**CAUTI (Catheter Acquired Urinary tract Infection)**

**SUMMARY: OPPORTUNITY:** Despite best efforts, CAUTI incidents still exist at all of our hospitals. How do we overcome this pervasive problem, especially in light of the new payment models? MSS bought only **9,899** insertion kits, or add-a-Foley trays- these products are alternative ways to obtain the insertion components needed to aseptically insert the **37,535** individual Foley catheters.  That’s a gap of **27,636** sets of insertion components. Which leads to the question: How are all of these catheters being inserted aseptically? OR, is there a massive overbuy of catheters and many of them are not even being used at all?  MSS also bought a mix of individual drain bags and meters (also required for insertion) totaling **49,760.  Over 12,000 more bags and meters than individual Foleys.**

These numbers clearly do not match up.  This indicates significant problems in excessive inventory and lack of standardization.  Considering there are well over **10,000** different nurses, with different opinions, all clinically tasked with inserting and maintaining these Foleys, variation in product and practice is obviously the standard.  Variation leads to increased cost, subpar nursing practice, and ultimately undesirable outcomes.

Generally the owner facilities that have assessed and implemented a change in stocking and insertion policy have seen a reduction in variation as well as improved nursing practice. Every major CAUTI guideline suggests that the practices these Lifecycle assessments measure are the evidence-based practiced proven to reduce CAUTI.  This strategy leads to reduced utilization and a focus on the patients that truly need catheters.

**SCOPE:** Track Utilization, Insertion, Maintenance, Duration of Foley catheters to reduce CAUTI incidence through the Zero-In Program

**DATA/EVIDENCE:** We need a solution that’s outside the bladder to solve CAUTI. Can’t work retroactively, must be proactive. Bard Zero-In Program performs assessments of Foley utilization, insertion, maintenance, and duration to reduce CAUTI, with a Foley Lifecycle program and used the SureStep tray (insertion tray developed by nurses).

Results:

* Aseptic technique improved by 33%
* DFU (Directions for Use) steps completed improved from 67% done correctly to 97% done correctly
* 8 of the 11 steps were done correctly 100% of the time vs. 0 of the 11 from the previous measurement
* Utilization of catheters decreased from 20% to 18%
* YTD in hospitals using the program = 0 rates of CAUTI

Need comparisons to other hospitals. This is a true lean Six Sigma process.

Captis did this – 2nd largest in Captis outside of Mayo is Sanford. They published their results in a supply chain magazine; they made the cover. They projected $800K but only spent $200. Every time they measured and went back to it more and more inventory got cleaned up; process became smoother.

Cox Health: Foley securement improved from 74% to 80% and the number of broken systems decreased by 18%. Data showed that 58% of insertions were done using the proper aseptic technique. BJC converted to SURESTEP- the smaller hospitals converted first, went away from silver, using all lean six Sigma trained specialists. Bard will have remote training capabilities to make the program scalable. Shared accountability between Bard and HOA.

The other benefit to the Clinical Assessments and partnership is the measure of practice and those leading indicators they can see in Foley Maintenance, Insertion and Duration.  The real benefit of this data comes from Six Sigma / Continuous Improvement.  Freeman is a great example of how this improvement can take place (2 assessments were a little less than 1 year apart):

**Aseptic Practices**

* Every step improved from Assessment 1 to Assessment 2
* 8 or 11 went from below 80% efficient to 100% efficient
* Specifically the use of a sterile hand went from 11% to 84%.  This was a key improvement measure they were looking to improve on with the SureStep Tray

**Following the DFU (Directions for Use)**

* Assessment 1 showed only 2 of 8 steps correct vs Assessment 2 showed 7 or 8 were 100% correct
* 67% increase on completely correct insertions from the nurses (again a target put in place from the SureStep Tray)

**Foley Utilization and Duration**

* 17% reduction in Foley Catheters used (significant reduction)
* Longer duration Foleys increased by 18%.  This is a normal occurrence when reducing the number of catheters used, however it is now what Freeman and Bard can work on together going forward

\*This is the key to this process.  Working together on improvement, not perfection.  Even after numerous successful data points shown above, there is still something for us to improve on, like duration.

\*Teamwork around continuous improvement allows hospitals to stay on the front end of a very competitive and comparative hospital environment

\*Because this duration scenario above is *important* and *common*, Bard’s solutions in product and education continue to grow around helping hospitals reduce duration and we continue to aim our development towards these areas as well.

Although HAC/CAUTI scores are commonly discussed and hospitals should be working towards improvement, they are difficult to use exclusively to make decisions because they are lagging indicators (often at least a year behind).  The Owner Summary shows that there is significant variation in the scores of each facility.  However, there is one very good data point and that is with **Freeman**.  They have the lowest CAUTI score of the group at 3.0 and have been on the front end of clinical activity and partnership with Bard.

Bard’s Foley Data Aggregation Program data base is going to make all of this data even more impactful as it allows you measure the MSS hospitals results against their peers.  A good analogy to put it into perspective:

* Imagine if someone just told me for the first time in my life that I weighed 180 lbs?  What would it really mean?  What value would it have?  (where we were a few years ago)
* Then imagine if someone was able to tell me my weight each of the past 3 years?  More helpful, correct? (where we have been the past few years)
* However, imagine now if someone can tell me my weight for the past 3 years AND the average weight nationally for males, etc.?  (where we are going now)

**Sustainability Quotient: (1-5 scale, 1 being most difficult to sustain)**

**1** because old habits die hard. There will need to be periodic follow up on a routine basis to make sure that the same standards are being practiced. Bard has a “paint-by-number” cath kit that costs a bit more, but if your facility experiences much turnover in this department, it could be worth the investment to keep the CAUTI rates from creeping back up

**Current Contracting Info:** 85699821 with Bard, expiring 7/1/18

**Financial Information:** Through July of 2017, MSS has purchased a total of: **226,773** in-dwelling Foley catheters.

That number is comprised of:

-**83% (189,238)** closed system insertion tray. These trays come complete with a catheter, all insertion components, and drainage bag or meter. There are over **100 different tray codes and 3 different tray layouts**

-**17% (37,535)** individual Foley catheters. This is only the catheter and requires the nurse to find insertion components and a drain bags or meter to use these individual Foleys. This does not include ANY of the specialty Foley catheters that a urologist would use in surgical cases.

$13M at risk, competitive scoring, inventory management, reduction in variation, who is already participating, nursing turnover rates?

**RECOMMENDATION:** Start the assessments with the owners (some have already begun), then gauge results going forward and make process scalable for next phase of members. Track and document results, with movement toward zero incidences of CAUTI among members, and potential for a white paper/case study

So how does Bard help us accomplish this strategy around utilization and Right Patient Right Product Right Time? That is where the Clinical Assessments come in to play. Conducting Foley Lifecycle Assessments within our facilities allows them to learn with you to better understand your practice, but it also allows them to get a better snapshot of what is working and what is wasted from each facility.  What’s most important is it allows for them to work on it from an inside-out approach rather than simply crunching spreadsheets.