Keeping Quality & Patient Safety on the Forefront

Making a difference in an ever changing world.
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Making a difference in an ever changing world.
Learning Objectives

• Review healthcare reform initiatives that focus on improving patient quality of care and safety.

• Discuss best practices and successful case studies which integrate clinical data into everyday patient care and clinical decision support.
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President, CSOHIMSS
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Carol J. VanPelt, RN, MSN, ANP

35 years of Nursing experience

Hospital
  Critical Care
  Inservice Coordinator
  Quality Management Coordinator

Nurse Practitioner
  Urgent Care
  Family Practice
David’s - Quality Journey
My wife said...

"You’ve been around quality since we got married!"
Carol’s - Quality Journey

• Teacher of Quality

• See one, do one, teach one

• Learn from each other!
Soku
History of Quality in Healthcare

Retrieved from http://thereliabilityroadmap.com
History in Quality Healthcare

• Headline in 1999
  – TO ERR IS HUMAN: BUILDING A SAFER HEALTH SYSTEM

  “At least 44,000 people, and perhaps as many as 98,000 people, die in hospitals each year as a result of medical errors that could have been prevented”

Today in Quality Healthcare

• Headline in 2014
  – Texas Hospital Makes Changes After Ebola Patient Turned Away?

“The Dallas hospital that mistakenly send home a man who had Ebola says flawed software and not human error caused doctors to miss the diagnosis.”

Healthcare Reform Initiatives

Health and Human Services (HHS)

Centers for Medicare & Medicaid Services (CMS)

2010 Medical Liability Reform & Patient Safety Initiative

2014 Hospital National Patient Safety Goals
What is happening nationally?

- Healthcare-associated infections account for an estimated 1.7 million infections and 99,000 associated deaths each year.²

- At least 1.5 million preventable drug events occur each year due to drug mix-ups and unintentional overdoses.

- Eighteen types of medical errors account for 2.4 million extra hospital days and $9.3 billion in excess charges each year.³

Health and Human Services (HHS)

Strategic Goals

• Make Coverage Secure and Affordable
• Improve healthcare quality and patient safety
• Emphasize primary and preventative care and link to prevention
• Decrease growth of healthcare cost
• Insure access to quality care
• Improve healthcare thru **meaningful use of healthIT**

Centers for Medicare & Medicaid Services (CMS)

- CMS has clearly indicated that Medicare will move to pay for performance and electronic reporting of quality measures in the near future.

- Out with the old…
  - Fee for Service

- In with the new…
  - Pay for Performance (P4P)
2010 Medical Liability Reform & Patient Safety Initiative

- Patient Safety one of the best ways
- Funded 7 Grants for 3 Year Projects with $23.2MM
- Funded 13 Grants for Projects with ~$50MM
  - Improving Patient Safety
  - Medication errors between facilities
  - Pregnancy associated Mortality Review
  - Decreasing Suicide and Attempts
  - Near miss safety events

2014 Hospital National Patient Safety Goals

- Identify patients correctly
- Improve staff communication
- Use medicines safely
- Use alarms safely
- Prevent infection
- Identify patient safety risks
- Prevent mistakes in surgery

Carol’s Cactus flower
Best Practices and Case Studies

Northern Manhattan Health Network – 2006
    2006 HIMSS Enterprise Davies Award Recipient
Texas Health Resources – 2006 – 2011
    2013 HIMSS Enterprise Davies Award Recipient
Lakeland Healthcare – 2010
    2014 HIMSS Enterprise Davies Award Recipient
University of Iowa Health Care – 2014
    2014 HIMSS Enterprise Davies Award Recipient
Case Study: Northern Manhattan Health Network

Issue: Medical errors cause significant harm to patients in healthcare settings across the country.

• In 2008, the Agency for Health Care Research and Quality (AHRQ) reported that preventable medical injuries are actually on the rise—by one percent a year.¹

Goals: Decrease Medication Errors

Screen Resolution Saves Lives

Digoxin 0.25 mg tab 1 PO QAM and hold for pulse less than 60

Digoxin 0.25 mg tab 1 PO QAM and hold for pulse less than 60

Increased screen size of med cart monitors

Reduced the weight of the cart

Supplies for 30 patients not needed

Case Study: Northern Manhattan Health Network

Conclusion:
• 1/6th of the malpractice claims
• Nurses have good ideas!
  • Med cart had monitors that were too small

Best practices:
Listen to staff
Leadership starts at the top

Case Study: Texas Health Resources

• Issue: Reduce CODE BLUES

• Goal: Give advance warning to Nurses BEFORE a CODE

Case Study: Texas Health Resources

• Started Rapid Response Teams
• Came up with the Modified Early Warning System (MEWS)
  – RR
  – HR
  – SBP
  – LOC
  – Temp
  – Hourly Urine Output (Lakeland)
  – Oxygen Saturation Levels (Lakeland)

Case Study: Texas Health Resources

<table>
<thead>
<tr>
<th>Modified Early Warning Score</th>
<th>MEWS</th>
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<tbody>
<tr>
<td>Score</td>
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<tr>
<td>Resp</td>
<td>&lt; 9</td>
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<tr>
<td>Puls/min</td>
<td>≤ 40</td>
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<tr>
<td>Syst.bltr</td>
<td>≤ 70</td>
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<tr>
<td>Temp °C</td>
<td>≤ 35</td>
</tr>
<tr>
<td>CNS</td>
<td>Nytillkommen förvirring</td>
</tr>
</tbody>
</table>

Vid allvarlig oro över hur patientens tillstånd utvecklas, om saturationen akut försämras till < 90% trots syrgas givet med avdelningens förutsättningar eller om diuresen är < 200 ml på 4 timmar: Kontakta dagtid; vårdlagsansvarig läkare, Kontakta journid; op.jour 97140

Early Warning System prevents Heart Attack

Case Study: Texas Health Resources

Conclusions

• 53% Decrease in Medication Errors
• 36% Decrease in Adverse Events
• 34% Decrease in Falls

Best practices

• Providing real-time data about patient’s condition
• Display information in an easy to use format

Carol’s Lily moment...
Case Study: Lakeland Healthcare

Issue: Wanted an EHR that could span the entire patient care continuum

- Chose EPIC for the singular platform
  - Vital Signs Acuity (VSA) monitoring
  - Morse Fall Risk Scale

Goals: Improve Patient Safety, Quality and Accuracy

Case Study: Lakeland Healthcare

Instituted a Daily 11:30 am Safety Check-in

Leaders from all over the organization

Goal: To keep everyone safe

Review last 24 hours

Looked ahead to next 24 hours to eliminate risk

Safe
Harm
Near misses

At end could request a huddle with people who could resolve issues immediately

Case Study: Lakeland Healthcare

Conclusion: Vendor is wrong, Vendor is right
VSA not providing staff information fast - Needed to implement MEWS
  • Hourly Urine Output
  • Oxygen Saturation Levels
BCMA implementation:
  • Vendor recommended wired solution
  • Decided to use wireless
  • Reverted to wired solution later

Patient is at the center of all you do

Case Study: University of Iowa Health Care

Issue: Adverse Medication Errors occurring every 4 – 6 weeks

Goals: Improve Patient and Medication Safety

- Reduce adverse medication errors causing harm to less than one per quarter
- Raise CMS Surgical Care Improvement Project (SCIP) compliance scores to 98%
- Meet the Joint Commission measure of success goal in response to the RFI of 90%
- Decrease patient safety notifications related to preoperative antibiotic errors

Case Study: University of Iowa Health Care

Conclusion:

Integrated 17 bedside devices

Increase Safety with Real-time Monitoring
Care Team can assess quickly?
Extend support to referring institutions
Including Radiology images

Case Study: University of Iowa Health Care

Conclusions: Adverse Drug Events dropped to ZERO in 2012

Case Study: University of Iowa Health Care

More Conclusions:

- Regulatory compliance with SCIP measures rose from 32% in CY 2007 to 96% (Inpatient) in CY 2012.
- Preoperative antibiotics order errors reduced by 71%.
- Surgical H&P compliance rose from less than 50% pre-implementation to over 98%.

Best Practices:

- There is NO acceptable level of Medication Errors

Future of Quality Improvement

• Real-time Feedback to care deliverers on results of their activities

• EHRs provide for large-scale analysis of nursing care

• Connectivity across the Patient Care Continuum
Quality in Transitions of Care

• Can focusing on the information of healthcare improve quality?
  – ER record
  – Discharge Summary
  – Don’t forget to ASK the patient!

• Lesson Learned?
  – Documentation matters!
  – (Only if you read it!)
Can EHRs improve Patient Safety?

- Panel of Pennsylvania hospitals
- 2005 – 2012
- Data from several sources
  - One source was Pennsylvania Patient Safety Authority
- Used a differences-in-differences strategy

RESULTS?

Can EHRs improve Patient Safety?

“Advanced #EHRs lead to a **27% decline** in patient safety events.”

- **30 percent** decline in events due to medication errors
- **25 percent** decline in events due to complications

Nursing Unit Design Improves Safety

• Divide patient rooms into zones of care (Gallant and Lanning, 2001)
  – Patient
  – Caregiver
  – Family

• LEAN Principle – Maximize zones for order, efficiency, and standardization

http://books.nap.edu/openbook.php?record_id=10851&page=270#p2000954a9960270001
Case Study: Australian Study

- Initial Goals where changed
  “Healthcare reform provides incentives by linking to performance and funding”
  - Were asking patient perception of care
  - Needed to establish patient’s expectations of care
    - Teach good health practices
    - Help patient understanding reasons
    - Explain why!

Retrieved from (need reference)
Nursing Lessons

• Nurse
  – Nurse Mentor
    • Pull out the best in others

• Nurse Practitioner
  – Give each patient all of you
  – Work as a care team
Questions?