



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



### **Overview: Transitions in Care Must Be Improved**

There is increased urgency to improve patient safety due to the new Joint Commission on Accreditation of Healthcare Organizations (JCAHO) National Patient Safety Goal Requirement 2-E which must be implemented by 1 January 2006. JCAHO requires all healthcare organizations to “implement a standardized approach to ‘handoff’ communications, including an opportunity to ask and respond to questions.”<sup>1</sup> The intent is to apply this requirement broadly across the continuum of care and across healthcare systems. For hospitals, examples of such transitions include:

- Doctor or nurse in the Emergency Department providing patient admission information to the hospitalist, charge nurse, or resident-attending team responsible for the next phase of care.
- Anesthesia provider to PACU nurse to ward nurse for a patient leaving surgery, transitioning through post-anesthesia care to an inpatient unit.
- Resident and/or Staff physician team to a night or weekend covering team before or after on-call responsibility for hospital inpatients on a service.
- Nurse-to-nurse change of shift or coverage while leaving the unit for a short time, exchanging information and care responsibility for specific patients.
- Discharge Summary information (reframed as transfer of care) from hospital care to primary care provider, nursing home staff, home health nurse, or to patient and family so they can carry out their responsibilities.

For the ambulatory setting, examples of handoff include:

- Office-based or ambulatory surgery unit to/from primary care provider and patient, relating the details of care, diagnoses, expectations and plan.
- Consultant and specialist to/from primary care provider and patient.
- Mental health professional to/from primary care provider and patient.

The need for a structured handoff process was prompted by several studies that focused on the root causes of sentinel events and poor medical outcomes across a variety of healthcare systems. These studies revealed that a majority of these avoidable adverse events were due to the lack of effective communication: lost information, misinterpretation, and misdirected or missed actions.

Recent advances in team communication have created an excellent opportunity to address this JCAHO requirement and improve quality and safety in health care across the United States. These advances include the development of the *I PASS THE BATON* tool, which provides a more accurate and structured method of transferring information during handoffs and transitions in patient care. In order to provide accurate, clear, and complete information during the multitudes of care transitions, the exchanges must address 1) care, treatment, and services; 2) current condition, and 3) any recent or anticipated changes. It is expected that questions and clarifications will occur, interruptions would be limited, and sufficient time must be allocated to the processes.



## JCAHO Requirements

### Handoff Patient Safety Goal

In an effort to simplify the terminology in this Toolkit, transitions in patient care will be referred to as “handoffs.” The primary objective of a handoff is to provide accurate information about a patient’s/client’s/resident’s general care plan, treatment, services, current condition, and any recent or anticipated changes. The information communicated during a handoff must be accurate in order to meet JCAHO’s patient safety goal. JCAHO applies the 2-E requirement to: <sup>1</sup>

- Ambulatory health care
- Assisted living facility
- Behavioral health care
- Critical access hospital
- Disease specific care
- Hospital
- Laboratory
- Long term care
- Office based surgery
- Home care

The definition of a handoff can be very broadly interpreted. JCAHO recognizes various types of patient handoffs that include the following: <sup>1</sup>

- nursing shift changes
- physicians transferring complete responsibility for a patient
- physicians transferring on-call responsibility
- temporary responsibility for staff leaving the unit for a short time
- anesthesiologist reporting to post-anesthesia recovery room nurse
- nursing and physician handoff from the emergency department to:
  - inpatient units
  - different hospitals
  - nursing homes and home health care
- critical laboratory and radiology results sent to physician offices.

Handoffs may also occur in behavioral health organizations that provide twenty-four hour care, treatment, or services. These handoffs can include teacher to child care worker, change-of-shift, or from clinical staff to program staff.

### Implementation Expectations

Preparing for the implementation deadline of 1 January 2006, JCAHO has published expectations for the 2-E requirement based on human factors and health-services research, best practices in high-reliability organizations, and expert opinion in areas of teamwork and healthcare communication. Below are the JCAHO “attributes” of effective handoff communications: <sup>1</sup>



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



- Handoffs are interactive communications allowing the opportunity for questioning between the giver and receiver of patient/client/resident information.
- Handoffs include up-to-date information regarding the patient's/client's/ resident's care, treatment and services, condition and any recent or anticipated changes.
- Interruptions during hand offs are limited to minimize the possibility that information would fail to be conveyed or would be forgotten.
- Handoffs require a process for verification of the received information, including repeat-back or readback, as appropriate.
- The receiver of the hand off information has an opportunity to review relevant patient/client/resident historical data, which may include previous care, treatment and services.



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



### Handoff Communications Tool

#### *I PASS THE BATON*

Transitions in health care occur millions of times every day, but they tend to be unstructured and incomplete. From review of sentinel events and root cause analyses, these handoffs have been identified as the source of significant medical error and tragic patient outcome. In reviewing existing tools and the critical elements required for transition of patient care, the “*I PASS THE BATON*” handoff tool was developed to cover the key areas for both simple and complex patient care handoffs. The tool is optimized for most healthcare handoffs and once understood, offers a foundation for clinical leaders to teach others on how to conduct a proper handoff. In an environment that is partially controlled and there is little risk for disruptions or interruption, this tool will be useful to promote a culture that encourages staff to clarify, question, confirm, and provide the opportunity to utilize established principles of team communication (verification and mutual support). This tool can remind clinicians of the key information and factors to include during their medical handoffs.



**“I PASS THE BATON”**

- A mnemonic for Handoffs and Healthcare Transitions
- With opportunities to ask QUESTIONS, CLARIFY, and CONFIRM

<b>I</b>	<b>Introduction</b>	Introduce yourself and your role/job (include patient)
<b>P</b>	<b>Patient</b>	Name, identifiers, age, sex, location
<b>A</b>	<b>Assessment</b>	Presenting chief complaint, vital signs and symptoms and diagnosis
<b>S</b>	<b>Situation</b>	Current status/ circumstances, including code status, level of (un)certainty, recent changes, response to treatment
<b>S</b>	<b>SAFETY Concerns</b>	Critical lab values/reports, socio-economic factors, allergies, alerts (falls, isolation, etc.)
THE		
<b>B</b>	<b>Background</b>	Co-morbidities, previous episodes, current medications, family history
<b>A</b>	<b>Actions</b>	What actions were taken or are required AND provide brief rationale
<b>T</b>	<b>Timing</b>	Level of urgency and explicit timing, prioritization of actions
<b>O</b>	<b>Ownership</b>	Who is responsible(nurse/doctor/team) including patient/family responsibilities?
<b>N</b>	<b>Next</b>	What will happen next? Anticipated changes? What is the <u>PLAN</u> ? Contingency plans?



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



**I – Introduction:** A formal introduction of the oncoming/off-going provider needs to be conducted. This ensures the continuum of patient care and allows the oncoming provider to ask questions if further clarification is needed after the handoff has taken place. Moreover, with a move toward patient-centered care, it is also important to involve the patient, to ensure that patients are aware of their care plan, and that they know who is treating them. Often, many hospital patients cannot remember the name of the nurse that is responsible for caring for them and do not know who to ask for if they need assistance. Therefore, it would be helpful for an oncoming nurse to introduce themselves to the patient before the nurse off-going nurse leaves his/her shift. Including this element is more crucial within the ambulatory care setting where patients are actively responsible for managing their own medical care. For example, if a patient is referred to a specialist for further evaluation, the specialist may need to contact the referring physician for the results of any prior lab tests or other studies that were conducted to fully comprehend the patient's condition and correctly diagnosis the patient.

**P- Patient:** It is important to make certain that the correct patient is identified during the handoff process. During this process, the patient's name, identifiers (medical record number, SSN, etc.), age, sex, and location (if appropriate) should be reviewed.

**A- Assessment:** Defining the patient's "problem" is of importance as well. The patient's presenting chief complaint, vital signs, symptoms, and diagnosis should be shared with the oncoming healthcare provider. Within a hospital setting, this information will provide a foundation for the oncoming nurse/physician to establish the normal parameters for the patient's condition and diagnosis (i.e., blood pressure, chest pain).

**S – Situation:** The current status of the patient's circumstances, level of (un)certainty, recent changes, response to treatment, including code status needs to be communicated with the oncoming staff. For example, the oncoming nurse may need to follow-up and assess if the 2mg of Morphine IVP just administered relieved the patient's pain or if further action is needed.

**S- Safety Concerns:** Any critical lab values/reports or studies, socio-economic factors, allergies, alerts (falls, isolation, etc.) must be presented during the handoff process. This information will indicate to the oncoming provider any triggers or potential hazards that may compromise the care delivered to the patient.

### THE

**B - Background:** The patient's co-morbidities, previous episodes, current medications, and family history should be shared with the oncoming provider. These facts will allow the provider to determine a broader scope of the patient's needs and who should monitor the patient's condition. For example, if the patient is diabetic, lower calorie meals may need to be ordered for the patient.

**A – Action:** Prior actions or patient interventions with a brief rationale should be shared with the oncoming provider. For example, the patient underwent a cardiac catheterization via the left groin due to a recent heart attack. This will prompt the oncoming nurse to check for any bleeding or complications at the incision site in the left groin area.



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



**T- Timing:** The level of urgency and explicit timing of interventions are factors that must be included during a formal handoff. This will allow the oncoming provider to prioritize their actions for caring for the patient. This can best be exemplified in a situation where a patient needs to be properly prepped for an upcoming procedure or test, such as a CT scan of the abdomen with contrast, in which the patient may need to drink a substance 30-60 minutes prior to the scheduled test.

**O- Ownership:** During the handoff process, the responsible healthcare provider/team and family members of the patient should be reviewed. This will give the oncoming providers the ability to contact the correct physician/nurse/team during a critical emergency or for any concerns that may arise. In addition, it allows the physician or nurse to consult and notify the patient's family members during an emergent situation.

**N- Next:** Next steps in the patient's care plan and/or any anticipated changes should be shared. If a patient is scheduled to be discharged from the hospital the next day, the oncoming provider could begin to educate the patient on any restrictions on their activity, scheduled follow-up visits, and prescribed medications. In addition, contingency plans should be shared answering the question "what if." If the patient's lab values are abnormal, is there a standing intervention already ordered. For example, if the potassium serum level is at a 3.1, is there a standing order to intervene and stabilize the patient's potassium level above 4.0?



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



### Case Based Example of Clinical Handoffs

*Scenario 1:* Doctor in the Emergency Department (ED) providing patient admission information to resident-attending team responsible for the next phase of care.

<b>I</b>	<b>Introduction</b>	The ED resident, Dr. Jones, introduces himself to the oncoming covering resident Dr. Smith. Dr. Jones explains that his 24-hour shift is about to end and would like to sign out a newly admitted to Dr. Smith.
<b>P</b>	<b>Patient</b>	Mrs. Green is a 34-year-old African American female, admitted from the ED to Ward 34, room 312 two hours ago.
<b>A</b>	<b>Assessment</b>	Presented to the ED in moderate distress unable to speak or walk more than 10-20 feet without stopping to catch her breath and complains of no other symptoms. Over the past 2 weeks she has noted fatigue, malaise, and decreased appetite. She has an irregular pulse of 120 beats/min, BP = 100/50 MM Hg, respiratory rate = 30/min, and a temperature = 99.2° F.
<b>S</b>	<b>Situation</b>	An arterial blood gas revealed a PO <sub>2</sub> of 75, PCO <sub>2</sub> of 20, with an O <sub>2</sub> saturation of 95%. She was started on O <sub>2</sub> via at NC at 4L/minute and the current pulse oximetry reading indicates 95% O <sub>2</sub> saturation. Full hematologic, coagulation, and metabolic panels are pending in the laboratory, sent approximately one hour ago. A chest x-ray was ordered. She has full code status. Rheumatology and pulmonary service consults have been requested. She has one peripheral IV in her left hand with 5% dextrose running at 50 mL per hour. No medications have been dispensed.
<b>S</b>	<b>Safety Concerns</b>	The patient may have a lupus-induced pleuritis/serositis or developed a thrombotic complication with a pulmonary embolus due to the recent addition of a birth control patch to her list of current medications.
<b>THE</b>		
<b>B</b>	<b>Background</b>	NKDA. 3-year history of lupus with muscle aches and joint stiffness for the past 11 months. History of gastritis/GI bleeding due to high dose of steroids at the onset of her disease. Current medications include prednisone 5 mg qd over the past two months, ibuprofen 200 mg PRN, and recently a new birth control patch. She also takes an OTC vitamin, iron, and calcium 1 gram/day.
<b>A</b>	<b>Actions</b>	Consideration for anti-coagulation therapy takes a high priority, especially with the history of a past GI bleed and recent NSAID use. Need to also consider an increase in her steroid dosage for both stress and underlying disease indications.
<b>T</b>	<b>Timing</b>	Obtain another direct assessment of her current clinical status. Within the next hour, retrieve the laboratory results from the ordered tests, get an official reading of chest x-ray, and check the status of the pulmonary and rheumatology consults.
<b>O</b>	<b>Ownership</b>	Dr. Smith will review the case and contact the attending physician to discuss any of their concerns and coordinate the plan for the day.
<b>N</b>	<b>Next</b>	Dr. Smith will coordinate with the charge nurse on the frequency of vital signs and O <sub>2</sub> saturation for the patient as well as specific parameters to contact the team. Nuclear medicine and radiology will be contacted to discuss the best approach to evaluating her pulmonary status. Order an ultrasound to examine her lower extremities for evidence of a clot. Dr. Smith will also call the ICU to check on the availability of a bed.



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



*Scenario 2: Transitioning through post-anesthesia care to an inpatient unit.*

<b>I</b>	<b>Introduction</b>	Dr. Sleep, the staff anesthesiologist and Dr. Ortho, the staff orthopedic surgeon, call the ICU resident from the PACU to coordinate the transfer of their patient.
<b>P</b>	<b>Patient</b>	Mrs. Hip is 74 years old female is currently in the PACU and will be transferred to ICU Bed 8.
<b>A</b>	<b>Assessment</b>	Mrs. Hip underwent a complicated hip fracture fixation under spinal anesthesia. During her surgical procedure, she sustained an acute myocardial infarction and her BP was unstable.
<b>S</b>	<b>Situation</b>	She is a full resuscitation status. Currently, her BP= 104/70 and her heart rate = 120 beats/minute at sinus rhythm. A nitro-paste patch was applied and currently on beta-blocker. She has a mask of O2 at 4 L/minute. Her urine output is poor. Dr. Ortho states he suspects that her MI was probably induced due to low fluid volume and thus ordered 2 units of packed RBCs to be given. She has SCDs, a Foley, and a central line.
<b>S</b>	<b>Safety Concerns</b>	Dr. Sleep and Dr. Ortho conveyed to the ICU resident that they were worried about failure, arrhythmia, her tenuous fluid status, low hemoglobin, increased risk for falls due to slight dementia. Also DVT issues, pulmonary toilet, and avoidance of pressure injury.
<b>THE</b>		
<b>B</b>	<b>Background</b>	She had another heart attack two years ago. Mrs. Hip lives at home and cares for her husband with Alzheimers. She has mild COPD and used to smoke 1/2 pack/day but quit smoking 5 years ago. A copy of her current medication list will be faxed to you before she is transferred to the ICU.
<b>A</b>	<b>Actions</b>	The ICU resident will review her record, write the ICU admission orders, check the results of the laboratory tests and double-check her medications. Additionally, the ICU resident will monitor her vitals and intake/outputs closely.
<b>T</b>	<b>Timing</b>	Within the next few hours, lab tests will be drawn to ensure that Mrs. Knee's fluids and electrolyte are returning to normal levels.
<b>O</b>	<b>Ownership</b>	The ICU resident and team will take care of her medical issues. Dr. Ortho will manage Mrs. Knee's activity orders, physical therapy, wound issues, and hip X-rays. They will work together to resolve DVT prophylaxis and antibiotics needed to treat the patient. The family will be working with social worker for rehabilitation services later this week.
<b>N</b>	<b>Next</b>	The ICU resident must determine if Mrs. Knee had an acute MI and avoid any cardiac and pulmonary complications. Troubleshoot fluids and electrolytes. Dr. Ortho will work towards early, aggressive stabilization, up in bedside chair. Sequential compression will be ordered to prevent DVT prophylaxis. Early social work-family interactions on nursing home-rehab will be conducted. Plan of care and any follow-up issues will be discussed with the patient's family members.



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



### Scenario 3: Resident to weekend covering team

<b>I</b>	<b>Introduction</b>	Dr. Jones introduces himself to Dr. James, the oncoming OB/GYN resident for the weekend and reviews Mrs. Smith's current status.
<b>P</b>	<b>Patient</b>	Mrs. Smith is a 24y/o female Gravida 1, Para 0 at 38+4 weeks gestation by her last menstrual period and a 10 week ultrasound admitted this morning at 0400 to labor and delivery in active labor with spontaneous rupture of membranes and regular uterine contractions every 5 minutes and cervical dilation to 5cm. Currently, she is afebrile and normotensive with a pulse of 90 BPM.
<b>A</b>	<b>Assessment</b>	The estimated fetal weight is 3600 grams. The fetal heart rate tracing demonstrates a baseline of 140s with good variability and no decelerations. An intrauterine pressure catheter shows regular uterine contractions occurring every 3-4 minutes.
<b>S</b>	<b>Situation</b>	The patient has progressed in labor and her cervix was completely effaced and dilated to 8cm when she was last checked 2 hours ago. The fetal heart rate demonstrated some variable decelerations approximately 2 hours ago, but these responded to an amnioinfusion and the fetal heart rate tracing is reassuring as stated.
<b>S</b>	<b>Safety Concerns</b>	Be aware that there is another patient on the unit with the same last name. The patient is allergic to penicillin. Her spouse is currently deployed. She has her mother here in the room with her for support.
<b>THE</b>		
<b>B</b>	<b>Background</b>	The patient's past medical history is uncomplicated and she has had no prior surgeries. Her prenatal course has been uncomplicated except for testing positive for Group B streptococcus in the third trimester. She is receiving clindamycin for this because of her penicillin allergy and she has received two doses of this medication so far.
<b>A</b>	<b>Actions</b>	She needs to have her cervix rechecked at this time to determine if she is progressing in labor. If she has not progressed then oxytocin augmentation should be initiated.
<b>T</b>	<b>Timing</b>	She is scheduled to receive another dose of clindamycin at 2100 for her GBS prophylaxis. Pediatrics should be notified that the mother is GBS positive after delivery.
<b>O</b>	<b>Ownership</b>	Dr. James acknowledges and Nurse Leaf, will go and assess the patient and re-check the patient's cervix after the signing out process is complete.
<b>N</b>	<b>Next</b>	After delivery, Nurse Leaf will call pediatrics to let them know about the patient's GBS status. If the patient requires oxytocin augmentation and does not progress in labor, then she will need to be counseled for a cesarean section.



## Strategies and Tools to Improve Healthcare Handoffs and Transitions



### Scenario 4: Nurse-to-nurse change of shift

<b>I</b>	<b>Introduction</b>	Nurse Jones is coming off the 12-hour day shift and introduces herself to Nurse Smith. Nurse Smith is the oncoming nurse from an outside agency and will care for Mr. Ramon on the night shift.
<b>P</b>	<b>Patient</b>	Mr. Ramon is in Bed 5 and is a 52 year-old male with medical record number 123-45-6789.
<b>A</b>	<b>Assessment</b>	He presented to the ED with complaint of 10/10 chest pain and shortness of breath this morning. BP = 165/80 and HR= 90 with frequent PVCs. EKG was conducted and cardiac enzymes were drawn in the ED. EKG and lab results revealed a positive myocardial infarction and patient was admitted to Bed 2 at 2pm this afternoon.
<b>S</b>	<b>Situation</b>	His BP = 120/60 and heart rate = 80 BPM. Patient is on O2 nasal canula with O2 saturation = 96%. Patient was started on Nitroglycerin 3mcg/min IV and Heparin IV at 1000U/hr. Vital signs have remained stable and patient has not complained of any chest pain or shortness of breath since IV drips were started. <i>Patient has a full code status.</i>
<b>S</b>	<b>Safety Concerns</b>	Cardiac enzymes are positive and have not peaked. Next set of cardiac enzymes are due at 2100 along with PT/PTT test to ensure that the correct amount of anti-coagulation therapy.
<b>THE</b>		
<b>B</b>	<b>Background</b>	The patient is diabetic, has a positive family history for heart disease, hypertension, and positive smoker. Patient currently takes medication for hypertension and high cholesterol.
<b>A</b>	<b>Actions</b>	Mr. Ramon is scheduled for a cardiac catheterization with possible stent placements at 0600 the next morning. To prepare for the procedure he must be NPO at midnight.
<b>T</b>	<b>Timing</b>	Nurse Smith acknowledges the laboratory tests that are scheduled for 2100 and will need to check the results of these tests within 1 hour after they are sent.
<b>O</b>	<b>Ownership</b>	Dr. Frank is the cardiologist that will be performing the cardiac catheterization procedure in the morning and is on-call if you need his assistance tonight. Also, our charge nurse will be happy to assist you if you need anything or have any concerns. Mr. Ramon's family has been very supportive and is currently at the bedside visiting with him. They plan to come early tomorrow morning to see him before his procedure.
<b>N</b>	<b>Next</b>	Nurse Smith will educate Mr. Ramon on the cardiac catheterization procedure and discuss their expectations of the patient after the procedure (i.e., bed rest, liquid diet). Nurse Smith will encourage Mr. Ramon to consider enrolling in a smoking cessation program after discharge.