

MaineHealth

## MaineHealth Knowledge Connection

---

Operational Excellence

---

8-5-2020

### Collaborative Strategies To Reduce Incomplete Operating Room Instruments Trays

Richard Neusch  
*Maine Medical Center*

Nicole Wagner  
*Maine Medical Center*

Colby Fike  
*Maine Medical Center*

Suneela Nayak  
*Maine Medical Center*

Follow this and additional works at: <https://knowledgeconnection.mainehealth.org/opex>



Part of the [Health Services Administration Commons](#), [Health Services Research Commons](#), [Patient Safety Commons](#), and the [Surgery Commons](#)

---

#### Recommended Citation

Neusch, Richard; Wagner, Nicole; Fike, Colby; and Nayak, Suneela, "Collaborative Strategies To Reduce Incomplete Operating Room Instruments Trays" (2020). *Operational Excellence*. 39.  
<https://knowledgeconnection.mainehealth.org/opex/39>

This Poster is brought to you for free and open access by MaineHealth Knowledge Connection. It has been accepted for inclusion in Operational Excellence by an authorized administrator of MaineHealth Knowledge Connection.

# Collaborative Strategies To Reduce Incomplete Operating Room Instruments Trays

Last Updated: 8/5/2020

Executive Sponsor: Richard Neusch

Facilitators: Nicole Wagner, Colby Fike. Op Ex Coach: Suneela Nayak

Team Members: Sterile Processing leaders and Tech, OR leaders and services

## Problem/Impact Statement:

Missing instruments identified in the middle of a surgical procedure can delay patient care, be a source of frustration for surgeons and surgical teams, and cause challenges to overall patient flow through surgical pathways. We identified a high number of missing and lost instruments, and developed an improvement strategy to locate and restore complete and correct instrumentation. Successfully restoring missing and lost surgical instruments impacts safe patient care, provider and team experience as well as reduced waste by eliminating the cost of expensive instrument replacement.

## Scope:

**In Scope:** MMC Sterile Processing Department or “SPD”, Inpatient Operating Room Clusters (the different surgical services).

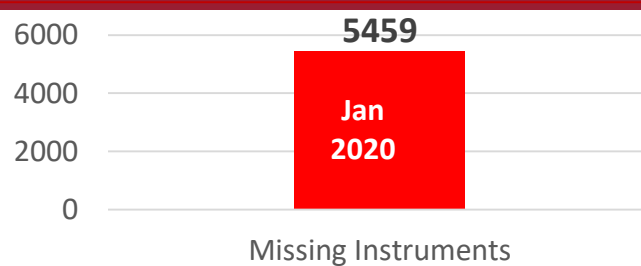
**Out of Scope:** Outpatient Surgical care at MH hospitals

## Goal/Objective:

- Locate missing instruments, to determine if ordering more/replacing missing instruments is necessary.
- Update tray ‘recipes’ to ensure that instruments needed are included in tray provided to surgeon.

## Baseline Metrics/Current State:

**Number of Missing Instruments at start of project**



## Business Case:

- avoidable cost to replace missing instruments
- surgical patient care delays
- surgeon dissatisfaction
- decreased joy in work for OR and SPD teams

## Root Cause Analysis:

Data	Process	People
<ul style="list-style-type: none"> <li>• Limited sharing of missing instrument data between the OR and SPD</li> </ul>	<ul style="list-style-type: none"> <li>• Limited processes in place to ensure that instruments remain with trays</li> </ul>	<ul style="list-style-type: none"> <li>• Employees in SPD and the OR functioned in Silos</li> </ul>

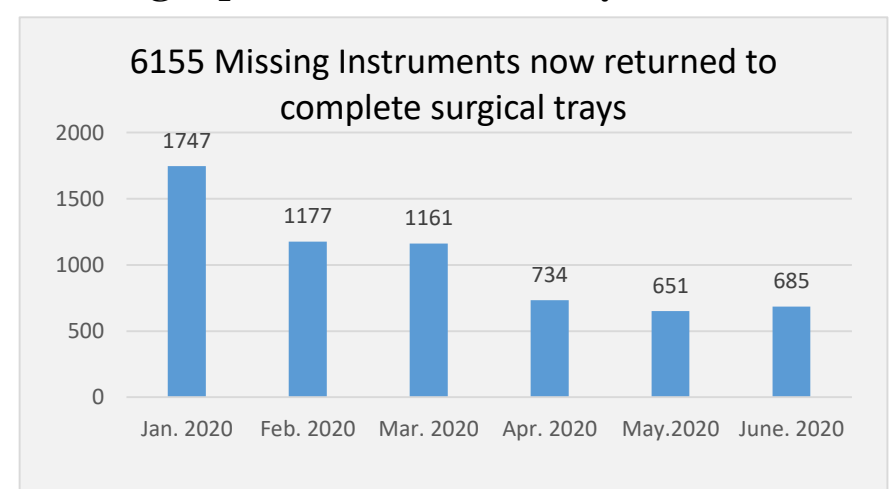
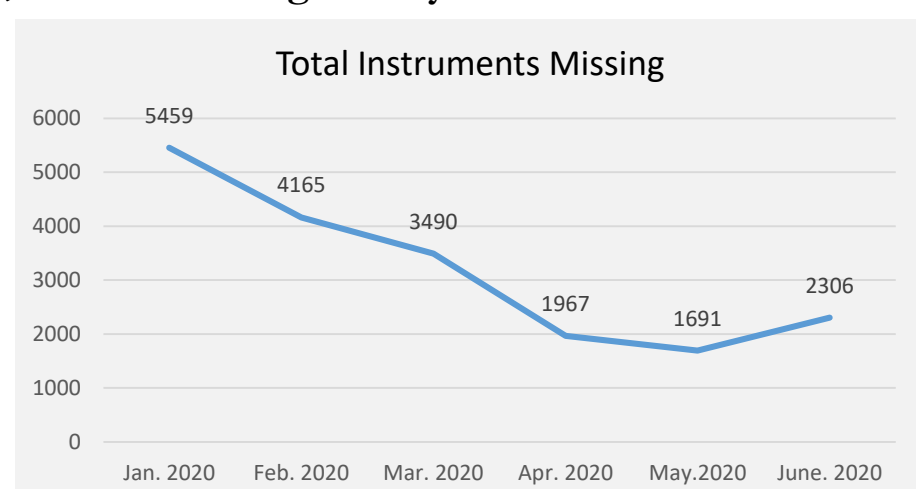
## Countermeasures

Action	Owner	Date Complete
1. Using tracking system to generate a missing instrument report and separate out missing instruments by surgical cluster. Members of the OR team joined SPD to learn how the sterilization process worked, so that they could make data-driven decisions.	SPD Leadership	
2. Missing instrument reports were shared with each OR cluster and if instruments had been missing 30, 60, 90 days, decisions were made in partnership about whether the instrument was needed in the surgical tray.	SPD	
3. Each SPD tech was given a copy of a section of the missing instrument report and a corresponding OR cluster resource, so that they could see the impact of their work as instruments were located.	SPD Techs	
4. The missing instrument report was printed every day and shared with each OR cluster. SPD asked the cluster “What do we do now?” and the OR would call to ask that the instrument be added or removed from the tray recipe.	SPD& OR Teams	
5. To sustain results, SPD and the OR built a collaborative approach to missing instruments. A culture of employee empowerment was created, where each tech can openly discuss issues, missing instruments, and process changes.	SPD & OR Teams	Ongoing
6. To sustain results, SPD met with the OR to determine how their cases are broken down and where in the process the items are going missing. A tag process in decontamination was created to allow SPD to keep all trays from one case together during the cleaning process and the prep and pack process.	SPD & OR Teams	Ongoing

## Outcomes

Baseline data shows 5,459 lost instruments in January. As a result of this work, this number has decreased to a little over 2,000 in June 2020, with a low point of 1,691 still missing in May.

Due to partnership and teamwork from SPD leaders, Technicians, OR leaders and Surgical Service Teams, the numbers of instruments and related avoidable costs being replaced has reduced by >50%.



## Next Steps

1. Continue to monitor and track data on missing instruments and incomplete trays
2. Develop, test and implement routine workflows to identify and locate missing instruments
3. Maintain positive working relationships across surgical services with the shared goal of providing safe, effective and reliable<sup>1</sup> care to our patients.