

ROOT CAUSE ANALYSIS ACTION PLAN: SAFE SUTURE NEEDLE MANAGEMENT IN THE OR

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Keeping track of surgical needles of varying sizes is one of the most vexing problems surgical perioperative care personnel have to address. Surgeons and operating room nurses and technicians are at the sharp end of the problem (no pun intended) but like most processes of care in the OR, it is a system problem.

At the SFVAMC a number of years ago we conducted a QI study to look at the frequency of counting "discrepancies" in a 7 room OR suite. There were 1015 cases performed over the six month period of time and we received 184 end case survey reports for review. In these 184 reports there were 17 discrepancies. Eleven of the 17 discrepancies (65%) involved needles.

In October 2007 we had a retained surgical needle case that resulted in a root cause analysis. The RCA review identified policy violations in the requirement to take xrays for missing items. In addition we were told that the VA had recently settled a retained surgical needle case for a generous sum and parties within the VA were anxious to develop a program of prevention both to increase OR efficiencies and improve surgical patient safety.

As a result we set up a trial to develop a safe needle handling process which may reduce the numbers of missing and mishandled needles, prevent needlestick injuries and allow OR personnel to know with a high degree of certainty what size needle is missing if a needle is lost. The process uses a plastic tray as a neutral zone, involves nurse and surgeon practice change in the passing and organization of needles and requires nurses to sort and track needles by size. If we can establish that we have a safe and systematically applied process for needle management then we expect to change OR policy. The policy will require that in the event of an incorrect needle count, procedures will be carried out depending on the size of the missing needle and eliminate the requirement for taking xrays in the case of small needles. The results from our work may be generally applicable to all OR's in the VA.