

Consultation-Liaison Psychiatry Quality Improvement Project: Assessing House Staff Familiarity with Delirium Management, Phase Two

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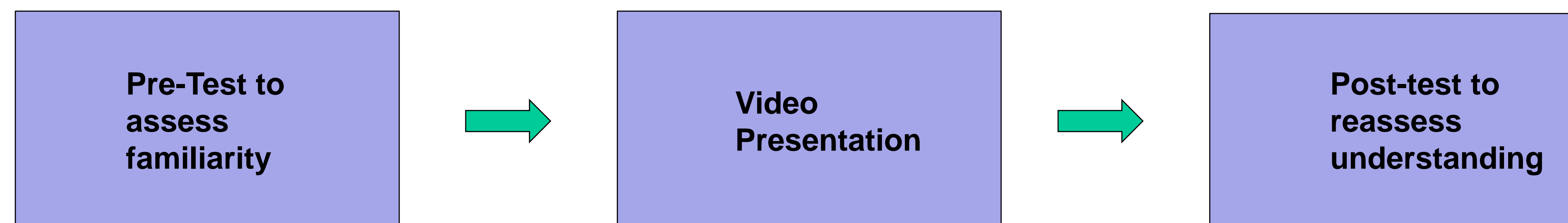
Background and Objectives

Delirium is a disturbance of attention and awareness, with key features such as acute change from baseline, fluctuating severity cognitive disturbances, and evidence that disturbances are a direct consequence of another medical etiology. Since delirium is due to a complex pathophysiology, it is important for those assessing and treating hospitalized patients to have training and resources for diagnosing and managing delirium. This project represents phase two of the implementation of the consult-liaison quality improvement project. The goal of the project is to evaluate the level of comfort in house staff with regards to the assessment and treatment of delirium in the hospital setting, as well as to provide education to house staff rotating through the hospital wards. The goal is to increase staff familiarity with both the assessment and treatment of patients presenting with behavioral manifestations of delirium in the hospital setting

Phase one of the project focused on providing monthly training sessions to individual psychiatry residents rotating through the consult-liaison service at UMC. This proved to provide a limited sample size, and subsequently, fairly insignificant data. As such, the decision was made to expand the training sessions to all house staff rotating through internal medicine wards.

Methods

The house staff evaluation and education session was carried out during a routine Internal Medicine noon report, a mandatory meeting which all house staff rotating through Internal Medicine are expected to attend. The session begins by having all attendees complete a pre-test survey. This pre-test assesses familiarity with the management of delirium. Following this is a short video presentation which outlines the assessment and treatment of delirium. After the presentation, a post-test survey is then administered.



Delirium Pre-Test Questionnaire

- How comfortable are you with assessing a patient for Delirium? (not at all comfortable) 1 2 3 4 5 (very comfortable)
- How comfortable are you with administering the CAM-ICU screening for delirium? (not at all comfortable) 1 2 3 4 5 (very comfortable)
- How comfortable are you with the difference between hypo-active vs hyper-active delirium? (not at all comfortable) 1 2 3 4 5 (very comfortable)
- How comfortable are you with choosing pharmacotherapy options for patient's exhibiting delirium? (not at all comfortable) 1 2 3 4 5 (very comfortable)
- Delirium is characterized by (best answer):
 - Depression or dysphoric mood
 - Anxiety or nervousness
 - Waxing and waning of attention
 - Hallucinations
 - Delusions of grandeur
- Which of the following medication classes is first-line in the treatment of agitation due to delirium that is not due to substance-use or alcohol withdrawal?
 - Anti-cholinergic
 - Anti-psychotics
 - Non-benzodiazepine anxiolytics
 - Benzodiazepines
 - Anti-depressants
 - Narcotics
- Which of the following medication classes is first-line in the treatment of agitation due to delirium due to substance-use or alcohol withdrawal?
 - Anti-cholinergic
 - Anti-psychotics
 - Non-benzodiazepine anxiolytics
 - Benzodiazepines
 - Anti-depressants
 - Narcotics

- At what QTc level should alternatives to Haloperidol be considered (best answer)?
 - QTc equal to or greater than 200
 - QTc equal to or greater than 300
 - QTc equal to or greater than 400
 - QTc equal to or greater than 500
 - QTc equal to or greater than 600
- What is the preferred method for addressing hypo-active delirium not due to substance use or alcohol withdrawal (best answer)?
 - Environmental/behavioral strategies (regular re-orientation, sleep-wake cycle regulation, etc.)
 - Anti-psychotics
 - Benzodiazepines
 - A & B
 - A & C
 - B & C
- What is the preferred method for addressing agitation in hyper-active delirium not due to substance use or alcohol withdrawal (best answer)?
 - Environmental/behavioral strategies (regular re-orientation, sleep-wake cycle regulation, etc.)
 - Anti-psychotics
 - Benzodiazepines
 - A & B
 - A & C
 - B & C

Hypoactive Delirium

- Supportive management
- Option of low-dose haloperidol (Haldol) or atypical antipsychotic PRN

Supportive management by intervention sub-type

- Environmental Interventions
- Precautions & Actions
- Labs & further evaluation

Results

At this point in time, 16 residents from multiple specialties have taken part in phase two. This represents a 100% increase in sample size from phase one. A positive change in average test scores was seen between pre-test and post-test surveys, increasing from a pre-test average of 74%, to a post-test average of 82%. Additionally, the self reported familiarity scores also saw an improvement across all questions.

Conclusions

Delirium, especially in the inpatient setting, is a critical condition that must be properly diagnosed and managed. It is anticipated that further training of house staff on delirium will increase comfort with the assessment and management of patients presenting with behavioral manifestations of this condition.

As efforts are made to expand on these encouraging results, future direction will include increasing sample size and editing certain questions that proved to be confusing to some respondents.