Clinical Safety and Effectiveness
Session: 5
Team Members

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Sponsors

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What We Are Trying to Accomplish?

OUR AIM STATEMENT

Increase the mean number of variance reports from the 3rd and 6th floor of the CHRISTUS Santa Rosa Children’s Hospital by 50% by the end of August 2010.
The ultimate goal is to create an environment where the nursing staff feels “safe” in reporting adverse outcomes, errors and near misses. We are striving to promote a “Culture of Safety.”
A culture of safety implies:

- **Acknowledgement of the high-risk, error-prone nature of an organization’s activities**
- **A blame-free environment** – a place where staff can report errors and near misses without fear of punishment or reprimand
- **Collaboration across the ranks to seek solutions to vulnerabilities**
- **Organization’s willingness to direct resources for addressing safety concerns**

One study by Flynn, et. al. compared methods of reporting:

- Direct observation, chart audits and variance reports were compared to determine how medication errors were reported in 2,557 doses administered.
  - 476 errors were reported on direct observations
  - 24 errors were noted during chart audit
  - 1 incident report was filed

(Flynn, Barker, Pepper, Bates & Mikeal, 2002)
Background

- **Multiple studies have looked at nurses' perceptions of medication error reporting:**
  - Nurses in 2 multi-hospital surveys (N=1,300) estimated that only 57% of medication errors were reported (Stratton/Wakefield et al., 1999).
  - Elnitsky, Nichols and Palmer (1997) polled 424 nurses
    - 14% did not believe that variance reports were reliable and valid
    - 14% did not believe that taking time to complete the reports would prevent future occurrences
    - 25% believed that their supervisors would use the variance report against them.
Reasons for Underreporting

- Unrecognized error
- Error judged to be harmless
- Fear of censure
- System factors discouraged variance reporting
  (Stratton/Wakefield et al., 1996, 1998, 2001)
How Will We Know That a Change is an Improvement?

- It is well accepted throughout medicine that improving error and near-miss reporting is beneficial to patients, practitioners, and system-based practices
  - Nothing can be learned from an error that goes unrecognized or unreported
- Promotion of a culture of safety provides a work environment that allows nurses to take responsibility for actions without fear of reprimand
  - Would likely increase job satisfaction
Selected Process Analysis Tools

- Flowchart -- allows us to identify the people and processes that contribute to successful variance reporting.
- Fishbone -- allows us to map out the factors that prohibited variance reporting.
Event Occurs

Reported?

Yes

Reviewed by BM

No

Fear of Retaliation
Fear of Disciplinary Action
Lack of Knowledge
Too Time Intensive
Cumbersome

Action Needed

Yes

Perform Needed Action

No

Send Thank You to Person Who Submitted Report

Sentinel Event?

Yes

Conduct RCA

No

File Report to Corporate Through Risk Master
Fishbone Diagram Template: **Variance Reporting**

- **Measurement**
  - Lack of data available to manager

- **Materials**
  - Availability of paper forms
  - Unable to locate HR, RM, QM

- **Method**
  - Availability of instructions
  - Unable to locate policy
  - Where to report, what to report

- **Environment**
  - Fear of Retaliation
  - Disciplinary action
  - Lack of respect
  - Fear of Punative Action
  - Fear of litigation

- **Manpower**
  - Time Factors
  - Who reports?
  - Dishonesty: Fear, Unclear expectations
  - Fear of Punative Action

- **Machines**
  - Software
  - Computers - down time,
  - lack of knowledge: don't know who to ask for when help is needed
  - lack of computer

**Lack of Variance Reporting**
April 24, 2010
Initial Meeting
AIM statement

May 2010
Attended Staff Meetings on 6th floor
Surveys done
Education on Event Reporting

May 13 & 14,
AIM Statement
Metric Flow Chart
Cause & Effect Diagram

July
Post Intervention
Data Collection
Revisit Nursing Units

September 17
Graduation Presentation of Project

Meeting with Managers
Collected variance report data from 2009

May 2010
Surveys done on 3rd floor

June 17 & 18
Houston Data Baseline
OF Tools Pareto Chart

August 2010
Post Intervention Data Collection
Plan

- Meet with Nurse Managers
- Survey Associates on 3rd and 6th floors regarding event reporting
- Attend monthly unit council meetings starting in May 2010.
- Create posters educating staff on the need for variance reporting.
Intervention (cont.)

- Share printed screen shots with instructions on how to complete a Meditech Risk Notification
- Review Variance Reporting Policy at unit council meetings
- Obtain and review data for risk reports completed between June 2009 - August 2010
- Send Thank You e-mails to staff when Risk Notification is submitted.
- Reminder flyers posted on each unit during the month of August
Survey

Risk Reporting Survey

Thank you in advance for helping us by completing this survey. The answers are to help us identify why staff report or do not report variances. Please review, complete and return the survey to your manager prior to May 12, 2010.

1. Do you report events?
   □ Yes
   □ No

2. If you do not report events can you chose the reason (s) from the list below or add your reason(s) in the space provided below?
   □ Afraid of retaliation
   □ Afraid of disciplinary action
   □ Do not know what to report
   □ Do not know when to report
   □ Do not know where or how to report
   □ Too cumbersome to complete
   □ Other: _________________________________

Do you feel that you have a responsibility to report adverse outcomes?
   □ Yes
   □ No

4. Do you feel that you have a responsibility to report near misses?
   □ Yes
   □ No

5. What types of events/issues should be reported? Give three examples.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
Survey Results

- Twenty one staff nurses responded.
- Twenty of the twenty one stated they reported events.
- Reasons for not reporting:
  - Reporting process was cumbersome
  - Too busy during the shift
- Twenty nurses felt it was their responsibility to report adverse outcomes
- Seventeen nurses felt it was their responsibility to report near misses
Survey Results (cont)

- Issues that Associates felt should be reported:
  - Falls
  - Medication errors
  - Work incidents
  - Infection
  - Unsafe practices
  - Unsafe nursing care
  - Patient/visitor/employee injury
  - IV infiltrates
  - Billing
  - Bodily fluid exposure
Implementing the Change

Do

- Associate education provided at unit council meetings
- Posters were created and hung on the 3rd and 6th floors of the Children’s Hospital
- Continued communication with Nurse Managers
- Thank you e-mails sent to Associates with each completed Risk Notification
Results/Impact

Check

- Reviewed the number of events reported during June - August 2009 and compared the number of events with June - August 2010.
- June - August 2009 there were a total of 16 risk reports generated
Expansion of Our Implementation

Act

- Continue to track Risk Notifications for 3rd and 6th Floors
- Share Results of the Study with the Directors, PIPS and Senior Leadership of Children’s Hospital
- Incorporate plan to include all Nursing Units by educating staff and management.
Return on Investment

- If events are reported within 30 days of event occurrence, this will play into a potential savings of a percentage of 10% of professional liability premium which could result in a cost savings of between $125,000 - $140,000 this year for the organization.
Statistical Process Control Chart showing project events by month

Pre Intervention period

Intervention

UCL 12.16

CL 5.27

Reports

Time Period

June 09 July 09 Aug 09 Sept 09 Oct 09 Nov 09 Dec 09 Jan 10 Feb 10 Mar 10 Apr 10 May 10 June 10 July 10 Aug 10
Conclusion

- June - August 2009 vs June - August 2010
  - We increased reporting by 61.5% (from 16 to 26)
- Comparing June 2009 - April 2010 to May-August 2010 shows an increasing trend of reporting post-intervention
  - Mean number of reports made 6/09-4/10 was 5.2 compared to a mean of 7.5 for 5/10-8/10
Conclusion

- Overall we have seen an increase in variance reporting from the nurses on 3rd and 6th floors at The Christus Santa Rosa Children’s Hospital

- Culture of Safety
  - Nurses feel more comfortable reporting
  - Nurses are taking responsibility for actions and errors
  - Reporting has been made slightly more user-friendly (Improved system-wide intervention)
Conclusion

- Continuing our interventions should continue to improve rates of variance reporting
- Nurses and physicians can evaluate causes of errors/near-misses and factors that influence their occurrence
  - Both entities can learn from this information
  - System-based practices can be modified
  - Patients and families benefit
References


- Milch C, Salem, D et al. Voluntary Electronic Reporting of Medical Errors and Adverse Events, An Analysis of 92,547 Reports from 26 Acute Care Hospitals. 2005

- Taylor J, Brownstein D et al. Use of Incident Reports by Physicians and Nurses to Document Medical Errors in Pediatric Patients. [http://pediatrics.aapublications.org/cgi/content/abstract/114/3/729](http://pediatrics.aapublications.org/cgi/content/abstract/114/3/729)
Thank you!