

# \$672,000/year cost avoidance

## 1,100 BED DAYS ANNUAL SAVINGS: PICC PROCESS IMPROVEMENT

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### Enhancing patient care through PICC Process



### The Results

67% reduction in PICC Wait times  
(from 3 days to 1 day wait)

1,100 bed days saved  
(\$672,000/year cost avoidance)

Over 550 patients treated sooner each year



### CONTACT

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### Our Goal

To close the time gap from Peripherally Inserted Central Catheter (PICC) request to insertion and enhance timely transitions out of acute care. This initiative came from the Red Deer Regional Hospital Centre (RDRHC) Transformathon.



### The Challenge

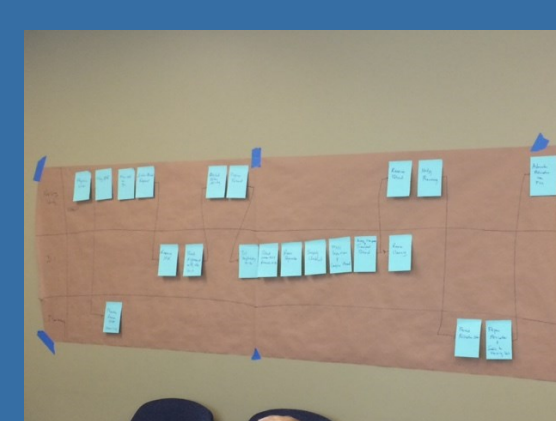
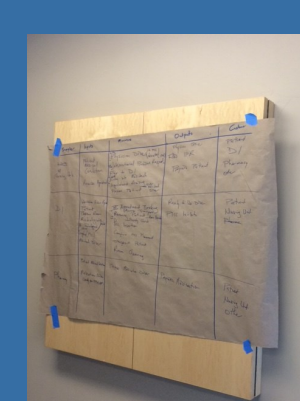
Prior to the initiative, PICC insertions took an average of 3 days from the time of request. This contributed to longer hospital stays and bed shortage for incoming patients.

### What we did

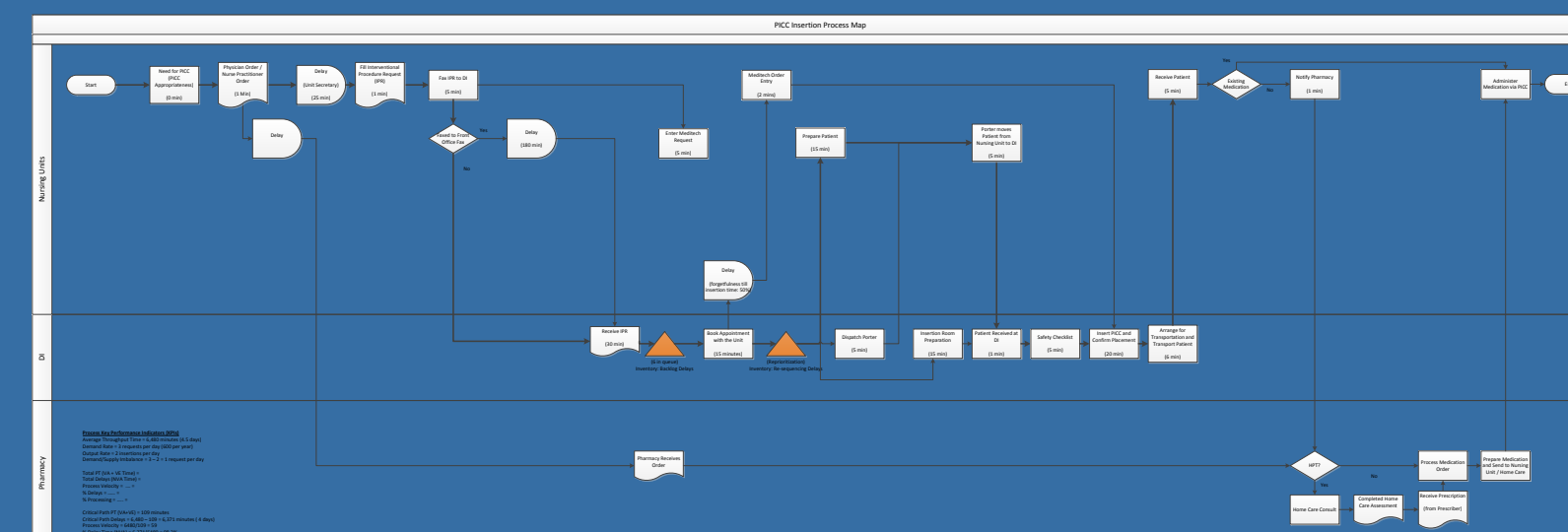
The RDRHC Transformathon was held to collaboratively decide what needs to be worked on. Over 80 diverse participants pitched 35 ideas resulting in 11 quality improvement project prototypes including this PICC project.

For this project, Sponsors from the relevant stakeholder departments were identified by RDRHC Leadership.

A multidisciplinary team including members from Diagnostic Imaging (DI), Nursing Units, Quality Improvement and Pharmacy was formed to lead the improvement journey.



At the first meeting, each stakeholder's perspective was heard, regarding the challenges they face with the PICC process and the impact on patient care.



Data was collected, the process was value stream mapped and bottlenecks were identified.

Demand and supply mismatch due to job reprioritization at DI, DI resource scheduling, and incomplete detail from nursing units was found to be the major cause of delays.

### Solutions

#### Data Driven Scheduling ►

New PICC Insertion Schedule was created to match the demand pattern. ★

Scheduling Protocol was updated at DI to ensure next day PICC insertion was maintained.

#### Information System Changes ►

Changes were made to the information system (MediTech) to facilitate better collaboration and prioritization of PICC Insertions.

Changes were also made to enable generating PICC Insertion Delay Reports for DI Manager.

#### Discharge with Peripheral IV ►

Discharging appropriate patients who are waiting for a PICC, with a Peripheral IV line for later PICC insertion was considered.

#### Educative Poster ►

Educative poster was developed and shared with units to reduce inappropriate PICC requests.



### Managing Change

Challenges encountered include staff concerns and staff education. The PROSCI ADKAR model was helpful to manage these challenges and implement change.

DI was able to manage and implement change through staff education using evidence based research and data collection which helped staff understand the need for change.

Materials and Educators were sent to each Nursing Unit to assist with MediTech changes and to answer questions. Nurses and Physicians at the Units were ecstatic at the improvement and efficiency noted by the changes taking place.

### What Next?

- Sustaining 1 day wait achievement with the help of MediTech automated wait-time tracking.

- Using similar quality improvement approach for other high volume DI Interventions.

