Evidence-Based Practice in Health Care Online Module

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How long do you think it takes for new medical evidence to reach the bedside and be applied to the general population receiving care?

a. 1-3 years  
b. 4-5 years  
c. 6-10 years  
d. >10 years
Evidence-Based Practice (EBP) is needed at the bedside
  - 15 years from discovery to practice
  - Medical information changes rapidly
  - Absence of current information → patients may be exposed to unnecessary or sub-optimal procedures

Face-to-face courses are time consuming and costly

Staff with EBP process can impact change more quickly
• PROBLEM STATEMENT
• The purpose of this instructional design project was to explore the delivery of an online evidence-based practice (EBP) course module in providing for retention of key objectives of EBP for health care providers at Hawaii Pacific Health
GOALS & OBJECTIVES

• Develop one module containing 3 lessons:
  • Evidence-Based Practice Overview and the Iowa Model
  • Forming a Clinical Question
  • Literature Critique and Synthesis
GOALS & OBJECTIVES

- Knowledge retention with pre and post-tests
- End-user satisfaction with post-participation survey
AUDIENCE

- Health care professionals at Hawaii Pacific Health (nurse managers, supervisors, and new nurses in training)
  - Professionals
  - Associates – Masters Degrees
  - Age range 22-55
Cognitive Domain
Affective Domain
Adult Learning
Small chunks
Own timing
Real world application
• HealthStream LMS Selected
• Import PowerPoint Slides to Storyline 360
• Rapid Design Sessions
• Addition of content, activities and video
Welcome to Evidence-Based Practice in Health Care Lesson 3: Literature Critique and Synthesis
Welcome to Evidence-Based Practice in Health Care Lesson 3: Literature Critique and Synthesis
Welcome to Evidence-Based Practice in Healthcare Lesson 3: Literature Critique and Synthesis
Graded Questions

Built in Graded Questions

True/False
Multiple Choice
Multiple Response
Fill-in-the-Blank
Word Bank
Matching Drag-and-Drop
Matching Drop-down
Sequence Drag-and-Drop
Sequence Drop-down
Numeric
Hotspot

Inspire

Multiple Choice
Multiple Choice
Multiple Choice

Vibrance

Insert Slide
### Learning Activities in this Course

<table>
<thead>
<tr>
<th>Activity</th>
<th>Status</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test EBP Intro Lesson 1 - EBP Overview and the Iowa Model</td>
<td>In Progress</td>
<td>Resume</td>
</tr>
<tr>
<td>EBP in Health Care Lesson 1 - EBP and the Iowa Model</td>
<td>Not Yet Started</td>
<td>Start</td>
</tr>
<tr>
<td>Pre-Test EBP Intro Lesson 2 - Forming a Clinical Question</td>
<td>Not Yet Started</td>
<td>Start</td>
</tr>
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</tr>
<tr>
<td>Post-Test EBP Intro Lesson 3 - Literature Critique and Synthesis</td>
<td>Not Yet Started</td>
<td>Start</td>
</tr>
<tr>
<td>EBP introduction Post-Participation Survey</td>
<td>Not Yet Started</td>
<td>View</td>
</tr>
</tbody>
</table>

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Student View within HealthStream
Welcome to Evidence-Based Practice in Health Care Lesson 1: Introduction and Overview
The terms research, EBP, and performance improvement are often interchanged, but have key differences that are important to understand.

Click on each of the terms to learn more.
<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>&quot;Does this work?&quot;</td>
<td>Answers the question &quot;Does this work?&quot;; aims to generalize information to large population</td>
</tr>
<tr>
<td>Is aspirin useful in patients with heart attack?</td>
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</table>
The terms research, EBP, and performance improvement are often interchanged, but have key differences that are important to understand.

Click on each of the terms to learn more.
Drag and drop each of the following examples to their appropriate basket below.

- Are antibiotics the best treatment for otitis media in children under the age of 10?
- How can we ensure patients that are issued prescriptions receive them from our pharmacy in a timely manner?
- Do patients that receive antibiotics recover faster from otitis media than patients that do not receive antibiotics?

- Research
- Evidence-Based Practice
- Performance Improvement
Select the correct order of steps when utilizing the Iowa Model for evidence-based practice.

- **Step 1**: Identify Triggers
- **Step 2**: Determine Priorities
- **Step 3**: Form a Team
- **Step 4**: Critique/Synthesize Literature
- **Step 5**: Pilot the Change
- **Step 6**: Institute Change, Monitor
Select the correct order of steps when utilizing the Iowa Model for evidence-based practice.

Step 1: Identify Triggers
Step 2
Step 3
Step 4
Step 5
Step 6: Institute Change, Monitor

Correct

That's right! You selected the correct response.

Continue
Reminder:
You can click the **Resources** button in the upper right hand corner to get a copy of literature critique form or literature matrix!
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PARTICIPANTS,
RESULTS & FINDINGS
PARTICIPANTS
PARTICIPANTS

Participant Age Range

- 46-55: 2
- 36-45: 6
PARTICIPANTS

Participant Age Range
- 36-45: 6
- 46-55: 2

Years in Nursing Practice
- More than 10 years: 5
- Less than 5 years: 3

Total Participants: 10
**PARTICIPANTS**

- **Previous EBP Training**
  - 36
  - 45

- **No Previous EBP Training**
  - 46
  - 55

**Participant Age Range**
- 36-45: 6
- 46-55: 2

**Years in Nursing Practice**
- Less than 5 years: 5
- More than 10 years: 3
RESULTS
OVERALL

Lesson 1
Lesson 2
Lesson 3

Pre-Test  Post-Test
RESULTS

INDIVIDUAL

![Graph showing test scores for individual students. The x-axis represents student numbers from 1 to 8, and the y-axis represents test scores from 0% to 100%. Two lines indicate pre-test and post-test scores.](image-url)
RESULTS – LEARNER SELF ASSESSMENT

Define evidence-based practice
Formulate a PICO statement
Evaluate/critique literature for a given clinical issue

Extremely Capable 4
Sufficiently Capable 3
Limited 2
Extremely Limited 1
<table>
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<tr>
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<tr>
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</tr>
<tr>
<td>Value of information in the course</td>
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I liked the interaction to keep the learner engaged.
RESULTS
PARTICIPANT
SURVEY

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Audio explaining each bullet point a little more.
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I really enjoyed how to create a PICO statement; the practice statements really helped
Challenges

- Recruitment challenges
- Technical Issues
FINDINGS

Challenges

• Recruitment challenges
• Technical Issues

Successes

• Increase pre-test to post-test
• Positive participant feedback
• Positive feedback from face-to-face instructor
WHAT’S NEXT?

- Flipping the classroom for session 1 of the EBP face-to-face course
- Convert additional lessons to online format
- Share with other facilities, outer island
Questions?

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