Birth Defects Data Collection Kaizen - Community and Family Health

Kaizen Event: August 2013
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PROBLEM/SITUATION
- Changes to the new database have added complexity.
- It is difficult to identify where cases are in the case verification process, making data analysis inconsistent.
- There are too many delays in the process.

SCOPE
- **Starting point**: List of potential cases is reported to birth defects program.
- **Ending point**: Nurse reviews confirmed cases and flags as needed for additional review.

PROJECT GOALS
- Decrease time from initial report to nurse review by 50% over next 6 months.
- Decrease number of handoffs by 25% in the next 3 months.
- Increase consistency of data collected by 25% in the next 6 months.
- Decrease team reviews by 25% over the next 6 months.

CURRENT AND FUTURE STATE PROCESS METRICS

<table>
<thead>
<tr>
<th></th>
<th>Current</th>
<th>Future</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Time</td>
</tr>
<tr>
<td>Tasks</td>
<td>5-21</td>
<td>5-26 days</td>
</tr>
<tr>
<td>Waits</td>
<td>1-7</td>
<td>6-190 days</td>
</tr>
<tr>
<td>Handoffs</td>
<td>2-7</td>
<td>3-6</td>
</tr>
<tr>
<td>Storage</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Decisions</td>
<td>3-4</td>
<td>4-6</td>
</tr>
<tr>
<td>Total</td>
<td>11-216 days</td>
<td>2-51 days</td>
</tr>
</tbody>
</table>

- 84% reduction in wait time
- 76%-82% reduction in total process time

FUTURE STATE RECOMMENDATIONS
- Establish a more efficient process for resolving coding questions and using team review, including real-time referral for physician consultation.
- Revisit the way the MEDSS Birth Defects module is set up to try to simplify and improve it.
- Automate some handoffs in MEDSS.

CURRENT STATE OBSERVATIONS
- The process is simple but MEDSS makes it more complicated.
- There are huge variations in wait times; the longest wait time could be reduced significantly.
- Too many cases go to team review. It involves handoffs to many people. Sometimes minor errors get sent to team review.

ACTION PLAN HIGHLIGHTS
- Scheduled time for reviews and set daily goals.
- Consolidated codes and guidelines for abstraction.
- Updated MEDSS.
- Revised relevant Standard Operating Procedures (SOPs) and policies.
- Streamlined meetings and monitor timeliness bimonthly.

PERFORMANCE MEASURES

<table>
<thead>
<tr>
<th></th>
<th>Before Kaizen</th>
<th>After Kaizen</th>
<th>Change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td># cases Median (days)</td>
<td>668 22 19</td>
<td>820 27 11</td>
<td>-7.1 22.7 -42.1</td>
</tr>
</tbody>
</table>

DISCUSSION
- Maximum days to completion was reduced by 53% from 406 days to 192.
- Median days to completion dropped from 42 to 39 days (-7.1%).
- 85% reduction in the number of cases sent to team review (from 40 to 6), which reduced the number of handoffs and waits.

SURVEILLANCE TIMELINESS - PRE/POST KAIZEN BOX AND WHISPER PLOT

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