Therapeutic Outcomes Research

School of Health and Rehabilitation Sciences
Indianapolis

Acting Program Director
Professor Joyce MacKinnon*

Departmental E-mail
jmackinn@iupui.edu

Departmental URL
sahs.iupui.edu/

Graduate Faculty

Professors
Sarah Hook*, Joyce MacKinnon*, Neil Oldridge*, Mark S. Sothmann*

Associate Professor
Karen Gable*

Graduate Advisor
Joyce MacKinnon*, 1140 W. Michigan Street, Indianapolis, IN 46202, (317) 278-1690.

Degree Offered

Master of Science in Therapeutic Outcomes Research and Certificate in Health Sciences Patient Centered Outcomes

Program Information

This graduate program is offered through the University Graduate School. This program is designed to prepare credentialed health care professionals to conduct patient outcomes research in order to evaluate the effectiveness of therapeutic interventions within their own disciplines. The chief feature of this program is the emphasis on original research to determine therapeutic benefit in terms of physiologic, symptomatic, functional, perceptual, and quality-of-life outcomes.

There have been three major eras in the evolution of the U.S. health care system since the late 1940s: expansion, cost-containment, and now assessment and accountability. In the expansion era, health care underwent remarkable growth in technology, training, and delivery. Emphasis was on the perfection of health care, with no consideration of costs or resource demands. Spiraling costs and disenchantment with the curative power of technology brought on the cost-containment era. Emphasis was then placed on limiting spending and maximizing productivity, often at the expense of patient satisfaction. Today, there is a growing understanding of the balance between use of healthcare resources on one hand and patient benefits on the other, or between assessment and accountability. Based on a more sophisticated awareness of what actually constitutes the costs and benefits of treatment, emphasis is now placed on rational use of resources in light of a realistic appraisal of therapeutic benefits. Patient-centered outcomes
research concentrates on the assessment of therapeutic interventions under conditions of real, not ideal, practice. Allied health professionals are particularly well positioned to conduct therapeutic outcomes research because their clinical work is oriented toward the holistic factors that outcomes research purports to measure: multidimensional assessment of health status and improvement of patient quality of life. Moreover, as demand for useful and valuable outcomes measurement continues to grow among healthcare institutions and organizations, allied health professionals are increasingly being called upon to conduct outcomes assessment at their place of employment.

**Master of Science**

**Admission Requirements**
Students accepted into the program must meet complete university, school, and program admission requirements. The minimum admission requirements are as follows.

1. A baccalaureate degree from an accredited institution (applicant must submit an official copy of all undergraduate transcripts).
2. Total undergraduate grade point average of 3.0 on a 4.0 scale.
3. Graduate Record Examination (GRE) scores of at least 500 on verbal and analytical sections OR for those enrolled in the Certificate in Health Sciences Patient Centered Outcomes (see description below), completion of all four courses in the certificate with a grade of B (3.0) or better in each course.
4. Two letters of recommendation from those familiar with the applicant’s academic and professional performance.
5. Eligibility for license or credential in a health care profession.
6. 300-500 word personal statement of academic and professional goals.
7. If applicable, a TOEFL score of at least 600.

Exceptions to those requirements may be granted by the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee upon written petition from the applicant and with written recommendation from the Therapeutic Outcomes Research program director. The petition must include a full statement of conditions justifying the exception. Conditional admission will be for a stated time period and will entail specific conditions to be met to receive regular admission status.

No student will be permitted to work toward a degree without first being admitted to the Master of Science Program.

**Prior Course Work Applied Toward Degree Requirements**

A maximum of 6 graduate credit hours earned at Indiana University before admission may be applied toward a degree. Upon the recommendation of the Therapeutic Outcomes Research program director and with the approval of the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee, up to 8 credit hours of graduate work at other institutions may be transferred in partial fulfillment of degree requirements. No course may be transferred from another institution unless the course was completed with a grade of B or higher within five years before matriculation in the Master of Science degree program.

**Application Materials**

An applicant must submit completed application forms to the Office of Academic and Student Affairs, School of Health and Rehabilitation Sciences. Transcripts from all universities attended must be included. Indiana University graduates should request that the registrar’s office send unofficial copies of their transcripts. Non-Indiana University graduates must submit at least one official transcript from each university attended.
Course Requirements
A total of 30 credit hours beyond the bachelor's degree, of which 12 credit hours are in health outcomes, 3 credit hours are in electives, and 15 credit hours are in research (including thesis work).

Thesis Requirement
The capstone experience is the writing and submission of a thesis based on original research conducted by the student and supervised by a thesis committee. Curricular electives are focused on developing expertise to articulate and research a testable hypothesis in a specific content area pertaining to patient-centered outcomes under the direction of a research advisor holding graduate faculty membership in University Graduate School. Theses must follow the Indiana University Guide to the Preparation of Theses and Dissertations.

Curriculum

Health Outcomes (12 cr.)
AHLT W510 Trends and Issues in the Health Sciences (3 cr.)
SPEA H517 Managerial Epidemiology (3 cr.)
INFO I530 Seminar in Health Informatics Applications (3 cr.)
AHLT W540 Patient-Centered Outcomes Research (3 cr.)

Electives (3 cr.)
(In consultation with graduate advisor) (3 cr.)

Research (15 cr.)
GRAD G651 Introduction to Biostatistics I (3 cr.)
AHLT W520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.)
AHLT W570 Research Communication in the Health Sciences (3 cr.)
AHLT W599 Thesis in Health Sciences (6 cr.)

Courses Offered in Other IUPUI Schools:
GRAD G651 Introduction to Biostatistics I (3 cr.)
SPEA H517 Managerial Epidemiology (3 cr.)
INFO I530 Seminar in Health Informatics Applications (3 cr.)

Total minimum credits: 30 cr.

Courses in Therapeutic Outcomes Research

Courses offered in the School of Health and Rehabilitation Sciences

"P" refers to a course prerequisite and "C" to a course that must be taken concurrently.

AHLT W510 Trends and Issues in the Health Sciences (3 cr.) A seminar course to review pertinent literature and other sources of information as a basis for discussing trends and issues affecting the therapeutic professions and the healthcare delivery system.

AHLT W520 Evidence-Based Critical Inquiry in the Health Sciences (3 cr.) P: GRAD G651 or equivalent. Fundamental concepts of research, ranging from philosophical foundations to practical applications. Course provides the conceptual framework in which graduate students may develop their own research agenda. In keeping with the diversity of research, this course strives to introduce graduate
students to the entire continuum of research paradigms, from qualitative, naturalistic inquiry to quantitative, experimental designs.

AHLT W540 Patient-Centered Outcomes Research (3 cr.) Explorations of selected patient-centered outcomes evaluation methodology and research evidence related to the health professions at an advanced level.

AHLT W570 Research Communication in the Health Sciences (3 cr.) P: W520 and consent of both instructor and research advisor. Instruction and consultation in the preparation of master's thesis proposals, including computer applications for conducting online literature searches, developing an individual bibliographic database, designing an original research project, and devising a sound methodology. Final outcome is a completed thesis proposal for submission to a graduate student's thesis committee. Course is open only to allied health graduate students pursuing the research/thesis track in their program of study. Students must begin the course with a specific research agenda already approved by their research advisor.

Courses offered in other IUPUI Schools

GRAD G651 Introduction to Biostatistics I (3 cr.)
SPEA H517 Managerial Epidemiology (3 cr.)
INFO I530 Seminar in Health Informatics Applications (3 cr.)

Certificate in Health Sciences Patient Centered Outcomes

Program Information

This four course 12 credit hour certificate is designed to provide credentialed health care professionals with information about the current trends and issues in health care to include the growing use of technology, use of evidence to inform practice decisions, and the use of outcome measures focused on the individual patient/client. The certificate will provide clinicians the opportunity to demonstrate career development in an area becoming increasingly important to clinicians both nationally and internationally. All courses are offered online.

The certificate is constructed so that all courses can be used as part of the two advanced master’s degrees offered by the Department of Health Sciences: the Master of Science in Therapeutic Outcomes Research and the Master of Science in Health Sciences.

Students must complete all required course work (the four designated courses) with a grade of B (3.0) or better. Students will have three years to complete the certificate. The certificate director will be responsible for certifying completion of all requirements and will notify the University Graduate School once all requirements have been met. The director will ensure that certificate information is properly recorded with university offices.

Admission Requirements

Students accepted into the program must complete university, school, and program admission requirements. The minimum admission requirements are as follows.

1. A baccalaureate degree from an accredited institution (applicant must submit an official copy of all undergraduate transcripts).
2. Total undergraduate grade point average of 3.0 on a 4.0 scale.
3. Two letters of recommendation from those familiar with the applicant's academic and professional performance.
4. Eligibility for license or credential in a health care profession.
5. 300-500 word personal statement of academic and professional goals.
6. If applicable, a TOEFL score of at least 600

Exceptions to those requirements may be granted by the School of Health and Rehabilitation Sciences Academic Studies and Research Development Committee upon written petition from the applicant and with written recommendation from the Therapeutic Outcomes Research program director. The petition must include a full statement of conditions justifying the exception. Conditional admission will be for a stated time period and will entail specific conditions to be met to receive regular admission status.

No student will be permitted to work towards the certificate without first being admitted to the certificate program.

**Prior Course Work Applied Toward Degree Requirements**

No credits will be accepted from other institutions to fulfill the requirements of the certificate. No undergraduate courses can be used to fulfill the requirements of the certificate.

**Application Materials**

An applicant must submit completed application forms to the Office of Academic and Student Affairs, School of Health and Rehabilitation Sciences. Transcripts from all universities attended must be included. Indiana University graduates should request that the registrar’s office send unofficial copies of their transcripts. Non-Indiana University graduates must submit at least one official transcript from each university attended.

**Curriculum**

The certificate consists of four courses for a total of 12 credit hours. The courses are as follows.

- **AHLT W510 Trends and Issues in Health Sciences** (3 cr.)
- **AHLT W520 Evidence Based Critical Inquiry in Health Sciences** (3 cr.)
- **AHLT W567 Patient Centered Therapeutic Outcomes Management** (3 cr.)
- **INFO I530 Seminar in Health Informatics Applications** (3 cr.)