Meaningful Use Case Study

Greater Rochester (N.Y.) Independent Practice Association - 2010 Stories of Success case study selection
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Recorded presentation

Stage 1 Meaningful Use Goal
To implement e-prescribing in outpatient clinics to improve the quality and efficiency of patient care.

E-prescribing Definition
A computer application that enables a physician to write and send a prescription from a computer or wireless device directly to a pharmacy.

Meaningful Use Core Objective and Measure: E-prescribing
Objective: Generate and transmit permissible prescriptions electronically.
Measure: More than 40 percent of all permissible prescriptions written by the EP are transmitted electronically using certified EHR technology.

Organizational Background
The Greater Rochester Independent Practice Association (GRIPA) offers Web-based portal technology to more than 150 physician practices. As part of an initiative to implement health IT in many of these practices, GRIPA facilitated the implementation of e-prescribing within outpatient clinics associated with the Rochester General Health System over a one-year period. This system also consists of a 528-bed tertiary care facility and several other care environments.

Lessons Learned—Successful Strategies
Identify champions to promote implementation
Identify clinicians interested in adopting technology, with the passion and cultural mindset to facilitate and encourage health IT use among other clinicians.

Focus on areas where the most benefits can be found
GRIPA focused on three areas - the way prescriptions were received and routed, changes in documentation practices, and increased accessibility of prescription information. Addressing these areas would dramatically increase safety with clinical decision support, improve legibility and create a durable medication list to facilitate reconciliation across all care environments. Realizing these benefits would also increase staff and patient satisfaction, reduce the time to turn around prescription renewal requests, and decrease the volume of incoming prescription-related phone calls and faxes.

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**Lend support and flexibility to the project**
E-prescribing selection decisions were made prior to deployment with preference given to infrastructure flexibility and interconnectivity features. On-site support and training was made available “long-tail” - for an extended period of time. A combination of trainer presence and provider and administrative encouragement were successful in developing durability with the new workflows over several months. The trainer was on site an average of eight hours weekly for six months, dropping to four hours weekly for the next six months.

**Make outcomes measurement practical**
Outcome measures were prioritized by their impact on workflow, with preference given to those with the least amount of staff labor involved, as clinical and support staff had no time to complete traditional reporting on outcome measures. GRIPA turned to existing data generators and sources such as phone and fax volume, patient complaints and medication-error reporting to evaluate the effectiveness of the e-prescribing deployment.

**Work closely with pharmacies**
Following a “long-tail” education strategy with pharmacies was as effective as it was with staff. Problems were addressed directly to the pharmacist as they arose, with the bulk of recurring issues diminishing significantly after the first three months. Several chronic issues regarding multiple renewal requests and prescriptions identified as not received were addressed at the community level through the pharmacy society.

**Finding solutions to challenges**
GRIPA had the tri-fold challenge of training the users on the technology, identifying the interim and final role the technology has in the practice workflow, and developing and communicating transitions to new workflows. GRIPA overcame these challenges with the following solutions:

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<tr>
<th>Challenge</th>
<th>Solution</th>
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<td>Limited computer resources</td>
<td>-&gt; Rearranged workplace and added equipment.</td>
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<tr>
<td>Apathy</td>
<td>-&gt; Made small successes personal and relevant.</td>
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<td>Changing conditions in operations</td>
<td>-&gt; Monthly staff meeting for e-prescribing.</td>
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<td>Communication challenges</td>
<td>-&gt; Made practice manager, charge nurse, and medical director accountable.</td>
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<td>Different perceptions of goals</td>
<td>-&gt; Posters describing desired outcome.</td>
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<td>Widening skill gap</td>
<td>-&gt; Empowered internal peer support, onsite support.</td>
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<tr>
<td>Electronic renewal request triage</td>
<td>-&gt; Developed role for medical records staff.</td>
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Several references and resources were also useful. The principles contained in *Electronic Prescribing: A Safety and Implementation Guide* (Author: Michael Van Ornum, Jones & Bartlett Publishers) were heavily used in this deployment. Information from the [HIMSS e-prescribing wiki](https://wiki.himss.org) also was quite useful.

**Results**
Within the first year of implementation, the following results were achieved:

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Improved patient satisfaction
There was a 50 percent reduction in patient complaints due to improved turnaround time (from one week to 24 hours) for renewal requests. There was an 80 percent reduction in prescription-related phone calls. The impact to budget and operations was minimal.

E-prescribing and electronic information continued to grow
The number of electronic prescriptions and patient medication profiles generated by the outpatient sites continued to grow. Every prescription renewed from a patient medication profile loaded into the system resulted in five minutes of nursing time saved. The value of nursing time reclaimed increased as more of these profiles were loaded.

Improvement on quality and safety measures and staff satisfaction
Records of cancelled prescriptions attested to an increase in more appropriate prescriptions. Transitions from inpatient to outpatient care improved, as did staff satisfaction as caregivers transitioned to an electronic renewal process, full electronic prescriptions and a durable medication record. Clinical staff members discovered and corrected many pre-existing medication discrepancies and saw a significant improvement in the number of prescription errors reported. In several instances, abuse of prescription medications by the patients were uncovered and addressed.

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