

Using a Novel Research Curriculum to Address the Leaky Pipeline in Rural Medicine



Sam Houston State University

MEMBER THE TEXAS STATE UNIVERSITY SYSTEM

Introduction



How to Meaningfully Engage a Mission focused on Rural Medicine?

CURRICULAR DESIGN

Semester 1:

- Core concepts of research design in the context of evidenced-based medicine
- *Student deliverable:* Identify a gap in knowledge in the literature addressing healthcare in the population of east Texas.
- *Student deliverable:* Creating a PICO

Semester 2:

- Developing a medically relevant research proposal
- *Student deliverable:* Addressing healthcare in the vulnerable population of east Texas

Semester 3 and 4:

- Defining clinical questions effecting special patient populations and critically appraising the literature
- *Student Deliverable:* Journal clubs

Semesters 5-8:

- Application of evidenced-based medicine to provide value-based care. Participation in the management of challenging cases through evidence supported interventions and contributing to the healthcare evidence literature
- *Student Deliverable:* Journal club
- *Student Deliverable:* Case Reports



First Year

Scientific foundations

The goal is to identify a gap in health care knowledge in the SHSU community service area. Students are expected to individually develop a question addressing a healthcare disparity unique to the rural and/or underserved communities in the SHSU service area.

Osteopathic Manipulative Medicine

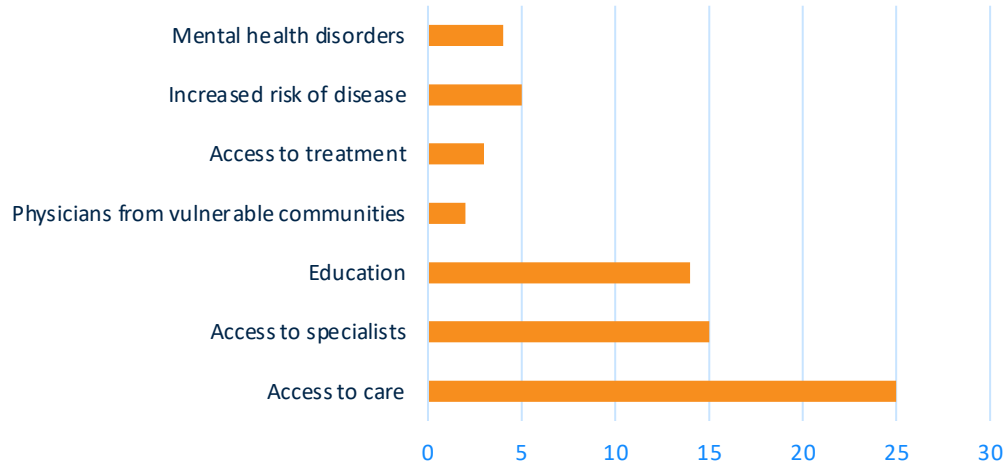
The goal is to identify the Ask, Acquire, and Appraise of evidence-based medicine utilizing OM techniques. Student develop a case scenario, describe the patient related question using the PICO format, acquire the best evidence and apply these finding to the decision. The student groups present their findings in the form of a presentation at the end of the course.

System Courses

The goal is to produce a research proposal outlining the need for research addressing a health disparity specific to the rural and/or underserved SHSU service community. Student groups will develop a background and significance, methods, and a description of data collection and analysis for a research proposal that will culminate in a presentation at the end of the spring semester.

Results and Student Feedback

First Semester Student Deliverables



Aggregation of the individual student perceived gap in healthcare knowledge by 7 broad categories

Second Semester Student Group Proposals

- The Impact of the COVID-19 Pandemic on the Number of Mental Health Admissions from Rural Counties in East Texas
- Comparative analysis of outcomes in outpatient psychiatry visits versus telepsychiatry in rural East Texas
- Barriers General Surgeons Face and the Resultant Effects on Rural Communities
- Comparison of Life expectancy of middle-aged women diagnosed with breast cancer living in Rural versus Urban Communities
- Healers on Wheels, the impact of mobile primary care on the health of the homeless population
- Benefits of Using Prehospital Blood Transfusions In EMS Air Transport
- Representing the Underrepresented: Increasing Marginalized Student Interest in Med School by Addressing Contributing Factors
- The Risk of Pre-diabetes for Children and Adolescents in east Texas Secondary to Food Deserts
- Infant Mortality Rates in East Texas
- Progression of diabetes and hypertension in the Huntsville Prison population



Infrastructure

CORE 7401 COM Student Research and Evidence-Based Medicine

College of Osteopathic Medicine

Curricular Research Activities

- Class of 2024
- Class of 2025
- Class of 2026
- Class of 2027

Extra-Curricular Research Activities

- Mentored Research Program
- Faculty Research Overview
- Student Research Resources
- Student Research Highlights
- Notifications

COURSE TOOLS

- Zoom
- Discussions
- Calendar
- Send Email

Notifications

Add Course Module Customize Page

Content Collection: Search Content Collection

File Name or Folder Name Contains

Search File Contents

My Announcements

No Course or Organization Announcements have been posted in the last 7 days. [more announcements...](#)

Blackboard

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CORE 7401 COM Student Research and Evidence-Based Medicine

Class of 2024

Build Content Assessments Tools Partner Content

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SF1: The Art of the Question

SF2: Impact on my Community

OMM1: Quality care starts with quality evidence

Neuro and Behavioral: The significance of my question

Immunology HEENT: Describing my Actions

Skin Skeletal Muscle: Ready for impact

CM1

CM2

CORE 7401 COM Student Research and Evidence-Based Medicine

Faculty Research Overviews

Build Content Assessments Tools Partner Content Discover Content

- COM Research: Faculty Projects**

This link provides an overview of up-to-date faculty expertise and research projects.
- Scholar Profiles**

Explore the scholarly profiles of faculty to learn more about scholarly interests, expertise, current research projects, and more.
- Most Recent Scholarship**

Search and review faculty's most recent scholarly/research activities.
- Research Opportunities**

Discover opportunities for student participation in current faculty scholarly/research projects.
- Professional Organizations**

Attached Files: [Professional Organizations.docx](#) (20,077 KB)

COM Faculty are members of the following Professional Organizations. As a Student Doctor consider the networking opportunities, what member benefits and resources you can take advantage of, and what can further your education.

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SHSU Online

Home Faculty Central Courses Tech Support Student Central

CORE 7401 COM Student Research and Evidence-Based Medicine Student Research Resources Eds Made in COM

CORE 7401 COM Student Research and Evidence-Based Medicine

Student Research Resources

Build Content Assessments Tools Partner Content Discover Content

- Conferences & Events**

Find opportunities to present/share your research and/or connect with your research communities.
- Funding Resources**

Find funding opportunities, including scholarships from a number of local, national, and international agencies and organizations.
- Laboratory Training**

Requirements prior to participating in laboratory activities
- General Research Guidelines & Best Practices**

Discover information to help you best manage various research activities, including reading scientific articles, searching for literature, writing for publication, building reputation and much more.
- Research Opportunities**

Find information regarding summer research and clinical opportunities within Sam Houston State University, SHSU-COM, and the Texas region.

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COURSE TOOLS

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Faculty Commitment

- Faculty mentorship
- Promotion of scholarship
 - Faculty scholarship
 - Student scholarship
- Contribution to the medical literature



Challenges

Meeting student expectations

Training Faculty

Community partners

Sustainability



Brainstorming

