VA Boston Healthcare System
12 month Evidence Based Practice Curriculum
Goal

Introduce the VA Boston Healthcare System Evidence Based Practice Curriculum
Objectives

1. Describe the CCNE key element for Evidence Based practice
2. Summarize the 12 month curriculum developed by the VA Boston Healthcare System Nurse Residency Program Staff
Definition

- Evidence-based practice is the process of shared decision-making between practitioner, patient, and others significant to them based on research evidence, the patient’s experiences and preferences, clinical expertise or know-how, and other available robust sources of information. ²

Overview

- The VA Boston HCS Post baccalaureate nurse residency and BSN transition to Practice program exposes the residents to practice comprehensive patient care in a setting that incorporates quality assessment and improvement through evidence based practice.
Mission Statement

The **Mission Statement** of the VA Boston Healthcare System RN residency Program is “to support Nurse Residents to transition from an entry-level, advanced beginner nurse to a competent professional nurse who provides safe, quality care to patients; to develop effective decision-making skills related to clinical judgment and performance, strategies to incorporate research-based and other evidence into practice, and clinical leadership skills at the point of patient care, and to formulate an individual career plan that promotes a life-long commitment to professional nursing.”
The *Philosophy* of the VA Boston HCS RN residency Program is based on the belief that America’s Veterans deserve the best healthcare that can be provided.

Nurses who practice an ethic of caring, are well-educated with relevant clinical experience, appreciate and contribute to interdisciplinary care, and ground their activities in available expert evidence while remaining patient-centered, are in the best position to ensure that the highest quality care is rendered to our Veterans.

Formalized nurse residency programs have been shown to strengthen newly graduated nurses’ capacity to care through patient-focused activities, critical thinking, and professional commitment to the discipline.
Goals for the VA BHS RN Nurse Residency program are to:

- Transition from entry-level, advanced beginner nurse to competent professional nurse, levels defined by Benner’s (1984) “Novice to Expert” theory,
- Develop effective decision-making skills related to clinical judgment and performance,
- Provide clinical leadership at the point of care,
- Strengthen commitment to nursing as a professional career choice,
- Incorporate research-based evidence into practice
- Formulate individual care development plan.
Content

Evidence Based Practice (EBP) is the practice of nursing in which the nurse makes clinical decisions based on the best available current research, clinical expertise, and the needs and preferences of the patient.

Each RN resident will develop and present an evidence-based practice project based on identified patient care concerns.

The resident will attend seminar sessions to review the key concepts of evidence-based nursing practice, review of literature, institutional policies and procedures to develop a research project in conjunction with a Academic VA Nurse Scientist.
Evidence Based Practice

What are the evidenced based nursing strategies to mitigate ward/hospital noise to effect patient outcomes.

Laura Iwasa, BSN, RN, James Dagg, MSN, RN, ACNS, Linda Leigh, MSN, RN, CBL
Department of Veterans Affairs

Purpose
Identify and implement nursing strategies to mitigate ward/hospital noise to improve patient outcomes.

Methods
Examine literature on ward/hospital noise and its impact on patient outcomes. Conduct focus groups with patients, healthcare staff, and family members to identify perceived noise levels and preferred strategies for noise reduction.

Results
Most patients reported feeling anxious and distressed due to ward/hospital noise. Nurses and other healthcare providers also noted a significant increase in stress levels during shift changes, particularly when noise levels were high.

Conclusions
Nursing strategies implemented to reduce ward/hospital noise included using headphones, soft music, and communication tools. These strategies resulted in a decrease in patient anxiety and improved overall satisfaction with hospital environment.

Table:

<table>
<thead>
<tr>
<th>Noise Level</th>
<th>Patient Anxiety</th>
<th>Staff Stress</th>
</tr>
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<tbody>
<tr>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Moderate</td>
<td>Moderate</td>
<td>Moderate</td>
</tr>
<tr>
<td>High</td>
<td>High</td>
<td>High</td>
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Recommendations
- Implement noise reduction policies in all hospital wards.
- Provide ongoing education for staff on noise reduction strategies.
- Conduct regular assessments of noise levels and patient satisfaction to evaluate effectiveness of interventions.

Linda Iwasa, RN, CBL
The nurse must have current knowledge of best patient care practices and must be able to use evidence from multiple sources, including nursing research. The program is designed to help the resident apply the concepts of evidence-based practice and identify its importance in the delivery of safe, quality patient care. Seminar content, clinical, and other learning experiences enable the resident to:

- Identify the key concepts of evidence-based nursing practice.
- Apply the concepts of evidence-based practice when caring for specific patient populations and/or to a specific clinical setting.
- Identify and use available resources for best practice information.
- Identify the institution’s process for using evidence in the revision of standards, guidelines, policies, and procedures.
- Critically appraise a research study.
- Develop an evidence-based practice project
The Professional Nurse of Today will integrate the best evidence available using nursing expertise and the values and preferences of individuals, families and communities who are served by health care.

What is Evidence-Based Practice in Nursing and Why is It Important?

Today's nursing workforce must be educated and equipped to challenge the "status quo" and they must learn to investigate the many traditions embedded within the culture of nursing as well as evaluate their usefulness and validity in practice (Dimitroff, 2011). Evidence Based Practice is interwoven and connected to outcomes and includes the identification of clinical problems that relate to patients and nursing. Through the modes of knowledge, attitude, and skills (KAS), nurses in practice develop and gain expertise in its use for the overall improvement of patient care.
Reflective Questions utilized during didactic sessions

Questions for Reflection in Practice:
1. How does evidence-based practice influence and improve nursing care?
2. What are barriers and probable limitations for implementing evidence-based practice and how would one overcome them?
3. What type of infrastructure is necessary to support EBP within organizations?
4. How does evidence-based practice facilitate decision making in nursing about patients?
5. What steps are used to evaluate the evidence within clinical practice guidelines and how are these taught in academic settings?
6. How can a culture be created to promote the use of EBP and how does it enhance the critical thinking at the bedside
Expectations

- Attend monthly Evidence Based practice Workshops
- Fourth Thursday of the month
- West Roxbury Campus-Barsamian Auditorium unless otherwise notified
- 7:30a-4pm for RN resident trainees for twelve months
- 7:30-10:30AM RN resident employees for first 6 months. 7:30-4pm for months 7-12.
- Time provided to complete data collection and collaboration as needed.
- VA Nurse Scientist (PhD prepared) meet on a monthly basis with residents and as needed basis to develop suitable PICO question and ensure appropriate development of EBP process.
Expectations continued

- Complete required readings as assigned
- Review of readings completed in large group before small group work
- Interprofessional Clinical reasoning and journal club participation
- Podium presentation of findings at Annual VA Boston HCS EBP/Nurses Day
- All VA Boston HCS staff invited plus incoming cohort
- Poster presentation on display with People’s choice awards
First Four Months

- Invited to Attend Annual VA Boston Healthcare System EBP/Research day.

<table>
<thead>
<tr>
<th>Class 1</th>
<th>Developing a PICO Question</th>
<th>VA Nurse Scientist introduction and discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class 2</td>
<td>How to conduct a Literature Search- all online and extensive!</td>
<td>VA VISN librarian</td>
</tr>
<tr>
<td>Class 3</td>
<td>Identify and refine a PICO Question</td>
<td>Small group work with facilitation by VA Nurse Scientists and RN residency Program Staff.</td>
</tr>
<tr>
<td>Class 4</td>
<td>Literature Critique- Walk through and critique two research articles.</td>
<td>Second year Pharmacy Resident</td>
</tr>
<tr>
<td>Class 5</td>
<td>Refining question and identifying key stakeholders (both pro and con) and why important</td>
<td>Small group work facilitated by RN residency program staff and VA Nurse Scientists.</td>
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<tr>
<td>Class 6</td>
<td>Identify interventions. How am I going to make this work?</td>
<td>Small group work facilitated by RN residency program staff and VA Nurse Scientists.</td>
</tr>
<tr>
<td>Class 7</td>
<td>Implementation Strategies - How am I going making this work?</td>
<td>Small group work facilitated by RN residency program staff and VA Nurse Scientists</td>
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<tr>
<td>Class 8</td>
<td>Implementation strategies - collecting data</td>
<td>Small group work facilitated by RN residency program staff and VA Nurse Scientists</td>
</tr>
<tr>
<td>Class 9</td>
<td>Evaluation - what does it mean? Identify barriers/limitation</td>
<td>Small group work facilitated by RN residency program staff and VA Nurse Scientists</td>
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<tr>
<td>Class 10</td>
<td>Dissemination and Sustainability. Where do we go from here? Recommendations</td>
<td>Small group work facilitated by RN residency program staff and VA Nurse Scientists</td>
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<tr>
<td>Class 11</td>
<td>Practice Podium Presentation in front of peers.</td>
<td>Peer review with written critique given to each presenter.</td>
</tr>
<tr>
<td>Class 12</td>
<td>Podium Presentation at Annual VA Boston Nursing EBP/Research Day.</td>
<td>Individual presentations with podium and poster presentations.</td>
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Therapeutic Music Group: The Effect of Listening To Instrumental Music on Acute Psychiatric In-Patients

Diana Hoang BSN, RN
VA Boston Nurse Residency Program

Background
- The clinical and evidence-based use of music interventions to accomplish individualized goals within a therapeutic relationship by a credentialed professional (AMTA, 1999-2004, p.1)
- Music therapists address physical, emotional, cognitive, and social needs of individuals.
- Designed music sessions can be either:
  - Individual or group based
  - Active improvisation, songwriting, facilitated group drumming or receptive (listening to pre-recorded music)
- Purpose
  - Research and analyze current literature on music therapy on acute psychiatric inpatients
  - Implement a music group on ward 23-3
  - Analyze the effect of specific music therapy intervention (receptive) on patient outcomes
  - Determine if music therapy is a viable treatment option

Methods
- Baseline data was collected once per person during first music session using 5 point Likert scale pre-questionnaire.
- After every music session, each participant completed a 5 point Likert scale post-questionnaire.
- Both pre and post questionnaires consisted of the same 10 questions for comparison.

Pre & Post Questionnaire

<table>
<thead>
<tr>
<th>Question</th>
<th>Pre (1-5)</th>
<th>Post (1-5)</th>
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</thead>
<tbody>
<tr>
<td>1. I feel relaxed.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>2. I sleep well.</td>
<td>2</td>
<td>4</td>
</tr>
<tr>
<td>3. I am able to focus.</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>4. I feel stressed.</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>5. I feel angry.</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>6. I express myself.</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. I interact with others.</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>8. I feel different from others.</td>
<td>1</td>
<td>3</td>
</tr>
</tbody>
</table>

Comparison of Patient Feelings Over Time

Statistics show significant improvement found except on the three right-most criteria.

Patient Rating of Music Group

- All patients either liked or loved the group.
  - Liked it: 39%
  - Loved it: 61%

Conclusion
- Therapeutic Music Group supports positive outcomes in following areas:
  - Increased relaxation
  - Decreased anxiety & anger
  - Improved sleep
  - Increased ability to focus
  - Diagnosis group (MDD) showed strong correlation with entire group
  - Likely that all psychiatric patients will benefit from implementation of a music group

Literature Review

- Systematic review of 6 randomized trials: active music therapy provides short term improvement in interpersonal interaction, coping skills, and psychiatric symptoms (Carr et al., 2013). Review suggests there was no single clearly defined model of music therapy.
- Exploratory randomized controlled trial showed PTSD patients who received group music therapy experienced reduction in severity of PTSD/depression symptoms.
- Compared the effectiveness of five different music interventions: positive outcomes in almost all the music techniques except lyrical analysis intervention.
- Studies showed promising results in immediate and short-term.

Implementation
- Total number of participants: 36
- 100% Male Participants
- Mean age: 53.1 years
- Mean duration of stay: 9.8 days
- Mixed diagnoses
- Design:
  - Session offered 3 times weekly on ward
  - Session length: 45 min per session
    - 30 min of instrumental music listening
    - 15 min discussion
  - 4-5 participants per session
- Total duration of music group/study: 23 sessions (~2 months)

Diagnosis Breakdown

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>Schizophrenia</td>
<td>24%</td>
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<tr>
<td>Substance Use Disorder</td>
<td>15%</td>
</tr>
<tr>
<td>Bipolar Disorder</td>
<td>28%</td>
</tr>
<tr>
<td>Major Depressive Disorder</td>
<td>30%</td>
</tr>
<tr>
<td>Schizoaffective Disorder</td>
<td>8%</td>
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Management of weight gain on a long stay mental health unit
ANISS MELLOUK, RN, BSN

BACKGROUND
- 2-4-B is a locked long stay psychiatric unit that provides care to veterans with a variety of mental disorders.
- It was noted that the majority of veterans started to gain weight as soon as they get transferred to 2-4-B. Some of these veterans started gaining weight while being inpatients on the acute units.
- The VA is not the only health care organization experiencing this issue; other locked psychiatric long term units, private and public, face the same challenge.

WEIGHT GAIN AND MENTAL ILLNESS
- The prevalence of obesity is higher in people with mental illness than in the general population.
- This population is more likely to smoke and less likely to engage in exercise.
- While there are justifiable concerns about the weight gain associated with antipsychotic medication, it is too simplistic to ascribe all obesity in people with serious mental illness to their drug treatment.

NON-PHARMACOLOGICAL AND PHARMACOLOGICAL FACTORS
- Genetics
- Low levels of physical activity and greater social deprivation especially among the inpatient population.
- Lowering of the basal metabolic rate during periods of depression, with a reduction in spent energy ultimately contribute to weight gain.
- Atypical antipsychotics have been associated with a higher prevalence of obesity. The following drugs were classified by their impact on the weight gain:
  1. Clozapine (Clozaril)
  2. Olanzapine (Zyprexa)
  3. Quetiapine (Seroquel)
  4. Risperidone (Risperdal)
  5. Aripiprazole (Seroquel)
  6. Atypical antipsychotics (Abilify)
  7. Ziprasidone (Geodon)

METHOD
- N=8
- Length of observation: 12 months
- Period of observation: June 2013-May 2014

RESULTS
- Average weight gain before the beginning of the interventions for the 8 patients was 12.85 lbs.
- Average weight loss after the interventions were implemented for the same 8 patients was 18.77 lbs.
- October 2013 had the highest average weight 211.10 lbs.
- May 2014 had the lowest average weight 199.36 lbs.
- The group experienced weight loss each month from November 2013 until May 2014.
- Lowest BMI was 21.87.

LIMITATIONS
- Patients’ motivation and compliance.
- Depression, inability, and refusal to participate in physical activities.
- Lack of variety of healthy snacks and drinks.
- Need for additional staffing to incorporate more interventions and activities.
- These are only pilot interventions aimed at managing weight gain on the unit. More comprehensive interventions are needed to look at specific variables such as age, gender, diagnosis, psychiatric history, and medications.
- Patients who often refused to be weighed were excluded.
- Other veterans experienced weight loss but were not included due to their short length of stay.
- Any sudden weight loss or gain caused by an illness were not taken into consideration.
- The small size of the group followed.

CONCLUSIONS
- Positive outcomes can be attained when veterans are involved in their own care.
- Education for patients and staff leads to a better management of weight gain.
- A multidisciplinary approach between nursing, medicine, psychiatry, dietary, and other disciplines is paramount to achieve positive outcomes.
Should Assessment Of Cognitive Ability Be Part Of The Best Practice For The Acute Psychiatry Patient?
Ryan P. Bearden, RN, BSN
Boston VA Healthcare System

BACKGROUND
Psychiatry Readmissions
Readmission: An admission within 30 days post discharge from previous hospitalization.
10,164 patient admissions to an acute psychiatry unit in the past 5 years (2009-2014). Based on the average percentage rate of 25%, for psychiatry readmissions during that time span, that equals about 2,614 patients that were readmitted to an acute psychiatry unit.

METHODS
Clock In The Box Cognitive Assessment Tool
Chosen tool for gathering information related to patient's cognitive ability for this project. Selectively chosen based on various reasons. The Clock In The Box Cognitive Assessment Tool is acknowledged for its simplicity and ease of administration, while it is a measurable tool used to detect cognitive decline associated with a variety of neurobehavioral disorders.

The Clock In The Box Cognitive Assessment Tool requires multiple cognitive abilities in order to perform appropriately, including:
- Auditory comprehension
- Visual comprehension
- Concentration
- Visuospatial ability
- Abstract conceptualization
- Executive control

Results of these areas reflect possible frontal and temporoparietal disturbances that are often exhibited in Alzheimer's Disease and other forms of cognitive decline, otherwise may not be detected by commonly used cognitive screening tests such as the Mini-Mental Status Exam.

Absence of Cognitive Decline
Currently, the ability for the nurse to assess the cognitive ability of the patient is based on the results of the initial nursing interview assessment.
- Alert and oriented
- Level of consciousness
- Calhoun Risk Assessment
- Richmond Agitation Sedation Scale (RASS)
The patient is expected to follow the complex healthcare instructions appropriately, regardless of the results from the initial interview.

Risks for Cognitive Decline
Contemporary research has exposed that the veteran population is at significant risk for cognitive decline correlated to military exposures and non-military related diagnoses:
- Traumatic Brain Injury (TBI)
- Post Traumatic Stress Disorder (PTSD)
- Depression
- Substance abuse
- Acute psychosis

TBI, PTSD, and depression have been linked together with affecting biological pathways of the brain associated with cognitive decline. Substance abuse withdrawal weakens cognitive ability while chronic abuse can create impairment beyond initial deterioration. Symptoms of psychosis can alter thought patterns and processes.

RESULTS

Implementation
Various diagnoses where selected, excluding patients with acute psychotic symptoms. 10 patients selected and completed assessment. Administered tests with in first 45 hours of admission to psychiatry unit. Cleared patient for any difficulty reading or deciphering colors. Explained no personal information would be used or stored on test results. Explained that results would not effect the length of stay on the unit.

Instructions
Please read and do the following carefully (no other help of instruction will be provided):
- In the blue box on the next page
- Draw a picture of a clock
- Put in the numbers
- Set the time to ten after eleven

Hand this sheet back and go to the next page.
Scored results according to separate scoring Sheet

Recommendation
Based on patients score, if warranted:
- Health care team would further investigate for cognitive decline
- Adjust plan of care and education according to patient's cognitive ability and understandings
- Possible need for medication reconciliation so medication regimen does not accelerate cognitive decline
- Increase priority of patient demonstration prior to discharge
- Increase frequency of outpatient meetings, groups, and follow-up

CONCLUSION
Health care staff are unable to determine cognitive ability through interview alone. Extending this project into clinical practice by increasing subjects, incorporating the healthcare team, and implementing stricter methods allows for a unique opportunity to continue to gauge patient's cognitive ability and adapt the plan of care accordingly. In doing so, VA Boston Healthcare System may be able to better aid the patient in understanding their plan of care and their ability to comply with the instructions provided to maintain optimal mental health. In this work it may also be possible to reduce the inflated patient readmission rate to acute psychiatry.