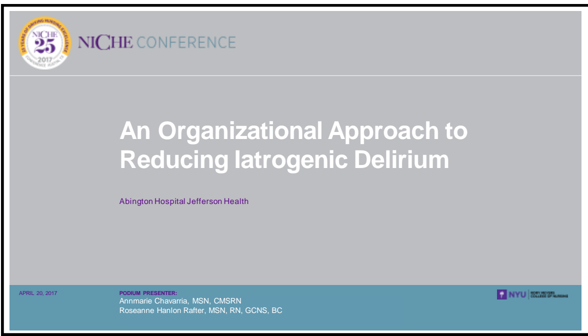
NICHE CONFERENCE
An Organizational Approach to Reducing Iatrogenic Delirium
Abington Hospital Jefferson Health
APRIL 20, 2017
PODIUM PRESENTER:
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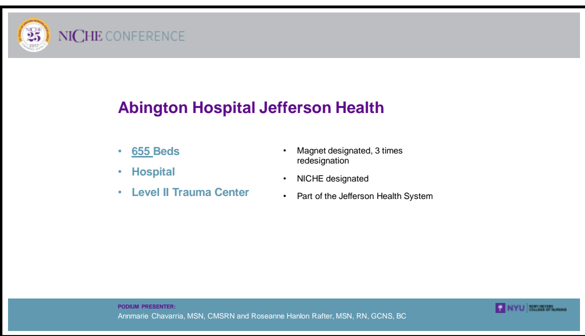
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Abington Hospital Jefferson Health
655 Beds
Hospital
Level II Trauma Center
Magnet designated, 3 times redesignation
NICHE designated
Part of the Jefferson Health System
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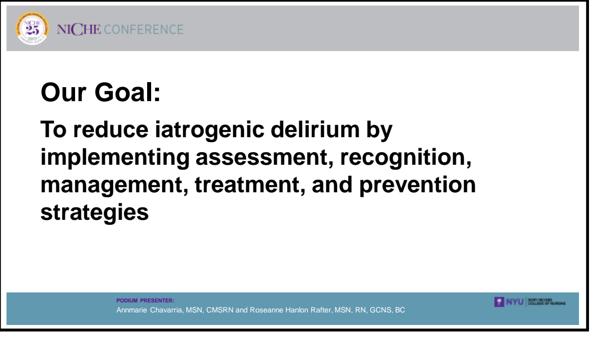
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Our Goal:
To reduce iatrogenic delirium by implementing assessment, recognition, management, treatment, and prevention strategies
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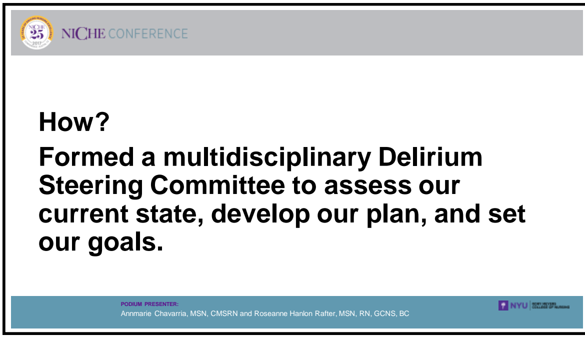
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How?
Formed a multidisciplinary Delirium Steering Committee to assess our current state, develop our plan, and set our goals.
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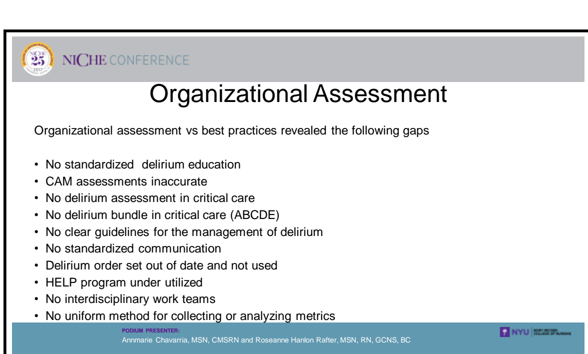
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Organizational Assessment
Organizational assessment vs best practices revealed the following gaps
• No standardized delirium education
• CAM assessments inaccurate
• No delirium assessment in critical care
• No delirium bundle in critical care (ABCDE)
• No clear guidelines for the management of delirium
• No standardized communication
• Delirium order set out of date and not used
• HELP program under utilized
• No interdisciplinary work teams
• No uniform method for collecting or analyzing metrics
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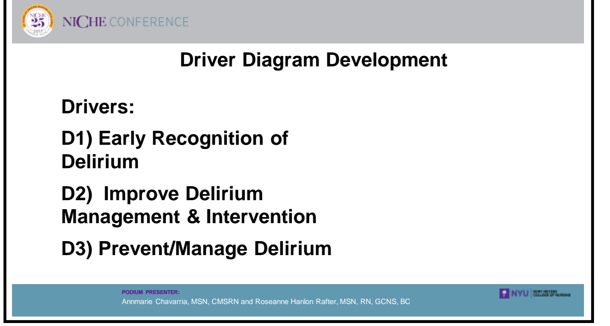
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Driver Diagram Development
Drivers:
D1) Early Recognition of Delirium
D2) Improve Delirium Management & Intervention
D3) Prevent/Manage Delirium
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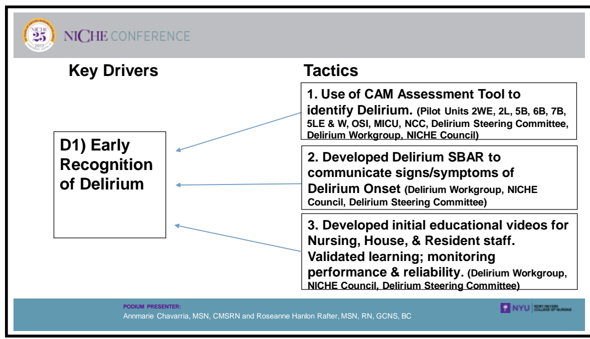
NICHE CONFERENCE
Key Drivers
Tactics
D1) Early Recognition of Delirium
1. Use of CAM Assessment Tool to identify Delirium. (Pilot Units 2WE, 2L, 5B, 6B, 7B, 5LE & W, OSI, MICU, NCC, Delirium Steering Committee, Delirium Workgroup, NICHE Council)
2. Developed Delirium SBAR to communicate signs/symptoms of Delirium Onset (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
3. Developed initial educational videos for Nursing, House, & Resident staff. Validated learning; monitoring performance & reliability. (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
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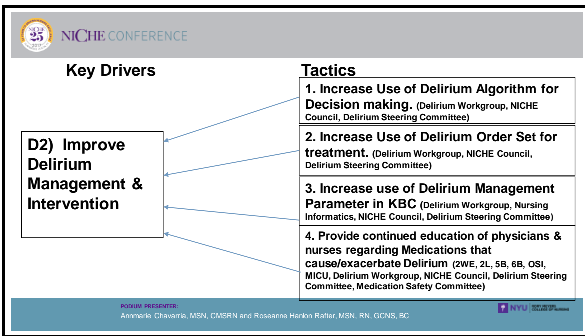
NICHE CONFERENCE
Key Drivers
Tactics
D2) Improve Delirium Management & Intervention
1. Increase Use of Delirium Algorithm for Decision making. (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
2. Increase Use of Delirium Order Set for treatment. (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
3. Increase use of Delirium Management Parameter in KBC (Delirium Workgroup, Nursing Informatics, NICHE Council, Delirium Steering Committee)
4. Provide continued education of physicians & nurses regarding Medications that cause/exacerbate Delirium (2WE, 2L, 5B, 6B, OSI, MICU, Delirium Workgroup, NICHE Council, Delirium Steering Committee, Medication Safety Committee)
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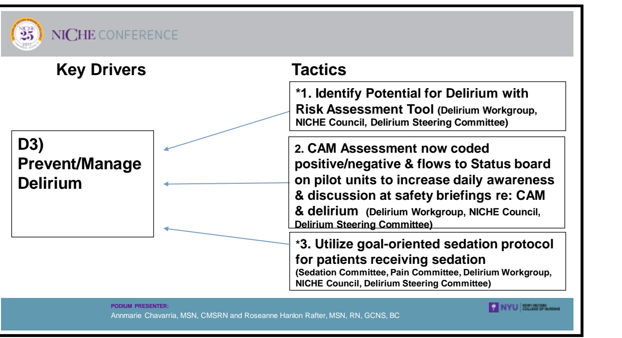
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Key Drivers
Tactics
D3) Prevent/Manage Delirium
*1. Identify Potential for Delirium with Risk Assessment Tool (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
2. CAM Assessment now coded positive/negative & flows to Status board on pilot units to increase daily awareness & discussion at safety briefings re: CAM & delirium (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
*3. Utilize goal-oriented sedation protocol for patients receiving sedation (Sedation Committee, Pain Committee, Delirium Workgroup, NICHE Council, Delirium Steering Committee)
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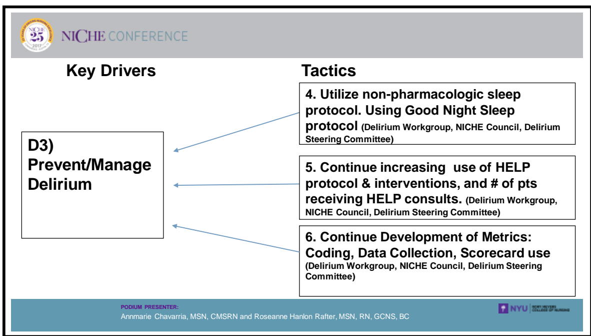
NICHE CONFERENCE
Key Drivers
Tactics
D3) Prevent/Manage Delirium
4. Utilize non-pharmacologic sleep protocol. Using Good Night Sleep protocol (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
5. Continue increasing use of HELP protocol & interventions, and # of pts receiving HELP consults. (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
6. Continue Development of Metrics: Coding, Data Collection, Scorecard use (Delirium Workgroup, NICHE Council, Delirium Steering Committee)
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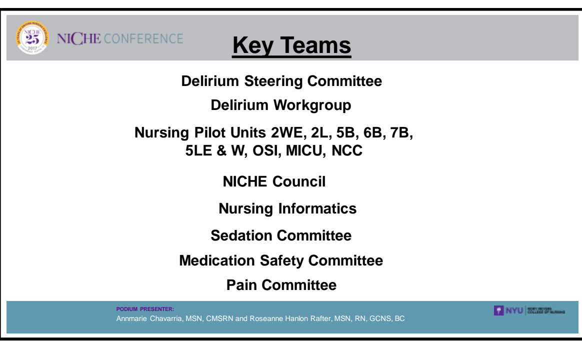
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Key Teams
Delirium Steering Committee
Delirium Workgroup
Nursing Pilot Units 2WE, 2L, 5B, 6B, 7B, 5LE & W, OSI, MICU, NCC
NICHE Council
Nursing Informatics
Sedation Committee
Medication Safety Committee
Pain Committee
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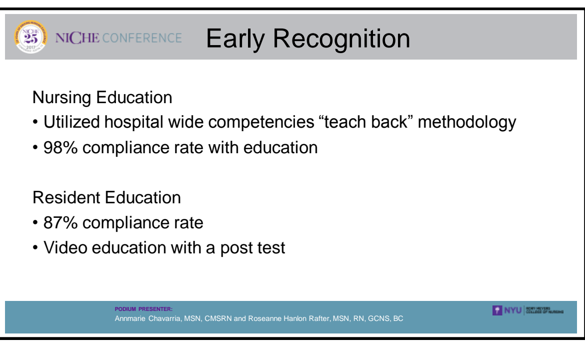
NICHE CONFERENCE
Early Recognition
Nursing Education
• Utilized hospital wide competencies "teach back" methodology
• 98% compliance rate with education
Resident Education
• 87% compliance rate
• Video education with a post test
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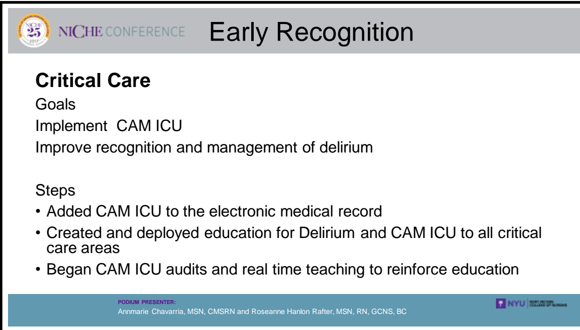
NICHE CONFERENCE
Early Recognition
Critical Care
Goals
Implement CAM ICU
Improve recognition and management of delirium
Steps
• Added CAM ICU to the electronic medical record
• Created and deployed education for Delirium and CAM ICU to all critical care areas
• Began CAM ICU audits and real time teaching to reinforce education
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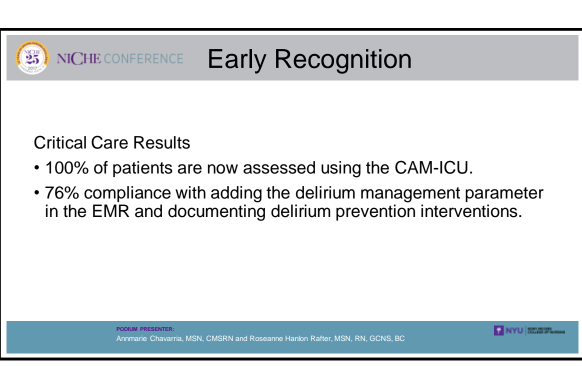
NICHE CONFERENCE
Early Recognition
Critical Care Results
• 100% of patients are now assessed using the CAM-ICU.
• 76% compliance with adding the delirium management parameter in the EMR and documenting delirium prevention interventions.
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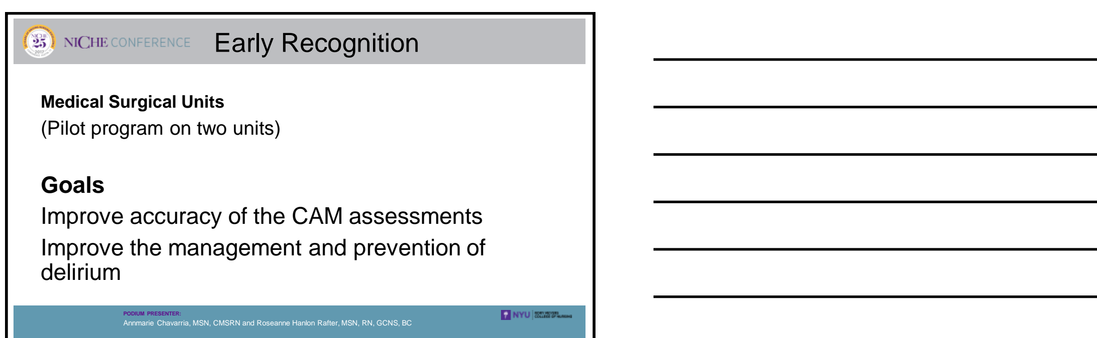
NICHE CONFERENCE
Early Recognition
Medical Surgical Units
(Pilot program on two units)
Goals
Improve accuracy of the CAM assessments
Improve the management and prevention of delirium
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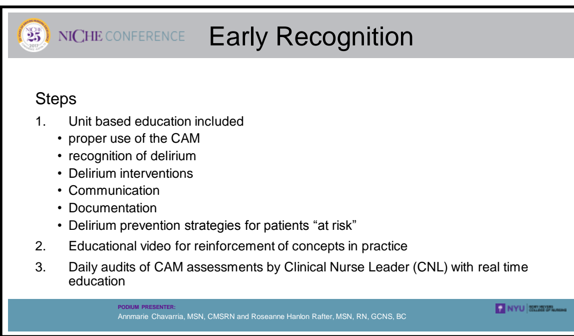
NICHE CONFERENCE
Early Recognition
Steps
1. Unit based education included
• proper use of the CAM
• recognition of delirium
• Delirium interventions
• Communication
• Documentation
• Delirium prevention strategies for patients “at risk”
2. Educational video for reinforcement of concepts in practice
3. Daily audits of CAM assessments by Clinical Nurse Leader (CNL) with real time education
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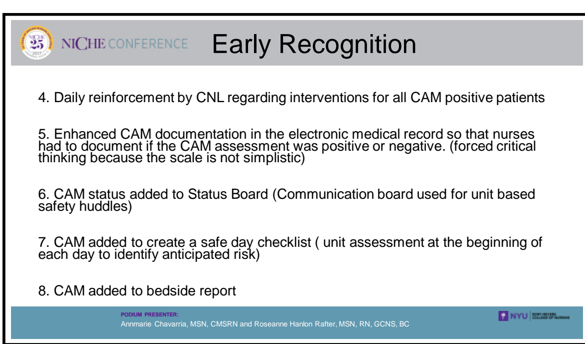
NICHE CONFERENCE
Early Recognition
4. Daily reinforcement by CNL regarding interventions for all CAM positive patients
5. Enhanced CAM documentation in the electronic medical record so that nurses had to document if the CAM assessment was positive or negative. (forced critical thinking because the scale is not simplistic)
6. CAM status added to Status Board (Communication board used for unit based safety huddles)
7. CAM added to create a safe day checklist (unit assessment at the beginning of each day to identify anticipated risk)
8. CAM added to bedside report
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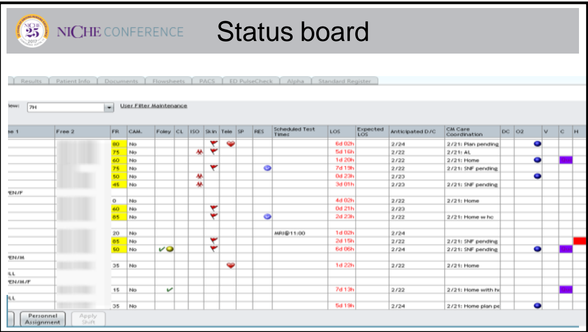
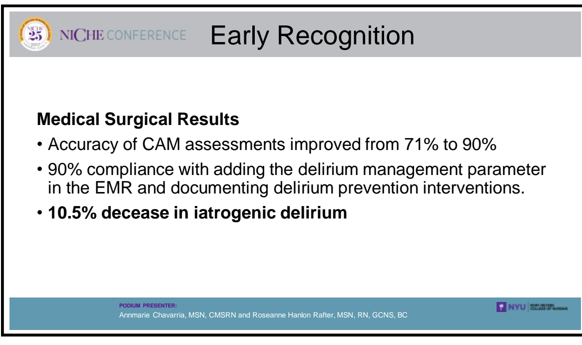

NICHE CONFERENCE
Status board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Early Recognition
Medical Surgical Results
• Accuracy of CAM assessments improved from 71% to 90%
• 90% compliance with adding the delirium management parameter in the EMR and documenting delirium prevention interventions.
• 10.5% decease in iatrogenic delirium
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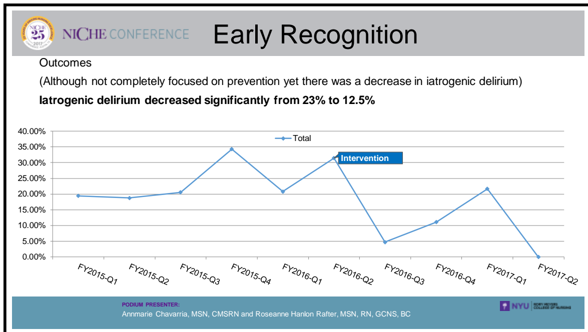
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Early Recognition
Outcomes
(Although not completely focused on prevention yet there was a decrease in iatrogenic delirium)
Iatrogenic delirium decreased significantly from 23% to 12.5%
40.00%
35.00%
30.00%
25.00%
20.00%
15.00%
10.00%
5.00%
0.00%
Total
Intervention
FY2015-Q1
FY2015-Q2
FY2015-Q3
FY2015-Q4
FY2016-Q1
FY2016-Q2
FY2016-Q3
FY2016-Q4
FY2017-Q1
FY2017-Q2
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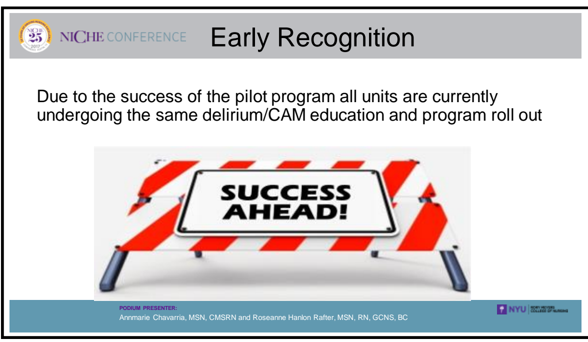
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Early Recognition
Due to the success of the pilot program all units are currently undergoing the same delirium/CAM education and program roll out
SUCCESS AHEAD!
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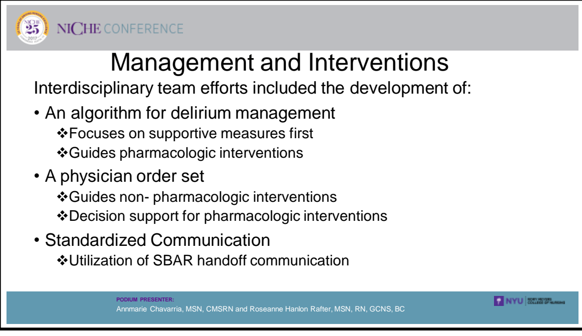
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Management and Interventions
Interdisciplinary team efforts included the development of:
• An algorithm for delirium management
❖Focuses on supportive measures first
❖Guides pharmacologic interventions
• A physician order set
❖Guides non- pharmacologic interventions
❖Decision support for pharmacologic interventions
• Standardized Communication
❖Utilization of SBAR handoff communication
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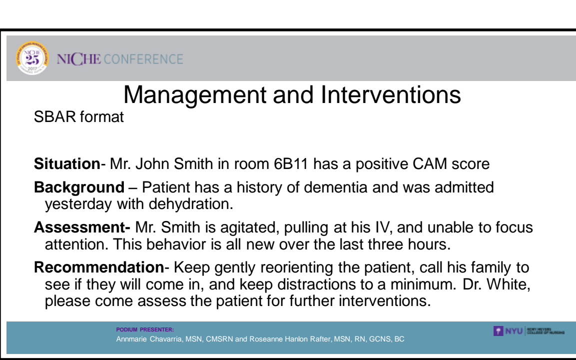
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Management and Interventions
SBAR format
Situation- Mr. John Smith in room 6B11 has a positive CAM score
Background – Patient has a history of dementia and was admitted yesterday with dehydration.
Assessment- Mr. Smith is agitated, pulling at his IV, and unable to focus attention. This behavior is all new over the last three hours.
Recommendation- Keep gently reorienting the patient, call his family to see if they will come in, and keep distractions to a minimum. Dr. White, please come assess the patient for further interventions.
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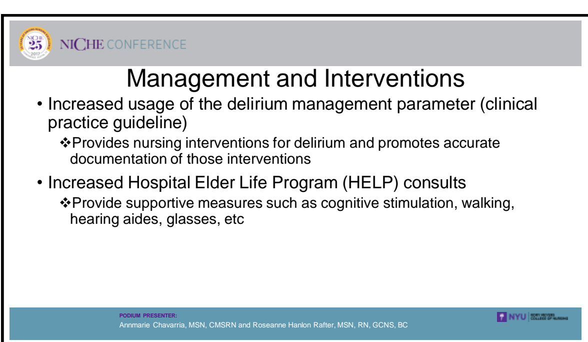
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Management and Interventions
• Increased usage of the delirium management parameter (clinical practice guideline)
❖Provides nursing interventions for delirium and promotes accurate documentation of those interventions
• Increased Hospital Elder Life Program (HELP) consults
❖Provide supportive measures such as cognitive stimulation, walking, hearing aides, glasses, etc
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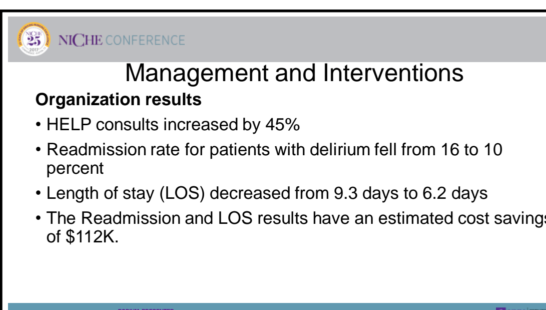
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Management and Interventions
Organization results
• HELP consults increased by 45%
• Readmission rate for patients with delirium fell from 16 to 10 percent
• Length of stay (LOS) decreased from 9.3 days to 6.2 days
• The Readmission and LOS results have an estimated cost savings of $112K.
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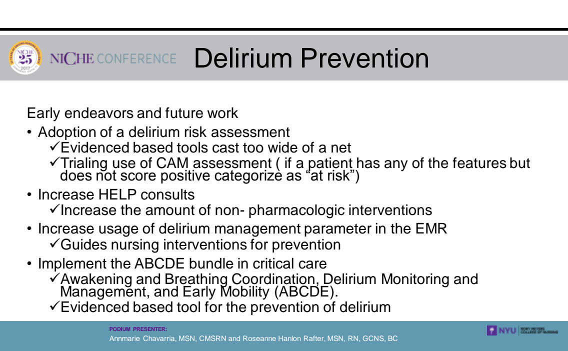
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Delirium Prevention
Early endeavors and future work
• Adoption of a delirium risk assessment
✓Evidenced based tools cast too wide of a net
✓Trialing use of CAM assessment (if a patient has any of the features but does not score positive categorize as "at risk")
• Increase HELP consults
✓Increase the amount of non- pharmacologic interventions
• Increase usage of delirium management parameter in the EMR
✓Guides nursing interventions for prevention
• Implement the ABCDE bundle in critical care
✓Awakening and Breathing Coordination, Delirium Monitoring and Management, and Early Mobility (ABCDE).
✓Evidenced based tool for the prevention of delirium
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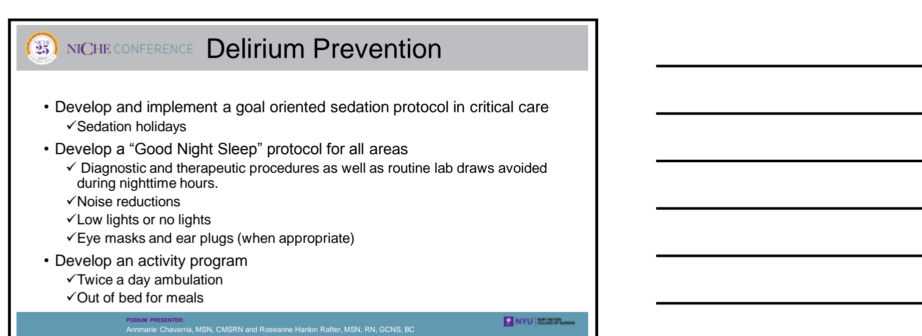
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Delirium Prevention
• Develop and implement a goal oriented sedation protocol in critical care
✓Sedation holidays
• Develop a "Good Night Sleep" protocol for all areas
✓ Diagnostic and therapeutic procedures as well as routine lab draws avoided during nighttime hours.
✓Noise reductions
✓Low lights or no lights
✓Eye masks and ear plugs (when appropriate)
• Develop an activity program
✓Twice a day ambulation
✓Out of bed for meals
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