Wired for Change:
Teamwork and Safety Leads to OR and SPD Relationship Building

Hartford HealthCare
Bone & Joint Institute

Leah Goldberg BSN, RN, CNOR, & Sarah B. Cruz CSPDT, CRCST, CHL

Description of Team

The Bone and Joint Institute at Hartford Hospital is a 10-Operating Room (OR), orthopedic focused facility at a larger, 900+ bed, level 1 trauma center.

Interdisciplinary Committee: Circulating RN, Surgical Technologist (ST), OR Manager, Sterile Processing Department (SPD) Manager, SPD Educator

Preparation and Planning

Used specialty system instruments (i.e. from specific company trays for joint replacement) are separated during case and not returned to their trays (exception of basic stringed instrument sets)

Awareness and acceptance of current practice's challenges on OR and SPD teams with dedication to work together for solutions

Current process of using solid plastic bins to hold and transport separated soiled instruments on the case cart from OR to SPD is not a standard of best practice

Create process map of steps in cleaning and moving instruments from sterile field in OR to decontamination (DECON) room in SPD

Process mapping of new standard practice

Purchased and tagged wire baskets dedicated to new process

Assessment

Initial observation and trial run in 1 OR

Expand new process go live for all cases

Collect and review staff feedback

Adjustment process based on feedback
- Order more wire baskets to meet demands of case volume
- Change how clean wire basket is brought to the OR:

Stored in room → 1 wire basket placed on each clean case cart before brought from SPD to OR for surgery

Implementation

Education provided to staff in OR and SPD
- Outlined new standard work process and defined roles/responsibilities
- Described importance to both departments

White Bin Process

Wire Basket Process

OR

Used, dry, dirty instruments placed by circulating RN into white bin at end of case and soaked in water

Water removed and bin moved from table to dirty case cart

Used, dirty instruments soaked on sterile field in water-filled basin during case by ST

Water removed by circulating RN and instruments transferred to wire basket

Wire basket placed in dirty case cart

ST pre-treats instruments and transports dirty case cart to DECON area

SPD

SPD technician lifts white bin from case cart to soaking sink

Instruments dumped into soaking sink

SPD technician ergonomically lifts wire basket from case cart and gently submerges in soaking sink

Instruments remain in wire basket for soaking sink and sonic wash process

Instruments replaced trays before going through washer

Outcomes

Overall feedback from staff in OR and SPD showed compliance and appreciation of new process.

Interdepartmental cooperation lead to mutual benefits:

Standards

AORN Guideline: cleaning of instruments begins at point of use

SPD industry standard best practice: No dumping of instruments into decontamination sink

Missing / Broken Instruments

Reduced bent / broken / lost instruments resulting from act of dumping white bin into sink

Reduce cost of replacing instruments

Keeping instruments in wire basket through DECON process **saves time** not having to remove instruments individually from sink to next step

Part of larger initiative to reduce missing instruments (~80% reduction)

Ergonomics

Wire basket is easier to lift (narrower)

Wire basket takes up less room in case cart, therefore more trays on higher shelves (less bending)

Reduce potential for staff injury

Bioburden

Process change allows for better cleaning of instruments at point of use by ST

Wire basket allows easier cleaning process in DECON

Part of larger initiative to **reduce bioburden** (~50% reduction)

Average Occurrence of Incident

New Process early Q2 2021

Year	Bioburden (per month)	Missing/ Wrong Inst (per month)
2020	10.7	28
2021	6.5	7.5
2022	5.5	4.8

Implications for Perioperative Nursing

OR and SPD teams worked together for mutually agreeable solution to maximize staff safety and optimize best practice for cleaning and transporting surgical instruments, setting precedent for future collaboration

Promote teamwork and respect between interconnected departments to provide optimal patient care