## Texas Children’s Hospital

## Global HOPE Learning Academy

## ESSENTIALS OF EVIDENCE-BASED PRACTICE

## Program Description

## This course is designed for health care professionals working in Sub-Saharan Africa. It is developed to teach the steps of evidence-based practice and cultivate a spirit of inquiry. During the course, participants will craft a clinical question in PICOT format, craft a search strategy including relevant databases, critically appraise and synthesize the evidence, and translate those findings into practice. Students will learn to critically appraise and synthesize evidence for translation into practice.

## Faculty

## Karen DiValerio Gibbs, MSN/MPH, RN, PHNA-BC, CPN

## Marilyn J Hockenberry PhD, RN, FAAN

## Program Objectives

## Analyze the essentials components of the evidence-based review process.

## Identify a clinical problem that pertains to quality or safety of patient care or health systems and translate the concept into a clinical question.

## Navigate among a variety of information sources to access, search, and critically evaluate appropriate resources related to a specific clinical question.

## Critically appraise literature and other evidence.

## Synthesize the findings of the evidence review and translate those findings into practice.

## Course Activities

## Didactic Sessions

## Within each module, specific presentations are audiotaped as part of the Global HOPE Open Courses in MOODLE. Following the lectures within each module, activities will focus on the principles of evidence-based practice. Each module varies in length depending on the amount of content covered~~.~~

## Assignments

## Students in the course will complete assignments in each Module before completing the Module quiz.

## Evaluation

## Evidence-based Review

## Students will demonstrate understanding of evidence-based practice through an evidence based-practice review that will be built throughout the course. With a series of assignments, the students will complete the following by the end of the Essentials of Evidence-Based Practice Course:

## Craft of a PICOT question and develop a search strategy,

## Review research articles using the CASP checklist

## Complete a literature appraisal table summarizing the evidence found to answer their clinical question

## Module quizzes

## Each module has a quiz that students must complete before moving to the next module.

## Course Modules

## The course is designed with four modules. These modules include:

## Module 1 Evidence-Based Practice and Why It Matters

This Module is designed to help the student understand EBP as the integration of best research evidence with clinical expertise and patient’s unique values and circumstances. Students will learn to recognize the rationale for EBP and practice the 5 steps of EBP: ask, acquire, appraise and interpret, apply, and evaluate. At the end of this module the student will understand the distinction between using research to inform clinical decision making vs. conducting research or initiating quality improvement activities.

##### **Readings**

Sackett, D., Rosenberg, W. M. C., Muir Gray, J. A., Haynes, R. B., Rickardson, W. S. (1996). Evidence-Based Medicine: what it is and what it isn’t. (1996). *BMJ, 312*(7023), 71-72

<https://www.bmj.com/content/312/7023/71>

##### **Lectures**

## [Overview of Evidence Based Practice—Definitions and History](https://www.screencast.com/t/klCoASavhu)

## [Differences between Evidence-Based Practice, Quality Improvement, and Research](https://www.screencast.com/t/c7VdAEZutBo)

## Translating Research Evidence into Clinical Practice

## Module 2 Asking & Acquiring: Crafting a PICOT Question & Creating Search Strategies

This Module explains the difference between background questions and foreground questions. Students will identify different types of clinical questions and convert clinical questions into structured, answerable clinical questions using PICOT.

##### **Readings**

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| Stillwell, SB et al. Asking the Clinical Question: A Key Step in Evidence-Based Practice, 110:3, 58-61. |

**Lectures**

* [Writing PICOT Questions](https://www.screencast.com/t/am2iNa0p)
* [Translating PICOT Questions into a Search Strategy](https://www.screencast.com/t/AgJA8Vw1YOJ)
* [Database basics: controlled vocabulary, keywords, and Boolean operators](https://www.screencast.com/t/7cF1gRD2)

**Module 3 Appraise & Interpret: Types of Evidence**

This module will explore how to evaluate research studies. by teaching how to Identify the key features of a study. Discussion will include how to interpret the results including measures of effect and uncertainty in quantitative studies. Introduction to the Clinical Appraisal Skills Program (CASP) checklists for randomized clinical trials and cohort studies.

##### **Readings**

[Murad, M. H., Asi, N., Alsawas, M., Alahdab, F. (2016). New evidence pyramid. Evidence-Based Medicine, 21(4), 125-127.](https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4975798/)

Critical Appraisal Skills Programme Tools: <https://casp-uk.net/casp-tools-checklists/>

**Lectures**

* [The Anatomy of a Research Article](https://www.screencast.com/t/PdP1KH1I)
* [Hierarchy of Evidence](https://www.screencast.com/t/XFx4VIyGa4)

**Module 4** **Apply & Evaluate: Evidence Synthesis and Decision-Making**

This Module demonstrates how to evaluate and synthesize a body of evidence gathered to determine its strength and applicability to clinical practice. Students learn to recognize the patients’ values and preferences and the different dimensions of decision-making. students learn how to translate evidence to clinical practice and identify potential barriers and strategies to overcome these.

##### **Readings**

Alonso-Coello, P., Schunemann, H. J., Moberg, J., Brignardello-Petersen, R., Akl, E. A., Davoli, M., …the GRADE Working Group. (2016). GRADE Evidence to Decsion (Etd) frameworks: a systematic and transparent approach to making well informed healthcare choices. 1: Introduction. *British Medical Journal, 353.*Retrieved from: <https://www.bmj.com/content/353/bmj.i2016>.

##### **Lectures**

* [Literature Tables: Helping you see the big picture](https://www.screencast.com/t/YLdwhthGcIab)
* [Grading of Recommendations, Assessment, Development, and Evaluation (GRADE) and CERQual Evidence to Decision (EtD) Framework](https://www.screencast.com/t/J3JIljnHg)