Clinical Decision Support-enabled Quality Improvement for Meaningful Use
Part 2

March 20, 2013
Learning and Action Network
Welcome/Speaker Introductions

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  – SME for Stratis Health
  – Family Nurse Practitioner

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  – Principal, TMIT Consulting
  – Faculty, University of Pennsylvania Health System
  – SME for ONC “CDS4MU Project”

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  – CMIO Stratis Health
  – Clinical Director MN/ND REACH (REC)
  – SME for ONC “CDS4MU Project”
Webinar Sponsors

• Stratis Health – Minnesota QIO

• North Dakota Healthcare Review Inc. – North Dakota QIO

• REACH – Regional Extension Center for Minnesota and North Dakota
Goals for the Two-Part Program

Help You:

- Improve workflows, information flow
- Improve patient care and reduce errors
- Address performance incentives and mandates
- Make your EHR more helpful
Session Agenda

• Review of CDS Part I Webinar materials
• Clinic Sharing: Clinics discuss/share use of CDS template
• Q and A
  – Open forum for CDS questions
• Next Steps for CDS
Clinical Decision Support-enabled Quality Improvement for Meaningful Use

Review
Overall We Hoped to Impart:

• CDS is a powerful tool to help you meet your goals
• Clinics that implement effective CDS interventions can improve outcomes and reduce provider stress
  – Lisa took us through an example of improved outcomes
• We’re not talking about your father’s CDS
• You learned of a three-tier process for understanding, building capacity and achieving improvements
• We presented the concept of the CDS 5 rights
• We showed you a tool and a process to help design and implement effective CDS interventions
  – Using the tool should be relatively easy, quick, and effective
Not Your Father’s CDS

- Outdated understanding:
  - CDS = interruptive alerts that impede workflow
  - Provider = dumb; EHR = smart
  - CDS targeted at provider
  
- New understanding:
  - Make the right thing the easy thing to do
  - Use interruptive alerts sparingly, only as critical guard rails
  - Trust the provider and add aids to insure outcomes
  - Involve the entire care team – use CDS to make provider time more efficient
Three-Tier Process

In our previous session we described implementing CDS as a journey. Basically, we recommended three tiers:

- Learn about CDS
- Build capacity in your organization
- Achieve results

Achieve measurable improvements

Build capability to improve many targets

Understand key concepts, tools, and approaches
Building Capacity with the “CDS 5 Rights”

To improve targeted healthcare decisions and outcomes, well developed and deployed CDS interventions must provide:

- the **right information** (evidence-based, actionable…) [what]
- to the **right people** (clinicians *and* patients…) [who]
- in the **right intervention types** (answers, documentation tools, data display, alerts…) [how]
- through the **right channels** (EHR, internet, smartphones, smart pill bottles…) [where]
- at the **right points in workflow** (decision/action …) [when]
How: CDS Intervention Types

- Situation-specific flow sheets, dashboards
- Relevant data presentation
- Referential information
- Order sets
- Alerts and reminders
- Others
Building Capacity Overview

- Engage key stakeholders (‘Who’ options)
- Understand/improve workflows (‘When’ options)
- Leverage EHRs/HIT (‘Where/How’ options)
- Manage CDS content (‘What’ options)
- Measure processes and outcomes
- Make decisions and manage processes systematically
Building Capacity with Teamwork

- Do CDS *with* stakeholders, not *to* them
  - “enhancing decisions and actions with pertinent information to improve health and healthcare” is a *team sport*!
Building Capacity w/ Research

• What are people currently doing?
  – Supposed to be doing (policy)
  – Think they’re doing (ask)
  – Actually doing (look!)

• What’s working?
  – Problematic?
  – Ripe for improvement?
Implement and Improve

• Select appropriate targets
  – Major benefit opportunities for patient health, provider efficiency, business strength, etc.

• Examine target-related information flow and workflow
  – CDS 5 Rights-based template

• Consider/prioritize improvement opportunities
  – Draw from full option palette
    (Who, What, When, Where, How)
Implement and Improve

<table>
<thead>
<tr>
<th>When (workflow)</th>
<th>Pre/Post Office Visit</th>
<th>During Office Visit</th>
<th>Outside Patient-specific Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities</strong></td>
<td>Check in, waiting</td>
<td>In exam room</td>
<td></td>
</tr>
<tr>
<td><em>Activities</em></td>
<td>Understand condition and treatment; take medications; keep appointments; document information (weight, blood sugar, food diary, etc.)</td>
<td>Data gathering/history and exam, vitals, ordering, teaching/shared decision making, care plan</td>
<td>Further education, checking out, scheduling</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>Front office</td>
<td>Exam room</td>
<td></td>
</tr>
<tr>
<td><em>Setting</em></td>
<td>Home</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Information below should be customized for each target**

<table>
<thead>
<tr>
<th>Who (people)</th>
<th>What (information)</th>
<th>Where (channels)</th>
<th>How (Formats)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient, care manager, payer</td>
<td>Health status questionnaires, education about conditions/medications, reminders about medications/testing/follow-up</td>
<td>Documentation tools, reference materials, flow sheets, text messages</td>
<td>Smartphone, PHR, mail, e-mail</td>
</tr>
<tr>
<td>Patient, front desk staff</td>
<td>Health status questionnaires,</td>
<td>Written materials</td>
<td>Documentation tools, reference materials</td>
</tr>
<tr>
<td>MA/nurse, physician/NP, patient</td>
<td>smart documentation tools (prompts for key data), display relevant data (graph parameters, share with patient)</td>
<td>EHR/CPOE/Results review</td>
<td>Formats: documentation templates, relevant data display, reference information,</td>
</tr>
<tr>
<td>Patient, educators, patients</td>
<td>After-visit summary,</td>
<td>EHR, written material,</td>
<td>Format: relevant data</td>
</tr>
<tr>
<td>Patients, care managers, payers</td>
<td>Lists of patients failing target measures</td>
<td>Registry/EHR, phone calls</td>
<td>Relevant data display, verbal exchange</td>
</tr>
</tbody>
</table>

We recommend using this template as a great way to design and implement an effective CDS program. Many clinics have reported that this is easy to use and effective, since it encourages inclusive thinking (involving everyone on the care team) and focuses on the CDS 5 rights.
In Conclusion

• Not your father’s CDS
• Start by building capacity
• Keep the CDS 5 rights in mind
• Design and implement improvements for priority targets
  – Use alerts sparingly – they are *guardrails* at best
  – Test interventions
  – Communicate, communicate, communicate
• Use the template – it works!
• Monitor results and continually improve
  – Is performance improving as expected?
  – Are there “unintended consequences”?
  – What enhancements need to be made?
Clinic Example
Pamela R. Akins  
Health Information/Medical Record Manager  
Performance Improvement Coordinator  
Open Cities Health Center, Inc.  
St. Paul, MN
**Clinical Decision Support Configuration Template (Ambulatory)**

**Target Measure:**

<table>
<thead>
<tr>
<th>DISEASE MANAGEMENT</th>
<th>Current Performance:</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>DIABETES</strong></td>
<td>Patient-specific, Encounter-oriented Activities</td>
</tr>
</tbody>
</table>

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<tr>
<th>When? (workflow)</th>
<th>Pre/Post Office Visit</th>
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<th>After exam room</th>
<th>Outside Patient-specific Encounters</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Activities</strong></td>
<td>Understand condition and treatment; take medications; keep appointments; document information (weight, blood sugar, food diary, etc.)</td>
<td>Checking in, updating insurance and clinical information; utilizing waiting time to familiarize patient with conditions, etc.</td>
<td>Data gathering/history and exam, vitals, ordering, teaching/shared decision making, care plan</td>
<td>Further education, checking out, scheduling follow-up and consult appointments</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>Home</td>
<td>Front office, Waiting area</td>
<td>Exam room</td>
<td>Back office</td>
</tr>
</tbody>
</table>

*Information below should be customized for each target (List current and/or desired approaches)*

<table>
<thead>
<tr>
<th>Who? (people)</th>
<th>Patient, Case Manager and Care Team</th>
<th>Patient, Front Desk Staff</th>
<th>MA, Nurse Practitioner, Nurse, Physician, Patient</th>
<th>Front Desk Staff, MA, Case Manager, Outreach Dept.</th>
<th>HIT and IT staff</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What? (information)</strong></td>
<td>Diabetes health Maintenance</td>
<td>Patient Satisfaction Surveys, Appointment Follow-up systems, Educational materials</td>
<td>Documentation, Medication Management, Consultation and</td>
<td>Return Appointments, Consultation follow up and recommendations, Diagnostics testing</td>
<td>Patient compliant reports</td>
</tr>
<tr>
<td><strong>Where? (channels)</strong></td>
<td>Flow sheets, Message Systems in Electronic Health Record, Chick-in responses</td>
<td>Printed material - Phamplets and print-outs for specific diagnosis</td>
<td>Electronic Health Record, Provider messaging and Patient portal in Electronic</td>
<td>MN Health Care Homes</td>
<td>Team Management, Case Manager, Diabetic Registry</td>
</tr>
<tr>
<td><strong>How? (Formats)</strong></td>
<td>Telephone Communication, Email</td>
<td>Past family social and medical history</td>
<td>Templates, Data Collection &amp; Display</td>
<td>Formulate Data with Compliance Measures</td>
<td>Data Collection, Verbal Information</td>
</tr>
</tbody>
</table>
Resources

• Workflow Assessment Toolkit from AHRQ at Healthit.gov
  – Workflow Tool Examples
  – Plan-Do-Check-Act
  – Benchmarking
  – [Link](http://healthit.ahrq.gov/portal/server.pt/community/health_it_tools_and_resources/919/workflow_assessment_for_health_it_toolkit/27865)

• Process Analysis Tools (American Society for Quality)
  – [Link](http://asq.org/learn-about-quality/process-analysis-tools/overview/flowchart.html)

• Cross-mapping and Prioritizing QI Measures
  – Meaningful Use/Patient Centered Medical Home/Physician Quality Reporting System Crosswalk for Eligible Professionals (EPs)
    • [Link](http://www.csi.mt.gov/MedicalHomes/QMSubcomm/2012EP_MU-PCMH-PQRS_Crosswalk.pdf)
  – DHS/CMS Final Notice Medicaid Program
Resources

• Building CDS and Monitoring QI Measures
  – AHRQ: Quality Measurement Enabled by Health IT
    • http://healthit.ahrq.gov/portal/server.pt/community/ahrq-funded_projects/654/health_it-enabled_quality_measurement/30886
  – AHRQ Website on Clinical Decision Support
  – Creating an Alert Based On Quality Measures and Clinical Guidelines
    • http://www.healthit.gov/sites/default/files/cds/3_5_17_creating_alert.pdf
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Thank You!