Using Lean Six Sigma to Improve a Nursing Career Ladder

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Background:
- Akron Children’s Hospital aims to be northern Ohio’s healthcare employer of choice.
- Nursing’s involvement in providing high quality care and improve patient outcomes is vital to our organization.
- Toward that aim, the CARE Ladder program was established to promote and advance excellence in professional nursing practice.
- To retain top talent, the program provides recognition and reward to RNs who demonstrate expertise in the areas of Clinical, Education, and Leadership.

Current Conditions:
- Number of participants has grown from 128 in 2003 to 344 in 2013 to 381 in 2014.
- Stratification with Spring/Fall applications each year 5 Levels, 3 tracks per level, each with varying requirements
- Tracking participants, communication of requirements and deadlines complex
- High volume of materials utilized
- Time involved in each step
- Dissatisfaction with forms easily accessed/requirements clearly defined/paperwork easily managed

Target / Goal:
- Increase nursing satisfaction of forms easily accessed/requirements clearly defined from 89% to 95%
- Increase satisfaction with paperwork easily managed from 75% to 85%

Key Factors:
- Information on program requirements
- Coaches/Mentors
- Project planning
- Reduction of paper waste; copies
- Accessibility of information from all sites
- Time from application to process complete (bonus)
- Clearly delineated timelines
- Use of electronic resources vs paper
- Accuracy of intent form/portfolio preparation
- Clarification of benefits information/timelines

Results
Control Phase

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<tr>
<th></th>
<th>Pre</th>
<th>N=86 4/2012</th>
<th>Post</th>
<th>N=100 4/2013</th>
<th>Net Change</th>
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<tbody>
<tr>
<td>% Intent Forms Complete</td>
<td>75%</td>
<td>75%</td>
<td>85%</td>
<td>88%</td>
<td>+14%</td>
<td>0.256</td>
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<tr>
<td>Average number of portfolio pages</td>
<td>82</td>
<td>53</td>
<td>-29 pages</td>
<td>na</td>
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<tr>
<td>Accuracy of intent form/portfolio</td>
<td>91%</td>
<td>98%</td>
<td>+7%</td>
<td>0.008</td>
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<tr>
<td>% New Level 2/3</td>
<td>64%</td>
<td>88%</td>
<td>+24%</td>
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Additional Benefits:
- Reduction of paper waste: average number of portfolio pages decreased from 82-53.
- Decreased over production: Mean time spent to complete portfolio decreased from 12 hours to 8 hours.
- Less down time in use of electronic resources

Control Plan:
- Satisfaction survey yearly to identify and act on any issues.
- Continue to consult with nursing informatics coordinator to improve electronic processes.
- Continue to transition to fully electronic application, portfolio, and evaluation system.

References:

Thanks to Project Coach: Trauida Gilbert, MBOE, BB

Improvements:
- Mentor training
- Re-organize information for easier electronic access
- Revised CL database to integrate/automate information
- Created CARE Ladder SharePoint site to house all forms, information, links to information sessions on webinar.
- Revised CARE Ladder site on myKidsnet to make accessible 24/7
- Forms change to be able to type in from any computer

Voice of the Customer - Critical to Quality Tree

Fishbone Diagram

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Diagram:

- Voice of the Customer - Critical to Quality Tree
- Fishbone Diagram

Graph:

- Number of CARE Ladder Participants Over Time
- Form/Portfolio Due dates
- Details
- Communicate requirements clearly defined/paperwork easily managed

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