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Reducing sharps disposal in the operating room

Kasey Brooks

Children's Mercy Kansas City

Brandon Layton

Children's Mercy Kansas City

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Reducing sharps disposal in the operating room

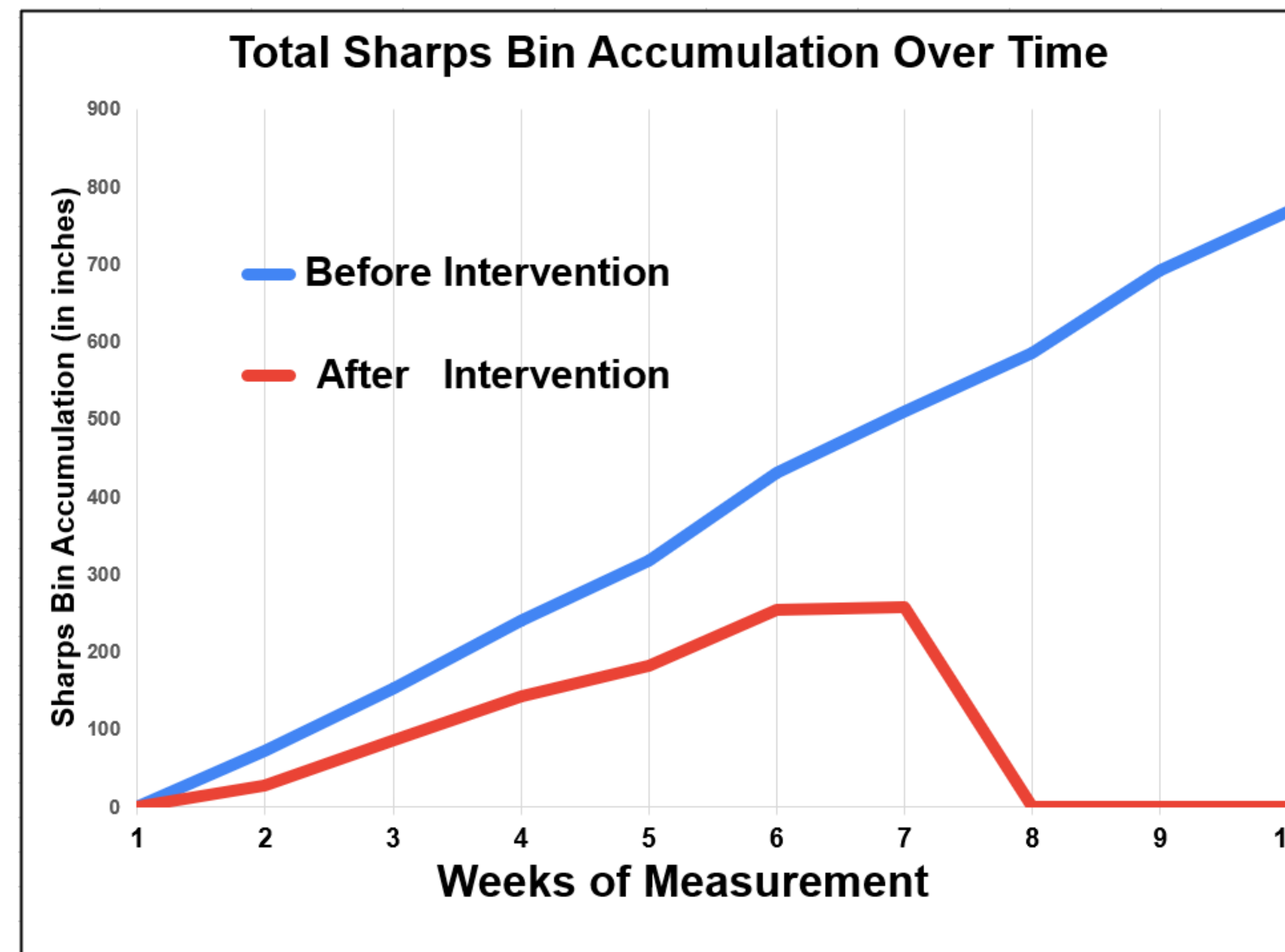
Brandon Layton MD, Kasey Brooks MD

Children's Mercy Hospital, Department of Anesthesiology

Background/Methods

- Sharps disposal is:
 - many times more costly than garbage disposal
 - energy intensive with a large carbon footprint
- We hypothesized 40% of the waste in the sharps bins was inappropriate
- An A3 problem-solving report was used to determine the main reasons for inappropriate sharps use:
 - Provider gap in knowledge
 - Workflow limitations
 - Restrictive policies compared to national guidelines
- A PDSA cycle helped create a logical approach to data collection and interpretation
- Intent was to reduce sharps disposal by 25% by department education and process changes, without negatively impacting workflow
- Baseline sharps accumulation was measured for 10 weeks before and after the educational intervention

Data



- There were several limitations to data collection and interpretation:
 - Inadequate access to sharps bins during OR use
 - OR construction
 - Non-anesthesia personnel utilizing sharps bins
 - Bins inappropriately replaced early

Discussion

- While data collection is ongoing, current data suggests we are far exceeding our goal of 25% sharps waste reduction.
- Countermeasures were addressed throughout data collection by discussing concerns with anesthesia techs and providing laminated reference cards on the anesthesia cart.
- To ensure our change is sustainable, these additional measures may be tracked to ensure a stable reduction in sharps utilization over time.
- Further ideas for improvement include surveying the department for obstacles to current project sustainability and remaining barriers to appropriate sharps utilization.
- Hospital-wide change could be implemented if sharps utilization was tracked by department usage over time, allowing problem areas to be identified.
- Future investigations could quantify the financial and carbon-footprint savings by the resultant reduction in sharps utilization.

