#### **Recommendations**

Patient care quality and safety can be improved during hand offs when physician, nurse, and clinical champions join leadership in making improved hand offs a system priority, including needed procedural and cultural changes. Hand offs must be redesigned based on best practices and human factors research using successful communication techniques and strategies. These include limited interruptions, interactive opportunities to question and clarify, and the ability to verify information with check-backs and read-backs. Use of ambiguous language should be restricted, and medical jargon, confusing terms, and unacceptable abbreviations should be avoided.

The transfer of information should be structured using assistive mnemonics, templates, and/or checklists to decrease the likelihood of lost information and increase the accuracy and safety of the hand off. Responsibility, accountability, and authority must be explicitly transferred and included during patient hand offs. Hand offs must be structured to include the opportunity for the oncoming care provider(s) to review relevant patient/client/resident historical data, which may include previous care, treatment, services, reports, and recommendations.

1. It is imperative that hand offs and transitions in health care be improved. Reasons include patient harm, sentinel events based on communication error (70%), The Joint Commission mandate (2006 National Patient Safety Goal 2-E, with expectations), and opportunity for the redesign of hand offs based on highly-reliable organizations and human factors research.

#### **Recommendation One:**

Leadership should respond to The Joint Commission mandate to improve hand offs by initiating a program within each facility, setting the priority, and identifying the timeline.

2. The hand off must be *structured* (standardized per The Joint Commission) and include an opportunity to ask and respond to questions (ie, be interactive). It may be that clinicians or facilities could modify/expand the "Five Ps of Hand-off," "I PASS THE BATON," "PACE" (Patient/Problem, Assessment/Actions, Continuing

[treatments]/Changes, Evaluation), or I-SBAR to become useful tools that are sufficiently robust to cover the important data elements for hand offs. There are opportunities to create new and better systems in the future. The requirement is for a standardized hand off, primarily verbal; however, according to human factors research, it is better to have a written component in addition that could relate to notes, PDA, or computer entries. Checklists and templates could be developed for work units, microsystems, or patient types that could serve to improve documentation of care and continuity.

#### **Recommendation Two:**

Consider use of structured tools that can facilitate consistency in communication exchanges. Examples include, but are not limited to, the "I PASS THE BATON," "I-SBAR," "PACE," or the "Five-Ps." Each mnemonic is developed to guide medical hand offs and optimize information transfer.

3. The concept of hand off as a transition in care is very *broadly interpreted* to include patient care hand offs of all types between care providers/teams, between institutions, and all along the continuum of care. This includes healthcare information and data involving discharges, transfers, and consultations, and it certainly includes transitions to the patient/family as it relates to information and responsibility.

#### **Recommendation Three:**

When implementing training and process changes, use a broad definition for hand offs, to include most care transitions and information handling across the continuum of care.

4. Hand offs should include *up-to-date information* regarding the patient's/client's/resident's care, treatment and services, condition, and any recent or anticipated changes. Using terminology consistent with the Perioperative Nursing Data Set (PNDS) is recommended when applicable. In the long term, an excellent opportunity exists to design information technology systems to support hand offs and transitions in care, including electronic medical records, continuity of care records, and various integrated summary-of-care documents.

#### **Recommendation Four:**

Use a system, checklist, template, or mnemonic that includes updated information, recent changes in condition or circumstances, and any anticipated changes or aspects of care that need to be observed or watched closely.

5. Interruptions during hand offs *should be limited* by designing the hand-off process to include some control over the environment and timing (as much as the microsystem allows). The rationale is to minimize the possibility that key information would not be transferred or would be forgotten or misinterpreted by the oncoming provider.

#### **Recommendation Five:**

Redesign the hand-off and shift change processes to protect against unnecessary interruptions and to allocate sufficient time to the process.

6. Hand-off communication requires a process for *verification of the received information*, including repeat-back or read-back, as appropriate. Accuracy demands, and human factors research demonstrates, that critical information should be repeated (or read back) to avoid error, confusion, and misunderstanding.

#### **Recommendation Six:**

Design methods that facilitate instruction on and implementation of effective communication and teamwork skills, as provided in TeamSTEPPS $^{TM}$ , that verify information transfer with closed-loop communication tools, including check-back, read-back, call-out, etc, for transferring important information such as critical actions, medication doses, and urgent actions.

7. The receiver of the hand-off information should have an *opportunity to review* relevant patient/client/resident historical data, which may include previous care, treatment, and services, usually most easily available in the medical chart. The data is possibly augmented by supporting documents, such as the medication administration record (MAR), consultations, operation reports, and imaging and laboratory reports. The rationale is that some sentinel events have occurred due to unclear transfer of responsibility.

#### **Recommendation Seven:**

To meet this requirement, charts, written information, and reports/results should be available for review (as appropriate) by the oncoming provider(s).

8. Along with the transfer of information, hand offs should include *a clear transfer of responsibility*, including who is responsible during the hand-off period.

Personnel must know who is in charge of decision making.

#### **Recommendation Eight:**

While developing hand-off policies and protocols, include a clear statement of how and when responsibility is transferred during healthcare transitions.

9. Use *clear language* to avoid confusing abbreviations and jargon that may mislead the oncoming care provider during hand off. Jargon is often not precise, and during root cause analysis for sentinel events, confusion occurred with suboptimal patient outcomes due to misunderstandings during the communication. Examples include she's "a little unstable," "somewhat lethargic," and "exaggerating her pain."

#### **Recommendation Nine:**

Teach and practice communication using established, clear, common language among care providers during hand offs.

Healthcare organizations should also consider short-term and long-term opportunities for incorporating information technology systems to support the hand-off process as part of an electronic health record. Such advances would significantly increase the effectiveness and efficiency of hand offs during transitions in care. Hand-off improvements should be

framed as an ongoing opportunity supported by future research. The eventual clarification of the impact of tools and strategies on patient outcome, along with identification of best practices, should then be shared across the healthcare system.

#### **Summary**

The Hand-off Toolkit developed in collaboration between the Association of periOperative Registered Nurses (AORN), and the Department of Defense Patient Safety Program (DoD PSP) provides health care organizations with strategies and examples of tools to improve health care hand offs and transitions during the perioperative phase of patient care. Each health care facility should adopt, develop, and implement a tool that promotes standardization of the hand-off process, with the ultimate goal of improving patient care and enhancing patient safety.

The terminology used in this toolkit for hand offs is defined as a transition during the provision of patient care occurring at any time throughout the perioperative experience. There are numerous opportunities in the perioperative setting when hand offs occur. Examples include, but are not limited to, the following:

- Shift change
- Break relief
- Physician to surgeon/nurse to nurse/surgical technician to surgical technician
- Reports to receiving unit
- Communication of laboratory and radiology data, and/or information from one hospital to another

Communications leading to an incomplete exchange of information can contribute to a significant untoward patient event or tragic error resulting in death. The significance for the development of a structured hand-off process is found in multiple studies and root

causes analyses of sentinel events and untoward patient outcomes as a result of poor communication.

The Joint Commission National Patient safety goals and the emerging evidence found in the literature have demonstrated the importance of appropriate communication transfers to avoid devastating patient safety consequences. The toolkit provides examples of implementation strategies in the perioperative setting for the 2006 Patient Safety Goal, set by The Joint Commission "to implement a standardized approach to hand off communications, including an opportunity to ask and respond to questions."

#### Standardization

Implementation of a successful program should include multidisciplinary teams to address opportunities for improvement for effective hand-off communication. Such a program will further patient safety and decrease the chance for error related to poor or incomplete communications. Attributes of an effective hand-off communications include the following: <sup>1,2</sup>

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

This resource provides samples of hand-off communications tools to assist in standardizing the information exchanged during patient transitions throughout the perioperative continuum. Each tool is unique and specific to meet the needs of the environment in which it will be implemented. Examples include the following hand-off tools:

- "I PASS THE BATON" (Introduction, Patient, Assessment, Situation, Safety Concerns, Background, Actions, Timing, Ownership, Next)
- "I-SBAR" (Introduction, Situation, Background, Assessment, Recommendation),
- "PACE" (Patient/Problem, Assessment/Actions, Continuing [treatments]/Changes, Evaluation)
- "Five-Ps" (Patient, Plan, Purpose, Problem, Precautions, Physician [assigned to coordinate]).

AORN does not endorse any one tool because each perioperative setting is unique and should adopt or design a tool to meet specific needs of the institution, the staff, and the patient population.

#### **Conclusion**

The development of a standardized hand-off communications tool is a dynamic process that allows for continued opportunities to improve the delivery of patient care for the perioperative patient. The toolkit is developed specific to the perioperative environment. It is intended to be utilized as a resource and a general guide for facilities developing a comprehensive, standardize approach to patient hand-off communications throughout the perioperative phase.

#### References

- The Joint Commission. 2007 Hospital/Critical Access Hospital National Patient Safety Goals.
  <a href="http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/07\_ha">http://www.jointcommission.org/PatientSafety/NationalPatientSafetyGoals/07\_ha</a>
  <a href="p\_cah\_npsgs.htm">p\_cah\_npsgs.htm</a>. Accessed March 25, 2007.
- The Joint Commission. (2007). 2007 National Patient Safety goals Hospital Version: Manual Chapter, Including Implementation Expectations.

  <a href="http://www.jointcommission.org/RN/rdonlyres/98572685-815E-4AF3-B1C4-C31B6ED22E8E/0/07\_HAP\_NPSGs.pdf">http://www.jointcommission.org/RN/rdonlyres/98572685-815E-4AF3-B1C4-C31B6ED22E8E/0/07\_HAP\_NPSGs.pdf</a>. Accessed March 25, 2007.