

# HIP AND KNEE REPLACEMENT PROGRAM

## Where we've been...

**M**ore than 1,000 total joint replacement (TJR) procedures are done annually through the Baystate Medical Center (BMC) Hip and Knee Replacement Program. TJR procedures are well proven to relieve the pain of arthritis and can greatly improve functional status and quality of life.

Since 1997, a multidisciplinary team has been in place to continually review and improve quality of care and satisfaction of patients undergoing TJR procedures. Many changes have been implemented, such as mandatory pre-operative education, pre-operative surgical risk screening, standardized orders and plans of care, optimal antimicrobial prophylaxis and pain management, hypotension management, temperature control, improving operating room efficiency, appropriate selection and use of supplies/equipment, adopting new technologies, such as the Navigator Robot, and competitive prosthetic pricing. In addition, several patient-centered projects and research studies have been completed.

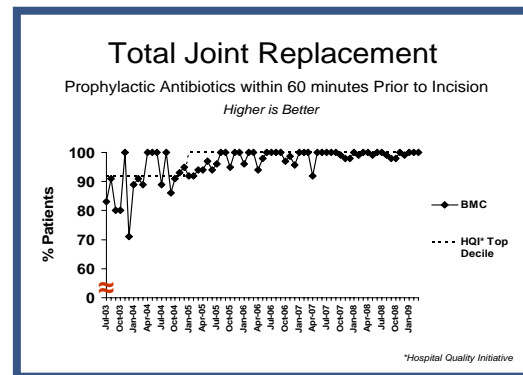
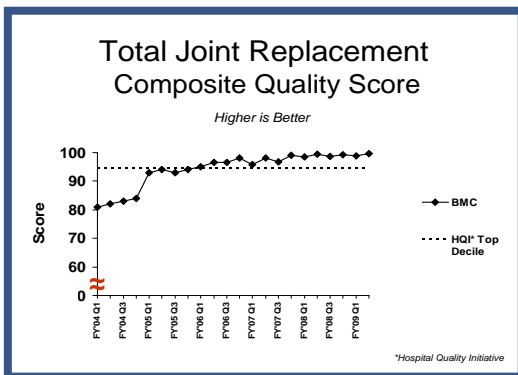
In 2009, BMC was recognized as a Premier "Top Orthopedic Performer" in Premier's Hospital Quality Demonstration (HQID) Project. Other notable accomplishments include being named a Baystate Health President's Quality Award "Distinguished Performer" and designation as a "Top 10 Orthopedic Performer" by Premier.

## Where we are now...

**BAYSTATE MEDICAL CENTER** TJR complication rates have consistently remained better than national averages (Premier Perspective Comparative Database, University HealthSystem Consortium). The 2009 post-operative dislocation rate, physiologic and metabolic dysfunction rates, and hemorrhage, wound infection and mortality rates remain below the national orthopedic benchmark of 3%, and in most areas are less than 1%.

The composite score for the TJR population includes the following measures related to antimicrobial prophylaxis: antibiotics given 60 minutes prior to incision, currently at 100%; appropriate antibiotic selection, currently at 100%; and ending therapy after 24 hours (a past focus area) is 99%. The "composite" score represents overall quality (how well BMC reliably provides all appropriate care), and has improved steadily since adoption of ending antibiotics within 24 hours and is currently 99.7%.

Intensive screening for risk of post-operative complications, changes in anesthesia selection, and optimal pain and antiemetic control, as well as easy access to on-unit rehabilitation facilities, have allowed patients to actively participate in their recovery, resulting in a length of stay consistently below the national benchmark. Patient satisfaction remains high, with scores comparable to or above the Professional Research Consultants (PRC) norm scores. Discharging patients directly to home or home with services continues to be a goal of the program.



## Where we are going...

A dramatic increase in demand for joint replacement is projected nationally over the next 10 years and beyond. It has been estimated that the number of total hip replacements will double and the number of knee replacements will triple over the next decade. We are developing care plans to prepare for the growing demand and anticipated increase in joint replacement volume. The BMC Center for Hip and Knee Replacement represents a commitment to ongoing quality improvement and innovative practice as we identify areas and processes to optimize delivery of quality care.