



**Case study:  
Failed hand-off communication  
processes contribute to patient  
safety event**



# Case Study: Diagnosis Unclear



- ▶ Patient presented with complaint of pain, swelling to right calf after sports injury.
- ▶ Orthopedic surgeon suspected gastrocnemius tear; failed to document in patient record.
- ▶ Patient admitted for DVT treatment – accomplished using only EMR – no direct or “warm” hand-off.



# Case Study: Safety Culture Lapse



- ▶ **The hand-off occurs: Patient transferred to med/surg.** Nothing communicated to med/surg about patient's condition, suspected diagnosis.
- ▶ Medical record only stated patient self-reported DVT.
- ▶ Organization culture relied on EMR for hand-off communications. No opportunity for questions and answers.
- ▶ Receiving nurse felt unable to ask about diagnosis.



# Case Study: Lost in Transmission



- ▶ Radiologist noted loss of flow; intended to call physician, became distracted and forgot.
- ▶ Med/surg day nurse failed to follow-up on stat CT scan results.
- ▶ Results usually communicated physician-to-physician by telephone. Nurse assumed call had taken place.
- ▶ Delay in reading study because CPOE order was initially stat, then cancelled and reordered as routine. Originally a telephone order, entered because it was an emergency.
- ▶ Stat CT not discussed in shift change hand-off. Night nurse was not aware CT was stat.

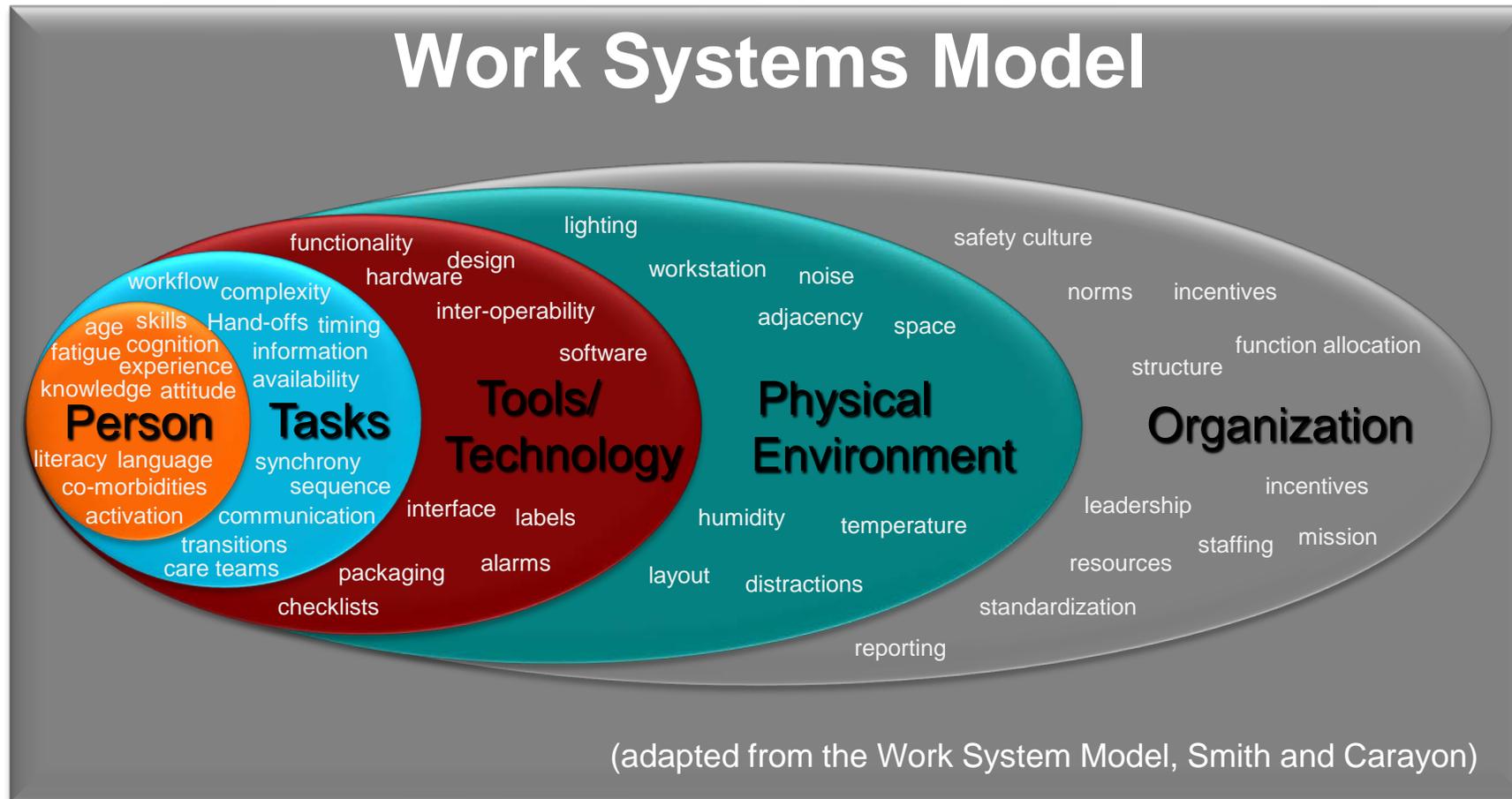


# Case Study: Poor Outcome



- ▶ Failures resulted in delay in surgical intervention for patient.
- ▶ ICU nursing noted loss of pulses. Resulted in wound exploration and hematoma evacuation at bedside.
- ▶ ICU nurse immediately contacted orthopedic surgeon by telephone.
- ▶ Further necrosis resulted in another debridement and surgery.
- ▶ Patient eventually underwent a right above-the-knee amputation.

# Hand-offs in the Context of a Complex Adaptive System



# Evaluating the Standards

- ▶ Case study demonstrates numerous failures involving multiple standards
  - Focused here on hand-off communications
- ▶ What is the policy and practice for:
  - Obtaining information from outside sources
  - Communication within units
  - Communication between services
- ▶ Example findings for 2017



# Evaluating the Standards

- ▶ What are barriers to effective communication?
  - Culture
  - Personnel availability
  - Staffing/workload
  - Lack of backup systems
- ▶ Where is leadership

# Hand-off Communications Case Study

- ▶ Expectations for a hand-off are out of balance
- ▶ Look at the entire process including the sender, the receiver, the communication method, the process, the environment, and the culture
- ▶ The importance of discussing the information being shared at the time of the hand-off including the opportunity to ask questions.

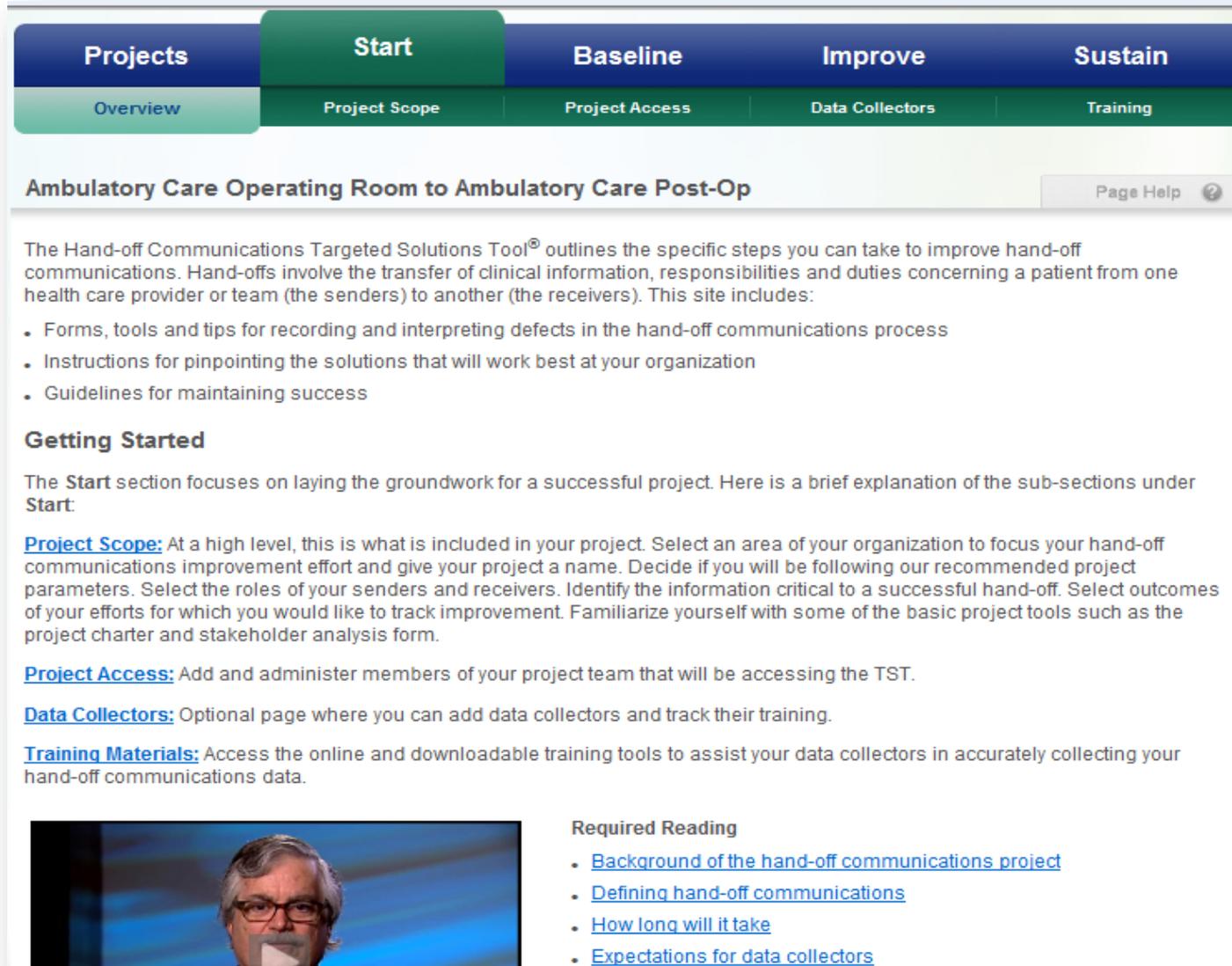
# Hand-off Communications Root Causes

## Validated Root Causes for Transition of Care: Hand-off Communications Failures

All participating hospitals

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

# Hand-off Communications TST®



The screenshot shows the website interface for the Hand-off Communications Targeted Solutions Tool (TST). The navigation bar at the top has five main sections: Projects, Start, Baseline, Improve, and Sustain. Under 'Start', there are sub-sections: Overview, Project Scope, Project Access, Data Collectors, and Training. The current page is titled 'Ambulatory Care Operating Room to Ambulatory Care Post-Op' and includes a 'Page Help' button. The main content area contains an introductory paragraph, a bulleted list of features, a 'Getting Started' section with sub-sections for Project Scope, Project Access, Data Collectors, and Training Materials, and a 'Required Reading' section with four links. A video thumbnail is visible at the bottom left of the content area.

**Projects** | **Start** | **Baseline** | **Improve** | **Sustain**

Overview | Project Scope | Project Access | Data Collectors | Training

## Ambulatory Care Operating Room to Ambulatory Care Post-Op

The Hand-off Communications Targeted Solutions Tool® outlines the specific steps you can take to improve hand-off communications. Hand-offs involve the transfer of clinical information, responsibilities and duties concerning a patient from one health care provider or team (the senders) to another (the receivers). This site includes:

- Forms, tools and tips for recording and interpreting defects in the hand-off communications process
- Instructions for pinpointing the solutions that will work best at your organization
- Guidelines for maintaining success

### Getting Started

The **Start** section focuses on laying the groundwork for a successful project. Here is a brief explanation of the sub-sections under **Start**:

**Project Scope:** At a high level, this is what is included in your project. Select an area of your organization to focus your hand-off communications improvement effort and give your project a name. Decide if you will be following our recommended project parameters. Select the roles of your senders and receivers. Identify the information critical to a successful hand-off. Select outcomes of your efforts for which you would like to track improvement. Familiarize yourself with some of the basic project tools such as the project charter and stakeholder analysis form.

**Project Access:** Add and administer members of your project team that will be accessing the TST.

**Data Collectors:** Optional page where you can add data collectors and track their training.

**Training Materials:** Access the online and downloadable training tools to assist your data collectors in accurately collecting your hand-off communications data.

#### Required Reading

- [Background of the hand-off communications project](#)
- [Defining hand-off communications](#)
- [How long will it take](#)
- [Expectations for data collectors](#)

# Creating Solutions

- ▶ Standardized processes
  - Person to person calls
  - Face to face sign-outs
  - Appropriate documentation
- ▶ Creating expectations – Push/pull
- ▶ Monitoring
- ▶ Leadership involvement