Clinical Safety & Effectiveness
Cohort 18 Team #9

Medication Reconciliation Upon Discharge from an Inpatient Psychiatry Unit

CENTER FOR PATIENT SAFETY & HEALTH POLICY

UT Health Science Center™

SAN ANTONIO
The Team

• Clinical Pharmacy Service
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• Pharmacy Service
  – Tera D. Moore, PharmD, BCPS, BCACP – Associate Chief, Clinical Pharmacy Programs (Sponsor)
• Psychiatry Service
  – Uma Kasinath, MD – Chief, Psychiatry Service (Sponsor)
  – Nicole Braid, MD – ACOS, Mental Health (Sponsor)
• Facilitator: Edna Cruz, MS, RN, CPHQ
AIM Statement

To increase accuracy of medication reconciliation completed at discharge from inpatient psychiatry (GLA PSY at STVHCS) as documented in the Medication Reconciliation and Discharge Note from 37.5% to 75% by May 15, 2016
Project Milestones - 2016

- **Team Created**: January
- **AIM statement created**: February
- **Weekly team meetings**: Jan 25 – June 1
- **Background, brainstorming, analysis**: Jan 25 – Feb 19
- **Intervention implemented**: April 1
- **Data Analysis**: May 15
- **Final Presentation**: June 3
Background

- Medication reconciliation is the #3 National Patient Safety Goal as discharge discrepancies lead to ADEs – a common event after hospital DC\(^1\)
- A recent study evaluating an 80 bed private psychiatric hospital, found 45% of medication reconciliations to be without error.\(^2\)
- The VHA has developed Essential Medication Information Standards to define the essential elements necessary on discharge and to comply with Joint Commission standards\(^3\)

1. Medication Reconciliation from AHRQ Patient Safety Network 2015  
Preliminary Data Review

40 charts reviewed of patients discharged from GLA PSY in January 2016

- 15% with medication errors (n=6)
- 62.5% with documentation errors (n=25)
- 12.5% with both (n=5)
Problem Statement
During (time), Pareto accounted for 50% of the problem which was 3X higher than desired and caused customer dissatisfaction.

Materials
- TIME (TAKES TOO LONG)
- NO MED REC COMPLETED
- MED NOT PROVIDED
- NEW MED NOT ON MED REC
- NON VA MEDS IGNORED
- NO SOP FOR MED REC

Process/Methods
- INCORRECT SIG
- MED NOT DISCONTINUED
- UNCLEAR PLAN
- MED REC NOT COMPLETED
- QUANTITIES
- REFILLS
- DOCUMENTATION UNCLEAR (TEMPLATE)
- WRONG INDICATION (AUTOPOP)
- NO STOP DATE FOR ANTIBIOTIC
- COPYING AND PASTING
- NO OUTPATIENT ORDERS FOR LAI
- FREE TEXT
- NO INDICATION FOR MEDS
- NON-VA MEDS NOT DATED

People

Machine
Pareto of Medication Errors by Type

Number of error by Category

- Incorrect Med List: 15 (36%)
- Indication: 13
- Med Error: 6
- Duplicate Med List: 5
- Not Completed: 3

Total: 42 errors
Pre-Intervention Data

List of patients admitted to inpatient psychiatry obtained from service line folder

Brief chart review conducted to determine discharge dates

Discharges broken by week and 6 charts randomly selected for intensive review
Process Control Chart

Medication Reconciliation
Percent Correct at Time of DC
Sample per Week - p Chart

Medication Reconciliation % Correct at DC

UCL: 100%
CL: 51.9%

Week/Year

1/14-10/2016
1/11-17/2016
1/18-24/2016
1/25-31/2016
2/1-7/2016
2/8-14/2016
2/15-21/2016
2/22-28/2016
2/29-3/6/2016
3/7-13/2016
3/14-20/2016
3/21-27/2016

0.0%
16.7%
33.3%
83.3%
16.7%
66.7%
66.7%
83.3%
50.0%
33.3%
33.3%
100%
# Action Plan

**Aim Statement:** To increase accuracy of medication reconciliation completed at discharge from inpatient psychiatry (GLA PSY at STVHCS) as documented in the Medication Reconciliation and Discharge Note from 37.5% to 75% by May 15, 2016

<table>
<thead>
<tr>
<th>Action Strength</th>
<th>Action Driver</th>
<th>Action</th>
<th>Why</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong</td>
<td>Unstandardized process between providers</td>
<td>Develop and establish an SOP for providers</td>
<td>Standardize</td>
<td>April 4, 2016</td>
</tr>
<tr>
<td>Intermediate</td>
<td>Unstandardized process between providers</td>
<td>Development of simple checklist to be placed at all computer work stations</td>
<td>Simplify</td>
<td>April 4, 2016</td>
</tr>
</tbody>
</table>

Haugen AS et al. Ann Surg 2014;00:1-8
Intervention

Draft of Checklist and SOP
Written and Sent to All Services

Revised

Beta Test of Checklist

After Input

Nursing, Pharmacy, Inpatient Providers, Psychiatry
## Discharge Checklist

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>D/C outpatient medications no longer indicated</td>
</tr>
<tr>
<td>2.</td>
<td>Only one medication list per note <em>(delete any others that may have been copied into the note)</em></td>
</tr>
<tr>
<td>3.</td>
<td>All medications have <strong>correct</strong> indications <em>(non-VA and OTC included)</em></td>
</tr>
<tr>
<td>4.</td>
<td>No duplicate medications are present</td>
</tr>
<tr>
<td>5.</td>
<td>All <strong>new</strong> medications are listed <em>(including primary care medications)</em></td>
</tr>
<tr>
<td>6.</td>
<td>All <strong>changed</strong> medications are listed</td>
</tr>
<tr>
<td>7.</td>
<td>All <strong>discontinued</strong> medications are listed</td>
</tr>
<tr>
<td>8.</td>
<td>Med Rec D/C Summary Note is error-free</td>
</tr>
</tbody>
</table>
DO: Implementing the Change

April 4, 2016

Checklist Posted

Providers Notified

Use Encouraged

Questions

Questions

Questions
# Calendar of Events

<table>
<thead>
<tr>
<th>April 15, 2016</th>
<th>April 20, 2016</th>
<th>May 15, 2016</th>
<th>May 16 and Beyond</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obtain Feedback On Checklist Use</td>
<td>Attend Inpatient Provider Meeting</td>
<td>Last Day of Data Collection</td>
<td>Gather Final Data</td>
</tr>
<tr>
<td>Modify Checklist if Needed</td>
<td>Provide Copies of the SOP</td>
<td>Celebrate!</td>
<td>Complete CS &amp;E Course</td>
</tr>
<tr>
<td>Query Use</td>
<td>Highlight Key Points for Discussion</td>
<td></td>
<td>Begin to Work on Other Elements of Discharge Process</td>
</tr>
<tr>
<td>Replace Missing Lists</td>
<td>Modify SOP if Needed</td>
<td>Initiate Process for Implementation</td>
<td></td>
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</tbody>
</table>
Results

Medication Reconciliation
Percent Correct at Time of Discharge
Sample per Week - p Chart

UCL 100.0%
91.1%

CL 44.9%

Re-appropriation of Staff
Checklist deployed
## Results

### Central Tendencies

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>$44.87 \pm 27.64%$</td>
<td>$33.33 \pm 18.26%$</td>
</tr>
<tr>
<td>Median</td>
<td>33.33%</td>
<td>33.33%</td>
</tr>
<tr>
<td>Mode</td>
<td>33.33%</td>
<td>50.00%</td>
</tr>
</tbody>
</table>
Troubleshooting

- Lack of Monitoring
- Re-appropriation of Staff
- Shifted Priorities

Setback
ACT: Sustaining the Results
ACT: Sustaining the Results

- Education
- Handbook
- Auditing
- Med Rec
Return on Investment

COSTS
- CPS time

SAVINGS
Through Process Improvement
- medication waste
- provider time
- nursing time
- pharmacist time
Not So Soft Savings

• Veteran Satisfaction
  – VHA exceeds private hospitals on care transition\(^1\)
  – On par for discharge information and medication communication\(^1\)

• Provider Satisfaction
  – “When you get in the work environment, it’s more and more clear that the team causes the largest change in outcomes for patients” - John Jelovsek, Cleveland Clinic\(^1\)
  – Changing the culture

• Regulatory Compliance\(^2\)