EMR Mastery: Optimizing Physician Skills as Digital Caregivers
A Guide for CMIOs

Introduction
The EMR is a remarkable tool that supports clinicians in patient care. However, the EMR is a dynamic and highly complex tool that is continually evolving. And, like all tools, it is only as good as the person using it, requiring the clinician user to engage in a continual process of learning and honing of skills. Complicating the issue is the fact that, as highly sophisticated professionals whose time is at a premium, conventional training programs have a checkered track record in achieving desired levels of physician EMR expertise. As a result, innovative thinkers in this area have developed a new approach called “EMR Mastery,” dropping the term training—all too often viewed as condescending by physicians—and embracing a more holistic approach to engaging clinicians in digital health. Member organizations of Scottsdale Institute, a group of leading health systems, are adopting EMR Mastery as the preferred approach to engage physicians in optimizing use of the EMR and achieve value-based care.

The goal of this white paper is to assist CMIOs in obtaining organizational support for programs aimed at promoting EMR Mastery among clinicians and staff.

EMR Mastery benefits
EMR Mastery benefits patients, providers and organizations. EMR Mastery is the effective and efficient use of the EMR to meet the needs of the patient and fulfill the responsibilities of the care team. Ultimately EMR Mastery is one of many strategies to help health systems achieve the Quadruple Aim:

• Improving the patient’s experience of care
• Improving the health of populations
• Reducing the per capita cost of healthcare, and
• Improving provider satisfaction

Studies have documented a return on investment (ROI) in financial, quality-performance and physician-satisfaction terms from implementation of EMR Mastery programs. Healthcare providers view it as an important part of the solution for addressing the issue of physician burnout, which is caused by multiple factors including the learning curve associated with EMR adoption, optimization and usability. EMR Mastery also reduces the time physicians have to spend working outside normal hours due to the time drain caused by documentation and other tasks demanded by the EMR—called “pajama time.”

Key Points
The EMR is a tool that requires continuous improvement and learning. Following implementation, however, what typically occurs is the consultants who assisted in EMR adoption and training leave, and health systems are left to shoulder the burden of building and maintaining a program of continuous learning and improvement for the EMR.

Experience has shown that provider-to-provider teaching works best, particularly within the same medical specialty. Providers teaching other providers should be compensated for their time and service.
**Tips for activities that promote mastery**

While personalizing—or customizing—the EMR can enhance the experience for individual providers, only 20% of clinicians update their EMR personalization after Go Live. The EMR should be ready to use when it goes live. Use “group think” or consensus to decide how to best set filters and other personalization items, correctly the first time.

Still, be ready to offer assistance to clinicians if they require additional personalization for new functionality. For example, some medical specialties may require development of specific content. Experience cautions that it’s easy to overbuild and create tools that are never used.

Generally, there’s strong sentiment that building a program for EMR Mastery should be a key component of optimization, following implementation. CMO support is critical, especially for CME activities related to informatics and improving use of the EMR.

Use a balanced set of metrics from within the EMR to identify clinicians who are expert users and those who may be struggling with its use. For those who need to improve it’s important to discuss potential gains in efficiency by changing current EMR practice. Study how respected clinical leaders are using the EMR more efficiently to help identify areas for improvement for others. Stay positive: DO NOT show raw EMR data, as it can demoralize a clinician end user; instead, show data as opportunities to gain.

**Education content & delivery**

It helps to approach EMR Mastery as another aspect of medical education. Start with core informatics concepts like problem versus diagnosis and the importance of the problem list and how it drives metrics. Here are some other tips:

- Mandate continuous learning for the EMR tool—a foundational step.

- Frame new workflows and tools as promoting the right care for the right patient.

- Continuous learning after Go-Lives is often best when led by provider with support from the training team.

- Explore EMR workflow improvements that are best practices for the medical discipline and specialty.

- Provide assistance to clinicians with setting up favorites and preferences.

Team-based training is critical. Develop a multidisciplinary team devoted to redesigning clinical workflows and optimizing their EMR workflows to provide the best care. This is typically combined with optimization activities such as improving local content and can often occur while a provider is on vacation. Some organizations close the practice for a period ranging from a half day to two days to conduct team training. Other organizations choose to send a multidisciplinary team out for two weeks while the practice is open.

**Measurement tips:**

- CMO and operational leadership support is critical.
• Track metrics over time.

• Engagement with the medical practice is key.

• Focus on:
  o Care improvements, specifically quality measures
  o EMR efficiencies
  o Time-to-encounter closure
  o The time that messages sit in the Inbox without being touched
  o “Pajama time” tracking

Programs to promote EMR Mastery
Health systems are using a variety of ways to encourage EMR Mastery. Here’s a summary:

• “Genius Bars”—Typically drop-in lounges that are popular and seem to work well because they can teach what the provider wanted. These are often held in physician dining rooms, surgical lounges or other convenient locations.

• Mandatory “remedial” education during dedicated time for struggling users who are identified using clearly defined metrics. Some programs may use specialty trained physicians, others use dedicated provider support staff.

• Creating a devoted “Provider Support Team,” which provides all class room, at-the-elbow and continuing education.

• Provider Fairs—Typically all-day events with opportunities for EMR Mastery assistance and personalization. These may incorporate genius bars.

• Medical Staff accountability for note quality/cloning with a collegial escalation process can promote positive change in EMR use.

• Monthly integrated meetings for providers and practice managers—for those working on the intersection of EMR and clinical workflows, led by a CMIO and EMR trainer. The participants work at improving both clinical and EMR workflows. One organization has made participation on “First Fridays” an option to choose for a citizenship activity. Physicians must attend 10 of 12 one-hour meetings each year. Attendance is tracked and a modest bonus is withheld if attendance requirements are not met. This organization had significantly better Meaningful Use performance within a nine-hospital enterprise.
• Roving EMR optimization team—Two weeks at a practice can make a significant impact.

• Super User network—Tried and true; Providers must be part of the Super User network.

• Clinical effectiveness and usability labs focused on a topic.

• eLearnings—Short nuggets based on provider workflows, shared prior to initial training; these can be used to teach new functionality. These how-to videos may be especially effective if they are provider to provider and are three minutes or less. One organization used these to effectively teach ICD10 functionality. The same organization launched electronic progress notes and office notes using a series of provider-to-provider videos.

• At-the-elbow support—Walk through why a method is better rather than quickly correcting; ensure end user can repeat it back. Some organizations use providers, others use individuals dedicated to supporting providers.

**Multi-mode communication**

Communication is a critical element of EMR Mastery to notify end users about upcoming changes.

Effective modes of communication include:

• Broad text messaging
• Super Users
• Newsletters
• Blogs
• Quick video demonstrations
• eLearnings
• Social media tools (generate collaborative approach to EMR workflows)

Structure and content for newsletters and blogs include:

• What just went live that will improve your EMR use
• What is planned to go live in the near term
• Tips on being efficient
• Links to quick videos on becoming more efficient
• Ask about what was missed, give a survey
• Links to surveys to get feedback on functionality/changes

Communication with independent providers (private practitioners)

• Don’t access company email
• Utilize their practice managers for communication, as they open everything
• Document who these individuals are in your credentialing databases
• Put Super Users in the private practices
• Message millennials more often.
**User satisfaction**

What are the vendor-agnostic core components required of an EMR to make it an efficient tool for patient care and that lead to provider satisfaction? Here are some pointers:

- Use a multidisciplinary approach to information presentation within the EMR, so that all disciplines see items the same way:
  - “Data Dense” with minimal scrolling
- Standardize alert presentations:
  - Level alert
  - Why did it fire?
  - What action can I take?
- Standardize naming conventions for smart templates, note templates, auto-text, order sets, orderables, etc., across the EMR with a logic behind them.
- Enterprise standardized reports:
  - With definitions of the data
  - Can be run self-service
  - Validated on a regular basis
  - Governance in place prior to changing a report
  - Users can easily identify through data definitions if it meets their needs.

**Eastern Maine**

Like many health systems, Eastern Maine Healthcare Systems (EMHS), a Brewer-based, nine-hospital system serving the entire state of Maine, grew organically and only recently shifted from being a loose federation to a true system. “We now have the opportunity to evaluate the impact of different processes across the enterprise, including EMR mastery,” says Michele Lauria, MD, system CMIO and VP.

“One of our Community Access Hospitals developed a ‘First Friday’ program four years ago. They hold a monthly meeting that includes a physician, practice manager and often the lead nurse from each medical practice, which is closed during this time while other staff also hold their own monthly meetings. Attendance is considered a component of citizenship and providers must attend 10 of the 12 meetings during the calendar year. Led by their local CMIO and a clinical informaticist, the meetings focus on topics related to patient-care workflows—from both people and EMR-technology perspectives. It is an opportunity to share best practices, develop solutions and reinforce best EHR use,” she says.

Lauria and her team measured the program’s impact, comparing eligible provider (EP) meaningful use (MU) performance on functional measures. Variation was evaluated based on hospital affiliation, as that was the primary determinant of EMR support.

Analysis of Variation showed statistically significant variation on functional measures reflecting team performance, including medication reconciliation, patient education, secure messaging, electronic transmission of the summary of care, patient view/download/transmit and patient education. The organization with the First Friday program had the highest overall rate of EP MU attestation.

<table>
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<th>Passing MU</th>
<th>Overall MU</th>
<th>Secure Elec Mess</th>
<th>VDT</th>
<th>Med Rec</th>
<th>Pt Ed</th>
<th>eSOC</th>
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<td>48%</td>
<td>86%</td>
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<td>100%</td>
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<td>43%</td>
<td>93%</td>
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Hosp 2 | 15% | 24% | 64% | 100% | 79% | 64%
Hosp 3 | 0%  | 27% | 27% | 100% | 73% | 91%
Hosp 4 | 29% | 41% | 53% | 88% | 82% | 88%
Grand Total | 0.092105263 | 0.162280702 | 0.5 | 0.947368421 | 0.719298246 | 0.416666667

Performance for qualifying encounters by Organization

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Super Users at Baptist Health
“I’m convinced that our Super Users are our greatest opportunity to improve communication and EHR usability at the practice and provider level,” says Brett Oliver, MD, CMIO at Baptist Health, a Louisville, Ky.-based, nine-hospital system.

“Super Users are well-known individuals in the office who are available much more for the one-off questions and ideas,” he notes. “We are hosting a Super User University with the goal of reinvigorating our Super Users following go live on Epic, when they believed their role was over. Wrong!” The Super User University is presented online over a 12-week period and features WebEx content developed in-house by existing Baptist Health training staff. “We spent only a few hundred dollars for t-shirts and pins for the ‘graduates’ and the operational time for each of the folks participating. We are considering Epic’s ‘Power Users’ as our ‘graduate-level’ course for additional training,” Oliver says, adding that they just completed their first class, so do not yet have data on the strategy’s effectiveness.

“I strongly believe in promoting a culture change around EMRs and discussing them and their use as a clinical competency,” he says. “As usability increases, CDS improves and reporting becomes more actionable, CMIOs and other leaders need to advocate for the EMR as a clinical competency as you would for any other tool that assists with patient care.”

Conclusion
EMR Mastery is a dynamic pathway for health systems to optimize their EMRs while improving quality, efficiency and provider satisfaction. More than merely training, EMR Mastery aims to engage physicians in their own journey toward value-based care, a journey of continual learning and mastery of a tool that is central to IT-enabled evidence-based care and digital health.

Related Resources
Check out “Successful Physician Training Program for Large Scale EMR Implementation” [Stanford Children’s Health], Applied Clinical Informatics. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4377562/

Check out “Training Providers: beyond the basics” [Kaiser Permanente Mid-Atlantic Region], BMC Health Services Research. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4220630/