

2019 Pennsylvania Hospital

Operational Award Winner

Reducing Variation In Surgeon Practice Decreases Colorectal Surgical Site Infections – KEEP IT SIMPLE

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The Problem:

Our NSQIP report consistently identified colorectal SSI as an area for improvement, with odds ratios well over 1. Provider data demonstrated that surgeons with greater variation from best practices had higher SSI rates.

The Process:

A review of literature revealed high evidence interventions that could be incorporated into physician practice with minimal disruption. These interventions directly impacted the surgical site: The intraoperative interventions included:

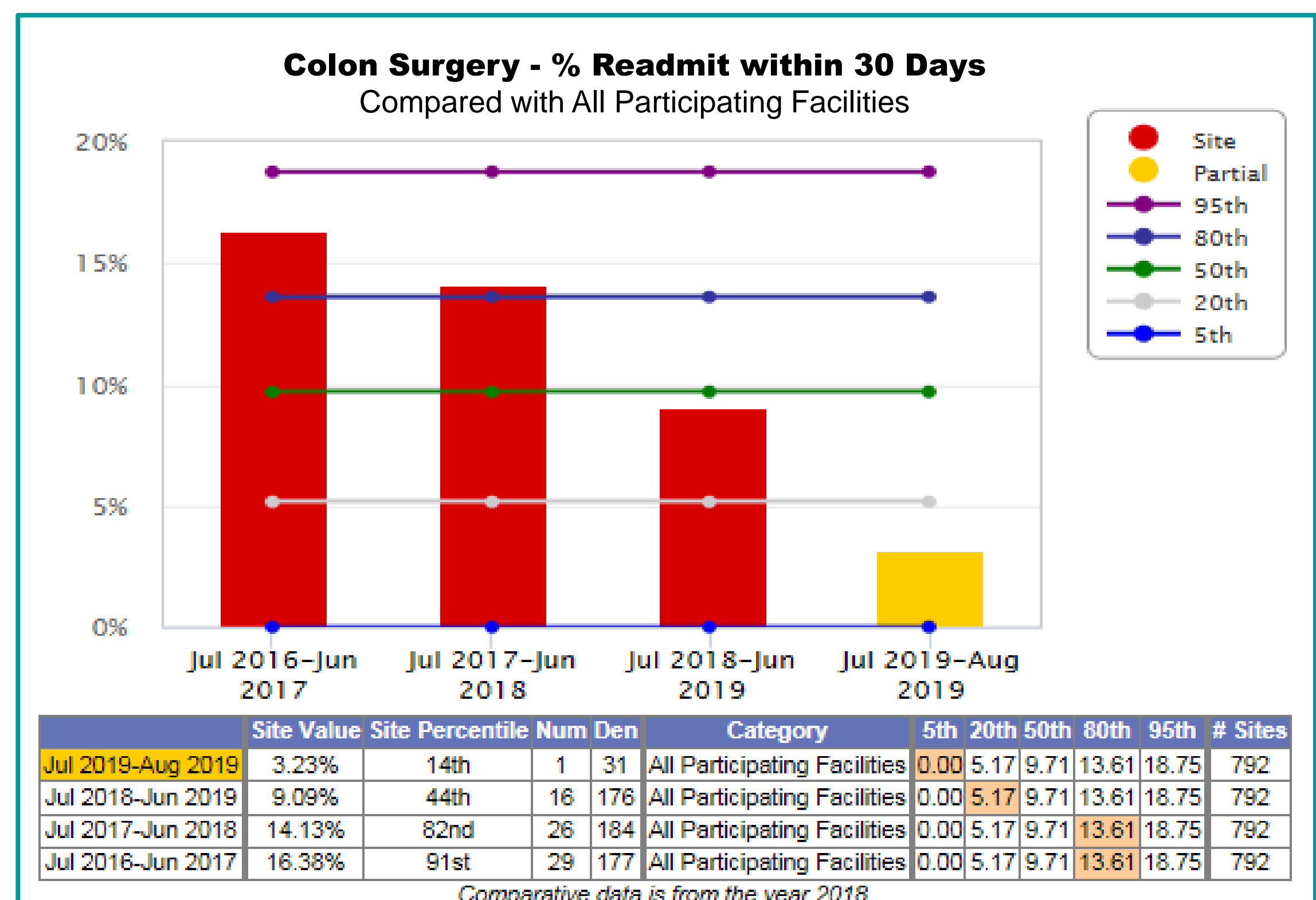
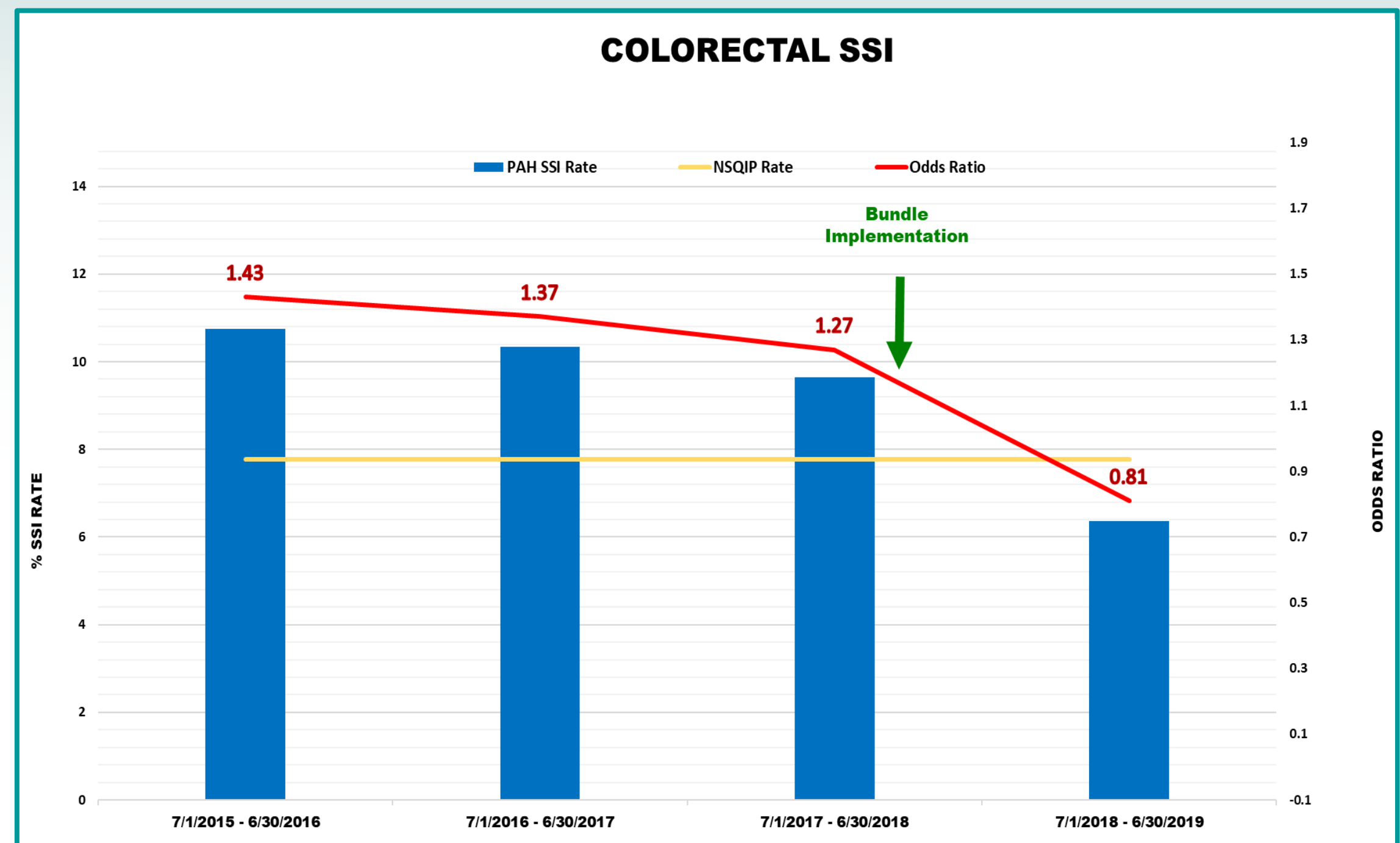
- use of a wound protector to isolate subcutaneous tissue
- changing of gowns and gloves for surgical closure
- use of a separate tray of clean instruments for wound closure

Operating room staff worked with the surgeon champion to determine availability and appropriateness of equipment. The process changes at closure were rehearsed and timed to ensure efficiency. The surgeon champion worked directly with individual surgeons to introduce the changes; demonstrating the evidence for the interventions as well as the minimal impact on flow within the operating room.

Nursing personnel monitored process compliance via a paper data collection tool that was entered as a custom field in the NSQIP data base by the surgical clinical reviewer

3 Keys to Making this Process Successful:

- **Simple:** Focus was on the “low hanging fruit” – high impact with minimal workflow disruption
- **Focused:** Rather than changing many practices by multiple groups, a focused approach supports process compliance
- **Engaged Staff:** Operating room personnel – both OR staff and surgeons – must be involved in the process change



Results:

- Over 50% reduction in NSQIP SSI odds ratio (1.75 → 0.81)
- A 40% reduction in NSQIP SSI raw rate (10.75% → 6.37%)
- A decrease of 38% in percentile rank for colon surgery readmissions in Midas
- PA NSQIP collaborative report shows we are no longer the poorest performer

