Taming the EHR Monster

Host: Dr. Adrienne Mims
Facilitator: Dr. Sven Berg

Presenter: Philip Deering
Implementation Manager, Stratis Health

**This is a recorded presentation.**
Agenda

- Housekeeping
- Welcome & Introductions
- Presentation
- Discussion/Q&A
- Adjournment
Adrienne Mims, MD MPH

Dr. Mims is board certified in family medicine and geriatrics with an expertise in clinical epidemiology and quality improvement. She is the Vice President and Chief Medical Officer for Medicare Quality Improvement for Alliant GMCF, the Quality Improvement Organization for Georgia. She serves as the current president of AHQA, the national trade association for QIOs.
Sven Berg, MD, MPH, CPE, FAAP

Dr. Berg joined West Virginia Medical Institute and Quality Insights two years ago following a 24-year career in the United States Air Force Medical Service where he ended his service as the Chief of Clinical Services at Wilford Hall Medical Center, the Air Force's flagship medical center. As Chief Medical Officer at WVMI and Quality Insights, the QIO for West Virginia, Pennsylvania and Delaware, he provides clinical oversight and guidance as well as directs the activities of its physician staff and consultants.
Phil Deering

Phil is a Regional Coordinator with the Regional Extension Center for Minnesota and North Dakota - REACH. Prior to working for REACH, Phil spent 15 years assisting clients with major change initiatives, including enterprise software implementations, quality initiatives, and mergers and acquisitions. As Regional Coordinator, he directs a staff of consultants who assist providers at clinics and hospitals in Meaningful and effective Use of their EHR systems. Phil has been active in developing tools and techniques to clarify client needs and deliver effective consulting services. His clients include integrated health delivery organizations, critical access hospitals and rural health centers, as well as community clinics and federally qualified health centers (FQHCs).
Taming the Technology Monster

Philip Deering
Implementation Manager,
Stratis Health
Session Learning Objectives

• Identify the most important barriers to successful implementation of technology that can improve outcomes
• Describe the 4 stages of the Stratis Health methodology for implementation of HIT
• Discuss key steps you can take to jump-start an HIT implementation
• Describe new findings resulting from a project to reduce re-admissions by improving data exchange between hospitals and LTC facilities
• Identify how to access free tools that to guide your EHR implementation
Confronting a Monster?

- EHR right now!
- Are we getting left behind?
- “I talked to a my pal and all the docs at her clinic love product X. We should switch!”
Is your response?

Yikes!
Know Where You’re Going

- Begin with the end in mind
- Establish a process and stick to it
- Be aware of the currents and adjust as necessary
Proven Method for Proven Success

Effective Use

- Method proven in many EHR implementations
- Works for No EHR, or existing EHR, implementing exchange, and in any care setting
- A method that drives to effective use and improved outcomes, not just putting in software
Not so Special

• I’ll will be using the Stratis Health methodology to explain how to implement technology
• There are other equally good methods to use
• Pay attention to the concepts, not the Stratis Health terms
• You can get the tools described online for free
Where You Spend Your Time….

- ½ of our effort is spent on: assessment, planning and selection
- We believe you need to go slow to go fast
- The key is to understand your culture, environment, risks and concerns, and unique strengths to ensure you prepare for the upcoming change
Why Go Slow to Go Fast?

Leadership and management determine how long you’re in the valley of despair.

Implement HIT

Good choices and management determine level of productivity and satisfaction

Implemented and Supported

Little or No HIT

Choices, planning, and execution determine extent of slide

Valley of Despair

Possible Future

Time

Productivity

Slide from Terry Hill of NRHRC, derived from Dr. Norman Okamoro, University of Hawaii
The Hard Stuff is the Soft Stuff

- Leadership
- Planning
- Change management, communication, and training
- Leadership
- Choices
- Execution

One more thing: LEADERSHIP
## Would You Diagnose Without Examining?

<table>
<thead>
<tr>
<th>Task</th>
<th>Key Actions</th>
<th>Key Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Define Roles</td>
<td>Name Steering Team, Project Manager</td>
<td>People in place</td>
</tr>
<tr>
<td>Assess Staff</td>
<td>Cultural surveys, Leadership surveys, Attitudes surveys</td>
<td>Understanding of key liabilities to mitigate and assets to leverage</td>
</tr>
<tr>
<td>Develop Work Plan</td>
<td>Create specific work plan</td>
<td>Written plan, dates on calendars</td>
</tr>
<tr>
<td>Establish Change Management and Communication Plans</td>
<td>Create communication matrix, Adopt a change management model</td>
<td>Written plans, with accountability</td>
</tr>
</tbody>
</table>

Roles identified, risks clarified, culture understood, and plans in place

*Accountability begins to get established*
Get Organized

- Leadership and management key to successful implementation
- Ad-hoc rarely works
- Name people and publicize roles
- Clarify who owns what
- RACI works if things get sticky
  - Responsible
  - Accountable
  - Consulted
  - Informed
## Sample Communication Plan

<table>
<thead>
<tr>
<th>Key Message</th>
<th>To Whom</th>
<th>From Whom</th>
<th>Medium</th>
<th>When</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. The organization is interested in adopting enhancements to our HIT that will aid our clinical care processes and want to form an HIT steering committee with your participation</td>
<td>Key stakeholders (1.1 HIT Project Governance)</td>
<td>CEO Medical director CNO CIO Clinic Administrator</td>
<td>Individual contacts with key stakeholder representatives</td>
<td>When organization leadership recognizes HIT need</td>
<td></td>
</tr>
<tr>
<td>2. The organization is interested in HIT and we want board support</td>
<td>Board of directors</td>
<td>CEO Clinic Administrator</td>
<td>Meeting</td>
<td>When HIT steering committee has formed</td>
<td></td>
</tr>
<tr>
<td>3. The organization is interested in HIT and we want to let all staff know of this interest and so they become excited about learning and adopting</td>
<td>All staff</td>
<td>CEO Clinic Administrator</td>
<td>Various: all staff meeting, newsletters, supervisor communications, other means within your organization</td>
<td>When steering committee has formed Repeat regularly as needed</td>
<td></td>
</tr>
</tbody>
</table>
If you fail to plan….

<table>
<thead>
<tr>
<th>Task</th>
<th>Key Actions</th>
<th>Key Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Empower Team</td>
<td>Review key roles in light of actual work</td>
<td>People in place → Skilled people in place</td>
</tr>
<tr>
<td>Clarify Vision</td>
<td>Establish SMART Goals</td>
<td>Vision of future sufficient to pull through Valley of Despair</td>
</tr>
<tr>
<td>Document Processes</td>
<td>Create flowcharts of current state</td>
<td>Agreement on current state. <em>Low hanging fruit (start picking!)</em></td>
</tr>
<tr>
<td>Calculate Total Cost of Ownership</td>
<td>Calculate realistic costs</td>
<td>Clarity on financial impact</td>
</tr>
</tbody>
</table>

*Strong team, shared vision, agreed-upon current state and clarity on financial implications*
SMART Goals

- **S** • Specific
- **M** • Measurable
- **A** • Attainable
- **R** • Relevant
- **T** • Timely (Time based)

<table>
<thead>
<tr>
<th>Objective</th>
<th>Intended Action</th>
<th>Source of Data</th>
<th>Application</th>
<th>Metrics</th>
<th>Baseline</th>
<th>Goal</th>
<th>Rationale/Obstacles</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improve revenue through better E&amp;M coding</td>
<td>Prompts for appropriate E&amp;M code assignment</td>
<td>Structured data collected via templates</td>
<td>EHR visit note</td>
<td># of outliers on coding audit</td>
<td>3% of visits are coded too low</td>
<td>Use structured data entry templates to record visit info &amp; improve E&amp;M coding so 100% of visits coded at appropriate level</td>
<td>Recent coding audit/ Potential for medical necessity questions</td>
<td>1% outliers, including 1 case exceeding medical necessity, at 3 mos. post go live. Check that LMRP guidance is part of E&amp;M coding support</td>
</tr>
</tbody>
</table>
Map Current Processes

- Engage organization in process thinking
- Create useful artifacts for software vendor
  - Use to establish work flow or complete Fit/Gap Analysis
- Identify areas of contention for early resolution
- Look for
  - Swim lanes (accountability)
  - Decision points
- Symbols nice but not necessary; pure text can work
A Picture is Worth.....

<table>
<thead>
<tr>
<th>Role Acting</th>
<th>Process Step</th>
<th>Mode of Communication</th>
</tr>
</thead>
<tbody>
<tr>
<td>SNF/Admissions Coordinator</td>
<td>1. Receives confirmation of patient match pending resident transfer from hospital</td>
<td>ShareLink Direct Communication OR Fax 763-463-4495</td>
</tr>
<tr>
<td>SNF/Admissions Coordinator</td>
<td>2.Pulls and prints Medication Administration Record (cMAR) and Interagency Transfer Form: MAR from hospital’s EHR. (EPIC View Only)</td>
<td></td>
</tr>
<tr>
<td>SNF/Admissions Coordinator</td>
<td>3. Sends Cover Sheet, cMAR and LATP: MAR to SNF/Pharmacy</td>
<td></td>
</tr>
<tr>
<td>SNF/Pharmacist</td>
<td>4. Conducts PMR</td>
<td></td>
</tr>
<tr>
<td>SNF/Pharmacist</td>
<td>5. Completes Medication Clarification Request Form</td>
<td>ShareLink Direct Communication OR Fax Nurses Station Family 651-257-7942 Fax Nurses Station N. Branch 651-237-3972</td>
</tr>
<tr>
<td>SNF/Pharmacist</td>
<td>6a. If discharge is today or on the weekend, send Clarification Request form to SNF only</td>
<td></td>
</tr>
<tr>
<td>SNF/Pharmacist</td>
<td>6b. If discharge is tomorrow and Monday through Friday, send Medication Clarification Request Form to Hospital and SNF</td>
<td>ShareLink Direct Communication OR Fax</td>
</tr>
<tr>
<td>SNF/Pharmacist</td>
<td>7. Call Hospital to notify them of the ShareLink Direct notification</td>
<td>Hospital phone: 651-982-7890</td>
</tr>
<tr>
<td>SNF/Pharmacist</td>
<td>8. Enters record in Prospective MRR Metrics</td>
<td></td>
</tr>
<tr>
<td>SNF/Admissions Coordinator</td>
<td>9. Adds Medication Clarification Request Form to resident record</td>
<td></td>
</tr>
<tr>
<td>B/HUC or Nurse</td>
<td>10. Receives notification of Medication Clarification Request Form</td>
<td></td>
</tr>
<tr>
<td>B/HUC or Nurse</td>
<td>11. Accesses Medication Clarification Request Form via ShareLink, prints, and alerts physician [writes sticky note to MD in Epic to alert them of the form – or – notifies MD of list to review in rounds. ]</td>
<td></td>
</tr>
<tr>
<td>B/HUC or Nurse</td>
<td>12. Gives Medication Clarification Request Form to physician or puts in physician-accessible location</td>
<td></td>
</tr>
<tr>
<td>H/Physician</td>
<td>13. Reviews Medication Clarification Request Form as part of discharge planning</td>
<td></td>
</tr>
<tr>
<td>H/Physician</td>
<td>14a. Requests additional information and clarifications from pharmacy as needed</td>
<td></td>
</tr>
<tr>
<td>H/Physician</td>
<td>14b. Facilitates physician request for information from pharmacy</td>
<td></td>
</tr>
<tr>
<td>H/Physician</td>
<td>15a. Documents PMR clarifications as part of Discharge Orders</td>
<td></td>
</tr>
<tr>
<td>H/Medical Records</td>
<td>15b. Transfers Medication Clarification Request Form to Medical Records “In Basket”</td>
<td></td>
</tr>
<tr>
<td>H/Medical Records</td>
<td>16. Sends Medication Clarification Request Form to Epic patient record</td>
<td></td>
</tr>
<tr>
<td>B/HUC or Nurse</td>
<td>17. Sends Discharge Orders to SNF</td>
<td></td>
</tr>
<tr>
<td>SNF/Admissions Coordinator</td>
<td>18. Receives Discharge Orders</td>
<td></td>
</tr>
<tr>
<td>SNF/Nurse</td>
<td>19. Notifies SNF/Nurse of pending resident transfer availability of Discharge Medication List</td>
<td></td>
</tr>
<tr>
<td>SNF/Nurse</td>
<td>20. Medication Reconciliation of Clarification Request Form and Discharge Medication List</td>
<td></td>
</tr>
<tr>
<td>SNF/Nurse</td>
<td>21. Provides support to pharmacy to fill orders using medication transfer form</td>
<td></td>
</tr>
</tbody>
</table>

**Prospective Medication Review (PMR) Pilot**

*12.20.13*

**Goal: Medication Screening Prior to Patient Discharge**

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Hospital sends PMR to SNF at the completion of the transfer to SNF anxious to receive PMR</td>
</tr>
<tr>
<td>2.</td>
<td>PMR is received and reviewed by SNF to identify any potential issues with medication that may need to be addressed before discharge</td>
</tr>
<tr>
<td>3.</td>
<td>SNF contacts HUC/Nursing for further clarification of any issues identified in PMR</td>
</tr>
<tr>
<td>4.</td>
<td>PMR is reviewed by HUC/Nursing to identify any potential issues with medication that may need to be addressed before discharge</td>
</tr>
<tr>
<td>5.</td>
<td>HUC/Nursing contacts SNF to address any issues identified in PMR</td>
</tr>
<tr>
<td>6.</td>
<td>Improved safety for patient &amp; SNF resident</td>
</tr>
</tbody>
</table>

*Stratis Health*
Choosing the Right Partner

<table>
<thead>
<tr>
<th>Task</th>
<th>Key Actions</th>
<th>Key Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vendor Demos</td>
<td>Attend and view demos</td>
<td>Understand how options affect <em>your practice</em></td>
</tr>
<tr>
<td>Migration plans</td>
<td>Plan integration w/ other systems and how to handle data</td>
<td>Clarity on affect of software choices on current infrastructure</td>
</tr>
<tr>
<td>Narrow the field</td>
<td>Review findings, eliminate non-starters</td>
<td>From many to 2 or 3</td>
</tr>
<tr>
<td>Choose</td>
<td>Select final choice</td>
<td>A (probable) choice</td>
</tr>
<tr>
<td>Negotiate</td>
<td>Establish cost, time, Ts &amp; Cs, etc.</td>
<td>Contract that avoids pitfalls</td>
</tr>
</tbody>
</table>

**Contracted vendor**
Puppies!

Beware!
Talk to Others

• Pay attention to local conditions
  – Understand what others in your ecosystem are planning and doing (what technology, when, connecting to who)

• Vendors will show you the puppies

• Customers can tell you the reality
  – Meet/tour without the vendor
  – We see tremendous amounts of altruist behavior across provider organizations
The $$$ Must Work

Cost and Benefits

- Capture all cost elements
  - Use a list
  - Assume you’re estimating low
  - Add contingency of at least 15%
- Calculate both tangible and intangible benefits
  - Incentive payments, Increased billing, less transcription
  - “Our patients are beginning to expect…” long range implications… regulatory environment

Find a Calculator

Total Cost of Ownership and Return on Investment
Have Negotiation Strategy and Tactics

- Submit a written list of issues to the vendor and schedule a target date for their written response. Consider conducting a meeting to present and clarify issues.
- Conduct formal negotiation sessions after reviewing the revised contract.
  - This is an interactive process that typically takes an in-person draft, sometimes more.
  - Ask for real-time drafts showing changes from prior draft.
  - Take good notes during the meetings, covering both intent and specific wording offered to resolve issues.
  - Ensure that the vendor's written response is consistent with its verbal one.
- Clarify exactly what you are buying and what the vendor is selling, including:
  - Hardware: what devices
  - Software: what applications
  - Implementation support
  - Interfaces
  - Data and chart conversions
  - Customization
  - Networks: infrastructure
  - Testing
- Conduct implementation planning concurrent with contract negotiations, and attach the plan to the contract. At a minimum, the implementation plan should include:
  - Project planning (if any)
  - Project status and control dates
  - Key milestones
  - Level of effort for buyer
  - Level of effort for seller
  - Recommended project organization chart

Negotiation Tips
- Remember, everything is negotiable, although you probably want to focus on those areas most important to the organization. You are in charge of the negotiation process.
- Beware of concentrating on cost issues too early. Once the vendor agrees to a cost, the vendor has an easier time either reducing other issues or re-opening cost if an issue has a cost impact.
- Try to find win-win solutions whenever possible. Remember that once the contract negotiation is over, you will be in a partnership situation with this vendor. A one-sided win is never successful.
- Request a complete set of product documentation—and arrange for users to read it. This will help clarify what you are buying in terms of features and functions. Legally speaking, most vendors usually specify that what you are buying is the product as defined in the documentation—hence the need to read it.
- Consider a final due diligence product demonstration to respond to any final questions or concerns you may have about product capabilities before getting too deep into contract negotiations.
- The terms of the agreement can have financial implications far beyond the price. The following contract items need to be carefully negotiated:
  - Payment terms: equal pay for performance
  - What is final system acceptance
  - Maintenance/support fees and inflation clauses
  - Price protections
  - Fixed fee for implementation
  - Expense controls
  - Term or perpetual license if an application service provider (ASP)
  - Define performance criteria, remedies, and dispute resolution processes in terms you can understand and measure.

- Including projects in negotiations, as this can color the project manager's perspective going forward with implementation.
- Are all the contract elements specified in your RFP included in the offered contract, including the best offer from the vendor that has tailored to your situation (e.g., the specifics of what you are buying and revised pricing)? Ensure that the vendor understands that the response to the RFP and implementation plan will become part of the contract, and allow it to make any changes necessary to conform to this requirement.
- Keep track of any issues that arise during the selection process or you asked to negotiate or attach to the contract. For example, if the vendor did something unique for you, add a feature function for you, or something that the system will be able to handle a key requirement for you—get that written in the contract. If you save promises as writing from the salesperson, they can be attached to the contract, but make sure the contracting agent from the vendor understands what is attached.
- Prepare for the vendor to be supplied by your negotiation process. Many small health care organizations, such as small doctors' offices, critical access hospitals, or independent nursing homes, are not savvy for approaching contract negotiations from the perspective of a well-informed consumer. Do not fall for any vendor tactics, such as "no one else has ever objected to these terms."

Tasks During Negotiation
- When you receive the contract (which should be in an electronic form so you can add line numbers or have the vendor add line numbers prior to sending it in final contract to you), set up a spreadsheet or outline to crosswalk your concerns. This can be as simple as the following example. Some issues have been included in italics as illustrations.

<table>
<thead>
<tr>
<th>Line Number</th>
<th>Topic</th>
<th>Issue/Concern</th>
<th>Vendor Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>Parties</td>
<td>Incorrect spelling of name of organization throughout</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Maintenance Fees</td>
<td>What is the basis for annual fee increases?</td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>Modules</td>
<td>What is the ongoing module charge included in price?</td>
<td></td>
</tr>
</tbody>
</table>

- To develop a list of issues, build off the list started during the selection process. Add issues based on a thorough review of the contract, such as:
  - Product capabilities
  - Cost and payment terms
  - Technical issues
  - Installation and implementation
  - Legal issues, including the HIPAA business associate agreement
  - Other business and contractual terms
- Develop a negotiation strategy and target timeframe. Do not back yourself into a corner with an unrealistic deadline.
Onward → Implementation!

- Vision → strong enough
- Leadership → in place
- Plans → set and communicated
- Management → demonstrated
- Choices → well made
- Execution → possible

*Conditions set to move quickly through the Valley of Despair*
### The opportunity to do more

<table>
<thead>
<tr>
<th>Task</th>
<th>Key Actions</th>
<th>Key Deliverables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oversee Vendor Build</td>
<td>Identify and manage issues, track progress</td>
<td>On time, on budget deliverables</td>
</tr>
<tr>
<td>Redouble Change Management Efforts</td>
<td>Understand opposition, fears, barriers</td>
<td>Ongoing change management activities</td>
</tr>
<tr>
<td>Identify Training Requirements</td>
<td>Determine who needs to know what</td>
<td>Training plan</td>
</tr>
<tr>
<td>Develop Go Live Plans</td>
<td>Test, training, conversion, support, etc. plans</td>
<td>Written plans with resources and go/no points</td>
</tr>
<tr>
<td>Go Live</td>
<td>Implement above plans</td>
<td>Working EHR</td>
</tr>
</tbody>
</table>

Implemented EHR
Training Plans

- Process, not the system
- Roles, not functions
- Specific, not general
- Super users are essential
With Dogs It’s All About Training

Good implementation of weak product beats a bad implementation of a good product
Eyes on the Prize

• Go live is the end of the beginning
  - Celebrate, but don’t let down
• Leaders must stick to the plan
  – Show up
  – Listen
  – Demonstrate shoulder-to-shoulder support
• Can’t or Won’t?
  – Can’t = workflow, technology, training
  – Won’t = management, motivation, incentives
Exchange → Interoperability

- Increasing understanding that getting to the Triple Aim requires focusing beyond the clinic and the hospital
- Effective exchange of information is the key to many of the benefits
- Interoperability is the holy grail
What We’re Learning

- Stratis Health is working on a CMS Special Innovations Grant – we call our project HIT-PAC: Health Information Technology for Post Acute Care
- Goal is reduce avoidable re-admissions by better use of EHR and Health Information Exchange technology
- Challenges include all those we’ve covered:
  - Technology that isn’t quite right
  - People that aren’t ready (Can’t or Won’t)
  - Political, cultural and leadership issues continue to be key
Interoperability/Technology

• True interoperability barely exists in Minnesota, a state that leads the nation in EHR adoption
• Agendas of many parties don’t align
  – Vendors may build in exchange mechanisms but they don’t necessarily work well with other vendors or even the state mandated information exchange
• A mechanism known as *The Direct Protocol*, or *Direct* does allow for secure exchange of documents, like PDFs
• View-only access does little to solve the problems – data doesn’t get permanently entered into the nursing home system
The Promise of the CCD

• CCD is a Continuity of Care document
  – In an interoperable world data would move smoothly from the hospital to the care facility ensuring better care with less effort
• There is an established specification of what information should be in a CCD document and how it should be formatted
• In reality, getting EHRs to exchange CCDs is proving to be difficult -- data fields don’t map smoothly
Training, Change Management, Workflows

- Without exception, there are important gaps in training of the staff in the use of technology
  - Too little, too fast
  - Staff turnover makes the problem worse
- When leaders are firm in commitment to the EHR, facilities are farther along and use the technology more consistently
- All facilities still use some combination of paper and electronic records
- Many essential workflows i.e., care transitions and med rec not optimal or consistent
  - Issues on both the hospital and LTC side
Leadership

• Facilities with leaders who are firm in their commitment to the EHR are farther along than those with less committed leadership

• When leaders come together, positive things happen
  – Agreements on exchanging data
  – Implementation of new workflows

• Leading vendors are rapidly adding new features to enable data exchange
Physician Leadership

- *Discharge Instructions?* or: *Ongoing Care Plan?*
- Start with what information and workflow is required to establish a seamless ongoing care plan?
- Physician leaders must demand that patients stay at the center of all design and implementation efforts.
Read-Only Access – a Cop Out?

- Hospitals are providing SNFs, LTCs, PCPs, etc. with read-only access to hospital EHR
- If partners don’t have technology for HIE, read-only can improve outcomes
- Read-only isn’t a sound long-term solution
  - Fraught with need to re-enter data
  - Burden still on downstream entity
  - Not taking advantage of national investment and consensus on standards
Jump Start

• Clarify why – end in mind
• Begin to communicate
• Empower leaders, establish teams
• Map some processes – find low hanging fruit
• Talk to others
• Lead
Great Resources - Free!

• **Stratis HIT Toolkit for Physician’s Office**

• The US Government has a very strong site:
Thank You!

Stratis Health is a nonprofit organization that leads collaboration and innovation in health care quality and safety, and serves as a trusted expert in facilitating improvement for people and communities.