

TRAINING PROGRAM IN Health Outcomes and Pharmacoeconomic Research

SEPTEMBER 24-27, 2018

Tucson Marriott University Park Hotel
TUCSON, ARIZONA

*A 4-day,
applied training
program for
personnel in the
pharmaceutical
industry, health
care delivery
systems, and
other health care
organizations*



THE UNIVERSITY OF ARIZONA COLLEGE OF PHARMACY

Center for Health Outcomes
& Pharmacoeconomic Research



AN Overview OF THE Training Program

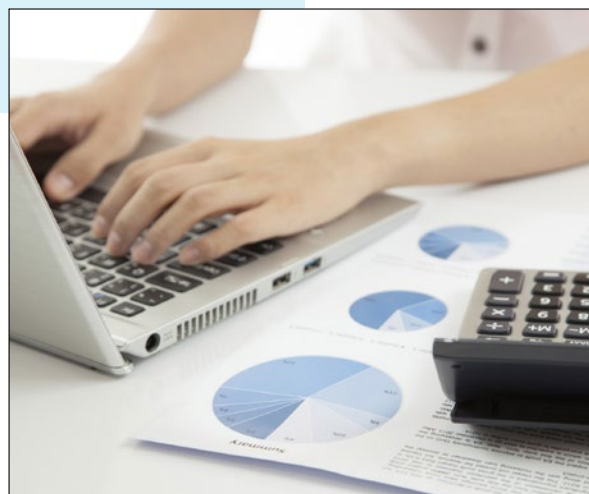
Higher quality, lower cost, and reasonable access to healthcare are universal goals shared by patients, providers and payers. To address these goals, the *Center for Health Outcomes and PharmacoEconomic Research* offers training on pharmaco-economic information and health outcomes assessment to professionals needing to interpret or apply these concepts. Participants will learn to critically evaluate the literature, collaborate on a mock pharmaco-economic project, identify appropriate cost and outcomes data sources, articulate the issues in value frameworks and use of real-world evidence, conduct a decision analysis, interpret results of cost-effectiveness analyses, apply concepts to managed care decision-making, and much more! Professionals with an entry to intermediate knowledge level will benefit most from this 4-day program. The curriculum offers breadth and depth of cutting-edge content through lecture, case study, hands-on workshops, and small group discussion. Participants should bring their own laptops installed with Excel to complete some of the interactive exercises. Space is limited to encourage interactive sessions and personalized attention.

PREPARATION FOR THE PROGRAM

Our goal is to provide as much background and as many tools as possible to allow you to return to your professional setting and put what you have learned to work. We also want to offer opportunities to work on problems and situations specific to your particular setting.

During one of the workshops, you will be able to apply the knowledge and techniques presented to a case study. Prior to the program, we will provide some background reading as well as one article that will be evaluated during the course.

Participants need to bring laptop computers to enhance participation in workshops.



Pharmacy Continuing Education



The University of Arizona College of Pharmacy is accredited by the Accreditation Council for

Pharmacy Education as a provider of continuing pharmacy education. Pharmacists participating in all sessions and completing associated activities may receive a total of **26** hours. Please provide your NABP identification number and birth date when you register so that we can upload credit data to the CPE Monitor system.



THE UNIVERSITY OF ARIZONA
College of Pharmacy

Monday, September 24

TRAINING PROGRAM IN Health Outcomes and Pharmacoeconomic Research Agenda

7:30-8:00 am	Continental breakfast, registration, and welcome
8:00-8:15	Pre-test <ul style="list-style-type: none">› Identify present knowledge base through pre-test <p>ACPE Program Number: 0003-0000-18-024-L01-P (.25 hours, knowledge-based activity)</p>
8:15-9:15	Pharmacoeconomic principles <ul style="list-style-type: none">› Describe basic terminology› Discuss how a medication can be cost-effective› Describe various study perspectives <p>ACPE Program Number: 0003-0000-18-025-L01-P (1 hour, knowledge-based activity)</p>
9:15-9:30	Break
9:30-10:45	Pharmacoeconomic methodology <ul style="list-style-type: none">› Identify differences among various pharmacoeconomic methodologies, such as cost-effectiveness analysis, cost-benefit analysis, and cost-utility analysis› Calculate the incremental cost-effectiveness for one medication over another <p>ACPE Program Number: 0003-0000-18-026-L01-P (1.25 hours, application-based activity)</p>
10:45-11:00	Break
11:00-12:00 pm	Decision analysis/Pharmacoeconomic models <ul style="list-style-type: none">› Describe the steps in building a decision tree› Illustrate how the data elements entered into a decision tree should be analyzed› Apply the fundamental concepts learned to build a decision tree using Excel software› Interpret findings from the decision analysis <p>ACPE Program Number: 0003-0000-18-027-L01-P (2.25 hours, application-based activity)</p>

Comment from past program participants:

“This was a fantastic overview of HE & OR. I learned so much that is directly applicable to my job. You have given me a great introduction, information and tool set to use. Thank you!”



12:00-1:00

Lunch

1:00-2:15

Decision analysis/Pharmacoeconomic models *(continued)*

2:15-3:00

Pharmacoeconomic Pearls - Part I

Biosimilars: Cost-efficiencies and expanded access

- › Describe the cost-efficiencies that can be achieved by converting patients from reference biologicals to biosimilar agents in supportive cancer care
- › Discuss how these savings can be applied to provide more patients with access to novel cancer treatments on a budget-neutral basis

Statistical vs clinical significance: Are p-values valuable?

- › Demystify p-values and contrast with effect sizes and confidence intervals

Deriving utilities: Where do they come from?

- › Explain utility measures such as the Time Trade Off and Standard Gamble

ACPE Program Number: 0003-0000-18-028-Lo1-P (.75 hours, knowledge-based activity)

3:00-3:15

Break

3:15-4:00

Cost and outcomes data sources

- › Identify data sources for costs and outcomes to populate pharmacoeconomic analyses
- › Describe strengths and weaknesses of data sources

ACPE Program Number: 0003-0000-18-029-Lo1-P (.75 hours, knowledge-based activity)

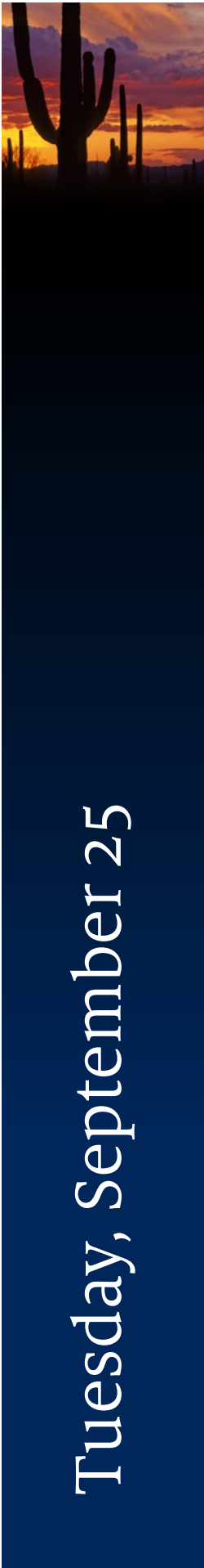
4:00-4:15

Complete daily evaluation

Comments from past program participants:

“The overall program was excellent, especially for my organization. I believe implementation of these concepts will eventually bridge PE communication gap between MCOs and industry.”

“Thank you for organizing this very valuable course. I would certainly recommend it to other professionals in the field. Tucson is a great place to visit!”



7:45-8:15 am

Continental breakfast

8:15-9:15

Sensitivity analysis

- › Discuss methods and limitations of one-way and two-way sensitivity analyses
- › Describe methodology used in probabilistic sensitivity analysis
- › Explain how to interpret graphic displays of sensitivity results

ACPE Program Number: 0003-0000-18-030-L01-P (1 hour, knowledge-based activity)

9:15-10:15

Interpreting cost-effectiveness results

- › Explain how to interpret data plotted on a cost-effectiveness grid
- › Discuss the use of cost-effectiveness acceptability curves

ACPE Program Number: 0003-0000-18-031-L01-P (1 hour, knowledge-based activity)

10:15-10:30

Break

10:30-12:00 pm

Markov models: A subset of decision analysis

- › Differentiate between decision trees and Markov models
- › Identify disease conditions where a Markov analysis is preferred to a decision tree
- › Build a Markov model using Excel software

ACPE Program Number: 0003-0000-18-032-L01-P (1.5 hours, application-based activity)

12:00-1:00

Lunch

1:00-2:00

Performance-based risk sharing agreements

- › Describe key characteristics of performance-based risk-sharing (PBRs) agreements and why they are becoming so popular
- › Identify good practice recommendations issued by the International Society for Pharmacoeconomics and Outcomes Research (ISPOR) PBRs Task Force
- › Outline specific examples of PBRs agreements
- › List benefits, challenges, and potential barriers for PBRs agreements

ACPE Program Number: 0003-0000-18-033-L01-P (1 hour, knowledge-based activity)

2:00-3:00

Budget impact analysis

- › Discuss ISPOR Principles of Good Practice for Budget Impact Analysis
- › Describe examples of published budget impact analyses
- › Outline differences between budget impact and pharmacoeconomic analyses

ACPE Program Number: 0003-0000-18-034-L01-P (1 hour, knowledge-based activity)

3:00-3:15

Break

3:15-4:15

Value frameworks for pharmaceuticals

- › Describe initiatives by professional societies to create value frameworks
- › Discuss limitations of value frameworks
- › List factors contributing to the creation of value frameworks

ACPE Program Number: 0003-0000-18-035-L01-P (1 hour, knowledge-based activity)

4:15-4:30

Complete daily evaluation

5:45

Group dinner – depart from lobby



7:45-8:15 am

Continental breakfast

8:15-9:15

Real-world evidence (RWE)

- Discuss reasons why RWE has received so much attention from a variety of stake holders
- Describe methodologies (pragmatic and observational studies) used to generate RWE, including associated advantages and disadvantages

ACPE Program Number: 0003-0000-18-036-L01-P (1 hour, knowledge-based activity)

9:15-10:00

Real-World Evidence (RWE): Payer perceptions & use

- Describe how RWE is perceived in managed care environments, including P&T decisions
- Identify attributes of RWE studies that increase their usefulness and relevance to payers
- Discuss barriers with the use of RWE by payers and current efforts to overcome them

ACPE Program Number: 0003-0000-18-037-L01-P (1 hour, knowledge-based activity)

10:00-10:15

Break

10:15-11:00

Database studies

- Discuss the characteristics of a “good” database
- Describe the limitations of database studies

ACPE Program Number: 0003-0000-18-038-L01-P (.75 hours, knowledge-based activity)

11:00-12:00 pm

Managed care workshop

- Evaluate pharmacoeconomic data to make formulary recommendations

ACPE Program Number: 0003-0000-18-039-L01-P (1 hour, application-based activity)

12:00-1:00

Lunch

1:00-2:15

Patient-reported outcomes (PRO) assessment

- Discuss the role of patient-reported outcomes assessment in the evaluation of health care products and services
- Complete and score the EQ-5D

ACPE Program Number: 0003-0000-18-040-L01-P (1.25 hours, knowledge-based activity)

2:15-3:00

Pharmacoeconomic Pearls - Part II

Data mining: A hands-on approach

- Query AHRQ’s HCUP data

Propensity score matching

- Explain how propensity score matching minimizes bias in observational research

ACPE Program Number: 0003-0000-18-041-L01-P (.75 hours, knowledge-based activity)

3:00-3:15

Break

3:15-5:00

Designing and conducting pharmacoeconomic studies *(break included)*

- Identify the steps in planning a pharmacoeconomic study
- Analyze a pharmacoeconomic problem and choose key elements for inclusion in a pharmacoeconomic evaluation

ACPE Program Number: 0003-0000-18-042-L01-P (1.75 hours, application-based activity)

5:00-5:15

Complete daily evaluation



Thursday, September 27

7:45-8:15 am

Continental breakfast

8:15-10:15

Evaluating pharmacoeconomic studies

- Discuss key issues that should be considered when evaluating pharmacoeconomic literature
- Critically evaluate a pharmacoeconomic study to identify strengths and weaknesses in study methodology and conclusions
- Replicate the study findings in a decision tree

ACPE Program Number: 0003-0000-18-043-L01-P (2 hours, application-based activity)

10:15-10:30

Break

10:30-11:45

Application of pharmacoeconomic data in the “real world”

Expert Guest Panel Discussion

- Describe use and limitations of pharmacoeconomic data in decision making

ACPE Program Number: 0003-0000-18-044-L01-P (1.25 hours, knowledge-based activity)

11:45-12:00 pm

Break

12:00-12:45

Jeopardy game: What have you learned? *(with working lunch)*

- Review and solidify key concepts learned during the program through a team-based quiz game

ACPE Program Number: 0003-0000-18-045-L01-P (.75 hours, knowledge-based activity)

12:45-1:00

Post-test

- Complete post-test to identify knowledge change

ACPE Program Number: 0003-0000-18-046-L01-P (.25 hours, knowledge-based activity)

1:00-2:30

Applying concepts/Pharmacoeconomic study presentations

- Present pharmacoeconomic studies and discuss with faculty and participants the project, considerations and methodologies
- Evaluate strengths and weaknesses of study designs

ACPE Program Number: 0003-0000-18-047-L01-P (1.5 hours, application-based activity)

2:30-2:45

Complete daily evaluation and close of program

Comment from past program participants:

“Great course – would recommend to peers. Excellent presentations and good topics relevant to my job. Now have a better understanding of the various tools used in assessing value.”



The University of Arizona College of Pharmacy Training Program Faculty

Ivo Abraham, PhD, RN

Professor, Department of Pharmacy Practice & Science

Edward P Armstrong, PharmD

Professor Emeritus, Department of Pharmacy Practice & Science

D Rhys Axon, MPharm, MS, PhD Candidate

Graduate Research Assistant

Sandipan Bhattacharjee, PhD, MS

Assistant Professor, Department of Pharmacy Practice & Science

Brian L Erstad, PharmD, MCCM, FASHP, FCCP, BCPS

Professor and Head, Department of Pharmacy Practice & Science

Amy Grizzle, PharmD

Assistant Director, Center for Health Outcomes and PharmacoEconomic Research

Jason Hurwitz, PhD

Research Scientist, Center for Health Outcomes and PharmacoEconomic Research

Robert Lipsy, PharmD, BCPS, FASHP

Senior Clinical Pharmacist and Medication Management Specialist

Clinical Associate Professor

Daniel C Malone, RPh, PhD, FAMCP

Professor, Department of Pharmacy Practice & Science

Marion Slack, PhD

Professor, Department of Pharmacy Practice & Science

Terry Urbine, PhD

Associate Research Scientist and Instructor, Department of Pharmacy Practice & Science

Terri Warholak, PhD, RPh, CPHQ, FAPhA

Assistant Dean, Academic Affairs and Assessment

Professor, Department of Pharmacy Practice & Science

Guest Faculty

Denise Erickson, PharmD, BCPS

Senior Director, Clinical Pharmacy Services

Banner Health

Stacie Hudgens

Managing Partner

Strategic Lead

Clinical Outcomes Solutions

Kim Saverno, PhD

Senior Research Scientist

US Real World Outcomes Research

Eli Lilly and Company

Marcus Sredzinski, PharmD

Executive Vice President

PBM Services & Health Informatics

MedImpact/ScriptSave



Registration

Location

The program will be held at the Tucson Marriott University Park Hotel, 880 East Second Street, Tucson, Arizona 85719. While in Tucson for the week, enjoy a full-service hotel setting coupled with a university campus experience. The hotel is located at the Main Gate to the University of Arizona affording close proximity to campus venues. Also within walking distance are restaurants, museums, and shopping and easy streetcar access to downtown Tucson. The hotel offers a staffed business center, fitness center and sauna, outdoor pool and spa, lounge, and restaurant.

A discounted group rate of \$129.00 per night plus applicable taxes is available for your stay during the training program. To make your reservation, please call 844-407-5441 or [click here](#). Book your group rate for UA College of Pharmacy Training in Health Outcomes

Please note that rooms will only be held until **September 3, 2018, or until the block is filled**. After this date, rooms will be on a space-available basis. If you have any questions or require any assistance with arranging your accommodations, please do not hesitate to contact us.

Please complete the enclosed registration form and return it with your payment, or use the online registration process at <https://events.pharmacy.arizona.edu/healthoutcomes>

The registration fee for the Training Program in Health Outcomes and Pharmacoeconomic Research is \$2,750 and includes all sessions, electronic training materials, daily breakfast, lunch, and refreshments, a group dinner, pharmacy continuing education credit, and a certificate of completion.

Slides and other program materials will be available electronically for your use prior to the program. You may also purchase a printed binder of materials for an additional fee of \$100. Binders must be purchased as part of your online registration and will be available upon arrival at the program.

REFUND POLICY: A refund (less \$450 cancellation fee) will be available for cancellations received in writing by September 1, 2018.

Registration fees paid to The University of Arizona Foundation are not considered a tax-deductible gift contribution.

Persons with a disability may request a reasonable accommodation, such as sign language interpreter, by contacting us at 520-626-3020 or continuinged@pharmacy.arizona.edu. Requests should be made as early as possible to allow time to arrange the accommodation.

▶ ▶ ▶ For further information:

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Tucson, Arizona 85721-0202

Phone: 520-626-3106

Email: continuinged@pharmacy.arizona.edu

Web address: www.pharmacy.arizona.edu

ONLINE REGISTRATION AVAILABLE

<https://events.pharmacy.arizona.edu/healthoutcomes>

If not using the online system,
please return registration form below:

REGISTRATION FORM

TRAINING PROGRAM IN
Health Outcomes and Pharmacoeconomic Research
September 24-27, 2018

NAME _____

DEGREE _____ POSITION _____

AFFILIATION _____

ADDRESS _____

CITY _____ STATE _____ ZIP CODE _____

TELEPHONE _____

EMAIL ADDRESS _____

Registration fee: \$2,750

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

Optional printed binder: \$100

Binders **must be purchased** as part of your online registration
and will be available upon arrival at the program.

Please indicate method of payment:

Check made payable to the The University of Arizona Foundation

Visa Mastercard American Express

Card Number _____ Expiration Date _____

Cardholder's name as it appears on card _____

Card Billing Address: _____

**Please return
completed
registration form
and payment to:**

Office of Continuing Education
The University of Arizona College of Pharmacy
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Tucson, Arizona 85721-0202