek partners who can provide the funding, technical expertise and/or logistical support needed to carry out program development and implementation.