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TEAMSTEPS IN INTERPROFESSIONAL TEAMWORK

A Demand for Interprofessional Collaboration

- Institute of Medicine (IOM) Publications: www.nap.edu
 - To Err is Human (2000)
 - Crossing the Quality Chasm: A New Health System for the 21st Century (2001)
 - Health Professions Education: A Bridge to Quality (2003)**
 - Improving Diagnosis in Health Care (2015)
 - Measuring the Impact of Interprofessional Education on Collaborative Practice and Patient Outcomes (2015)

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Health Professions Education: A Bridge to Quality (IOM, 2003)

- Identified 5 core competencies for all health professions:
 - Patient-centered care
 - Interdisciplinary teams**
 - Evidence-based practice
 - Quality improvement
 - Informatics

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Interprofessional Educational Frameworks

- Interprofessional Capability Framework
 - United Kingdom, 2005
- The National Interprofessional Competency Framework**
 - Canada, 2010
- Core Competencies for Interprofessional Collaborative Practice**
 - United States, 2011
- The Curtin University Interprofessional Capability Framework
 - Australia, 2013

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The National Interprofessional Competency Framework (Canada)

- Developed in 2010 by The Canadian Interprofessional Health Collaborative (CIHC)
- Identifies six core competency domains:
 - Communication**
 - Patient-centered care
 - Role clarification
 - Team functioning**
 - Collaborative leadership
 - Conflict resolution

Compare with IOM's Competencies

- Patient-centered care
- Interdisciplinary teams**
- Evidence-based practice
- Quality improvement
- Informatics

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Core Competencies for Interprofessional Collaborative Practice (United States)

- Developed in 2011 by the Interprofessional Education Collaborative (IPEC) <https://www.ipecollaborative.org/>




- Based on the 5 core competencies described in IOM's report *Health Professions Education: A Bridge to Quality* (2003)

IOM's Competencies

- Patient-centered care
- **Interdisciplinary teams**
- Evidence-based practice
- Quality improvement
- Informatics

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Core Competencies for Interprofessional Collaborative Practice

Interprofessional Collaborative Practice Competency Domains



Competency Domain 1:	Values/Ethics for Interprofessional Practice
Competency Domain 2:	Roles/Responsibilities
Competency Domain 3:	Interprofessional Communication
Competency Domain 4:	Teams and Teamwork

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Core Competencies for Interprofessional Collaborative Practice

- "Using professional jargon creates a barrier to effective interprofessional care. A common language for team communication is a core aspect of the **TeamSTEPPS** team training program..." (p22)
- <https://www.ipecollaborative.org/resources.html>
- Identified TeamSTEPPS as an effective foundation for meeting IPEC competencies

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Interprofessional Collaborative Practice

- Congratulations to Dr. Brandy Gunsolus, the first Doctor of Clinical Laboratory Science (DCLS)!
- Dr. Gunsolus participates in interdisciplinary teams providing patient-centered care during patient care rounding
- As medical laboratory professionals become more integrated into the patient's interprofessional healthcare team, we must share a common language with other healthcare professionals



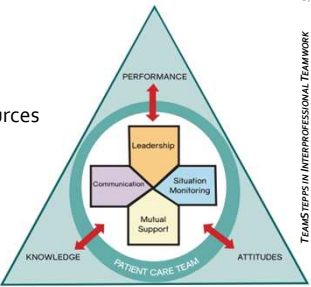
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Core Competency: Communication

TeamSTEPPS[®] Evidence-based Teamwork Tools to Optimize Patient Outcomes

TeamSTEPPS Curriculum

- Development
- Speaking up
- Free, open-access resources
- Five core principles:
 - Team structure
 - Leadership
 - Situation monitoring
 - Mutual support
 - Communication



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TeamSTEPPS Tools

<http://www.teamsteppportal.org/evidence-base>

TeamSTEPPS Tool	Definition
Brief – Huddle – Debrief	Strategy for sharing the plan, monitor, and review team performance <ul style="list-style-type: none"> • Brief – short session prior to start to share plan, discuss roles and responsibilities, and establish expectations • Huddle – break to either reinforce plan or assess and adjust plan • Debrief – occurs post-session to discuss performance, lessons learned, and reinforce positive behaviors
Call-outs	Strategy used to communicate important or critical information to inform all team members simultaneously and allows team to anticipate next steps.
Checkbacks	Using closed-loop communication to ensure that information conveyed by sender is understood by the receiver as intended
CUS	Mutual support strategy to advocate for your patient. <ul style="list-style-type: none"> • C- I am concerned! • U- I am uncomfortable! • S- This is a safety issue!

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Tools, cont.

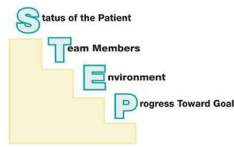
TeamSTEPPS Tool	Definition
Handoff	Strategy designed to enhance information exchange during transitions in care.
SBAR	Used to communicate critical information requiring immediate attention in a standardized format. <ul style="list-style-type: none"> S- Situation – What is going on with the patient? B- Background – What is the clinical background of the patient or context of situation. A – Assessment – What do I think the problem is? R – What would I do to correct it?
STEP	Tool for on-going monitoring of situations in the delivery of healthcare. <ul style="list-style-type: none"> S- Status of patient T- Team Members E- Environment P- Progress Toward Goal

Instilling Team Culture

Measures to Create Team Culture
Regular team assembly and interaction
Trainings with objectives aligning with safety goals; evaluation of effectiveness
Timely feedback and regularly addressing situations as they arise; conflict resolution
Comfortable speaking up and obligation of team members to speak up when issues are discovered
Interdisciplinary communication toward a common, shared goal
Cognizant of situation at hand
Full commitment to the program
Dedication, persistent effort, and leadership from the highest level

TeamSTEPPS Applied

- Trauma Team Performance Observation
- Improvements in:
 - TeamSTEPPS core principles
 - Time to CT Scanner
 - Time to Operating Room
- Tools:
 - Briefing
 - STEP
 - CUS
 - Call Outs
 - Check Backs



Team STEPPS Applied: Effective Team Leaders

- Team STEPPS encourages communication, collaboration and effective team leaders



TeamSTEPPS Applied

- Surgical Environment
- Impact:
 - Positive Communication
 - Less Surgeon Complaints
 - Decreased Turn-around time
 - Positive Reception of Training
- Approach:
 - Debriefing
 - Simulation



TeamSTEPPS Applied

- Interventional Ultrasound PQI
 - Teamwork
 - Safety Climate
- Tools:
 - Brief-huddle-debrief
 - Simulation
- Results:
 - Development of well-coordinated team
 - Ability to speak-up
 - More appropriate feedback



Nursing Concerns

- Impact of nurse-physician communication on patient safety
- The importance of proper communication during shift report
- The nurse as a “case manager”



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Medical Imaging Concerns

- Medical Imaging Utilization & Exam Appropriateness
 - 1/3 of procedures inappropriately ordered in U.S.
 - 26% of CT and MRI exams for inappropriate indications by PCPs
- Needs:
 - Interdisciplinary communication



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CUS in Medical Imaging

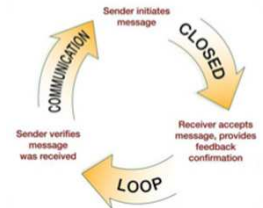
- CUS, a mutual support mnemonic, can be used if the technologist is still uncomfortable upon application of checkback:
 - Pregnancy status
 - Diabetic conditions
 - Renal function
 - Inappropriate protocol ordered per patient history
 - Recent applicable study conducted

I am **C**ONCERNED!
 I am **U**NCOMFORTABLE!
 This is a **S**AFETY ISSUE!
 “Stop the Line”

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Checkbacks for Medical Imaging

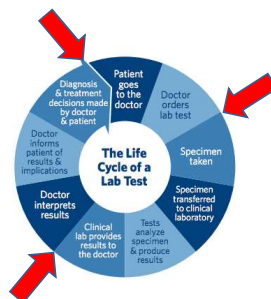
- Checkbacks, a communication tool, can be used to:
 - Verify orders for suspicious indications
 - Report previous patient imaging studies prior to proceeding with the exam
 - Verify the appropriateness of contrast and/or multi-phase imaging approaches



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Medical Laboratory Science

- Points of potential interprofessional collaboration
- Opportunities for application of TeamSTEPPS tools
- Need for a common language to connect with other disciplines



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Medical Laboratory Science Concerns

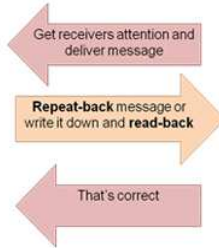
- Diagnostic Lab Test Utilization & Appropriateness
 - Single highest-volume medical activity
 - Drives clinical decision-making
 - Overall mean rates of overutilization at 20.6%
 - Overall mean rates of underutilization at 44.8%
- Needs:
 - Interdisciplinary communication



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Checkbacks for Diagnostic Testing

- Checkbacks, aka Repeat Back:
 - Report critical patient results that must be called immediately after testing is complete
 - Verify the addition or modification of testing orders to a sample already in the lab



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Situation Monitoring

- Situation monitoring (individual skill)
- Situation awareness (individual outcome)
- Shared mental model (team outcome)



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Handoffs

- Handoffs are a communication tool that can be used to inquire on:
 - Patient's current health status
 - Ability to complete the procedure
 - Potential of changing imaging exams from portable to department
- Used when:
 - Transferring care between departments
 - Shift change to ensure that previously acquired details are documented and/or are understood



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Interdisciplinary Communication

- Teaching universal "communication" and "how to address conflict" encourage health professionals to "speak the same language"
 - Communication: SBAR, Checkbacks
 - Conflict: CUS, DESC
- The use of "huddles" to decrease hospital re-admission



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Case Study: Guidelines for IV Contrast Administration in CT Examinations

- 62 year old male
- History of chronic kidney disease and hypertension
- The CT scan is scheduled for later this afternoon and contrast will be administered at this time
- Do we need to be concerned about contrast-induced nephropathy (CIN)?
 - What test(s) should be run before administering the contrast?
 - How can we communicate our concerns?

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Factors to Consider

TeamSTEPPS Implementation Considerations¹⁹

- Preliminary assessment of needs and situation should first be considered
- Senior leadership engagement is needed to obtain buy-in prior to implementation
- Simplified initiatives should be utilized to prevent overburdening
- Definitive metrics need established for all levels of effectiveness evaluation
- On-going coaching and monitoring is required to reinforce successful teamwork behaviors

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TeamSTEPS Value

- Benefits:
 - More accurate imaging orders
 - More appropriate test ordering
 - Process streamlining
 - Technologist vocalization
 - Reduced medical errors
 - Improved clinical outcomes
- Interdisciplinary team education more effective than discipline-specific



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Team STEPPS in the Academic Setting

- Consider the results if Team STEPPS were taught to all students in health care
- Encourage universal communication and decreased errors
- Foster team-based care from the very beginning of their professional education



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Conclusion

- TeamSTEPS improves teamwork in healthcare
 - Could be used to address appropriateness concerns
 - Single common goal maximizes patient safety
- All healthcare professional voices are important and need to be heard



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Questions



- What is the challenge your organization is facing that is linked to a problem with teamwork and/or communication?
- Is the teamwork issue related to communication, leadership, mutual support, or situation monitoring? What tools might you consider to address the issue?
 - SBAR, Call-Out, Check-Back, Brief-Huddle-Debrief, Task Assistance, CUS, DESC
 - Is there a lack of a shared mental model?
- If you had to identify only one tool or strategy to implement first, which one would it be and why?

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