**Background**

Peripheral nerve blocks (PNB), in combination with general anesthesia, have been recognized as effective methods to manage acute surgical pain for orthopedic patients. PNB may be placed in the operating room (OR), but dedicated block rooms space outside the ORs may improve block quality and shorten non-operative OR time. Humber River Hospital, a community hospital in Toronto, Ontario, has dedicated four block rooms to support PNBs outside the ORs. However, despite having four block rooms to support four orthopedic ORs, the block rooms at HRH were often inefficient with delays in OR start time due to PNBs. Consequently, our “first case on time to OR” percentage was consistently below the provincial target. An interprofessional team of nurses and anesthesiologists was formed to analyze existing practice and to improve Block Room’s utilization at HRH.

**Aim**

To improve Block Rooms efficiency and to reach the 85% provincial target for “first case on time start” for orthopedic procedures at HRH in one year.

**Actions Taken**

An electronic patient tracing system was used to analyze existing practices, monitor progress and provide real time feedback. The system tracked patients’ location, time to enter and exit location, and type and time of care interventions. Using Plan-Do-Study-Act methodology, we implemented the following changes to the HRH block rooms:

- **PDSA Cycle 1 - Improve patient flow:** We established a block patient pathway, created patient information/education on PNBs, established criteria for patient selection in the block room, and created an “patient in block room 45 minutes before OR” initiative.
- **PDSA Cycle 2 - Improve work flow:** Staff education, new staffing model, daily block rooms schedules, pharmacy daily exchange block medication tray program, dedicated block room phones; documentation tools for staff assisting with procedure.
- **PDSA Cycle 3 - Reinforcement strategies:** Regular follow up with OR staff and real time monitoring to reinforce flow strategies and identify barriers to block room delays.

**Summary of Results**

From April 2016-May 2017, our “first case on time to OR” had improved from 64 % to 91% for orthopedic procedures at HRH as result of improving our block room efficiency. Consequently, we surpassed our initial goal of reaching the 85% provincial target for “first case on time start.” Our results demonstrated that standardized processes for block room utilization, supported by evidence based guidelines, patient education and communication, adequate staffing resources, and increased supplies, improve the block room efficiency at HRH.