The Joint Commission’s Center for Transforming Healthcare aims to solve health care’s most critical safety and quality problems. The Center’s participants – the nation’s leading hospitals and health systems – use a proven, systematic approach to analyze specific breakdowns in patient care and discover their underlying causes to develop targeted solutions that solve these complex problems. In keeping with its objective to transform health care into a high reliability industry, The Joint Commission will share these proven effective solutions with the more than 18,000 health care organizations it accredits.

Improving Transitions of Care: Hand-off Communications

Participating Hospitals:
- Exempla Lutheran Medical Center
- Fairview Health Services
- Intermountain Healthcare LDS Hospital
- Kaiser Permanente Sunnyside Medical Center
- The Johns Hopkins Hospital
- Mayo Clinic Saint Marys Hospital
- New York-Presbyterian Hospital
- North Shore-LIJ Health System Steven and Alexandra Cohen Children’s Medical Center
- Partners HealthCare, Massachusetts General Hospital
- Stanford Hospital & Clinics
A hand-off is a transfer and acceptance of patient care responsibility achieved through effective communication. It is a real-time process of passing patient specific information from one caregiver to another or from one team of caregivers to another for the purpose of ensuring the continuity and safety of the patient’s care.

To further define the roles, the sender is responsible for sending or transmitting the patient data and releasing the care of the patient to the receiver, who receives the patient data and accepts care of the patient.

The consequences of substandard hand-offs may include delay in treatment, inappropriate treatment, adverse events, omission of care, increased hospital length of stay, avoidable readmissions, increased costs, inefficiency from rework, and other minor or major patient harm.
Why Tackle Hand-off Communications?

It has been estimated that 80 percent of serious medical errors involve miscommunication during the hand-off between medical providers. The majority of avoidable adverse events are due to the lack of effective communication. (1)

Breakdown in communication was the leading root cause of sentinel events reported to The Joint Commission between 1995 and 2006 (2) and one U.S. malpractice insurance agency’s single most common root cause factor leading to claims resulting from patient transfer (3). Of the 25,000 to 30,000 preventable adverse events that led to permanent disability in Australia, 11 percent were due to communication issues, in contrast to 6 percent due to inadequate skill levels of practitioners (4).


(2) The Joint Commission Sentinel Event Data Unit.


## Hand-off Communications Project: Participating Hospitals’ Characteristics and Project Details

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Location</th>
<th>Type of hospital</th>
<th>Number of Beds</th>
<th>Internal Hand-offs</th>
<th>External Hand-offs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exempla Lutheran Medical Center</td>
<td>Colorado</td>
<td>Community</td>
<td>400</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Fairview Health Services</td>
<td>Minnesota</td>
<td>Academic</td>
<td>860</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Intermountain Healthcare LDS Hospital</td>
<td>Utah</td>
<td>Community</td>
<td>350</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Kiser Permanente Sunnyside Medical Center</td>
<td>Oregon</td>
<td>Tertiary Care</td>
<td>290</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>The Johns Hopkins Hospital</td>
<td>Maryland</td>
<td>Academic</td>
<td>1,041</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mayo Clinic Saint Marys Hospital</td>
<td>Minnesota</td>
<td>Academic</td>
<td>1,265</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>New York-Presbyterian Hospital</td>
<td>New York</td>
<td>Academic</td>
<td>2,298</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>North Shore-LIJ Health System Steven and Alexandra Cohen Children's Medical Center</td>
<td>New York</td>
<td>Academic</td>
<td>167</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Partners HealthCare, Massachusetts General Hospital</td>
<td>Massachusetts</td>
<td>Academic</td>
<td>899</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Stanford Hospital &amp; Clinics</td>
<td>California</td>
<td>Academic</td>
<td>450</td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Joint Commission Center for Transforming Healthcare
Measuring A Successful Hand-off Between Clinicians: Sender/Receiver

**Expectations Out of Balance**

- The expectation of the Receiver is to get the critical information needed in order to safely care for the patient.
- The expectation of the Sender is to be able to communicate the critical information to the Receiver in a timely manner.
- However, there is a disconnect between the critical information the Receiver actually receives versus the critical information the Receiver actually needs to care for the patient.
- Receivers experienced less successful hand-offs than Senders.*

*Statistically significant, P value = .001
Validated Root Causes for Transition of Care: Hand-off Communications Failures

<table>
<thead>
<tr>
<th>Validated Root Causes</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
<th>G</th>
<th>H</th>
<th>I</th>
<th>J</th>
</tr>
</thead>
<tbody>
<tr>
<td>Culture does not promote successful hand-off, e.g. lack of teamwork and respect</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Expectations between sender and receiver differ</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Ineffective communication method, e.g. verbal, recorded, bedside, written</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Timing of physical transfer of the patient and the hand-off are not in sync</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Inadequate amount of time provided for successful hand-off</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interruptions occur during hand-off</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of standardized procedures in conducting successful hand-off, e.g. SBAR</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inadequate staffing at certain times of the day or week to accommodate successful hand-off</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Patient not included during hand-off</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sender provides inaccurate or incomplete information, e.g. medication list, DNR, concerns/issues, contact information</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sender, who has little knowledge of patient, is handing off patient to receiver</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Sender unable to provide up-to-date information, e.g. lab tests, radiology reports, because not available at the time of hand-off</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sender unable to contact receiver who will be taking care of patient in a timely manner</td>
<td></td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability of sender to follow up with receiver if additional information needs to be shared</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sender asked to repeat information that has already been shared</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver has competing priorities and is unable to focus on transferred patient</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver unaware of patient transfer</td>
<td>X</td>
<td>X</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inability for receiver to follow up with sender if additional information is needed</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of responsiveness by receiver</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Receiver has little knowledge of patient being transferred</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

Note that not all of the main causes of failure appear in every hospital. The chart above represents the validation of the root causes across hospitals. This underscores the importance of understanding hospital-specific root causes so that appropriate solutions can be targeted.
Targeting Solutions for Specific Causes

**Causes**

- Culture does not promote successful hand-off, e.g. lack of teamwork and respect
- Ineffective communication method, e.g. verbal, recorded, bedside, written
- Inadequate amount of time provided for successful hand-off

**Solutions**

- Make successful hand-offs an organization priority and performance expectation
- Teach staff on what constitutes a successful hand-off
- Standardize training on how to conduct a hand-off
- Engage staff – real time performance feedback, just-in-time training
- Sender uses standardized form, tool and method every time a hand-off occurs, e.g. checklists, SBAR tool
- Identify new and existing technologies to assist in making the hand-off successful and complete, e.g. electronic medical records, PDAs
- Develop and use standardized forms, tools and methods, e.g. checklists, SBAR tool
- Sender identifies and stresses key information and critical elements about patient when talking to receiver
- Sender synthesizes patient information from disparate sources prior to passing it on to the receiver

Joint Commission Center for Transforming Healthcare
Targeting Solutions for Specific Causes (cont’d)

**Causes**

- Sender provides inaccurate or incomplete information, e.g. medication list, DNR, concerns/issues, contact information
- Receiver has competing priorities and is unable to focus on transferred patient

**Solutions**

- Sender provides details of patient’s history and status when speaking with receiver
- Develop and use standardized forms, tools and methods, e.g. checklists, SBAR tool
- Sender synthesizes patient information from disparate sources prior to passing it on to the receiver
- Establish workspace or setting that is conducive for sharing information about a patient; e.g. zone of silence
- Hold staff managing patient’s care responsible
- Examine the work flow of health care workers to ensure a successful hand-off
- Focus on the system, not just the people
Hand-off Communications Performance Improvement Measure

This Bar Chart represents aggregated data from participating hospitals (N=5) that have fully implemented solutions, to date.
A Successful Hand-off is Critical

**Standardize Critical Content**
- Provide details of patient’s history and status when speaking with receiver
- Identify and stress key information and critical elements about patient when talking with the receiver
- Synthesize patient information from disparate sources prior to passing it on to the receiver
- Develop and use key phrases to help standardized communications

**Hardwire Within Your System**
- Develop and use standardized forms, and tools and methods, e.g. checklists, SBAR tool
- Establish a workspace or setting that is conducive for sharing information about a patient, e.g. zone of silence
- Have patient present during hand-off discussion between sender and receiver
- State expectations about how to conduct a successful hand-off
- Focus on the system, not just the people

**Allow Opportunity to Ask Questions**
- Use critical thinking skills when discussing a patient’s case
- Share and receive information—as an interdisciplinary team—about the patient at the same time, e.g. “pit crew”
- Expect to receive all key information and critical elements about the patient from the sender
- Collect sender’s contact information in the event there are follow-up questions
- Scrutinize and question the data

**Reinforce Quality and Measurement**
- Demonstrate leadership’s commitment to implement successful hand-offs
- Utilize a sound measurement system to determine the real score in real time
- Hold staff managing patient’s care responsible
- Monitor compliance of standardized form, tools and methods for hand-off between sender and receiver
- Measure the specific, high-impact causes of a poor hand-off and target solutions to those causes
- Use data as the basis for a systematic approach for improvement

**Educate and Coach**
- Teach staff on what constitutes a successful hand-off
- Standardize training on how-to conduct a hand-off
- Engage staff—real time performance feedback; just-in-time training
- Make successful hand-offs an organization priority and performance expectation

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Developed by the participating hospitals, this is a compilation of solutions that are linked to specific root causes.