A Nurse Driven Strategy to Significantly Decrease PICC Insertion Delays Through the Design and Execution of a Pre-PICC Procedure Process
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Background
The PICC team places approximately 200 PICC lines per month.
The mean time from room arrival to start of procedure was 15 minutes.
The previous process was fragmented with subsequent delays.
The delays encountered when entering the patient’s room resulted in an average of 50 hours per month.

Objective
By decreasing the number of delays the PICC team encounters for each patient there was an opportunity to place more lines, decrease length of stay (LOS), increase patient throughput, decrease ED boarding, and increase patient and nurse satisfaction.

Implications
Measurable patient outcomes included decreased LOS, increased patient throughput, and decreased ED boarding.
Additional benefits included:
• increased patient satisfaction due to improved communication amongst the interdisciplinary health care team;
• increased overall nurse satisfaction with teamwork;
• increased the number of PICC lines placed per day;
• decreased delays in patient discharge times.

Methods
The team developed and implemented a Pre-PICC Procedure Process (P4) tool for the nursing staff.

First Call - RN will be notified that the patient’s PICC line will be placed within a 3 hour window.
- Notify patient they will be having a PICC line placed within the next 3 hours.
- Give patient the PICC Home Guide Handout and clarify plan of care.

Second Call - RN will be notified that the PICC team will arrive within 20 minutes to place the PICC line and request the P4 to be completed.
The remaining components of the P4 include:
- Assess toileting needs
- Place patient in bed
- Remove extra furniture from the room
- Assure bedside table is clear of all patient belongings
- Assess for pain, nausea or anxiety issues and medicate patient if needed

Results

<table>
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<tr>
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<th>Apr-14</th>
<th>Jun-14</th>
<th>Jun-15</th>
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<tbody>
<tr>
<td>Average wait to start PICC insertion</td>
<td>14.99</td>
<td>7.49</td>
<td>9.00</td>
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Conclusions
• The P4 check list items allow the bedside nurse to adequately prepare the patient, family, and the room for the procedure.
• In addition to improving the patient’s plan of care, the P4 improved operational flow resulting in a positive ripple effect for the entire organization.
• The P4 strategy may be replicated in other organizations to yield similar positive outcomes.

Implications
• Total procedure delays decreased from 15 to nine minutes per case.
• Total PICC placement prep time delays decreased from 50 hours to 30 hours per month.
• Length of stay decreased from 5.63 days (June 2014) to 5.25 days (June 2015).
• Hours on delay decreased from 267 (June 2014) to 0 (June 2015).
• ED Median Boarding time decreased from 7 hours (June 2014) to 5 hours (June 2015).