



THE UNIVERSITY OF ARIZONA COLLEGE OF PHARMACY

## Center for Health Outcomes & PharmacoEconomic Research



# VIRTUAL TRAINING PROGRAM IN Health Outcomes and Pharmacoeconomic Research

**APRIL 26–29, 2021**

## PROGRAM OVERVIEW

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

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

- Develop an understanding of HEOR concepts and methodologies
- Discover no-cost data resources for costs and outcomes
- Articulate the issues in value frameworks and 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 the best course I have ever taken. I learned so much and recommend this to all interested in learning about HEOR”



# HEOR TRAINING PROGRAM AGENDA

April 26-29, 2021

## Monday, April 26 *(Pacific Time)*

**9:00-9:10**    **Welcome**

**9:10-9:25**    **Pre-test**

- Identify present knowledge base through pre-test

*ACPE Program Number: 835-9999-20-048-L04-P (0.25 hours, knowledge-based activity)*

**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

*ACPE Program Number: 0835-9999-20-049-L04-P (1.25 hours, knowledge-based activity)*

**10:40-11:00**    **Break**

**11:00-11:30**    **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

*ACPE Program Number: 0835-9999-20-050-L04-P (1 hour, knowledge-based activity)*

**11:30-12:15**    **Lunch break**

**12:15-12:45**    **Pharmacoeconomic methodology *(continued)***

**12:45-1:45**    **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

*ACPE Program Number: 0835-9999-20-051-L04-P (1 hour, knowledge-based activity)*

**1:45-2:00**    **Complete daily evaluation**

## Tuesday, April 27 *(Pacific Time)*

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

### 9:00-10:15 Patient-reported outcomes (PRO) assessment

*Shannon Vaffis, MPH, PMP*

- 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

*ACPE Program Number: 0835-9999-20-052-L04-P (1.25 hours, knowledge-based activity)*

### 10:15-10:35 Break

### 10:35-Noon 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

*ACPE Program Number: 0835-9999-20-053-L04-P (1.5 hours, application-based activity)*

### 12:00-12:45 Lunch break

### 12:45-1:45 Interpreting cost-effectiveness results

*Dan Malone, RPh, PhD*

- Explain how to interpret scatter plots
- Discuss the use of cost-effectiveness acceptability curves

*ACPE Program Number: 0835-9999-20-054-L04-P (1 hour, knowledge-based activity)*

### 1:45-2:00 Complete daily evaluation

## Wednesday, April 28 *(Pacific 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

*ACPE Program Number: 0835-9999-20-055-L04-P (1.25 hours, knowledge-based activity)*

### 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

*ACPE Program Number: 0835-9999-20-056-L04-P (1.25 hours, knowledge-based activity)*

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

**12:35-1:50 Value frameworks**

*Dan Malone, RPh, PhD*

- Describe initiatives by professional societies to create value frameworks
- Discuss limitations of value frameworks
- Discuss the impact of ICER recommendations for payers and manufacturers

*ACPE Program Number: 0835-9999-20-057-L04-P (1.25 hours, knowledge-based activity)*

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

**Thursday, April 29** *(Pacific 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

*ACPE Program Number: 0835-9999-20-058-L04-P (1.5 hours, application-based activity)*

**10:30-10:50 Break**

**10:50-11:30 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

*ACPE Program Number: 0835-9999-20-059-L04-P (0.75 hours, knowledge-based activity)*

**11:30-11:45 Post-test (and Review session)**

- Complete post-test to identify knowledge change

*ACPE Program Number: 0835-9999-20-060-L04-P (0.5 hours, knowledge-based activity)*

**11:45-Noon Complete daily evaluation**

**12:00-12:15 Review post-test results**

- Discuss answers to post-test questions and address any remaining concerns over incorrect responses

# COLLEGE OF PHARMACY TRAINING PROGRAM FACULTY

## Edward Armstrong, PharmD

*Professor Emeritus*  
Department of Pharmacy  
Practice & Science

## Rhys Axon, MPharm, MS, PhD

*Assistant Professor*  
Department of Pharmacy  
Practice & Science

## Harman Dhatt, PhD, MPH

*Research Assistant*

## Amy Grizzle, PharmD

*Associate Director*  
Center for Health Outcomes  
and PharmacoEconomic Research

## Jason Hurwitz, PhD

*Assistant Director*  
Center for Health Outcomes  
and PharmacoEconomic Research

## Daniel Malone, RPh, PhD, FAMCP

*Professor*  
University of Utah College of Pharmacy  
*Professor Emeritus*  
University of Arizona College of Pharmacy

## Shannon Vaffis, MPH, PMP

*Graduate Research Assistant*

## PHARMACY CONTINUING EDUCATION

### ACCREDITATION STATEMENT:

Banner Health is accredited by the Accreditation Council for Pharmacy Education as a provider of continuing pharmacy education.



### DESIGNATION STATEMENT:

These knowledge-based and application-based activities have been assigned ACPE UANs for pharmacists. If all activities are attended, Banner Health will grant 13.75 contact hours of continuing pharmacy education credit in compliance with ACPE policy and standards. Credit will be issued immediately upon successful completion of the activity and evaluation via CPE Monitor.

“Thank you for a great program! I truly appreciate your great teaching and team of instructors, and look forward to staying in the loop with future programming.”



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## PROGRAM REQUIREMENTS

- Laptops installed with Excel are needed to complete some exercises
- Prior to the program, participants will be sent one pharmacoeconomic article to evaluate in preparation for an interactive session

“I have been wanting to take this class for the last 3-4 years but taking a full week out to go to AZ is tough, so I jumped on the chance to take it virtually. I understand it loses something virtually but it may be a better fit for many folks like myself to get the ‘basics’ down. THANK YOU!”



## OUR PROGRAM

Our annual program has been offered in person for over 20 years with attendance each year generated through recommendations from prior attendees. While we cannot offer our full program virtually and do it justice, we have come up with this virtual option. Join us for selected core topics most amenable to virtual delivery.

This abbreviated, virtual program will get you off to a great start in the HEOR space. For those wanting more depth and additional topics, please consider coming to Tucson in October 2021! We will structure our agenda to allow you to join where you left off OR attend the full program at a discounted fee.

## REGISTRATION

**Register online at:**

<https://www.eventbrite.com/e/130495414297>

**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 March 12, 2021.

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