Using the EMR to Improve Clinical Documentation & Patient Involvement in Population Health Management

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Copernicus Rides
Shifting the Center of the Universe

Fee for Service and Managed Care Universe

Current State—the way it’s always been

Payer Data
Clinical Data

ACO + VBP Program Universe

Future State—Clinical Data Drives everything

EHR Clinical Data
Payer Data
Population Health – What are We Talking About?

**Public Health**
Use of large data sets to inform health-based hypotheses or to facilitate population behavioral pattern discovery, population preventive practices, or population interventions designed to improve aggregate outcomes or decrease cost.

**Clinical**
Creating disease and population registries to inform local evidence and discover local best practice through virtual trials and forming the basis of clinical continuous improvement processes.

**Finance-Delivery Integration**
Accountable Care Organizations, Patient Centered Medical Home, Value Based purchasing, Bundled Payments, and whatever is coming next.
Clinical Data Utilization

But First, Get all the Data

Patient Portal

UAMD offices Diagnostics Plan Claims Pharmacy, etc.

Integrate with External Clinical Data Sources

Unified View of All Internal Clinical Data

EHR #1 EHR #2 EHR #3 EHR #n

Interoperable State

Healthcare Data Platform

Data Management Mobility Security Communication
Information Interoperability – It’s Alive

People, Processes, Technology

Healthcare Data Platform

Data Management
Mobility
Security
Communication

Acquisitions

HIM- EHR-
100+ Apps –
current state

Networks

New Diagnostics

Clinical Trials

Networks

HIM- EHR-
100+ Apps –
current state

Acquisitions

New Diagnostics

Clinical Trials

Data Management
Mobility
Security
Communication

Networks
What is Your Clinical Data Strategy for Population Health?

- Business analytics
- Optimize service delivery cost
- Automate compliance reporting
- Population-disease registries

- Risk adjusted data
- Ad hoc query
- Search
- Drill down
- Local evidence-decision support

- Patient portal
- Registries
- Local evidence
- Integrated data

Unified Data
CLINICAL DOCUMENTATION IMPROVEMENT IS KEY TO EMR SUCCESS
Challenges with Clinical Documentation in the Era of the EMR

• Note Bloat: Many exceed 10 pages
• Inaccuracy from *copy forward* and *copy & paste* functions
• Plagiarism from copying another’s history into your note without giving attribution
• Templated physical exams that are not edited
• Copious lab and imaging results pulled into notes under the guise that it improves the quality of the note
• Inadequate assessments and plans
Implications from CMS and the OIG

- Threat of penalties for inaccurate documentation
- Threat of penalties for plagiarism
- Difficulty with best coding due to poor documentation

The OIG “Office of Inspector General,” in a survey of 864 hospitals, found that only 25% had policies in place to govern the use of copy and paste functions. Only 44% had auditing functions to assure the accuracy of the medical record.
Important to Capture
What is Happening to the Patient

- Complications and Co-morbidities (CC)
- Major Complications and Co-morbidities (MCC)
- Severity of Illness Score (SOI)
  1-minor, 2-moderate, 3-major, 4-extreme
- Risk of Mortality (ROM)
  1-minor, 2-moderate, 3-major, 4-extreme
- Mortality Index = SOI/ROM
Coders and Clinicians Must Work together

Example

- Reviewer identified low rate of MechVent (MV) > 96 hours. In three months, only 11 cases.
- This DRG 207 is weighted 5.2556 and, if documented appropriately, could improve reimbursement by $30,000/case
- Documentation Improvement: In ICU notes, add MV Day 1-30 as well as day of intubation/extubation to the ICU Time Line to correctly capture this more accurate code

Coders should query clinicians to clarify details in the medical record. Queries should be answered promptly and changes made as needed.
Examples Where Documentation Needs to Improve

- CHF – but Acute on Chronic Systolic Heart Failure
- Anemia – but Acute blood Loss Anemia
- Obesity – but Morbid Obesity with a BMI of 60
- Weight Loss – but Protein Calorie Malnutrition with BMI of 18
- Chronic Kidney Disease – but CKD stage 1-5
- DM – but DM with its complications including CKD stage 4, retinopathy with blindness OD, and peripheral neuropathy and gastroparesis
Kadlec’s Model for Improving Clinical Documentation

- 12-member committee of physicians, nurses, and coders
- Audit clinical notes monthly, with records kept for Joint Commission and DOH surveys
- Apply the use of a scoring card
- Send audited notes to clinicians with comparative scores and improvement suggestions
- Clinical documentation audits posted on intranet to spur competition among providers to improve CDI and HCAHPS scores
Expectations of the History and Physical

- Identifying data
- History of the present illness (time line)
- Chief complaint
- Review of systems
- Past medical and surgical history
- Medications (pre admit)
- Allergies
- Family history
- Laboratory data
- Social history and living situation
- Physical exam
- Imaging
- Assessment
- Plan

Expectations of the History and Physical
**Score Card**

<table>
<thead>
<tr>
<th>Scoring</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Score for Completeness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score for Accuracy</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score for Conciseness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score for Adequate Assess/Plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Score for Adequate Problem List</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

(1-unacceptable, 2-poor, 3-fair, 4-good, 5-excellent)
Multiply score times four for percentage score.
Additional comments of reviewers also helpful.
Scoring:

- Five-member team discusses each note
- Scores from each section are totaled to yield cumulative score:

<table>
<thead>
<tr>
<th>Score</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>&gt;90%</td>
<td>excellent compared to peers</td>
</tr>
<tr>
<td>&gt;80%</td>
<td>above average compared to peers</td>
</tr>
<tr>
<td>&gt;60%</td>
<td>average compared to peers</td>
</tr>
<tr>
<td>&lt;60%</td>
<td>below average compared to peers</td>
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</table>
Case Review Example #1

29 year old female admitted for a C-section
History and physical (H&P) audited

<table>
<thead>
<tr>
<th>1. Completeness</th>
<th>28%</th>
</tr>
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<tbody>
<tr>
<td>2. Accuracy</td>
<td>32%</td>
</tr>
<tr>
<td>3. Conciseness</td>
<td>68%</td>
</tr>
<tr>
<td>4. Quality of Assess/Plan</td>
<td>24%</td>
</tr>
<tr>
<td>5. Quality of Problem List</td>
<td>28%</td>
</tr>
<tr>
<td>Total Over All Score</td>
<td>35%</td>
</tr>
</tbody>
</table>

Below Average Compared to Peers
Case Review Example 1

Peer Comments:

“Of the ten notes reviewed today by our committee, this was the worst one. In the History of the Present Illness, one would expect to include the history of her pregnancy with appropriate landmarks. Instead, a discussion of complications of C-sections were included. These comments are appropriate for a consent not an HPI.”

“ROS inadequate”

“The physical exam should focus on the patients pregnant condition but appears to be a template for a non-pregnant patient. One gets the impression that the provider either did not examine the patient or completely missed editing the physical exam template. Very egregious regarding clinical documentation.”

“Assess/Plan should explain the mothers obstetrical course and why the C-section is indicated and what gestational age the fetus is and why performing it at this time is appropriate.”
An 87 year old man admitted for a sigmoid colon cancer resection

History and Physical (H & P) audited

<table>
<thead>
<tr>
<th>Description</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Completeness</td>
<td>62%</td>
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<tr>
<td>2. Accuracy</td>
<td>90%</td>
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<tr>
<td>3. Conciseness</td>
<td>88%</td>
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<tr>
<td>4. Quality of Assess/Plan</td>
<td>76%</td>
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<td>5. Quality of Problem List</td>
<td>12%</td>
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<tr>
<td>Total Over All Score</td>
<td>67%</td>
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</table>

Average compared to Peers
Case Review Example #2

• Peer Comments:

“The HPI has not been proof read and is missing words and information.”

“No problem List! It is incumbent on every provider to maintain an accurate problem list with the principle problem and secondary problems specified.”

“Although you mentioned the comorbidities of HTN, DM, and HLD in the history, you failed to include a list of medications the patient is taking.”

“Not including vital signs in the physical exam is below the standard of a complete H & P. In fact, if the patient were hypertensive or tachycardic, his case would have been canceled.”

“The assessment and plan is too brief. It does not discuss preoperative staging or a metastatic workup and does not include an assessment of what the operative risk is.”
General CDI Recommendations

- Concise but complete
  - Exclude imaging reports
  - Address abnormal imaging findings in Assess/Plan, discussing implications and care plan
  - If you copy some one else’s work, italicize it and give attribution
- Edit with scrupulous concern to avoid mistakes and inaccuracies
- Maintain a problem list with both primary and secondary diagnoses to capture co-morbidities
- Include pertinent lab but avoid note bloat
- Assess/Plan is the king pin of the note: summarize the case and discuss differential diagnosis and other factors, including treatment options and care plan
Goal

- Increase awareness of clinical documentation deficiencies by adult hospitalists
- Improve the accuracy of the clinical record by improving the adult hospitalists clinical note and problem list management
- Improve patient care as a result of a more accurate, readable clinical record

Method

- The Medical Director will review 30 random notes per provider quarterly.
- Each note will be reviewed and scored as passing or failing based on set objective criteria
- Adult hospitalist will receive quarterly feedback on their performance
- The feedback form will clearly state the MRN of the patient’s chart being reviewed, the date of any failing note and the reason the note was graded as failing

Quality Incentive

- Each adult hospitalist will have a portion of their annual quality incentive bonus tied to the accuracy of their clinical notes
- 1\textsuperscript{st} qtr – Baseline passing rate and education
- 2\textsuperscript{nd} qtr – 75% passing to receive quality bonus
- 3\textsuperscript{rd} qtr – 85% passing to receive quality bonus
- 4\textsuperscript{th} qtr – 90% passing to receive quality bonus
Adult Hospitalist Clinical Note Criteria

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Yes = Pass</th>
<th>No = Fail</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Is the note without clinical inconsistencies?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Is the problem list updated in each note with a primary diagnosis clearly indicated:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Is any part of the note is copies and pasted from another provides, is this clearly documented and credit given to the authoring provider:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. If the note is copied and forwarded from previous day’s note is there an updated subjective and A/P?</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- If a note fails any of the above criteria, it is considered a failing note.
Clinical Note Documentation Improvement Project
Baseline pass rate 2nd Q 2014

Physician Pass Rate
2nd Quarter Baseline Average
3rd Quarter Goal
4th Quarter Goal
1st Quarter 2015 Goal
Clinical Note Documentation Improvement Project
Breakdown of reasons for failing note

- A/P not updated: 88
- Clinical inconsistency: 16
- Multiple: 13
- No credit given to author of copied part of note: 14
- No primary diagnosis listed in problem list: 11
- No problem list: 30
- Primary discharge diagnosis not identified: 2
- Problem list not updated: 2
The Bottom Line About Clinical Documentation Improvement

• Critical to improving safety, quality, and satisfaction in patient care
  ■ It’s only a matter of time before patients will routinely be reading your notes (Mayo clinic).

• Best accomplished with team work between the clinical note writers, peer reviewers, and coders

• Yields improved reimbursement, a lower mortality index, and a higher case mix index

• Can only be accomplished and sustained through peer review and accountability with open loop feedback
Improved Use of EMRs Will Contribute to Better Patient Engagement
Achieving the “Triple Aim”

Health Reform

- Improve Patient Experience
- Advance Population Health
- Reduce Per Capita Costs

Population Health

- Information Driven Clinical Decisions
- Primary Care-Led Care Teams
- Patient Engagement

Institute for Healthcare Improvement
EMR and the Patient / Consumer

- **20%**: US adults with access to their medical records online
- **41%**: Consumers willing to switch doctors to gain access to their EMR information
- **80%**: Those Americans who have access to their EMR info and actually use it
63% of adult cell owners use phones to go online

35% of U.S. adults have gone online to decipher a medical condition

69% of U.S. adults track a health indicator like diet, exercise routine, weight

39% of U.S. adults provide care for a loved one

Source: Pew Research Center
Patient Engagement Defined

- Skills, Ability, and Willingness of Patients to Manage Their Own and Family Members Healthcare
- Collaboration Among Patients and Providers to Manage and Achieve Positive Outcomes
- Healthcare Organization Culture to Prioritize and Support Patient Engagement

“True” Patient Engagement
Developing a Patient Engagement Strategy

Three Critical Elements

- Create an “end state” vision
- Develop goals and expected outcomes
- Plan for change

Implementing the Strategy

#1: Define the Vision
- Get buy in
- Explain why this is important
- Rely on policies and procedures
- Ensure comfort w/ tasks
- Address concerns

#2: Focus on Culture

#3: Deploy Technology

- Start with a patient portal
- Make it everyone’s job to encourage use
- Phase in the portal rollout
- Educate patients and promote use
- Measure portal adoption - “X% by April”
# Advanced Automation of Patient Engagement

## Patient Outreach

### Population Management System

<table>
<thead>
<tr>
<th>Patients</th>
<th>Appointments</th>
<th>Outreach</th>
<th>Population Insight</th>
<th>Care Management</th>
<th>FQRS</th>
<th>Hospital Readmission</th>
<th>Reports</th>
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</thead>
</table>

### Outreach Summary

**Outreach**

<table>
<thead>
<tr>
<th>Name</th>
<th>Group</th>
<th>Reason</th>
<th>Phone Number</th>
<th>Provider</th>
<th>Facility</th>
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</thead>
<tbody>
<tr>
<td>Delaney, Adam</td>
<td>Medical Center, Westside</td>
<td>Annual</td>
<td>(409) 201-8779</td>
<td>Casey, Ben, MD</td>
<td>Medical Center</td>
</tr>
<tr>
<td>Harrington, Lisandra</td>
<td>Hypertension, Cholesterol</td>
<td>Annual</td>
<td>(214) 552-4196</td>
<td>Casey, Ben, MD</td>
<td>Medical Center</td>
</tr>
<tr>
<td>Cole, Edan</td>
<td>Annual</td>
<td></td>
<td>(214) 435-9374</td>
<td>Casey, Ben, MD</td>
<td>Westside</td>
</tr>
<tr>
<td>Kleen, Krista</td>
<td>AIC</td>
<td></td>
<td>(972) 934-5315</td>
<td>Casey, Ben, MD</td>
<td>Westside</td>
</tr>
<tr>
<td>Hinton, Gairn</td>
<td>Annual</td>
<td></td>
<td>(214) 942-7319</td>
<td>Casey, Ben, MD</td>
<td>Westside</td>
</tr>
<tr>
<td>Barnett, Wanda</td>
<td>Colon Cancer Screening</td>
<td>Annual</td>
<td>(409) 261-1876</td>
<td>Casey, Ben, MD</td>
<td>Westside</td>
</tr>
<tr>
<td>Clements, Jerry</td>
<td></td>
<td>Annual</td>
<td>(214) 558-6338</td>
<td>Casey, Ben, MD</td>
<td>Westside</td>
</tr>
</tbody>
</table>

**Statuses:**
- ✔ Successful
- ✗ Incomplete
- ☐ Queued

**Response:**
- ✔ Delivered
- ☐ Queued
- ✗ Not Delivered
- ☐ All

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## Risk Stratification

## Telemonitoring and Mobile Health Applications

## Patient Education

**Esophageal Cancer**

What is the esophagus?

The esophagus is a muscular tube that carries food and liquids from the mouth to the stomach. See anatomy. It is located behind the windpipe (trachea). When a person swallows, the wall of the esophagus contracts to push food down into the stomach. The lower part of the esophagus that connects to the stomach is called the gastroesophageal junction, or GE junction.

What is esophageal cancer?

Cancer develops when cells grow and divide out of control to form a tumor or mass. These cancer cells can invade and destroy the tissue around them. The cancer cells can spread to other parts of the body in a process called metastasis. The lymph nodes, liver, lung, brain, and bone are common sites for esophageal cancer metastasis.
Questions

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