

Hardwiring High Reliability: One Health System's Journey to Reduce Harm



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BACKGROUND

As part of ongoing regulatory survey readiness activity, it was identified that key high level disinfection processes were not being consistently followed in sterile processing, resulting in tray defects (bioburden, wet trays, torn wrappers, missing/wrong instruments). These had potential for patient harm and also resulted in case delays, reprocessing, increased instrument wear and costs.

AIM

Improve sterile processing department quality by reducing total defects to zero and improve financial performance by reducing missing instrument spend by 10%.

STRATEGY

Utilize High-Reliability concepts to develop, implement and sustain consistently safe, high quality standard work for processing trays meeting all regulatory standards for high level disinfection.

PROCESS

Collect reports from Infection Control and Surgical/Invasive on tray defects

Develop categories of defects (Note: an individual entry can have more than one category of defect)

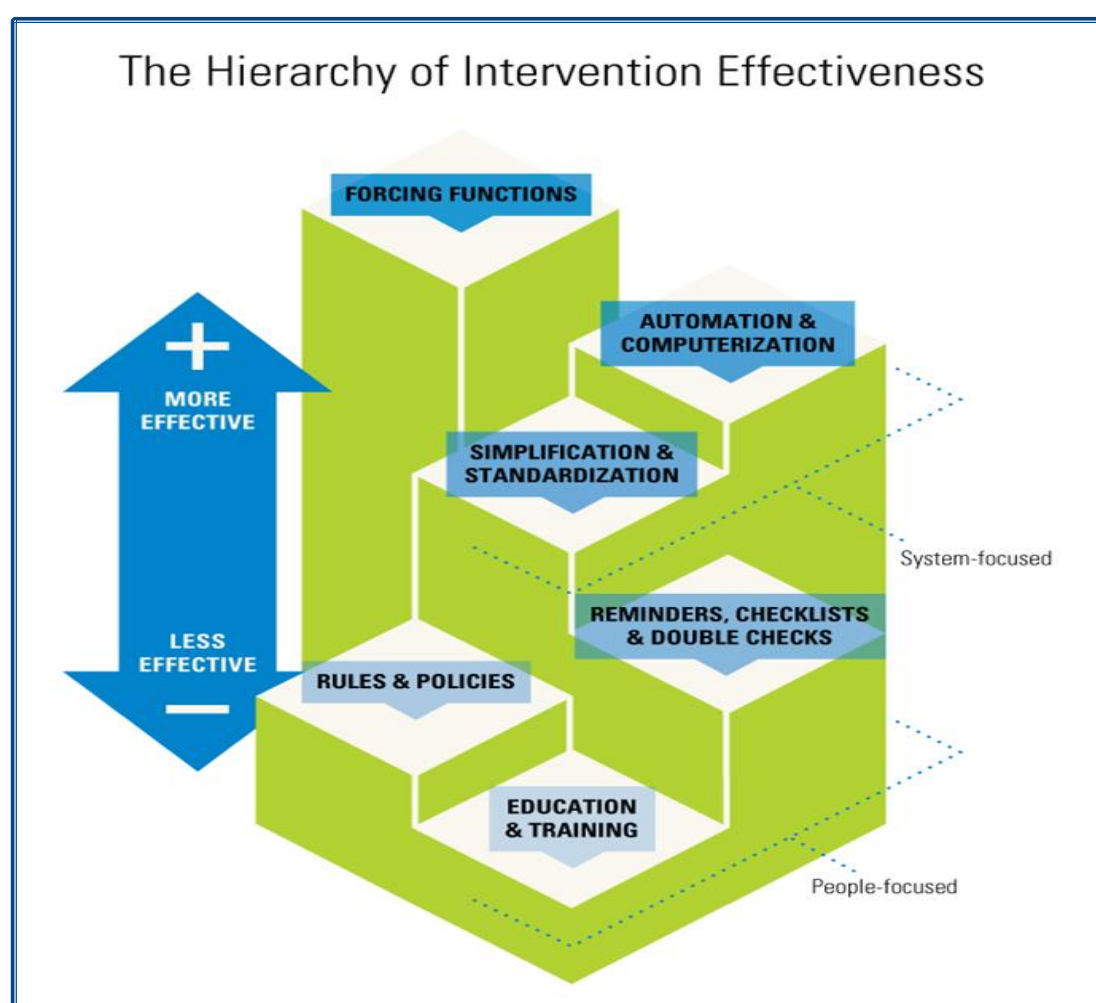
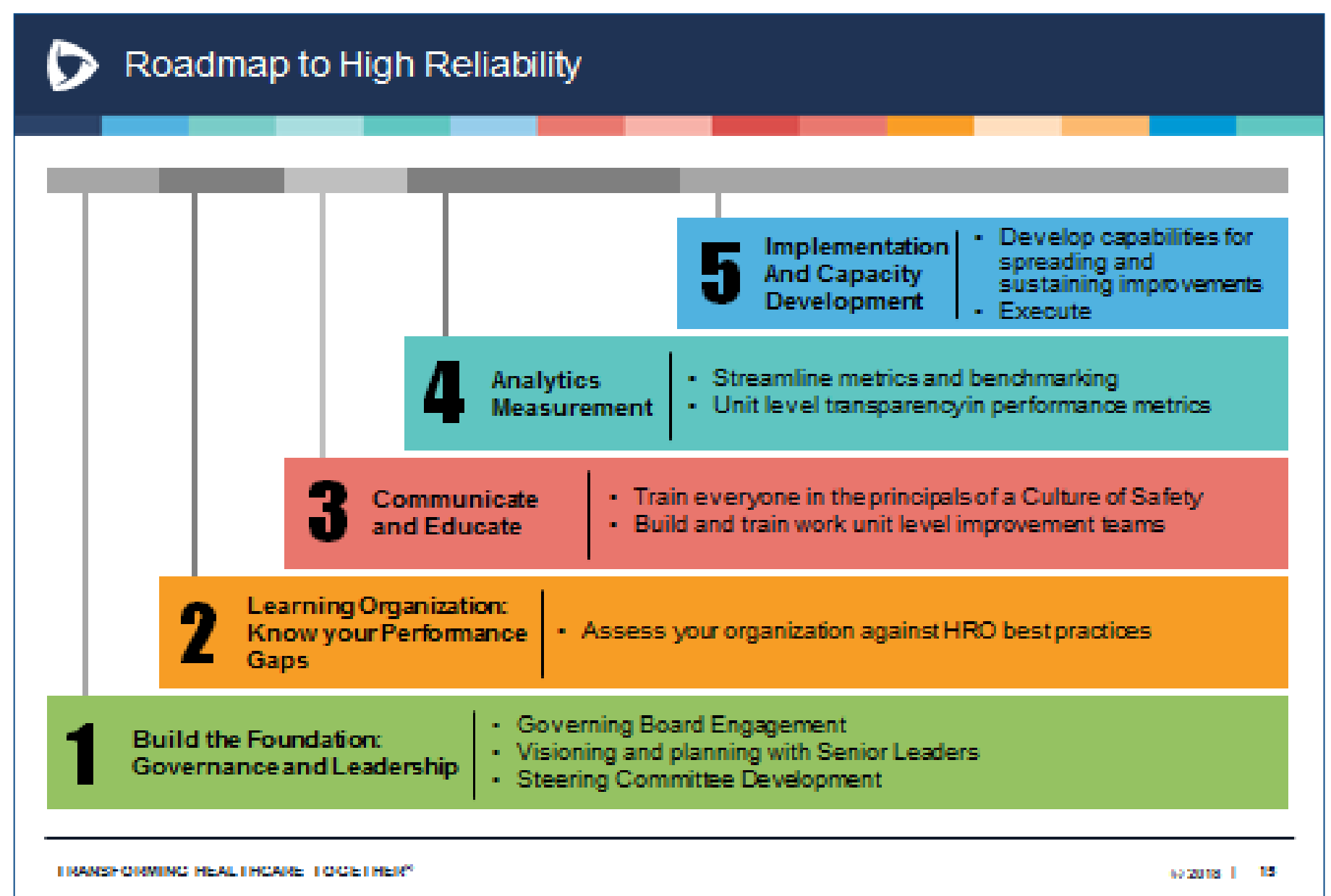
Benchmark against best practice with AAMI and Steris

Conduct gap analysis, apply Lean A3 problem solving approach

Use High Reliability domains to establish standard work, apply hierarchy of intervention effectiveness

Measure, collect KPI data to assess progress

Leadership establish safety culture of 100% responsibility and 200% accountability, develop real-time feedback loop for performance, sustainability



4S Standard Work: Returning items to SPD for Sterilization

POINT OF USE: At end of case rinse reusable instruments in sterile water and wipe down to remove any visible bioburden. Open/unclamp and disassemble instruments prior to rinsing. Flush lumens with sterile water and wipe down instruments. Instruments should stay damp until enzymatic gel can be applied.

Sort

- Remove and dispose of sharps and trash
- Check drapes for instruments prior to discarding
- Place in groups of like-kind instruments

String

- Insure all instruments open/unclamp and disassembled
- Place all ring-handled instruments on stringer

Squirt

- Flush lumened instruments with sterile water* if not done previously

NOTE: Do NOT use saline

Spray

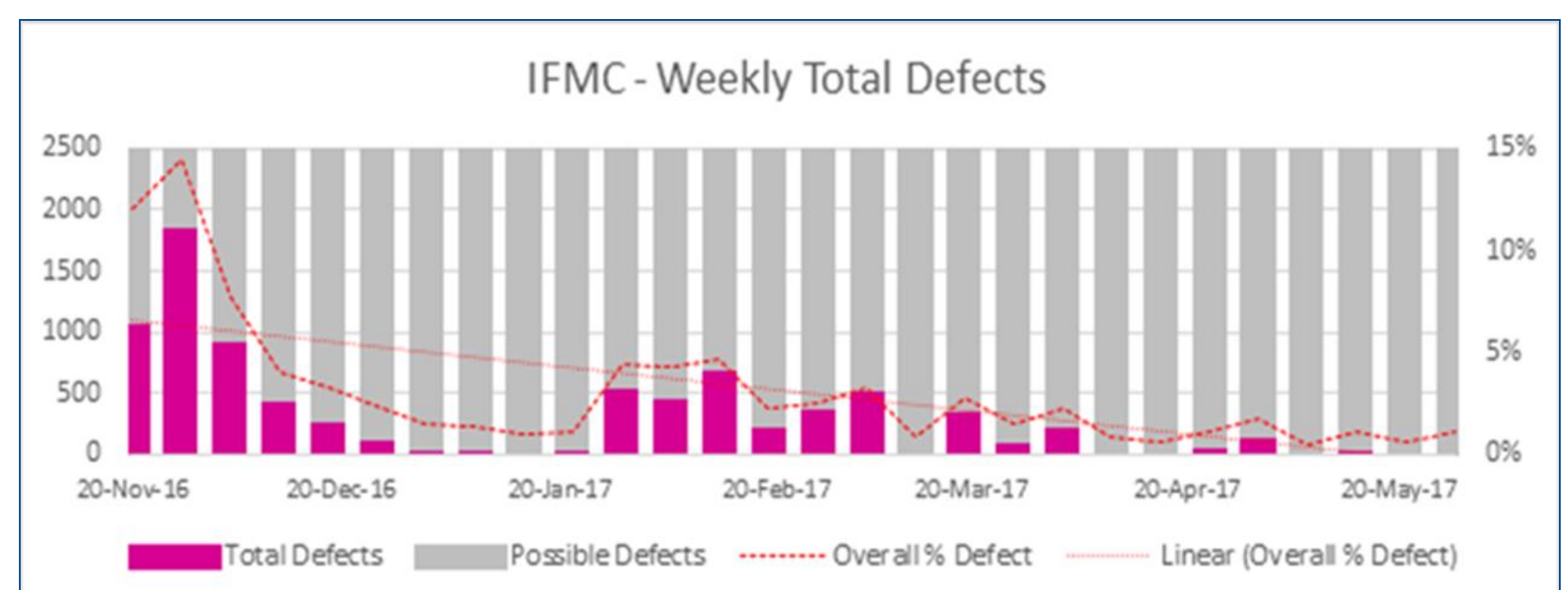
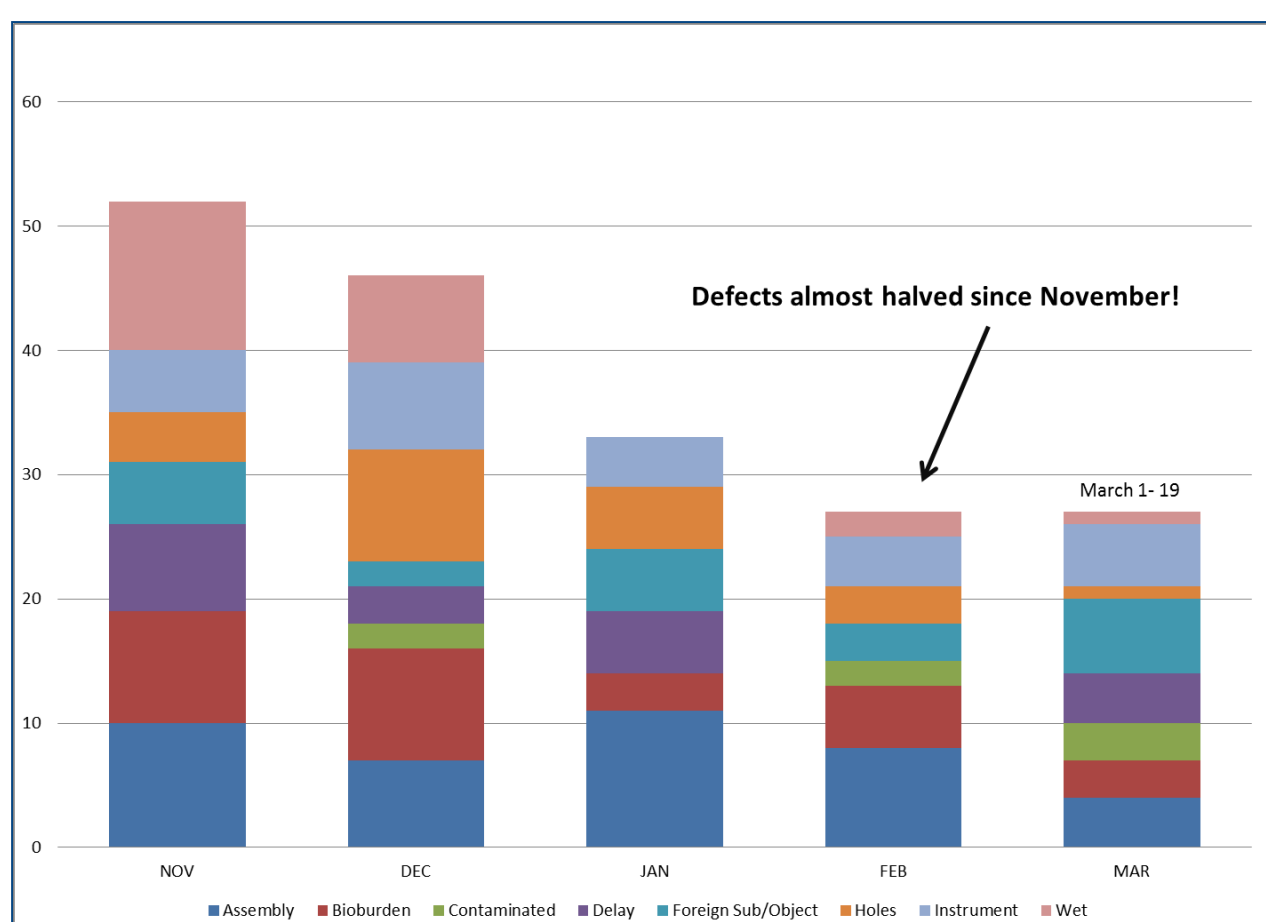
- Spray enzymatic detergent to keep instruments moist*
- Instruments must stay moist until received in SPD

*Prevents bioburden from drying and improves cleaning

Transport

Return all instruments to SPD in a rigid, leak-proof container with a lid, marked biohazardous.

RESULTS & OUTCOMES



Overall decrease in total defects by 96%; decreased torn wrappers by 83% and instrument spend by 22%; no survey findings involving the High Level Disinfection process