Tips from a Joint Commission Expert on Ambulatory Care Quality and Safety

Katherine Virkstis, ND
Managing Director
Nursing Executive Center

Ann Scott Blouin, RN, PhD, FACHE
Executive Vice President of Customer Relations
The Joint Commission
An Emerging Arena for Quality & Safety Issues: Ambulatory Care, Transitions and Care Coordination

Ann Scott Blouin, RN, PhD, FACHE
Executive Vice President, Customer Relations

The Advisory Board Company
October 20, 2016
Agenda

- Introduction
- Growing Awareness of Quality and Safety Issues in Ambulatory Care
- The Science of Diagnostic Errors
- Joint Commission’s Most Frequent Ambulatory Findings
- Transitions of Care and Care Continuum: Challenges and Opportunities
- Discussion
What Are the Top Three Factors Driving Your Organization’s Ambulatory/Outpatient Care Strategy?

<table>
<thead>
<tr>
<th>Factor</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improving quality and outcomes</td>
<td>52%</td>
</tr>
<tr>
<td>Expanding market share</td>
<td>50%</td>
</tr>
<tr>
<td>Increasing revenue</td>
<td>48%</td>
</tr>
<tr>
<td>Population health management</td>
<td>43%</td>
</tr>
<tr>
<td>Responding to consumer-driven trends</td>
<td>43%</td>
</tr>
<tr>
<td>Reducing costs</td>
<td>39%</td>
</tr>
<tr>
<td>Protecting market share</td>
<td>12%</td>
</tr>
<tr>
<td>Taking on risk dictates control of services</td>
<td>7%</td>
</tr>
<tr>
<td>Don’t know</td>
<td>1%</td>
</tr>
</tbody>
</table>

“The vast majority of health care is delivered in ambulatory settings, yet we are just beginning to understand the safety risks that exist outside of hospital walls . . . Experience to date indicates that safety issues in the ambulatory setting differ from those in the inpatient setting in obvious and not-so-obvious ways. There are differences in the types of errors (treatment errors predominate in inpatient settings, whereas diagnostic errors do in outpatient settings), the provider-patient relationship (e.g., adherence is more critical in outpatient settings), organizational structure (ambulatory practices tend to lack the infrastructure and expertise to address quality and safety improvement), and regulatory and legislative requirements (e.g., there are staffing ratios and accreditation requirements for hospitals that do not exist for private practitioners).”

Time pressures, distractions, interruptions

Micro environment: IT, staff, teamwork, support systems

Pt. Presentation: difficult diagnoses, incomplete information

Training
Prior experience
Self-awareness of limitations

Diagnostic Errors

Adapted from: Schiff, 2014.
# Safety Risks in the Ambulatory Setting

<table>
<thead>
<tr>
<th>Category of Errors</th>
<th>Most Common Errors</th>
<th>Specific Areas for Errors</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clinical Knowledge Errors</td>
<td>• Clinical task errors&lt;br&gt;• Misdiagnosis&lt;br&gt;• Errors in treatment decisions</td>
<td>Studies reported that clinical knowledge errors resulted in patient hospitalization or death, but did not provide detailed information on which errors caused the outcomes</td>
<td>Dovey et al. (2002)&lt;sup&gt;iv&lt;/sup&gt;; Pace et al. (2005)&lt;sup&gt;v&lt;/sup&gt;</td>
</tr>
<tr>
<td>Communication Errors</td>
<td>• Information transfer delays&lt;br&gt;• Barriers to effective communication with patients attributed to low health literacy or low English proficiency</td>
<td>• 23% of PCPs were unaware their patients had been hospitalized 4 weeks postdischarge&lt;br&gt;• Health literacy or LEP interventions not applied</td>
<td>Bell et al. (2008)&lt;sup&gt;vi&lt;/sup&gt;</td>
</tr>
<tr>
<td>Administrative Errors</td>
<td>• Scheduling errors&lt;br&gt;• Managing patient records errors&lt;br&gt;• Failure to protect information</td>
<td>• Approx. 50% of patients had pending test results when they left the hospital, and 6% of these were considered potentially actionable</td>
<td>Roy et al. (2005)&lt;sup&gt;iii&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

# Safety Risks in the Ambulatory Setting

<table>
<thead>
<tr>
<th>Category of Errors</th>
<th>Most Common Errors</th>
<th>Specific Areas for Errors</th>
<th>Citation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Errors</td>
<td>• Prescriptions for incorrect drugs&lt;br&gt;• Incorrect dosages&lt;br&gt;• Errors most common in aging population on multiple drugs</td>
<td>• Cardiovascular 26%&lt;br&gt;• Antibiotics/anti-infectives 14.7%&lt;br&gt;• Diuretics 13.3%&lt;br&gt;• Nonopioid analgesics 11.8%&lt;br&gt;• Anticoagulants 7.9%</td>
<td>Gurwitz et al. (2003)(^i)</td>
</tr>
<tr>
<td>Diagnostic Errors</td>
<td>• Missed diagnoses&lt;br&gt;• Delayed diagnoses&lt;br&gt;• Incorrect diagnoses</td>
<td>It is not clear which types of diagnostic errors most commonly produced which types of harm, nor which produced the greatest patient harm</td>
<td>Singh and Weingart (2009)(^ii)</td>
</tr>
<tr>
<td>Laboratory Errors</td>
<td>• Switched or lost specimens&lt;br&gt;• Delays in communicating test results&lt;br&gt;• Patient follow-up failures</td>
<td>• 41% of patients with pending lab results on the day of discharge&lt;br&gt;• 43% of these were abnormal&lt;br&gt;• 9.4% were potentially actionable</td>
<td>Roy et al. (2005)(^iii)</td>
</tr>
</tbody>
</table>


Risk Factors for Ambulatory Errors in Pediatrics

- Young patient age
- Weight under 35 kg
- Use of multiple medications by child
- Communication barriers
- Prescriptions written by trainees not familiar with dosing for children
- Lack of teamwork
- Incomplete evaluation of patients
- Multiple health care providers; fragmented or uncoordinated care
- Illegible prescriptions
- Improper abbreviations
- Medication measurement devices
- Barriers due to health literacy, culture, and language

What is a Diagnostic Error?

Adverse Outcomes

Delayed, Missed, Misdiagnosis

Diagnostic Process Failures

Modified from Schiff Adv. in Patient Safety AHRQ 2005, Schiff & Leape Acad Med 2012
The Safer Dx Framework for Measurement and Reduction of Diagnostic Errors

doi:10.1136/bmjqs-2014-003675
Diagnostic Error Risk Risk 1. Situational Awareness

- Specialized type of situational awareness
- High reliability organizations
  - High worry: anticipation of what can go wrong
  - Preoccupied with risks around recognizing/preventing
- Appreciation of diagnosis uncertainty, limitations
  - Limitations of tests, systems’ vulnerabilities
  - Knowing when need for additional help arises
- Making failures visible (transparency)
- Don’t jump quickly to obvious diagnoses, red flag symptoms
- Diagnostic pitfalls – potentially useful construct
## Diagnosis Challenges:

### Examples of 30 Important and/or Frequently Missed or Delayed Diagnoses

| Rare Diagnoses | Atypical Presentation | Nonspecific St & Sots | Unusual/Oddly Specific Dx | Red Hair/missed finding | Slowly Evolving | Disseminated | Language/Communication | Pt failure to share data | Test Availability | False Pos/Neg | Test Interpretation | Pt follow-up Issues | Time constraints | Discontinuities | Fragmentation of Care | Memory loss of challenges | Recognition of Acute Severity | Diagnosing Failure to respond to ct | Recognizing Med diagnosis |
|----------------|-----------------------|-----------------------|---------------------------|-------------------------|----------------------|--------------|-----------------------|------------------------|-------------------|--------------|-------------------|----------------------|-------------------|----------------|-----------------|--------------------------|--------------------------|----------------------------|--------------------------|-------------------------|
| Cancer         |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| PE             |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Acute MI       |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Dissection Aorta|                      |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Tamponade      |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| SVT            |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Tuberculosis   |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Fungal Infections |                 |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Occult abscess |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Giardia        |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Necr Fascitis  |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Septicemia     |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Endocarditis   |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Food Poisoning |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Celiac Sprue  |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| B12 Deficiency |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Von Willebrand's|                     |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Hemochromatosis|                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| CO Poisoning   |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Adrenal Insuff.|                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Temporal Arteritis|                   |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Guillain-Barre Synd |               |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| SAH Aneurysm   |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Epidural abscess|                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Meningitis     |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Torsion Ovary/Testes |             |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Ectopic pregnancy|                     |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| Appendicitis   |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |
| GI Perforation |                       |                       |                           |                         |                      |              |                       |                        |                  |              |                   |                      |                  |                |                |                          |                          |                            |                          |

_Schiff, BMJ Qual & Safety 2/2012_
Recognizing inherent uncertainties/risks, build in mitigation, protections, recovery structures and processes

Proactive, systematic follow-up, feedback via closed loop systems

Major role for HIT to hard-wire
  - To automate, ensure reliability, ease burden on staff/memory, ensure loops closed and outliers visible
1. **Essential Data Elements** – Elements of history and physical exam, and tests that should be reliably obtained for *every* patient presenting with given symptoms.

2. **Don’t miss diagnoses** – critical diagnosis can present with symptoms that are fatal or have serious consequences if not recognized and treated promptly. These diagnoses should be considered in *every* patient with that symptom.

3. **Red flag symptoms** – symptoms or findings (e.g., back pain with new urinary incontinence in cancer patient) that may indicate serious condition & should lead to heightened suspicion/evaluation for other possibilities.
4. **Potential drug causes** – medications that can cause the symptom. High % of presenting symptoms are medication side effects, yet infrequently considered.

5. **Required referrals** – When is specialist expertise or technology needed to adequately and safely evaluate the patient? Includes possible rare conditions that only specialists have sufficient experience or expertise in testing (e.g., biopsy or endoscopy).

6. **Patient follow-up instructions and plan** – Warnings that patients should receive regarding specific symptoms that should lead them to return or call. These should be in writing, repeated several times to patient and family/friend and include a time frame (e.g., call if you develop rash or fever, or if you are not improved in 48 hours).
Improving Diagnosis in Health Care
Key Report Themes

Diagnostic errors are a significant and underappreciated health care quality challenge.

Patients are central to the solution.

Diagnosis is a collaborative effort.
Society to Improve Diagnosis in Medicine

- SIDM is a not-for-profit organization whose mission is to make diagnosis more accurate, timely, efficient and safe
- Stakeholders are clinicians and other healthcare professionals, patients and families, employers, consumer advocates, insurers, researchers, policymakers, and educators
- Initiatives encompass research, education, practice improvement and patient engagement
- Their efforts catalyzed the recent IOM report, convened the Coalition to Improve Diagnosis, and annually sponsors the Diagnostic Error in Medicine conference (attended by more than 300 diverse participants from 15 countries in 2015)
- For more information, visit www.improvediagnosis.org
10 Principles for Reducing Diagnostic Error

1. ↓ reliance on human memory
2. Leverage HIT: clinical documentation, follow-up
3. Co-production of diagnosis (patient with the team)
4. Need for new science and culture around uncertainty
5. Culture of conservative diagnosis
6. Foundation of trusting, continuous relationships
7. Linkages diagnosis and treatment (diagnosing what matters)
8. Special role/responsibility to consider iatrogenic causes in diagnosis
9. Synergies among “disease specific” issues
10. Diagnosis as a multi-dimensional construct
Ambulatory Quality & Safety Challenges: Joint Commission Surveyor Perspectives

- Sterilization and high-level disinfection
- Processing of endoscopes, particularly those used for ERCP
- Sterilization and processing of ophthalmic surgical instruments
- Off-label use of blood glucose monitors
- ASC case selection/medical emergency preparedness
- Ebola, Zika (and other epidemic diseases) preparedness
Ambulatory Quality & Safety Challenges: Joint Commission Surveyor Perspectives

(continued)

- Staffing related to access to care and scheduling
- Performance improvement
- Keeping up with regulations especially in leased multi-use buildings (EOC, LSC, hazardous materials)
- Skyrocketing costs and shortages of key medications
<table>
<thead>
<tr>
<th>Percentage</th>
<th>Standard Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>48%</td>
<td>HR.02.01.03</td>
<td>The organization grants initial, renewed, or revised clinical privileges to individuals who are permitted by law and the organization to practice independently.</td>
</tr>
<tr>
<td>46%</td>
<td>IC.02.02.01</td>
<td>The organization reduces the risk of infections associated with medical equipment, devices, and supplies.</td>
</tr>
<tr>
<td>36%</td>
<td>EC.02.03.05</td>
<td>The organization maintains fire safety equipment and fire safety building features.</td>
</tr>
<tr>
<td>31%</td>
<td>MM.03.01.01</td>
<td>The organization safely stores medications.</td>
</tr>
<tr>
<td>28%</td>
<td>MM.01.01.03</td>
<td>The organization safely manages high-alert and hazardous medications.</td>
</tr>
<tr>
<td>27%</td>
<td>EC.02.05.01</td>
<td>The organization manages risks associated with its utility systems.</td>
</tr>
<tr>
<td>26%</td>
<td>IC.01.03.01</td>
<td>The organization identifies risks for acquiring and transmitting infections.</td>
</tr>
<tr>
<td>26%</td>
<td>EC.02.05.07</td>
<td>The organization inspects, tests, and maintains emergency power systems.</td>
</tr>
<tr>
<td>26%</td>
<td>EC.02.02.01</td>
<td>The organization manages risks related to hazardous materials and waste.</td>
</tr>
<tr>
<td>24%</td>
<td>EC.02.04.03</td>
<td>The organization inspects, tests, and maintains medical equipment.</td>
</tr>
</tbody>
</table>

Note: The data determined for the ambulatory care program were derived from an average of 650 applicable surveys.

From The Joint Commission’s Sentinel Event Database

- **Diagnostic Imaging**
  - CT scans and X-rays: Over-exposure to radiation due to equipment failures, competencies, miscalculations, lack of education and training, and lack of leadership follow-up; Under-dosing for radiation treatments

- **Infection Control**
  - Lack of or improper cleaning, disinfection and sterilization processes

- **Sedation/Anesthesia**
  - Over or under sedation: Lack of proper training, lack of staffing, diversion of narcotics, lack of leadership with regard to follow-up, and outdated/inadequate policies and procedures
From The Joint Commission’s Sentinel Event Database (continued)

- Practicing outside of the scope of an individual’s license and/or certification
- Lack of or inadequate credentialing/privileging of physicians and others
- Lack of anticipation or preparation for post-op cardiac and respiratory arrests
- Adverse events in ambulatory dialysis treatments
A Key Risk: Transitions Across Settings
What are Transitions of Care (TOC)?

- The movement of patients between health care practitioners, settings and home as their condition and care needs change.

- Effective care transitions must be engineered into the structure of the health care system at each point of exchange – ideally becoming part of the work flow – instead of the current system which relies on the behavior of individuals.

- A set of actions designed to ensure the coordination and continuity of health care as patients transfer between different locations or between different levels of care in the same location.

-Mansur J. Transitions in Care: What are you doing to improve the process? Oak Brook Terrace, IL: Joint Commission Resources. 2013. 1-38
-National Transitions of Care Coalition. Improving transitions of care. 2008 May. 1-44
Healthcare Professional Views of Transition From the Hospital

Healthcare System Fragmentation

- Patient's complex social needs
- Need for training in transitional care
- Fragmented communication across settings

Hospital
- Lack of standardized processes
- Poor multidisciplinary communication
- Not anticipatory

Care Transition
(chaotic, unsystematic)

Outpatient Setting
- Lack of standardized processes
- Limited access to services

Poor patient outcomes
Provider futility and dissatisfaction

Miscommunication of all kinds is implicated as one (or more) of the contributing factors in 80% of adverse events.

Errors in Hand-off Communications Contribute to Serious Medical Harm

59% of physicians reported at least 1 patient was harmed as a result of errors in hand-off.

- Increased Length of Stay: 40%
- Major Harm: 10%
- Minor Harm: 60%

Survey Respondents (%)
Substandard Hand-offs May Result in:

- Delay in treatment
- Inappropriate treatment
- Adverse events
- Omission of care
- Increased costs
- Inefficiency from rework

Problematic hand-off resulted in misinformation to:

- The attending physician
- Consulting physician
- Another resident physician
- Nurse or technician
- Patient or patient's Family

Survey respondents (%)
Barriers to Effective Care Transitions

**Structural**
- Lack of integrated care systems
- Lack of longitudinal responsibility
- Lack of standardized forms and processes
- Incompatible information systems
- Lack of coordination and team based approaches taught to care providers in school

**Procedural**
- Ineffective communication
- Failure to recognize cultural, education or language differences
- Processes are not patient centered

**Performance Measurement/Alignment**
- Lack of valid measures for the quality of optimal transitions
- Compensation and performance incentives not aligned with care coordination and transitions
- Payment is for volume of services rather than outcomes

## Ambulatory Practices: AMA’s Principles for High Quality TOC

<table>
<thead>
<tr>
<th>Responsibilities</th>
<th>Principles</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Assessment</strong> - Conduct baseline assessment prior-to and post-discharge</td>
<td><strong>Person-centered</strong> – focus on patients and caregivers</td>
</tr>
<tr>
<td><strong>Goal Setting</strong> – Document patient’s goals and care decisions</td>
<td><strong>Collaborative</strong> – Take advantage of complementary skill sets of team members</td>
</tr>
<tr>
<td><strong>Supporting Self-Management</strong> – Provide information and facilitate access to resources that can assist the patient/caregivers with safe management of their condition</td>
<td><strong>Structured</strong> – Use clear and carefully planned protocols, forms and processes</td>
</tr>
<tr>
<td><strong>Medication Management</strong> – Communicate with the patient, pharmacy and other members of the care team to promote effective and safe medication use</td>
<td><strong>Iterative</strong> – Recognize the evolving nature of care and make adjustments as appropriate</td>
</tr>
<tr>
<td><strong>Care Coordination</strong> – Synchronize the efforts of all members of the care team</td>
<td><strong>Flexible</strong> – Pursue creative solutions to novel problems based on unique patient needs</td>
</tr>
</tbody>
</table>

Benefits of an Electronic Health Record (EHR)

Fully functional EHRs should:

- exchange patient records with other entities across the continuum and within care settings
- provide quick access to health information whenever needed
- provide enhanced support for diagnostic and therapeutic decisions
- provide built-in safeguards against potential adverse events
| Tools that assist in information gathering |
| Cognition facilitation by enhanced organisation and display of information |
| Aids to generation of a differential diagnosis |
| Tools and calculators to assist in weighing diagnoses |
| Support for intelligent selection of diagnostic tests/plan |
| Enhanced access to diagnostic reference information and guidelines |
| Tools to facilitate reliable follow-up, assessment of patient course and response |
| Tools/alerts that support screening for early detection of disease in asymptomatic patients |
| Tools that facilitate diagnostic collaboration, particularly with specialists |
| Systems that facilitate feedback and insight into diagnostic performance |

El-Kareh R, Hasan O, Schiff GD. “Use of health information technology to reduce diagnostic errors.” BMJ Qual Saf 2013;0:1-12..
But there are challenges . . .

EHR design and implementation challenges can:
- affect the quality and safety of care provided
- increase provider frustration and “burnout” in an already overburdened care delivery system
- lead to “rework” and additional cost if not well planned and implemented
### Physician Survey

31. If yes, how has EMR affected your practice?

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>All Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved quality of care</td>
<td>29.9%</td>
<td>36.3%</td>
<td>32.1%</td>
</tr>
<tr>
<td>Detracted from quality of care</td>
<td>25.7%</td>
<td>20.9%</td>
<td>24.1%</td>
</tr>
<tr>
<td>Improved efficiency</td>
<td>22.5%</td>
<td>27.9%</td>
<td>24.3%</td>
</tr>
<tr>
<td>Detracted from efficiency</td>
<td>48.1%</td>
<td>41.4%</td>
<td>45.8%</td>
</tr>
<tr>
<td>Improved patient interaction</td>
<td>4.3%</td>
<td>5.1%</td>
<td>4.6%</td>
</tr>
<tr>
<td>Detracted from patient interaction</td>
<td>47.8%</td>
<td>45.7%</td>
<td>47.1%</td>
</tr>
<tr>
<td>Has had little to no impact on the above</td>
<td>8.0%</td>
<td>6.8%</td>
<td>7.6%</td>
</tr>
</tbody>
</table>
Planning for Success

Areas where challenges may occur

– Interoperability within the Health System
– Communication Handoffs
– Transitions of Care
– EHR Workarounds
– EHR Usability
– EHR Software Issues
– Actual Implementation
Reducing System Issues – SAFER Guidelines

SAFER Guidelines

- Developed by ONC
- Meant to enable healthcare organizations to address EHR safety issues in nine (9) categories, including:
  - High Priority Practices
  - System Configuration
  - Computerized Order Entry with Decision Support

http://www.healthit.gov/safer/safer-guides
Recommended Practices for **Phase 1 — Safe Health IT**

<table>
<thead>
<tr>
<th>Practice</th>
<th>Description</th>
<th>Implementation Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Coded allergen and reaction information (or No Known Allergies [NKA]) are entered and updated in the EHR prior to any order entry.</td>
<td>Worksheet 1</td>
</tr>
<tr>
<td>2</td>
<td>Evidence-based order sets are available in the EHR for common tasks/conditions and are updated regularly.</td>
<td>Worksheet 2</td>
</tr>
<tr>
<td>3</td>
<td>User-entered orderable items are matched to (or can be looked up from) a list of standard terms.</td>
<td>Worksheet 3</td>
</tr>
<tr>
<td>4</td>
<td>The EHR can facilitate both cancellation and acknowledgment of receipt of orders for laboratory, radiology, and pharmacy.</td>
<td>Worksheet 4</td>
</tr>
<tr>
<td>5</td>
<td>CDS alerts are displayed in the relevant clinical context.</td>
<td>Worksheet 5</td>
</tr>
<tr>
<td>6</td>
<td>CDS incorporates current “best practices” and guidelines from authoritative sources, such as national organizations and medical specialty professional associations.</td>
<td>Worksheet 6</td>
</tr>
</tbody>
</table>
Care Coordination

Care coordination in the primary care practice involves deliberately organizing patient care activities and sharing information among all of the participants concerned with a patient’s care to achieve safer and more effective care.

Examples of specific care coordination activities include:

- Establishing accountability and agreeing on responsibility
- Communicating/sharing knowledge
- Helping with transitions of care
- Assessing patient needs and goals
- Creating a proactive care plan
- Monitoring and follow-up, including responding to changes in patients’ needs
- Supporting patients’ self-management goals
- Linking to community resources
- Working to align resources with patient and population needs

Redesigning a health care system in order to better coordinate patients’ care is important for the following reasons:

- Current health care systems are often disjointed, and processes vary among and between primary care sites and specialty sites.
- Patients are often unclear about why they are being referred from primary care to a specialist, how to make appointments, and what to do after seeing a specialist.
- Specialists do not consistently receive clear reasons for the referral or adequate information on tests that have already been done. Primary care physicians do not often receive information about what happened in a referral visit.
- Referral staff deal with many different processes and lost information, which means that care is less efficient.

So where do we go from here?
Five Core Aims for Improving Ambulatory Safety

1. **Collect basic data** on how many patients experience health care-related harms in the ambulatory setting

2. **Identify early achievable goals** (short-term and long term) for improving safety

3. **Engage patients and their families** as equal members of ambulatory safety improvement teams

4. **Link the agenda for ambulatory safety** to related high-profile initiatives to improve inpatient safety

5. **Develop networks** of ambulatory clinics capable of conducting research

Patient Issues Related to Management of Clinical Information

<table>
<thead>
<tr>
<th>Type of Clinical Information-Related Patient Safety Issues</th>
<th>Laboratory/X-ray Report, N (%)</th>
<th>Problem List, N (%)</th>
<th>Consultant Note or Letter, N (%)</th>
<th>Hospital Records, N (%)</th>
<th>Progress Notes, N (%)</th>
<th>Insurance Information, N (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Missing</td>
<td>41 (76.0)</td>
<td>34 (64.2)</td>
<td>35 (72.9)</td>
<td>37 (78.7)</td>
<td>16 (47.1)</td>
<td>8 (72.7)</td>
</tr>
<tr>
<td>Wrong place</td>
<td>8 (14.8)</td>
<td>5 (9.4)</td>
<td>8 (16.7)</td>
<td>3 (6.4)</td>
<td>7 (20.6)</td>
<td>0</td>
</tr>
<tr>
<td>Wrong information</td>
<td>3 (5.6)</td>
<td>13 (24.5)</td>
<td>4 (8.3)</td>
<td>6 (12.8)</td>
<td>9 (26.5)</td>
<td>2 (18.2)</td>
</tr>
<tr>
<td>In someone else’s chart</td>
<td>2 (3.7)</td>
<td>1 (1.9)</td>
<td>1 (2.1)</td>
<td>1 (2.1)</td>
<td>2 (5.9)</td>
<td>1 (9.1)</td>
</tr>
</tbody>
</table>

(N=247)
Safety Event Reporting

Type of safety event reported for all Novant Health Medical Group practices, April 2013 – March 2014

What are the processes of care for patients with chronic illnesses? How do we change care delivery using outcomes?

- **Coordination of Care**
- **Data Collection, Coding Co-morbidities**
- **Decrease acute hospitalizations, ED visits**
  - Risk Stratification
  - Triggers Monitoring
  - Interventions to reduce risk:
    - Non MD F/U, Telephonic Management
    - Home Visits, Care Management

**Patient Self Management Strategies**
- Define Patient & Provider Goals
- Personal Health Record Symptom Diaries w/ Interventions
- Use of Control Charts for self mgmt
- Design Pt/Provider Interface

**Patient & Family Engagement**
Ambulatory Patient Safety for Effectively Managing Chronic Disease

The ecological model for ambulatory patient safety in chronic disease represents an Extension of the Chronic Care Model (Wagner EH.; Chronic disease management: What will it take to Improve care for chronic illness: *Eff Clinical Practice* 1:2-4, Aug-Sept, 1998)
### Examples of Patient and Family Advisor Roles in Quality and Safety Initiatives

<table>
<thead>
<tr>
<th>Quality and Safety Initiative</th>
<th>Patient and Family Advisor Role</th>
</tr>
</thead>
</table>
| Task force to develop patient educational materials, communication tools and signage | » Contribute to the design and content of materials  
» Provide objective feedback from the patient’s perspective  
» Identify language or materials that are confusing or unhelpful, as well as identify which materials are particularly well formatted and helpful  
» Assist with piloting and testing the materials and follow up with other patients to gather their opinions |
| Root cause analysis | » Share personal hospital story, leading to a more focused commitment by the RCA team  
» Identify pieces of the process that are confusing or missing from a patient’s perspective  
» Participate in information/data gathering  
» Discuss and analyze findings  
» Assist in developing action plans and recommendations |

Patient as Partner in Safety

Low and marginally literate patients have difficulty following the prescription label instruction “take two tablets by mouth daily” even when they are able to read dosage instructions correctly.

- Low Literacy: 70.7%
- Marginal Literacy: 84.1%
- Adequate Literacy: 89.4%

<table>
<thead>
<tr>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>40</td>
</tr>
<tr>
<td>60</td>
</tr>
<tr>
<td>80</td>
</tr>
<tr>
<td>100</td>
</tr>
</tbody>
</table>

- Could read label instructions correctly
- Could demonstrate label instructions correctly

### Framework for Expanding Outpatient Quality Measurement

<table>
<thead>
<tr>
<th>Examples</th>
<th>Representation in Current Quality Measures</th>
<th>Possible Interventions to Improve Quality</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety (never events)</td>
<td>Medication errors; failure to inform of infection acquired from outpatient procedures</td>
<td>Joint Commission national patient safety goals but not used for small physician practices</td>
</tr>
<tr>
<td>Preventive and chronic disease care</td>
<td>Process measures such as attainment of vaccinations, preventive cancer screening, and use of chronic medications</td>
<td>Well-represented in HEDIS measures</td>
</tr>
<tr>
<td>High level of quality</td>
<td>Diagnostic accuracy; judicious use of resources; treatment decisions for rare or complex diseases</td>
<td>Poorly represented</td>
</tr>
</tbody>
</table>

**Abbreviations:** EHR, electronic health record; HEDIS, Healthcare Effectiveness Data and Information Set.
References


Discern, LLC. A re-engineered delivery model for transitions of care: addressing evolving market trends. 1-50.


Greiner A. White space or black hole: What can we do to improve care transitions?. ABIM Foundation. 2007 Jun. Issue Brief #6:


Institute of Medicine. *Improving Diagnosis in Health Care.* September 2015.
References

- Mansur J. Transitions in Care: What are you doing to improve the process? [powerpoint] Oak Brook Terrace, IL: Joint Commission Resources. 2013. 1-38
References

- National Transitions of Care Coalition. Improving transitions of care. 2008 May. 1-44.
- Ricciardi, R. “AHRQ Focuses on Ambulatory Patient Safety.” J Nurs Care Qual. April 2015. 30(3);193-196
References


Schiff GD. “Diagnosis and diagnostic errors: time for a new paradigm.” BMJ Qual Saf 2014; 23:1 1-3.


Webconference survey

Please take a minute to provide your thoughts on today’s presentation.

Thank You!

Please note that the survey does not apply to webconferences viewed on demand.