A Six Sigma Approach to Denials Management

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Stanly Regional Medical Center
Albemarle, NC
Agenda

- Overview & Background
  - About Stanly Regional
  - Project History
  - Six Sigma Overview
- Using the Six Sigma DMAIC process methodology to tackle insurance denials
  - Define
  - Measure
  - Analyze
  - Improve
  - Control
- Parting Advice/Takeaways
- Q & A
About Stanly Regional

- Located 1 hour east of Charlotte in Albemarle, NC
- 97 Acute Care Beds, 10 Rehabilitation Beds, and 12 Behavioral Health Beds
- Specialties include Cancer Treatment, Imaging, Women’s Services, and Rehabilitation
Project Overview

Team Members:
- Nick Samilo, Executive Champion
- Kelly Hill, Health Information Management
- Todd McSwain, Patient Accounts
- Renee Rogers, Decision Support
- Janet Daugherty, Patient Accounts
- Mary Kiser, Patient Access
- Elaine Byrd, Patient Accounts
- Betsey Kennedy, Project Black Belt
Before Denials Management…
  - A project was done to improve registration processes
    - Project 1 Goals:
      - Make the registration process as easy as possible for our patients
      - Reduce the number of registration errors that occur
      - Ensure accurate demographic data
      - Provide financial counseling to patients at the time of registration
      - Go live with the new process October 1, 2007

  - The Denials Management project started in October 2007, after the registration project
What is Six Sigma (and why did we use it)?

- Six Sigma is a project methodology that strives for:
  - Continuous Improvement
  - World-class Quality (only 3.4 defects per 1 million opportunities)
  - Customer Satisfaction

- The Six Sigma approach follows 5 phases:
  - Define: Identify, prioritize, and select projects
  - Measure: Identify & understand process parameters and measure performance
  - Analyze: Identify the key process determinants
  - Improve: Optimize performance
  - Control: Hold the gains
What is Six Sigma (and why did we use it)?

- Denials Management is a “textbook” type of Six Sigma project
  - Insurance denials are defects in your revenue cycle process
- Six Sigma provides a focused methodology for reducing defects
- Stanly Regional had no previous experience using Six Sigma in the past
Project Overview

- **Project Statement:**
  - From November 2007 to January 2008, Stanly Regional Medical Center averaged over $760,000 in insurance denials each month, leading to a 5.47% denials/charges ratio.

- **Mission Statement:**
  - Reduce the amount of insurance denials to 2.0% by June 2008, resulting in a savings of $5,600,000.
Project Overview

- The Six Sigma DMAIC Methodology was utilized to minimize the quantity of denials and reduce the Denials/Charges ratio.
- The Denials/Charges ratio (3 month average) decreased to 4.12% (as of May 2008), resulting in an annualized savings of nearly $1.6 million.
- We are still working toward sustaining improvement and our Denial/Charges ratio goal of less than 2.0%.
  - **3.67% as of November 2008
Define Phase

- First, the team developed a charter to define the project’s purpose, metrics, and goals:
  - **Purpose:** SRMC has a major problem with insurance claims being denied. These denials require investigation and rework and cause a substantial loss of revenue. The purpose of this Six Sigma project is to reduce the volume of insurance claims that are denied to minimize rework and increase revenue.
Define Phase

- **Metrics:** Performance improvement is measured by examining the Denials/Charges Ratio. Additionally, the volume of denials should be measured and monitored.
  
  - We counted all denials, even the ones out of our control

- **Goals:** The team will implement necessary process improvements and develop control mechanisms by project’s end to achieve a sustained Denials/Charges Ratio of 2.0%.
Define Phase

- The team mapped the process for a “clean claim”, meaning a claim is submitted to a payer and paid without delay.
- There is no denial of payment.
Measure Phase

- Automated tracking of denials using Meditech was not possible because important details (ex. Reason for denial) were not always able to be captured.
- Therefore, the team created a Denials Tracker worksheet. Insurance Analysts were instructed to enter all denials into the worksheet beginning in October 2007.
- Information was collected for Payer, Reason for Denial, Ability to Appeal, Date of Denial, Final Billing Date, $ Amount Denied, $ Amount Recovered, etc.
Measure Phase

- The Denials Tracker allowed the team to look at the top payers and reasons for denials (in terms of both $ amount and quantity). The 80-20 rule was used to prioritize the team’s focus.
- After 3 months of data were collected, the team established a baseline denials/charges ratio of 5.47%. (October data were omitted.)
Analyze Phase

Claims Denials & Delays - Cause & Effect Diagram

Policies
- Insurance policies beyond our control
- No policy to address walk-ins
- No policy for late charges going back to the departments
- No policy for community to realize that we are serious about having correct info
- Pt can refuse treatment, need a policy for documenting this, ABN form to sign

People
- Staff training: Insurance, Medifax
- Not focusing on one patient at a time
- Unit secretary training (V#s, billing)
- Staff not educated on clinical issues
- Not looking at armband (radiology?)
- Patients don’t know about insurances
- Staff need to be able to handle insurance changes

Equipment/Space
- Windstream - delay for fax line, work order for credit card lines
- Printers need installed

Procedures
- MD/MD office need training on walk-in
- Physicians office issues
- Need to address changes in repetitive issues
- A.M. admits (MORE/MCAI D payments - ? denials)
- Clinical Documentation (UR nurse)
- RCR patient status (revise)
- Late charged (ex. CO-1 code)
- Agreement to pay form needs changed to
- Many patients are walk-ins (Radiology)
Analyze Phase

- The original clean claim process diagram was analyzed to identify vulnerabilities in the process. Any problems that could potentially occur were noted on the diagram.
# Analyze Phase

- **Failure Mode and Effects Analysis (FMEA)**

<table>
<thead>
<tr>
<th>Process Step</th>
<th>Potential Failure Mode</th>
<th>Potential Effect(s) of Failure</th>
<th>Severity</th>
<th>Potential Cause(s)</th>
<th>Occurrence</th>
<th>Current Controls</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Full Registration Process</strong></td>
<td>Billing primary vs. secondary</td>
<td>denied claims, no payment, rework, have to start all over</td>
<td>4</td>
<td>Medicare questionnaire not completed, PACs not using resources</td>
<td>4</td>
<td>- MSP Questionnaire&lt;br&gt;- Medifax (for Medicaid)&lt;br&gt;- PACs make copies of all cards for verification</td>
</tr>
<tr>
<td>Charges entered by ancillary depts. (after the procedure)</td>
<td>Charges not entered</td>
<td>lost revenue, rework (if caught)</td>
<td>6</td>
<td>carelessness by clinical areas</td>
<td>4</td>
<td>- Pyxis ensures that supply charges are entered&lt;br&gt;- ED, SDC do manual review of accounts&lt;br&gt;- SSI Edits</td>
</tr>
<tr>
<td>Order entered by ancillary depts. (generates charge) (before the procedure)</td>
<td>Non-Covered charges / MCRE (abdominal/pelvic CT)</td>
<td>write offs, fraud, compliance issues</td>
<td>5</td>
<td>physician choice</td>
<td>3</td>
<td>- none</td>
</tr>
<tr>
<td>Chart analyzed by HIM clerk</td>
<td>Chart does not match Meditech demographic info (due to reg errors)</td>
<td>delay, rework</td>
<td>2</td>
<td>PAC makes error</td>
<td>2</td>
<td>- PACs getting educated on errors</td>
</tr>
</tbody>
</table>
### Analyze Phase

- From the Denials Tracker – November 2007:

<table>
<thead>
<tr>
<th>Reason</th>
<th>Total</th>
<th>Cumul. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>INFO REQUESTED FROM PT</td>
<td>48</td>
<td>10.46%</td>
</tr>
<tr>
<td>COVERED BY ANOTHER PAYOR</td>
<td>47</td>
<td>20.70%</td>
</tr>
<tr>
<td>SERVICES NOT COVERED</td>
<td>43</td>
<td>30.07%</td>
</tr>
<tr>
<td>PATIENT NOT COVERED ON DOS</td>
<td>42</td>
<td>39.22%</td>
</tr>
<tr>
<td>INCORRECT AUTH NUMBER</td>
<td>34</td>
<td>46.62%</td>
</tr>
<tr>
<td>NEED MEDICAL RECORDS</td>
<td>31</td>
<td>53.38%</td>
</tr>
<tr>
<td>BILLING PROV NOT CA PCP</td>
<td>26</td>
<td>59.04%</td>
</tr>
<tr>
<td>PAYS PART B PREMIUM ONLY</td>
<td>24</td>
<td>64.27%</td>
</tr>
<tr>
<td>NEED EOB FROM PRIMARY INS</td>
<td>22</td>
<td>69.06%</td>
</tr>
<tr>
<td>OTHER</td>
<td>22</td>
<td>73.86%</td>
</tr>
<tr>
<td>NAME DOES MATCH MCD CARD</td>
<td>18</td>
<td>77.78%</td>
</tr>
<tr>
<td>INCORRECT OR MISSING PT INFO</td>
<td>15</td>
<td>81.05%</td>
</tr>
</tbody>
</table>
Analyze Phase

- From the Denials Tracker – November 2007:

<table>
<thead>
<tr>
<th>Payer</th>
<th>Total</th>
<th>Cumul. %</th>
</tr>
</thead>
<tbody>
<tr>
<td>MCAD TRADITIONAL</td>
<td>90</td>
<td>19.61%</td>
</tr>
<tr>
<td>MCAD MANAGED CARE</td>
<td>82</td>
<td>37.47%</td>
</tr>
<tr>
<td>MCRE TRADITIONAL</td>
<td>81</td>
<td>55.12%</td>
</tr>
<tr>
<td>BCBS</td>
<td>51</td>
<td>66.23%</td>
</tr>
<tr>
<td>MEDCOST</td>
<td>39</td>
<td>74.73%</td>
</tr>
<tr>
<td>COMMERCIAL</td>
<td>31</td>
<td>81.48%</td>
</tr>
</tbody>
</table>
Improve Phase

- Action plans were created for the most critical failure modes and denials reasons. Responsibilities and due dates were assigned to each team member.
- The team met two times each week to continually monitor the progress of the action plans.
## Propose centralized scheduling plan. Utilize the Meditech system that has already been purchased.

- **Task Leader:** Betsey Kennedy
- **Team Members:** Kelly H, Mary, Todd, (Erin, Peggy, Beth Little or Eric V, Gail G, Kelly A)
- **% Done:** 100%

## Propose that all ancillary appointments are scheduled.

- **Task Leader:** Betsey Kennedy
- **Team Members:** Janet Daughtery, Denials Team
- **% Done:** 100%

## Write a formal policy for handling walk-ins.

- **Task Leader:** Betsey Kennedy
- **Team Members:** Janet, Denials Team, Radiology PACs
- **% Done:** 100%

## Automate Denials Tracker, incorporate with Reg Errors log

- **Task Leader:** Betsey Kennedy
- **Team Members:** 5, Denials Team
- **% Done:** 0%

## Emphasize importance of late charge reports to departments. The reports need to be taken seriously and reviewed by an attentive manager.

- **Task Leader:** Elaine Byrd
- **Team Members:** Kelly, Todd
- **% Done:** 100%

## Draft proposal for late charges to be charged back to accountable department to promote timely charges.

- **Task Leader:** Elaine Byrd
- **Team Members:** Kelly, Todd
- **% Done:** 100%

## Work with Ben Jolly in PR to inform patients about the importance of correct information. Could hold potential sessions on what patients need to know about insurance or Medicare advantage plans. (~ Lab Drop Offs)

- **Task Leader:** Elaine Byrd
- **Team Members:** SHIIP, Ben Jolly
- **% Done:** future

## Hold education sessions with nursing homes/assisted living.

- **Task Leader:** Elaine Byrd
- **Team Members:** SHIIP, Ben Jolly
- **% Done:** future
Improve Phase

- Other specific improvement tasks included:
  - Increasing accountability for Patient Access and Patient Accounts Staff.
  - Improved communication and continuing education for Patient Access staff.
    - Adding a Lead Patient Access Coordinator
  - Making improvements to Medifax system to correctly verify insurance at time of registration.
Improve Phase

- Several improvements are planned for the future:
  - Contract negotiations with payers.
  - Nursing home education.
  - Integrating the Denials Tracker with Meditech.

- The Improve Phase seemed to function as a continuous cycle. As new data became available, new action plans were created to target each denial reason / payer.
Results

The table below summarizes Denials/Charges ratios by month. There are two ways to consider this ratio:

(1) Denials by the Month Received – this is the actual month the denial came back from the payer. It is a more accurate measure because once a month ends, no more denials can be added to that month.

(2) Denials by the Date of Service Month – this is the month a patient actually came in for service. At any given time, denials may come in for any DOS, so this number could change frequently. It is a less accurate measure but can be used to forecast trends in the coming months.

<table>
<thead>
<tr>
<th>Month</th>
<th>(1) Month Received Denials / Charges</th>
<th>(2) DOS Month Denials / Charges</th>
</tr>
</thead>
<tbody>
<tr>
<td>November-07</td>
<td>4.99%</td>
<td>5.95%</td>
</tr>
<tr>
<td>December-07</td>
<td>5.79%</td>
<td>5.86%</td>
</tr>
<tr>
<td>January-08</td>
<td>5.64%</td>
<td>3.94%</td>
</tr>
<tr>
<td>February-08</td>
<td>5.49%</td>
<td>4.02%</td>
</tr>
<tr>
<td>March-08</td>
<td>5.00%</td>
<td>3.17%</td>
</tr>
<tr>
<td>April-08</td>
<td>3.91%</td>
<td>3.73%</td>
</tr>
<tr>
<td>May-08</td>
<td>3.45%</td>
<td>4.63%</td>
</tr>
</tbody>
</table>

A decrease in the D/C ratio from 5.47% (baseline) to 4.12% (3-month average) results in a savings of over $132,000 monthly, or nearly $1,600,000 per year. Rework by insurance analysts is also substantially reduced.

** November 2008 D/C ratio = 3.67%
Control Phase

- Controls Currently Implemented:
  - Adding a Lead Patient Access Coordinator to help with performance monitoring, training, and knowledge transfer.
  - Creating an inventory of financial reports to easily identify:
    - Purpose
    - Creator
    - Recipients
    - Frequency
  - A well-established system for updating of the Denials Tracker and creating new action plans as needed.

- Future Goals / Opportunities:
  - A more automated denials monitoring process.
  - Creation of a Chargemaster Team to address problems with the charge process.
Parting Advice / Takeaways

- Addressing insurance denials is a big project
  - Expect lots of time and resource commitment
  - The Revenue Cycle Team at Stanly Regional still meets once each week to look at the most recent denials and drive further improvements
  - Insurances change frequently, and hospitals must stay on top of these changes to maximize revenue
  - Significant return on investment can be achieved
    - Get the right team together
    - If not already tracking insurance denials, start as soon as possible
    - Install accountability where appropriate
    - Let the front line staff know that you’re seeing improvement
Contact Information

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Questions

- Thank you for your attention!