Integration Strategies for Quality and Safety Education for Nurses (QSEN) in Classroom and Clinical learning.

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Objectives

• Participants will be able to:
  – Identify specific knowledge, skills and attitudes that emphasize the QSEN competencies in baccalaureate education
  – Review pedagogic strategies for building quality and safety knowledge through the pre-licensure and RN to BSN courses of study
  – Explore teaching strategies that can be incorporated into the classroom and/or clinical practice setting for nursing education
  – Apply an evidence-based methodology for levelling the QSEN knowledge, skills and attitudes across beginning, intermediate and advanced level baccalaureate courses.
Leveling the KSAs
From Early Curriculum to Advanced
Specific Aim

- To determine what KSAs should be introduced and what KSAs should be emphasized in pre-licensure RN curriculum:
  - At the beginning of the program?
  - At the second (intermediate) phase of the program?
  - At the third (advanced) phase of the program
Methods

- Web-based Delphi survey methodology
  - Nomination of an expert panel
  - Distribution of a series of questionnaires in a manner in which anonymity is maintained
  - Statistical analysis of responses
  - Controlled feedback of responses to panel members
Panel of Experts

• Nominees
  – 12 QSEN Core faculty
  – 2 Advisory Committee members
  – 15 Pilot school directors

• Participants
  – 18 experts (62%) from 16 states
    • Diploma education
    • Associate degree education
    • Baccalaureate education
Questions

• For each of the 162 KSAs…
  – Where in the curriculum should this be introduced?
  – Where in the curriculum should this be emphasized?

• Forced choice responses in pull-down menu
  – Beginning
  – Intermediate
  – Advanced
Results

• Consensus at 2/3rds majority was achieved for 152 KSAs

• Consensus at simple majority for remaining 10 KSAs (marked with * in data tables)
<table>
<thead>
<tr>
<th>QSEN Competency</th>
<th>Beginning introduction</th>
<th>Intermediate introduction</th>
<th>Advanced introduction</th>
<th>Beginning emphasis</th>
<th>Intermediate emphasis</th>
<th>Advanced emphasis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient-centered care</td>
<td>Knowledge, skill and attitude competencies</td>
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<tr>
<td>Teamwork and collaboration</td>
<td>Skill and attitude competencies</td>
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<tr>
<td>Evidence-based practice competencies</td>
<td>Knowledge and attitude competencies</td>
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<td>Skill competencies</td>
<td>Knowledge and attitude competencies</td>
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<tr>
<td>Quality improvement competencies</td>
<td>Attitude competencies</td>
<td>Skill and attitude competencies</td>
<td>Knowledge competencies</td>
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<td>Knowledge, skill and attitude competencies</td>
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<tr>
<td>Safety competencies</td>
<td>Knowledge, skill, and attitude competencies</td>
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<td>Knowledge, skill, and attitude competencies</td>
<td>Knowledge competencies</td>
</tr>
<tr>
<td>Informatics competencies</td>
<td>Skill and attitude competencies</td>
<td>Knowledge competencies</td>
<td></td>
<td>Skills competencies</td>
<td>Knowledge and attitude competencies</td>
<td></td>
</tr>
</tbody>
</table>

Find complete results of Delphi Study at: www.qsen.org
Results & Implications

• Introduce all competencies early in the curriculum
• Support for development of curricular threads
• Emphasis on both individual patients and systems should occur throughout the curriculum
• Find full study:
Patient-centered Care

Patient is in control and a full partner; care is based on respect for patient’s preferences, values, and needs.

(Offer more control, choice, self-efficacy, individualization of care)

http://www.ihi.org

Person and Family Centered Care 101

1.5 contact hrs

Basic Quality and Safety Certificate earned Across Curriculum–13 modules
Patient Centered Care

- Medication Reconciliation

Medication Reconciliation Exercise
I. Extracting a Medication List
Patient Centered Care

http://www.escapefiremovie.com/
Patient–Centered Care

- **Crucial Conversations**: Tools for talking when stakes are high. Kerry Patterson, Joseph Grenny, Ron McMillan, Al Switzler. 2012 McGraw Hill

  - There are many examples in this book of how having the skills of speaking up is vital to quality and safety in complex work environments.
Crucial Conversations:
Table of Contents

• What is a crucial conversation (CC)?
• Mastering CC
• Start with Heart
  – How to stay focused on what you really want
• Learn to Look
  – How to notice when safety is at risk
• Make it safe
  • How to make it safe to talk about almost anything
• Master My Stories
  – How to stay in dialogue when you’re angry, scared or hurt

• State my path
  – How to speak persuasively, not abravasively
• Explore others’ paths
  – How to listen when others blow up or clam up
• Move to action
  – How to turn CC into action and results
• Putting it all together
  – Tools for preparing and learning
• Yeah, but
  – Advice for tough cases
• Change your life
  – How to turn ideas into habits
Patient–Centered Care

• What if your school is in a homogenous community?

Using a Capstone Cultural Diversity Paper for Program Outcomes Evaluation

(http://www.qsen.org/search_strategies.php?id=24 )

– First, students interview a diverse client.

– Second, students analyze the interview data and compare their findings with the literature.

– Third, students reflect on their own cultural beliefs and values and discuss their influence on future nursing practice.
Teamwork and Collaboration

Achieve quality patient outcomes by effectively communicating with nurses and inter-professional teams having mutual respect and shared decision making.

• Ability to Raise Concerns; Assertion
  – CUS (concerned, uncomfortable, safety)
  – 2 challenge rule
  – Critical Language “I need some clarity.”

• TeamSTEPPS Tools and Videos
Teamwork and Collaboration

• Teams provide a safety net for individuals
  
  — An individual, no matter how professional or experienced, can never be as reliable as a team  
  
  Nance 2008

http://www.youtube.com/watch?v=lp8vOqZ_o2I

Lucian Leape
What does a healthy team look like?
Teamwork & Collaboration for Fundamentals of Nursing Students


– Traditionally, we waited until a senior level course to teach students about systems
– Difficult for them to digest and apply in one semester
– Our students are ready for this content!!
Making the T & C Struggle Real…

• Why effective teamwork is SO hard:
  – Upon analysis, researchers found that the etiology of 70% of preventable errors was from faulty communication
  – Physicians and nurses are trained to communicate differently
  – What is “power distance”?
  – “A large and ever present cultural barrier is the deep embedded belief that quality of care and error free clinical performance are the result of being well trained and trying hard” (pg 186).

• Students are asked to observe and report each of the above phenomena in their clinical rotations.
Evidence Based Practice

Integrate best current evidence, clinical expertise, and patient preferences and values to deliver optimal health care.

- Need to Move from Treating Disease to Creating Health
- IHI Open School
  - **TA 101 The Triple Aim for Populations**
    (Improving experience, improving health of populations, reducing costs)
    1.5 contact hours
  - **PS 201 Partnering to Heal: Teaming up Against HAI**
  - **PS 202 Preventing Pressure Ulcers**
Evidence-based Practice

• Reduce Variability through evidence
• Identify those at risk for infection
  – Bundles and protocols
    • http://www.jointcommission.org/infection_control.aspx

• Activities
  – Group work to make posters that highlight an assigned bundle:
    – Cauti
    – CLABSI
    – VAP
    – HAPUs
    – Falls
Quality Improvement “on the ground”

- How often do students see nurses actively incorporating EBP into their daily practice? Are they too busy? What are the barriers/facilitators?

- Help students think about the commitment to EBP in their own emerging practice

EBP “on the ground”

- N = 119
- 64% read at least 1 specialty journal
- 53% read at least 1 general nursing journal
- 20% do not regularly read any professional journal
- 31% – facility has a journal club
- 50% did not know their facility benchmarks of care
Making EBP real in students’ practice

• Easy access to current knowledge can help remove impairments
  – What might that “easy access” look like?
• Staff RNs don’t know how to use literature and implement into care
  – How can this process be facilitated for bedside clinicians?
• Policies and procedures not seen as being EBP based
  – Importance of involvement on hospital committees
EBP – What is YOUR future?

• Lots of variation in other clinical agencies in nurses’ involvement in EBP

• Staying connected to the literature is a personal choice for your professional work
  – Time investment
  – Monetary investment
  – Valuable benefits for your practice

• Write a 2 page paper where you reflect on a nursing role model you have seen integrate EBP into his/her practice and the impact of EBP on that clinician’s practice.
Quality Improvement (QI)

Monitor outcomes of care processes and use improvement methods to design and test changes to improve the health care system.

• Pair Two landmark articles about nursing and QI
  – Available from Atul Gawande’s website: [www.gawande.com](http://www.gawande.com)
  – Looks at QI from a historical perspective in healthcare.
  – Examines topical, timely issues about nurses implementing most of the QI work in the acute care setting.
Central Line Infection Rates in this context...

- "ICUs put 5,000,000 lines into patients each year, and national statistics show that after 10 days, 4% of those lines become infected. Line infections occur in eighty thousand people/year and are fatal between 5% and 28% of the time. Those who survive line infections spend on average a week longer in intensive care."
Gives students concrete details of complex work environments

• “10 years ago a study in Israel found that average patient care required 178 individual actions per day, ranging from administering a drug to suctioning the lungs and every one of them posed risks. Remarkably, the nurses and doctors were observed to make an error just 1% of the time, but that still amounted to an average of 2 errors/day with every patient.”
Specific example of an effective QI project:

- Plotted out the steps to take to avoid line infections:
  1) wash hands with soap
  2) clean the pt’s skin with chlorhexidine antispetic
  3) put sterile dressings over the entire patient
  4) wear a sterile mask, hat, gown and gloves
  5) place a sterile dressing over the catheter site once the line is in.
Dr. Pronovost’s work...

- ICU nurses watched physicians place central lines for a month. In more than 1/3 patients, one step was skipped.

- Nurses were the QI force in the actual study – nurses kept the process consistent; RNs implemented the checklist

- Watched results for a year – the 10 day line infection rate went from 11% to 0%. Followed patients for fifteen more months – only two line infections occurred. In this one hospital, the checklist had prevented 43 infections and 8 deaths and saved $200 million in costs.
Now Consider Disch’s work

- Nurses implement most QI work in the hospital setting
- What is the limit of continuously layering this kind of work?
- Encourages systematic standardization to lessening the impact of the quality burden:
  - Limits to work outside of shift time
  - Paying nurses for any data mining, QI work, training
Quality Improvement (QI)

- Student Assignment using Model for Improvement
  - Improve something about themselves, their school, etc

- Presentation of data:
  - Describe Aim
  - PDSA (Plan, make the change, how tested, how studied)
  - Use of Tools (flow charts, check sheets, run charts, bar graphs)

- PDSA (Plan, Do, Study, Act)
  - What are we trying to accomplish?
  - How will we know that a change is an improvement?
  - What changes can we make that will result in improvement?
Quality Improvement

- QSEN Competency Based Clinical Evaluations

<table>
<thead>
<tr>
<th>Core Competencies</th>
<th>Midterm 1 to 4</th>
<th>Final 1 to 4</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Faculty</td>
<td>Student</td>
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<tr>
<td><strong>Patient-Centered Care/Caring/Empowerment</strong></td>
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<tr>
<td>Focusing on the impact of Acute Illness on adults and their families regarding priority treatments, health restoration, and health maintenance, the student completing NURS 424 will be able to:</td>
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<tr>
<td>1. Provide comprehensive patient care in compliance with clinical agency policy and procedure (1,2)</td>
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<tr>
<td>2. Synthesize pathophysiology of patient conditions and associated pharmacological interventions, drawing on past experiences to improve quality of life for individuals, families, and community systems in a comprehensive plan of care (1)</td>
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<tr>
<td>3. Demonstrate caring behaviors, modifying interventions to address actual and anticipatory physical, emotional, and spiritual comfort, pain, and/or suffering (2,3,8)</td>
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<tr>
<td>4. Collect a family history and identify disorders that may indicate need for genetic assessment (1)</td>
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<tr>
<td>5. Demonstrate cultural sensitivity and respect for diversity in promoting health and maintenance in the health care setting (3)</td>
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<tr>
<td>6. Evaluate effectiveness of patient and family teaching and modify plan of care as needed (6)</td>
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<td>7. Advocate for and include the patient and family as the center of the caregiving team when setting and modifying care goals (2,5)</td>
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<tr>
<td>8. Engage patients and families in discharge planning that includes evidence-based strategies to prevent avoidable readmissions throughout the hospital stay (5,6,9)</td>
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<tr>
<td><strong>Teamwork and Collaboration</strong></td>
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<tr>
<td>9. Coordinate and delegate elements of care to the inter-professional healthcare team within the scope of practice (5,7,10)</td>
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<tr>
<td>10. Recognizes changing patient condition and communicate changes in patient status to the inter-professional team in a timely manner using SBAR framework (2,4,5,7)**</td>
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<tr>
<td>11. Conduct patient care reports (hand-off communication) efficiently and effectively (7)</td>
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<tr>
<td>12. Engage patient and family in a collaborative relationship by providing relevant information, resources, access, and support (3,6,7)</td>
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<tr>
<td>13. Accurately Interpret physician and inter-professional orders and communicate accordingly(2,4,5)</td>
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<tr>
<td>14. Initiate requests for help when appropriate to the situation (2,4,7)</td>
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Quality Improvement

Create a Newsletter
Safety

Minimize risk of harm to patients and providers through both system effectiveness and individual performance.

- Two patient identifiers
- Patient armbands where standardized
- Correct surgery/Correct site
- Medication reconciliation
- Standardization of medications
- Identify Work-arounds
- Time outs
- Huddles—prebriefing; debriefing
- SBAR Communication
# Teaching Safety

<table>
<thead>
<tr>
<th>Nsg Intervention Week One</th>
<th>NQF Safe Practices for Better Healthcare</th>
<th>IHI 5 Million Lives Campaign</th>
<th>Nursing Sensitive Indicators</th>
<th>National Patient Safety Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Oral Care</td>
<td>#23 Care of the Ventilated patient</td>
<td>Ventilator Associated Pneumonia</td>
<td>Ventilator Associated Pneumonia</td>
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</tr>
<tr>
<td>Decub Ulcer Prevention</td>
<td>#27 Decub ulcer prevention</td>
<td>Decub ulcer prevention</td>
<td>Decub ulcer prevention</td>
<td>#14 Decub ulcer prevention</td>
</tr>
<tr>
<td>Falls/Mobility/Restraints</td>
<td>#28 DVT prevent #33 Fall prevent</td>
<td>DVT prevention</td>
<td>DVT prevention</td>
<td>#9 Reduce the risk of patient harm resulting from falls</td>
</tr>
</tbody>
</table>

# Teaching Safety

<table>
<thead>
<tr>
<th>Nsg Intervention Week Two</th>
<th>NQF Safe Practices for Better Healthcare</th>
<th>IHI 5 Million Lives Campaign</th>
<th>Nursing Sensitive Indicators</th>
<th>National Patient Safety Goals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medication Administration</td>
<td>#13 Order read-back and abbreviations</td>
<td>Prevent adverse drug events</td>
<td></td>
<td>#1 Improve the accuracy of patient identification</td>
</tr>
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<td></td>
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<td></td>
<td>1A: Use of two pt identifiers</td>
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<td></td>
<td>1C Elimination of transfusion errors</td>
</tr>
<tr>
<td></td>
<td>#16 Safe adoption of computerized prescriber order entry</td>
<td>Prevent harm from high alert medications</td>
<td></td>
<td>#3 Improve the safety of using medications</td>
</tr>
<tr>
<td></td>
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<td>3C: Managing look alike, sound alike medications</td>
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<td></td>
<td>3D: Labeling meds</td>
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<td></td>
<td>3E: reduce harm from anticoagulation therapy</td>
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<td>#8: Accurately and completely reconcile medications across the continuum of care</td>
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<td>8A: comparing current and new meds</td>
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<td>8B: communication meds to next provider</td>
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<td>8C: providing reconciled med list to</td>
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# NQF Safe Practices for Better Healthcare

1. Order read-back and abbreviations
2. Prevent adverse drug events

# IHI 5 Million Lives Campaign

1. Improve the accuracy of patient identification
   1A. Use of two pt identifiers
   1C. Elimination of transfusion errors

# Nursing Sensitive Indicators

1. Improve the safety of using medications
   3C. Managing look alike, sound alike medications
   3D. Labeling meds
   3E. Reduce harm from anticoagulation therapy

# National Patient Safety Goals

1. Improve the accuracy of patient identification
   1A. Use of two pt identifiers
   1C. Elimination of transfusion errors

3. Improve the safety of using medications
   3C. Managing look alike, sound alike medications
   3D. Labeling meds
   3E. Reduce harm from anticoagulation therapy

8. Accurately and completely reconcile medications across the continuum of care
   8A. Comparing current and new meds
   8B. Communication of reconciled medications to next provider
   8C. Providing reconciled medication list to next provider
## Teaching Safety

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</thead>
<tbody>
<tr>
<td>IV Therapy</td>
<td>#21: Central Line-Associated Blood stream Infection</td>
<td>Prevent Central Line Infections</td>
<td>Central Line catheter associated blood stream infection</td>
<td>7: Reduce the risk of health-care associated infections</td>
</tr>
<tr>
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<td></td>
<td>7D: Preventing Central Line Associated Blood Stream Infections</td>
</tr>
<tr>
<td>Oxygenation</td>
<td>#23: Care of the Ventilated Patient</td>
<td>Deploy Rapid Response Teams</td>
<td>Failure to rescue</td>
<td>#16: Improve recognition and response to changes in patient’s condition</td>
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<tr>
<td></td>
<td></td>
<td>Prevent Ventilator Associated Pneumonia</td>
<td></td>
<td>16A: Requesting assistance for a patient with a worsening condition</td>
</tr>
<tr>
<td>Integumentary Care</td>
<td>#27: Pressure Ulcer Prevention</td>
<td>Prevent Pressure Ulcers</td>
<td>Decubitus/Pressure ulcers</td>
<td>#14: Prevent health care associated pressure ulcers</td>
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<thead>
<tr>
<th>Nsg Intervention Week Three</th>
<th>NQF Safe Practices for Better Healthcare</th>
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<td>Dosage Calculation</td>
<td>Prevent harm from high alert medications</td>
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<td></td>
<td>#3 Improve the safety of using medications 3E: reduce harm from anticoagulation therapy</td>
</tr>
</tbody>
</table>
One Minute Safety Check

- Used for clinical setting
- Helps students prioritize safety concerns
Safety

• Create Unfolding Case Studies that emphasize safety
  
Culture of Safety VS Culture of Blame:
Give Meaningful Feedback
Fairness Algorithm

Give Constructive Feedback
Most effective when focused on
– Task
– Process
– Self-regulation; error detection skills

Least effective when focused on
– Person him/herself

Fairness Algorithm
1. Did the individuals intend to cause harm?
2. Did they come to work drunk or impaired?
3. Did they do something they knew was unsafe?
4. Could two or three peers have made the same mistake in similar circumstances?
5. Do these individuals have a history of involvement in similar events?

Applying the Fairness Algorithm
- [Link](http://www.youtube.com/watch?v=8le7vYPUwaM)
The Lewis Blackman Story

Here are the 5 videos they are between 4 and 6 minutes long each.

Free download at:
https://www.youtube.com/watch?v=Rp3fGp2fv88
Help Patients Advocate for Self

1. What is my main problem?
2. What do I need to do?
3. Why is it important for me to do this?

http://www.npsf.org/?page=askme3
Use information and technology to communicate, manage knowledge, mitigate error and support decision making.

Informatics = Data, Information, Knowledge, and Wisdom

Source: Journal of Knowledge Management Practice, Vol. 9, No. 3, September 2008
Reusable Data, Information, Knowledge And Management Techniques
O. K. Harsh, University of New England, Australia
Data

- discrete entities that are described objectively without interpretation
- 985721512278

Information

• data that are interpreted, organized, or structured

• 98.5, 72, 15, 122/78

Knowledge

• information that is synthesized so that relationships are identified and formalized
• 72 year old female, admitted from long-term care for pneumonia, has foley catheter. Since admission, temp is increasing, BP decreasing, HR increasing, respirations increasing
• Signs of sepsis

Wisdom

• the appropriate use of knowledge to manage and solve complex human problems
• focuses on the application of knowledge
• e.g., implementation of an evidence-based practice protocol

Clinical Post–Conference Application Activity

• Discuss a patient scenario from the clinical shift.
• Ask students to reflect on the type of information required for effective clinical decision making.
  – Was the information available?
  – What data had to be collected and processed to make the information meaningful?
  – What systems improvement might help facilitate clinical decision-making?
  – How did technology improve or impede workflow in this scenario?
Informatics

Data Mining Activities


2. Groups assigned specific zip codes. Charge them with identifying 2 most significant illnesses for that population.

3. Groups assigned indicator from NDNQI. Determine national benchmarks.
Data Mining Activity

• Present a short case study of 15 year old diabetic young man presenting to ED with hypoglycemia.

Group Activities
• Find innovative ways to teach self-injecting insulin
• Show ways to use technology to help a newly diagnosed diabetic with self-management
• Find physical and online resources in your city that could be recommended to a newly diagnosed diabetic and family
And in the midst of this…..
”mindfulness and sensemaking

(Weick & Sutcliffe, 2001)

• Mindfulness
  – Staying focused and tuned in
  – Ability to see the significance of early and weak signals and to take strong decisive action to prevent harm
  – Trouble starts small and is signaled by weak symptoms that are easy to miss

• Situational Awareness

• Sense-making
  – Using multiple cues; critical thinking
Resources

QSEN Teaching Strategies

• http://www.qsen.org/

Thank you

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