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Improving Type And Screen Specimen Collection Prior To Elective Surgery

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Project: Blood Bank - Elective Surgery Type & Screen
Last Updated: 8/21/2017

Team Members: NorDx Blood Bank Staff, Bramhall Campus, Suneela Nayak, Stephen Tyzik, Ruth Hanselman

### Executive Sponsor: Mark Parker
Facilitator: Haley Pelletier

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**Problem/Impact Statement:**

100% of scheduled elective surgery patients requiring transfusion will have a type and screen specimen 24 hours prior to surgery.

**Scope:**

**In scope:** Maine Medical Center (MMC) elective surgeries  
**Out of scope:** Elective surgeries other than MMC

**Goal/Objective:**

**Overall Goal:** The goal is to prevent any delays in providing compatible blood products to scheduled surgical patients.

**Baseline Metrics/Current State:**

- Lack of physician awareness.
- Lack of supporting systems, identifying which cases are at high risk.
- Fragmentation of patient care.

**Root Cause Analysis:**

- **Standard Type and Screen**  
  - Good for 3 days once completed  
  - Should be completed at least 24 hours prior to elective surgery

- **Extended Specimen Program**  
  - Good for up to 2 months if patient criteria met  
  - Should to be completed at least 24 hours prior to elective surgery

Main causes for delay in the availability of compatible blood for OR cases:

- No current Type & Screen  
- Patient has a positive antibody screen  
- Lack of pre-screened antigen negative RBCs

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**Countermeasures**

<table>
<thead>
<tr>
<th>Action</th>
<th>Owner</th>
<th>Due Date</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data collection of elective surgical cases without a type &amp; screen which required a transfusion or had a positive antibody screen.</td>
<td>Blood Bank Staff</td>
<td>Apr. 2016</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Interdisciplinary meetings</td>
<td>Blood Bank Staff</td>
<td>May. 2016</td>
<td>Completed</td>
</tr>
<tr>
<td>ESP outreach to additional providers</td>
<td>Blood Bank Staff</td>
<td>May. 2016</td>
<td>Completed</td>
</tr>
<tr>
<td>IT: electronic format for ESP EPIC ticket initiated</td>
<td>Blood Bank Staff</td>
<td>Sept. 2016</td>
<td>Pending</td>
</tr>
<tr>
<td>Extension of ESP 1-2 months</td>
<td>Blood Bank Staff</td>
<td>Jan. 2017</td>
<td>Completed</td>
</tr>
<tr>
<td>Continuing dialogue with all disciplines</td>
<td>Blood Bank Staff</td>
<td>For the life of the project</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Education of new ASU and NorDx staff</td>
<td>Blood Bank Staff</td>
<td>For the life of the project</td>
<td>Ongoing</td>
</tr>
<tr>
<td>Master surgical list requiring a type &amp; screen compiled by surgery, anesthesia, OB, BB, &amp; PREP</td>
<td>Inter-professional teams</td>
<td>Jun. 2017</td>
<td>Completed</td>
</tr>
</tbody>
</table>

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**Outcomes**

**No Type and Screen Completed 24 Hours Prior to OR Elective Procedure**

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**Next Steps**

- Continue to offer the ESP to additional providers
- Awareness of master surgical list associated with Blood Bank ordering practice criteria.
- Develop a process whereby the master surgical list of procedures requiring a type & screen is incorporated into the PREP workflow such that these patients do not end up in surgery without a type & screen if indicated.
- Complete EPIC ESP electronic documentation