Preoperative showers with chlorhexidine gluconate (CHG) have been shown to reduce the skin microbial colony counts. In addition, decolonizing the nasal and extranasal sites of patients preoperatively, the day of surgery and 2 days postoperatively decreases the risk of surgical site infections.

The objective of this program is to reduce surgical site infections with the hip and knee arthroplasty patients at The Methodist Hospital in Houston, Texas.

Preoperative patients are encouraged to attend a hospital sponsored educational class prior to hip and knee arthroplasty. Class curriculum includes information on this initiative to reduce infections through repeated preoperative showers with CHG and application of nasal Mupirocin ointment.

Patients that attend class and/or are evaluated by the anesthesia preoperative evaluation clinic are provided CHG to shower the night before and the morning of surgery. Preoperative patients are also provided a prescription for Mupirocin ointment and instructed to apply it for 5 days: 2 days prior to surgery, the day of surgery and 2 days postoperatively. As a teaching aid for each patient, a personalized surgery checklist is provided to instruct them on each step of the process.

Future plans involve conducting a study on the impact of showers and nasal ointment on the postoperative infections in joint replacement surgery patient population. Postoperative patients will be questioned on the number and timing of CHG and use of the intranasal Mupirocin ointment.