This course supports the assessments for FWC2. The course covers 7 competencies and represents 3 competency units.

**Introduction**

**Overview**
This graduate-level course builds on your baccalaureate-level statistical knowledge to help you develop skills in analyzing, interpreting, and translating research into nursing practice using principles of patient-centered care and applications to individuals and populations.

**Competencies**
This course provides guidance to help you demonstrate the following 7 competencies:

- **Competency 7000.1.1: Evaluating Comprehensive Literature Reviews**
  The graduate evaluates comprehensive literature reviews for historical context, completeness, applicability, reliability, organization, and quality of information sources.

- **Competency 7000.1.2: Defining Key Features and Use of Statistical Concepts**
  The graduate defines features and use of basic statistical concepts needed to interpret research findings and guide evidence-based practice.

- **Competency 7000.1.3: Evaluating Quantitative Studies**
  The graduate analyzes and interprets qualitative research reports.

- **Competency 7000.1.4: Evaluating Qualitative Studies**
  The graduate analyzes and interprets qualitative research reports.

- **Competency 7000.1.5: Comparative Effectiveness**
  The graduate analyzes and interprets comparative effectiveness findings and their impact on standards of practice.

- **Competency 7000.1.6: Ethical and Legal Issues in Healthcare Research**
  The graduate evaluates research for ethical and legal protection of human subjects in healthcare research.

- **Competency 7000.1.7: Evidence-Based Practice and Translation of Research in Patient-Centered Clinical Practice**
  The graduate interprets evidence and evaluates its applicability in practice.

**Nursing Dispositions Statement**
Please review the [Statement of Nursing Dispositions](#).

**Course Mentor Assistance**
As you prepare to successfully demonstrate competency in this subject, remember that course mentors stand ready to help you reach your educational goals. As subject matter experts, mentors enjoy and take pride in helping students become reflective learners, problem solvers, and critical thinkers. Course mentors are excited to hear from you and eager to work with you.

Successful students report that working with a course mentor is the key to their success. Course mentors are able to share tips on approaches, tools, and skills that can help you apply the content you're studying. They also provide guidance in assessment preparation strategies and
troubleshoot areas of deficiency. Even if things don’t work out on your first try, course mentors act as a support system to guide you through the revision process. You should expect to work with course mentors for the duration of your coursework, and you are encouraged to contact them as soon as you begin. Course mentors are fully committed to your success!

**Preparing for Success**

The information in this section is provided to detail the resources available for you to use as you complete this course.

**Learning Resources**

The learning resources listed in this section are required to complete the activities in this course. For many resources, WGU has provided automatic access through the course. However, you may need to manually enroll in or independently acquire other resources. Read the full instructions provided to ensure that you have access to all of your resources in a timely manner.

**Automatically Enrolled Learning Resources**

You can access the learning resources listed in this section by clicking on the links provided throughout the course. You may be prompted to log in to the WGU student portal to access the resources.

**VitalSource E-Texts**

The following textbooks are available to you as e-texts within this course. You will be directly linked to the specific readings required within the activities that follow.


*Note: These e-texts are available to you as part of your program tuition and fees, but you may purchase hard copies at your own expense through a retailer of your choice. If you choose to do so, please use the ISBN listed to ensure that you receive the correct edition.*

**Nursing Standards**

You will be able to access Nursing Professional Standards as they apply to your program through the WGU Library. Please access these documents at the following website:

- [WGU Library Nursing E-Reserves](#)

**Evaluating Comprehensive Literature Reviews**

It is vital that the master’s-prepared nurse has a thorough understanding of techniques in performing and evaluating literature reviews.

**Comprehensive Literature Review**

A comprehensive literature review is an essential element of high-quality research. It provides
the background needed to understand the purpose and significance of the research, identifies relevant theories and concepts, and demonstrates how the research builds on what is currently known about the field of study. It is important for the graduate-level nurse to know how to evaluate the quality of comprehensive literature reviews as part of a rigorous critique of evidence used to guide practice and improve patient outcomes.

This topic addresses the following competency:

- **Competency 7000.1.1: Evaluating Comprehensive Literature Reviews**
  The graduate evaluates comprehensive literature reviews for historical context, completeness, applicability, reliability, organization, and quality of information sources.

This topic highlights the following key concepts:

1. the purposes and value of a literature search in contemporary research
2. attributes and appropriate use of different information sources
3. search tools for accessing research-based literature in nursing and healthcare
4. appropriate search terms for use in search engines and databases for accessing research-based literature in nursing and healthcare
5. the quality of a literature review, with regard to factors such as organizational format, historical context, citations, conclusions, and completeness

**Watch: Searching PubMed Video**

Review the following video:

*Note: View the video in full screen at 720p for best results*

**Application of Techniques to Evaluate Literature**

This exercise is designed is to give you an opportunity to generate key words and search selected databases using these key words to access research-based literature. The search process begins by developing a PICO (patient problem or population, intervention, comparison, and outcome) question, then determining the key words that should be entered into the search database to help you retrieve articles relevant to your research question.

Review information about writing a PICO question from the following pages of *Evidence-Based Practice for Nurses: Appraisal and Application of Research*:

- pages 81–82 of chapter 3 ("Identifying Research Questions")

Read the following page of the following article:

Then complete the following steps:

- Identify a clinical problem and develop a PICO question using the PICO worksheet. Write the question using the following format:

  In _______________ (patient population), does _______________ (intervention) improve/reduce ___________ (outcome) as compared to _________________ (comparison group)?

- Using the keywords in the PICO question, identify MeSH search terms and use search engines (e.g., Pub Med, Google Scholar, Google, Cochrane Collaboration and Library) to access research about the particular clinical problem you have identified.

**Analyzing Literature**

As you review articles you have retrieved in the search process, it is important to keep a record of relevant information you have read in some type of a database. A data table/grid is one of the most common approaches to organize and summarize evidence. You will be using this tool throughout the course as you learn to analyze different aspects of a journal article.

Refer to the data table/grid and the following journal articles:


Complete the following:

- Enter the citations for these articles into the first column of the grid.
- Enter the purpose for each of the studies into the grid.

Here is the grid/table for this exercise:

- **Journal Article Grid**

Read the following article:


This article will help you to understand the purpose of the literature review of medication errors and the need for evidence-based practice changes in this area.
Evaluate

Review the article following article:


Critique the literature review section at the beginning of the article using the criteria listed below. Provide a rationale supporting your critique. Refer to The Literature Review: A Step-By-Step Guide for Students to help you answer the questions.

- What was the purpose and value of the review? (See chapter 2 ("The Multiple Purposes of a Literature Review"))
- Were appropriate databases/information sources used? (See chapter 2 ("The Multiple Purposes of a Literature Review"))
- Were the search terms linked to the research question? (See chapter 3 ("Sources of Information and Conducting Searches"))
- Was the review organized in a format that was easy to understand? (See chapter 6 ("Structuring the Literature Review"))
- Did the review provide a historical context for the research? (See chapter 2 ("The Multiple Purposes of a Literature Review"))
- Are sources adequately and correctly cited? (See chapter 7 ("In-Text Citations"))
- Were the conclusions of the review consistent with the evidence provided?
- Do they support going forward with the study?
- Was the review complete?

Readings on Comprehensive Literature Review

The readings below provide you with an overview of the purpose of a literature review and methods used by researchers to create a literature review. While you are not expected to actually create a literature review, you will need to know how to search the literature to find evidence (research) that informs best practice. You should also be able to evaluate the quality of this evidence. The literature review is an essential element of every research article. These readings provide you with information about the essential elements of a literature review—important information you need in order to evaluate the quality of literature review.

Read the following in The Literature Review: A Step-By-Step Guide for Students:

- chapter 1 ("Introduction")
- chapter 2 ("The Multiple Purposes of a Literature Review")
- chapter 3 ("Sources of Information and Conducting Searches")
- chapter 6 ("Structuring the Literature Review")
- chapter 7 ("In-Text Citations")

Read the following chapters in Evidence-Based Practice for Nurses: Appraisal and Application of Research:
Read the following article:


**Defining Key Features and Use of Statistical Concepts**

Master's-prepared nurses are expected to be able to comprehend statistical concepts used in research to determine significance, relevance, and whether or not they are scientifically sound data.

**Statistical Concepts**

As a master's-prepared nurse, you are expected to be able to read and critique research to determine if the evidence is statistically significant, clinically relevant, and scientifically sound. An important aspect of the critique is a thorough review of the statistics that were used in the study. This section builds on your previous knowledge about statistics and provides you with an opportunity to review how descriptive and inferential statistics are used to analyze quantitative data as well as report and interpret the findings.

This topic addresses the following competency:

- **Competency 7000.1.2: Defining Key Features and Use of Statistical Concepts**
  The graduate defines features and use of basic statistical concepts needed to interpret research findings and guide evidence-based practice.

This topic highlights the following key concepts:

1. statistical concepts such as central tendency, variability, probability, hypothesis testing, etc.
2. appropriate use of the statistical tools correlation and regression
3. the proper use of the basic tools of descriptive statistics, such as central tendency, variability, and frequency distributions
4. key tenets of basic probability theory
5. the use of the basic tools of inferential statistics such as hypothesis testing, statistical significance, Type I and Type II errors
6. when to use a statistical test such as t-test, chi-square, and ANOVA. Identify types of quantitative research design employed in a research study

**Connections with Statistical Analyses**

Post a response to the following questions in the learning community and respond to at least one other student posting.

- Describe a situation when you have used a measure of central tendency in your nursing
Comprehension of Statistics

The purpose of this exercise is to provide you with an opportunity to strengthen your understanding of the purpose and type of data required for commonly used descriptive and inferential statistics. This will enhance your ability to determine when to use a particular statistic and also evaluate whether or not the correct statistic has been used in a particular study. The exercise requires you to assemble a table that provides information about the purpose of the selected statistic (e.g., descriptive, inferential, describe difference, or relationship), and type of data that is appropriate for a particular statistic: categorical (nominal or ordinal level data) or continuous (interval or ratio level data). In the table of inferential statistics, you will also note the type of sample(s) that can be used for calculating a particular statistic (e.g., one group, two group (related, independent), etc.).

Complete the following document:

• topic 2: Statistics Table Exercise

Refer to the following section of Evidence-Based Practice for Nurses: Appraisal and Application of Research for help developing the inferential statistics table:

• table 12-2 on page 296 of chapter 12 ("What Do the Quantitative Data Mean?")

Evaluation of Statistics

The purpose of this exercise is to give you an opportunity to identify appropriate use of descriptive and inferential statistics by reading and interpreting tables provided in a published research study, as it is very important to be able to judge the quality and accuracy of the data presented as part of the critique.

Download the following article.


Take some time to view the tables in the Britt Pipe article (focus on tables 2 and 3 on page 250, and tables 4 and 5 on page 251) and answer the questions below:
1. What is the level of data for each of the variables in tables 2 and 3? (Review description of the instruments on pages 249 and 250 to learn how each of the variables was measured. Note if higher scores indicate improvement or worsening of selected variables).

2. Based on what is displayed in table 2, how you describe the patient characteristics in this sample?

3. Describe what you are seeing in table 3 regarding levels of ADL (activities of daily living), quality of life (physical, social, emotional, functional, and total), spiritual well-being, and acuity over time in this sample. For example, does hope appear to get better or worse over time? Again, you may need to refer to the description of the instrument used to measure each variable to determine what a change upward or downward in the numbers indicates.

4. Table 4 displays correlations between two variables. For example, reading across the top, go to "Quality of Life" and see the correlations of this particular variable with each of the others listed in the first column. A correlation of 1 indicates that quality of life scores correlate perfectly with quality of life scores. This is the case where each of the variables intersects with itself on the chart. All of the other values displayed on the chart provide the correlation along with the p-value underneath it.
   a. What is the highest correlation on this table? How would you interpret this score?
   b. Find a negative correlation and explain what that means in the case of these two variables.
   c. Describe the meaning you derive from the data displayed in this table about the variables with statistically significant correlations (p-value of < 0.01).

5. Table 5 displays the results of a multiple regression that explored the amount of variance in three variables (quality of life, length of stay, and referrals) that can be attributed to orientation to life, health hope scale, activities of daily living, and acuity. Two of the regression analyses were statistically significant, as noted by the asterisk (*) by the F Statistic on Model in Table 5 of the Britt Pipe article on page 251. The amount of variation that can be explained for the two models that were statistically significant is reflected in the "Adjusted R2," which is reported in the last row of the table. Almost 24% of the variance in quality of life is explained by the 4 variables listed in the first column, and 15% of the variance in referrals is explained by these four variables. Are these values clinically important? How would you determine that? How would you use this information in your nursing practice?

6. Read the article now that you have scrutinized the tables in the results section. How does your assessment of the results section align or differ from the perspective of the authors?

7. Add this article to your research article matrix and fill in the columns titled “measurement” and “results” with the information you gathered in this analysis.

Statistics Table Summary

Using Evidence-Based Practice for Nurses: Appraisal and Application of Research and The Literature Review: A Step-by-Step Guide for Students textbooks, fill in the tables in the following document:

- Statistics Table Exercise
Examples have been provided in each table. These tables will be useful as you evaluate research articles in the future to determine how data are being used for evidence-based practice.

Readings on Statistical Concepts

Note that this chapter provides a brief overview of descriptive and inferential statistics. This topic has been designed to build on previous experience with statistics, and provides you with an opportunity to refresh/update your knowledge about statistics. It is highly recommended that you participate in all of the learning activities provided in the text, in addition to those listed here, as you proceed through the readings.

Read the following chapter in Evidence-Based Practice for Nurses: Appraisal and Application of Research, which provides a brief overview of descriptive and inferential statistics:

- chapter 12 (“What Do the Quantitative Data Mean?”)

Evaluating Quantitative Studies

Quantitative research studies generally deal with numerical data. Master’s-level nurses need to be able to evaluate the quality of this type of research.

Evaluating Quantitative Research Reports

You will continue to develop your skills in reading and critiquing quantitative research to evaluate the quality of the research. It is essential that nurses know how to appraise research to determine if the results being reported are credible and based on sound research methods. Evidence that is credible and clinically significant should be used to make decisions about clinical practice. This section provides you with an opportunity to apply knowledge about quantitative research design.

This topic addresses the following competency:

- Competency 7000.1.3: Evaluating Quantitative Studies
  The graduate analyzes and interprets qualitative research reports.

This topic highlights the following key concepts:

1. types of quantitative research design employed in a research study
2. a research study to determine if its design addresses the research questions posed
3. key concepts of quantitative research design such as causality, randomization, control, manipulation, independent variables, dependent variables, extraneous variables, random sampling, validity, random sampling, bias, etc.
4. the difference between statistical significance and clinical significance
5. whether the conclusions/recommendations of a quantitative research study are justified
6. whether appropriate research methodologies were utilized in a quantitative study
7. the applicability of quantitative research study findings to clinical practice
8. the unique characteristics of ethical practice in quantitative research

Additional Readings for Evaluating Quantitative Studies
Read the following report from the "Advanced Evidence Based Practice" folder in the Nursing E-Reserves, which provides an excellent overview of the ethical issues related to conducting research and quality improvement studies in healthcare settings:


**Evaluation of Quantitative Research Activity**

Read the following articles:


Review the article and apply the questions from the following table in Evidence-Based Practice for Nurses: Appraisal and Application of Research to the article:

- Table 14-2 ("Questions to Consider When Appraising Nursing Studies") (p. 368) of chapter 14 ("Weighing in on the Evidence")
  - Write down your thoughts on each of the evaluation elements as they relate to this article.
  - Provide a rationale and specific examples from the article supporting your evaluation.
  - How would you rank this study? (p. 371) Figure 14-1 of Evidence Based Practice for Nurses text. (Meta-Analyses, Systematic Reviews, Integrative Reviews, EBP Guidelines, Randomized Controlled Trials, Experimental Designs, Quasi-experimental Designs, Nonexperimental Designs, Qualitative Systematic Reviews/Meta-Syntheses, Qualitative Studies, Expert Opinion)
  - Enter this ranking and other information you have learned about the article on the Journal Article Grid.
  - Were the findings clinically relevant? Provide a rationale for your answer.

Read the following article:


**Connections with Quantitative Research**

The purpose of this exercise is to explore the unique characteristics of ethical practice in quantitative research Quality Improvement (QI) and allow you an opportunity to discuss aspects of the assigned readings as they relate to the ethical practice of research and QI. This exercise will guide you through that process.
Review the following article:


Add your analysis of this article to the Journal Article Grid. Post a response to each of the questions below to the discussion area. Comment on at least one other student posting.

1. How would you explain your understanding of the differences and similarities in the ethical practice of QI and research to a colleague?
2. Is the article by Fowler an example of research or quality improvement? Provide the rationale for your assessment, cite references as needed.

Readings on Evaluating Quantitative Studies

As you read and/or review the chapters listed below, consider the following key concepts:

- elements to be considered in the design of a quantitative research study to enhance validity and reliability of the research
- ethics of conducting qualitative and quantitative research
- experimental design to determine if a cause/effect relationship exists
- developing and implementing the plan for data collection
- levels of measurement
- validity and reliability when describing instruments used to conduct the research.
- qualitative research data collection methods
- statistical tests

Read the following sections in Evidence-Based Practice for Nurses: Appraisal and Application of Research:

- chapter 6 ("Key Principles of Quantitative Design")
- chapter 7 ("Quantitative Designs: Using Numbers to Provide Evidence")
- chapter 9 ("Collecting Evidence")
- pages 293–338 of chapter 12 ("What Do the Quantitative Data Mean?")
- pages 366–375 of chapter 14 ("Weighing in on the Evidence")

Evaluating Qualitative Studies

Qualitative data generally deals with textual data. Master’s-level nurses need to be able to evaluate the quality of this type of research.

Analysis and Interpretation of Qualitative Research Reports

Qualitative research design that is used to answer questions that cannot be answered using quantitative methods. Qualitative research differs from quantitative in that the analysis focuses on words rather than numbers. Qualitative methods are often used to explore topics that have not been studied before and to generate theory. Although qualitative research is necessarily subjective in nature, it is still an important aspect of evidence-based practice. It is important to
know how to evaluate the results of these studies to ensure that the data is trustworthy.

This topic addresses the following competency:

- Competency 7000.1.4: Evaluating Qualitative Studies
  The graduate analyzes and interprets qualitative research reports.

This topic highlights the following key concepts:

1. the research questions answered by qualitative research
2. the appropriate qualitative research approach to employ in a research study
3. the research design of a study to determine if it is appropriate to answer the research questions posed
4. key concepts of qualitative research, such as types of interviews, methods of data collection, interpretive techniques, when appropriate to use qualitative rather than quantitative, and focus groups
5. whether the conclusions/recommendations of a qualitative research study are justified
6. whether appropriate methodologies were employed in a qualitative study
7. the applicability of a qualitative research study to clinical practice
8. the unique characteristics of ethical practice in qualitative research

**Evaluation of Qualitative Research**

Download the following article


Review this article and evaluate the quality of the study by answering the questions below. Provide rationale and specific examples from the article supporting your assessment. Pages 194 and 195 in chapter 8 ("Qualitative Designs: Using Words to Provide Evidence") of Evidence-Based Practice for Nurses: Appraisal and Application of Research should help you support your responses.

- What type of study was this? Were the methods consistent with the description of this type of method in the text? (e.g., type of question being asked, sampling method, data collection approach, analysis of data)
- What did the authors do to enhance credibility?
- What did the authors do to enhance transferability?
- What did the authors do to enhance dependability?
- What did the authors do to enhance confirmability?
- Would you judge the findings to be clinically relevant?

**Analysis of Qualitative Research**

Add the information from the following article to your Journal Article Grid:

Connections with Qualitative Research

Post a response to the following questions in the learning community. Comment on at least one other student posting.

- What aspect of qualitative research do you find to be most ethically challenging? What would you do to protect the participant in this situation?

Readings on Qualitative Research

As you complete the listed material below, pay attention to the following key concepts:

- design of a qualitative research study to ensure the data are trustworthy
- factors that influence credibility, transferability, dependability, and confirmability
- ethics of conducting qualitative research
- developing and implementing the plan for data collection.
- ranking evidence

Read and/or review the following sections in Evidence-Based Practice for Nurses: Appraisal and Application of Research:

- chapter 8 ("Qualitative Designs: Using Words to Provide Evidence")
- pages 235–245 chapter 9 ("Collecting Evidence")
- pages 370–371 of chapter 14 ("Weighing in on the Evidence")

Comparative Effectiveness

Comparative effectiveness research is designed to inform healthcare decisions by providing evidence on the effectiveness, benefits, and harms of different treatment options. The evidence is generated from research studies that compare drugs, medical devices, tests, surgeries, and other ways to deliver healthcare.

There are two ways that this evidence is found:

1. Researchers look at all of the available evidence about the benefits and harms of each choice for different groups of people from existing clinical trials, clinical studies, and other research. These are called research reviews, because they are systematic reviews of existing evidence.
2. Researchers conduct studies that generate new evidence of effectiveness or comparative effectiveness of a test, treatment, procedure, or healthcare service.

Comparative Effectiveness

This topic introduces you to the key concepts of comparative effectiveness research (CER), an important element of the current healthcare environment. The Agency for Healthcare Research and Quality (AHRQ) uses comparative effectiveness research to evaluate treatment options by reviewing existing evidence or conducting studies to generate new evidence.
This type of research differs from traditional research in that the intervention being studied is compared to other types of treatment instead of a control group (no treatment). In this topic you will have the opportunity to explore different sources of evidence that can be used for comparative effectiveness research.

This topic addresses the following competency:

- **Competency 7000.1.5: Comparative Effectiveness**
  The graduate analyzes and interprets comparative effectiveness findings and their impact on standards of practice.

This topic highlights the following key concepts:

1. the key concepts of comparative effectiveness research and its importance in today’s healthcare environment
2. comparative effectiveness research and quality improvement activities in healthcare
3. the basis or justification for changes in standards of practice
4. why patient-centered outcomes research is important in healthcare

**Introduction to PCORI**

The Patient-Centered Outcomes Research Institute (PCORI) is a non-profit agency charged with funding comparative effectiveness research (CER) in the United States. CER is designed to help patients and their caregivers make decisions about healthcare interventions.

Review the research that is being funded by this organization in the following section of the PCORI website:

- **Research We Support**

The Center for American Progress is an “independent nonpartisan educational institute dedicated to improving the lives of Americans through progressive ideas and action”. This institute produced and posted a clear definition of Comparative Effectiveness Research in the following video:

**Analyze Evidence**

Add the following articles to your Journal Article Grid.

Answer the following questions in your notes:

1. What do you think of the evidence?
2. Would you use this to change practice? Why or why not?

**Evaluation of Patient-Centered Care**

Read the following article, which is a concept analysis of patient-centered care:


Does this type of study enhance your understanding of patient-centered care? How can this be used in evidence-based practice?

Read the following article, which is a systematic review of patient handoffs:


Does this type of study enhance your understanding and ability to make decisions about handling patient handoffs in your clinical area? Why or why not?

Go to one or more of the databases listed on pages 283–86 of *chapter 11 ("Other Sources of Evidence")* in *Evidence-Based Practice for Nurses: Appraisal and Application of Research* to find evidence regarding a particular clinical problem you are interested in. How will you use these resources in your nursing practice?

**Collaborate With Peers**

In the Translational Research for Practice and Populations learning community, post a response to each of the following questions:

- Critics of comparative effectiveness research have said that this type of research will lead to rationing of healthcare because panels will be charged with determining effectiveness, and interventions determined to be ineffective by the panel will no longer be available to the public. What can be done to ensure that the decisions about effectiveness are not biased?
- How is quality improvement similar and different from comparative effectiveness research?

You may want to use the PCORI website and other online resources to answer these questions.

After you have posted your responses, respond to at least one other student posting in your learning community.

**Readings on Comparative Effectiveness**
As you read the material in this activity, pay attention to the types of evidence that can be used to inform clinical decision making and how an organization can transition evidence into practice and some of the barriers that can slow or deter the process. Three models are provided to demonstrate the extensive planning and preparation that goes into translating research into practice. In this section, you will focus on the initial stages of preparation and review evidence that is used to make decisions about practice.

Read the following chapters in *Evidence-Based Practice for Nurses: Appraisal and Application of Research*:

- chapter 11 (“Other Sources of Evidence”)
- chapter 15 (“Transitioning Evidence to Practice”)

Read the following article on effectiveness in the WGU E-Reserves:


## Ethical and Legal Issues in Healthcare Research

Master’s-prepared nurses may perform research studies or be part or research in their practice. It is critical that they understand the ethical and legal issues in research in healthcare settings.

### Ethical and Legal Issues

This topic provides you with an opportunity to explore the ethical and legal issues associated with healthcare research.

This topic addresses the following competency:

- **Competency 7000.1.6: Ethical and Legal Issues in Healthcare Research**
  
The graduate evaluates research for ethical and legal protection of human subjects in healthcare research.

This topic highlights the following key concepts:

1. legal protections for human subjects in healthcare research
2. protection of human subjects in healthcare research
3. an original study for ethical treatment of the participants

### Protection of Human Subjects

Go to the following website to complete the NIH online training for protection of human subjects:

- [Protecting Human Research Participants](#)

You will need to register for the Protecting Human Research Participants (PHRP) course to complete the full training. Registration is free.
Once you have completed the course, save a copy of the verification of completion and submit the file to scores@wgu.edu. Certification of completion is a required element for proceeding to the assessment, and students who have not filed their course completion will not be allowed to schedule the final assessment for this course.

**Evaluation of Research Study**

Download the following article:


Based on what you have read in this section, review this article to identify any ethical and legal issues, and evaluate the ethical treatment of the participants. Provide a rationale and specific examples from the article and/or the assigned readings to support your comments.

- Who is vulnerable in this study and what are the potential risks?
- What actions were taken or should have been taken to protect the subjects in this study?
- How was consent obtained?
- Did you identify any ethical or legal issues in this study?

**Collaborate With Peers**

In the Translational Research for Practice and Populations learning community, post a response to each of the following questions:

- What have you found to be most challenging and/or thought-provoking in the assigned readings for this section?
- Evidence should be guiding nursing practice and decision making in healthcare. However, Rogers points out (p. 142) that limiting who can participate in research can compromise the quality of evidence that is currently available for healthcare providers. How can participation in research affect the evidence?
- What needs to change in order to ensure equitable distribution of evidence-based treatment?
- What are some of the barriers that limit the ability to target disadvantaged groups for research participation?
- Critics of comparative effectiveness research have said that this type of research will lead to rationing of healthcare and panels will be charged to determine effectiveness and interventions. What can be done to ensure that the decisions about effectiveness are not biased?
- How is quality improvement similar to and different from comparative effectiveness research?

After you have posted your answers, respond to at least one other student posting.

**Readings in Ethics**
As you read the material in this activity, focus on the role of evidence-based practice and the development of nursing as a science. You will learn about ethics and human rights in research and read about some research studies that violated human rights.

Read the following chapters in *Evidence-Based Practice for Nurses: Appraisal and Application of Research*:

- chapter 1 ("What Is Evidence-Based Practice?"
- chapter 2 ("Using Evidence Through Collaboration to Promote Excellence in Nursing Practice"

Read the following articles:

- "Code of Ethics for Nurses"
- *NursingWorld Code of Ethics 2001* American Nursing Association ANA

Skim the following document to become familiar with the types of information it contains:


This document was developed by the Office of Research Integrity, which oversees the Public Health Service research activities. The manual is a teaching tool that provides an overview of the rules and regulations that govern each step of the research process. Bookmark or download a copy of this document and refer back to it as needed in this course and others.

**Evidence-Based Practice and Translation of Research in Patient-Centered Practice**

Strategies for implementing use of research in nursing practice in healthcare settings are presented for the master’s-prepared nurses.

**Evidence-Based Practice and Translation of Research in Patient-Centered Practice**

This section focuses on strategies for implementing (or translating) research in nursing practice.

This topic addresses the following competency:

- Competency 7000.1.7: Evidence-Based Practice and Translation of Research in Patient-Centered Clinical Practice
  The graduate interprets evidence and evaluates its applicability in practice.

This topic highlights the following key concepts:
1. the key tenets of evidence-based practice
2. strategies for implementing (or translating) research in healthcare and nursing practice
3. barriers to implementation of new scientific findings in healthcare and nursing practice
4. the value of research and translating it into evidence-based practice
5. the implementation of research findings in a clinical setting

Self-Check

Meet with your nurse manager or another nurse manager you know and ask about an example of how research has been translated into practice in the unit that nurse manager works in.

Use the Stetler Model, Iowa Model of Evidence-based Practice, or UTMB Model discussed in chapter 15 (“Transitioning Evidence to Practice”) of Evidence-Based Practice for Nurses to guide your interview and questions about the steps of the process.

Identify areas of similarity and difference between the completed translation project and the theoretical model you chose to compare it to, paying particular attention to the evidence used to inform the practice change and metrics used to evaluate its effectiveness.

Readings in EBT and Translation of Research

You will now focus on translating research into practice. Look for elements of this in chapters you have already read.

Review the following chapters in Evidence-Based Practice for Nurses: Appraisal and Application of Research:

- chapter 1 (“What Is Evidence-Based Practice?”)
- chapter 2 (“Using Evidence Through Collaboration to Promote Excellence in Nursing Practice”)
- chapter 15 (“Transitioning Evidence to Practice”)
- chapter 17 (“Evaluating Outcomes of Innovations”), paying attention to outcomes in management and research

Outcomes are used to set priorities and monitor quality of care, so it is important for you as a master’s-prepared nurse to know how outcomes are used in quality management. It is also important to apply what you have learned about evidence-based practice to ensure that the evidence used to make decisions about practice and quality in your setting is valid and reliable.

Final Steps

Congratulations on completing the activities in this course! This course has prepared you to complete the assessments associated with this course. If you have not already been directed to complete the assessments, schedule and complete them now.

The WGU Library

The WGU Library is available online to WGU students 24 hours a day.
For more information about using the WGU Library, view the following videos on The WGU Channel:

Introducing the WGU library

*Note: To download this video, right-click the following link and choose "Save as...": [download video].*

Searching the WGU library

*Note: To download this video, right-click the following link and choose "Save as...": [download video].*

**Center for Writing Excellence: The WGU Writing Center**

If you need help with any part of the writing or revision process, contact the Center for Writing Excellence (CWE). Whatever your needs—writing anxiety, grammar, general college writing concerns, or even ESL language-related writing issues—the CWE is available to help you. The CWE offers personalized individual sessions and weekly group webinars. For an appointment, please e-mail [writingcenter@wgu.edu](mailto:writingcenter@wgu.edu).

**Feedback**

WGU values your input! If you have comments, concerns, or suggestions for improvement of this course, please submit your feedback using the following form:

- [Course Feedback](#)

**Accessibility Policy**

Western Governors University recognizes and fulfills its obligations under the Americans with Disabilities Act of 1990 (ADA), the Rehabilitation Act of 1973 and similar state laws. Western Governors University is committed to provide reasonable accommodation(s) to qualified disabled learners in University programs and activities as is required by applicable law(s). The Office of Student Accessibility Services serves as the principal point of contact for students seeking accommodations and can be contacted at [ADASupport@wgu.edu](mailto:ADASupport@wgu.edu). Further information on WGU’s Accessibility policy and process can be viewed in the student handbook at the following link:

- [Policies and Procedures for Students with Disabilities](#)