VIRTUAL TRAINING PROGRAM IN
Health Outcomes and Pharmacoeconomic Research Part 1
SEPTEMBER 11 – 14, 2023

PROGRAM OVERVIEW
Professionals with an entry to intermediate knowledge level will benefit most from this 4-day program consisting of:

- Interactive Lectures
- Case Studies
- Hands-On Workshops
- Small Group Discussion

- Develop an understanding of HEOR concepts and methodologies
- Discover no-cost data resources for costs and outcomes
- Articulate the issues in real-world evidence
- Evaluate HEOR literature
- Conduct a decision analysis
- Interpret results of cost-effectiveness analyses
- Recognize good practice for budget impact analysis and simulate an example
- And more!

“This was a wonderful training. I appreciated the set-up that we could participate as able and willing, and that the sessions are recorded if we need to go back. I learned a lot and am really happy with this new knowledge I have!”
**Monday, September 11 (Arizona Time)**

- **9:00-9:10** Welcome
- **9:10-9:25** Pre-test
  - Identify present knowledge base through pre-test
- **9:25-10:40** Pharmacoeconomic principles
  *Jason Hurwitz, PhD*
  - Describe basic terminology
  - Discuss how a medication can be cost-effective
  - Describe various study perspectives
  - Distinguish among the types and uses of sensitivity analyses
- **10:40-11:00** Break
- **11:00-12:00** Pharmacoeconomic methodology
  *Amy Grizzle, PharmD*
  - Identify differences among various pharmacoeconomic methodologies, such as cost-effectiveness analysis, cost-benefit analysis, and cost-utility analysis
  - Discuss when an average cost-effectiveness ratio is appropriate to use
  - Calculate the incremental cost-effectiveness for one medication over another
- **12:00-12:45** Midday break
- **12:45-2:00** Quick start guide to free HEOR data resources
  *Rhys Axon, MPharm, MS, PhD*
  - Identify publicly available data sources for costs and outcomes
  - Describe strengths and weaknesses of data sources
  - Query AHRQ’s HCUP data
- **2:00-2:15** Complete daily evaluation
Tuesday, September 12 (Arizona Time)

8:50-9:00  Log-in & Announcements

9:00-10:15  Patient-reported outcomes (PRO) assessment
  Shannon Vaffis, PhD, MPH
  • Discuss the role of patient-reported outcomes assessment in the evaluation and approval of new product development
  • Describe key components of the FDA regulatory guidance for patient-reported outcomes
  • Complete and score the EQ-5D instrument

10:15-10:35  Break

10:35-12:00  Decision analysis / Pharmacoeconomic models
  Jason Hurwitz, PhD
  • Describe the steps in building a decision tree
  • Illustrate how the data elements entered into a decision tree should be analyzed
  • Interpret findings from the decision analysis
  • Apply a sensitivity analysis to vary model parameters

12:00-12:45  Midday break

12:45-1:45  Interpreting cost-effectiveness results
  Ed Armstrong, PharmD
  • Explain how to interpret scatter plots
  • Discuss the use of cost-effectiveness acceptability curves

1:45-2:00  Complete daily evaluation

Wednesday, September 13 (Arizona Time)

8:50-9:00  Log-in & Announcements

9:00-10:15  Real-world evidence (RWE)
  Ed Armstrong, PharmD
  • Describe methodologies (pragmatic and observational studies) used to generate RWE, including associated advantages and disadvantages
  • Explain how propensity score matching minimizes bias in observational research
  • Describe how RWE is perceived in managed care environments and which study attributes increase usefulness and relevance to payers
  • Discuss FDA's RWE Framework announced in 2019
  • Review designs and data sources used to address questions in a variety of research studies

10:15-10:35  Break
10:35-11:50  **Budget impact analysis**  
*Harman Dhatt, PhD, MPH*
- Discuss ISPOR Principles of Good Practice for Budget Impact Analysis
- Outline differences between budget impact and pharmacoeconomic analyses
- Review the components considered in budget impact through a simulated example

11:50-12:35  **Midday break**

12:35-1:50  **Getting HEOR results: Tailoring study designs to research questions**  
*Shannon Vaffis, PhD, MPH and Briana Choi, PharmD*
- Review designs and data sources used to address questions in a variety of research studies
- Discuss why different methods and tools were selected and any limitations or challenges encountered

1:50-2:00  **Complete daily evaluation**

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**Thursday, September 14 (Arizona Time)**

8:50-9:00  **Log-in & Announcements**

9:00-10:30  **Evaluating pharmacoeconomic studies**  
*Jason Hurwitz, PhD and Amy Grizzle, PharmD*
- Discuss key issues that should be considered when evaluating pharmacoeconomic literature
- Evaluate a pharmacoeconomic study to identify strengths and weaknesses in study methodology and conclusions

10:30-10:45  **Break**

10:45-11:30  **Jeopardy game: What have you learned?**  
*Jason Hurwitz, PhD and Amy Grizzle, PharmD*
- Review key concepts learned during the program through a team-based quiz game
- Discuss remaining questions to solidify key concepts

11:30-11:45  **Post-test**
- Complete post-test to identify knowledge change

11:45-12:00  **Complete daily and overall evaluation**

12:00-12:15  **Review post-test results**
- Discuss answers to post-test questions and address any remaining concerns over incorrect responses
Edward Armstrong, PharmD  
*Professor Emeritus*  
University of Arizona  
R. Ken Coit College of Pharmacy

Rhys Axon, MPharm, MS, PhD  
*Associate Professor*  
University of Arizona  
R. Ken Coit College of Pharmacy

Briana Choi, PharmD  
*PhD Candidate*  
University of Arizona  
R. Ken Coit College of Pharmacy

Harman Dhatt, PhD, MPH  
*Director, Patient Reported Outcomes*  
*Global Market Access*  
Janssen Pharmaceuticals

Amy Grizzle, PharmD  
*Associate Director*  
Center for Health Outcomes and PharmacoEconomic Research

Jason Hurwitz, PhD  
*Assistant Director*  
Center for Health Outcomes and PharmacoEconomic Research

Shannon Vaffis, PhD, MPH  
*Research Scientist II*  
*Clinical Outcomes Solutions*

### PHARMACY CONTINUING EDUCATION

The University of Arizona R. Ken Coit College of Pharmacy partners with Banner Health to provide continuing education for pharmacists.

“I thought the program was very well structured and delivered. The activities helped to apply concepts, the lecturers were knowledgeable and interactive despite the virtual setting and I would definitely recommend it.”
OUR PROGRAM

Our annual program has been offered in person for over 20 years with attendance each year generated through recommendations from prior attendees. In response to the challenges of COVID-19, we have developed Part 1 and Part 2 virtual options until we can return to in-person programming. Recordings of all sessions will be available for 30 days following the program.

REGISTRATION

Register online at:
https://HEORPart1Sept2023.eventbrite.com

Registration fee:   $1,000 Professionals
                    $750 Trainees

Group rates for 5 or more can be pre-arranged.

The registration fee for the Training Program in Health Outcomes and Pharmacoeconomic Research includes all sessions, electronic training materials, pharmacy continuing education credit, and a certificate of completion.

Slides and other program materials will be available electronically prior to the program.

Refund Policy: A refund (less $200 cancellation fee) will be available for cancellations received in writing by August 21, 2023.

Persons with a disability may request a reasonable accommodation, such as sign language interpreter, by contacting us at 520-626-3106 or HEORtraining@pharmacy.arizona.edu. Requests should be made as early as possible to allow time to arrange the accommodation.

FOR FURTHER INFORMATION:

HOPE Center
Center for Health Outcomes & PharmacoEconomic Research
HEORtraining@pharmacy.arizona.edu
520-626-3106
https://www.pharmacy.arizona.edu/hope