TRAINING PROGRAM IN
Health Outcomes and Pharmacoeconomic Research

SEPTEMBER 23-26, 2019
Lodge on the Desert
TUCSON, ARIZONA

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

Participants will learn to:

- critically evaluate literature
- identify appropriate cost and outcomes data sources
- articulate the issues in value frameworks and real-world evidence
- conduct a decision analysis and Markov model
- interpret results of cost-effectiveness analyses
- apply concepts to managed care decision-making
- collaborate on a mock project
- and much more!
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

Space is limited to encourage interactive sessions and personalized attention.

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 25.75 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.

Pharmacy Continuing Education

“Awesome training course. I greatly appreciate every speaker’s contribution along with the interactive exercises. Thank you!”

“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!”
TRAINING PROGRAM IN
Health Outcomes and Pharmacoeconomic Research
Agenda

7:30-8:00 am  Continental breakfast and registration/Welcome

8:00-8:15  Pre-test
  › Identify present knowledge base through pre-test
  ACPE Program Number: 0835-9999-19-031-L04-P
  (.25 hours, knowledge-based activity)

8:15-9:15  Pharmacoeconomic principles
  › Describe basic terminology
  › Discuss how a medication can be cost-effective
  › Describe various study perspectives
  ACPE Program Number: 0835-9999-19-032-L04-P
  (1 hour, knowledge-based activity)

9:15-10:15  Pharmacoeconomic methodology
  › 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
  ACPE Program Number: 0835-9999-19-033-L04-P
  (1 hour, application-based activity)

10:15-10:30  Break

10:30-11:15  Deriving utilities: Where do they come from?
  › Describe methods to measure utility such as the Time Trade Off and Standard Gamble
  › Complete and score the EQ-5D, a utility instrument
  ACPE Program Number: 0835-9999-19-034-L04-P
  (.75 hours, knowledge-based activity)

11:15-12:00 pm  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: 0835-9999-19-035-L04-P
  (.75 hours, knowledge-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 and approval of new product development
  › Review and discuss the concepts and elements of a multi-dimensional patient-reported outcome measure
  ACPE Program Number: 0835-9999-19-036-L04-P
  (1.25 hours, knowledge-based activity)

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### 2:15-3:00  Decision analysis/Pharmacoeconomic models
- 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

ACPE Program Number: 0835-9999-19-037-L04-P
(1.75 hours, application-based activity)

### 3:00-3:15  Break

### 3:15-4:15  Decision analysis/Pharmacoeconomic models

### 4:15-4:30  Complete daily evaluation
7:30-8:00 am  Continental breakfast

8:00-8:45  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: 0835-9999-19-038-L04-P
(.75 hour, knowledge-based activity)

8:45-9:30  Interpreting cost-effectiveness results
  Ed Armstrong, PharmD
- Explain how to interpret scatter plots
- Discuss the use of cost-effectiveness acceptability curves
ACPE Program Number: 0835-9999-19-039-L04-P
(.75 hour, knowledge-based activity)

9:30-10:00  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: 0835-9999-19-040-L04-P
(1.5 hours, application-based activity)

10:00-10:15  Break

10:15-11:15  Markov models: A subset of decision analysis (continued)

11:15-11:45  HeRo3: An introduction to an economic modeling software
- Describe the HeRo3 modeling program, why it was developed, and how it has been used
- Discuss advantages and disadvantages of the HeRo3 program as compared to other software for developing economic models
- List the technologies that have been evaluated using HeRo3
ACPE Program Number: 0835-9999-19-041-L04-P
(.5 hour, knowledge-based activity)

11:45-12:45 pm  Lunch

12:45-1:30  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
- List benefits, challenges, and potential barriers for PBRS agreements
ACPE Program Number: 0835-9999-19-042-L04-P
(.75 hour, knowledge-based activity)

1:30-2:30  Database studies (lecture and workshop)
- Discuss the characteristics of a “good” database
- Describe the limitations of database studies
- Query AHRQ’s HCUP data
ACPE Program Number: 0835-9999-19-043-L04-P
(1 hour, knowledge-based activity)

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<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
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<tbody>
<tr>
<td>2:30-2:45</td>
<td>Break</td>
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<tr>
<td>2:45-4:00</td>
<td><strong>Value frameworks</strong>&lt;br&gt;  - Describe initiatives by professional societies to create value frameworks&lt;br&gt;  - Discuss limitations of value frameworks&lt;br&gt;  - Discuss the impact of ICER recommendations for payers and manufacturers</td>
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<td>4:00-4:15</td>
<td>Complete daily evaluation</td>
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<td>5:45</td>
<td>Group dinner</td>
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7:30-8:00 am  Continental breakfast

8:00-9:00  Real-world evidence (RWE)
  › Discuss reasons why RWE has received so much attention from a variety of stakeholders
  › 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

ACPE Program Number: 0835-9999-19-045-L04-P
(1 hour, knowledge-based activity)

9:00-9:45  Real-world evidence (RWE): Payer perceptions & use
  › Describe how RWE is perceived in managed care environments and which study attributes increase usefulness and relevance to payers
  › Identify barriers with the use of RWE by payers and current efforts to overcome them
  › Discuss FDA's RWE Framework announced in 2019

ACPE Program Number: 0835-9999-19-046-L04-P
(.75 hour, knowledge-based activity)

9:45-10:00  Break

10:00-11:00  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: 0835-9999-19-047-L04-P
(1 hour, knowledge-based activity)

11:00-12:00 pm  Managed care workshop
  › Evaluate pharmacoeconomic data from an ICER report to make formulary recommendations
  › Identify health economics and outcomes data that are needed for decision making

ACPE Program Number: 0835-9999-19-048-L04-P
(1 hour, application-based activity)

12:00-1:00  Lunch

1:00-2:00  Value based pricing 2.0
  › Describe pricing strategies and alternative payment models considered for managing high cost pharmaceuticals
  › Discuss issues around value assessment
  › Discuss issues of thresholds for cost-effectiveness and the effect on pricing and reimbursement

ACPE Program Number: 0835-9999-19-049-L04-P
(1 hour, knowledge-based activity)

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2:00-2:30  Designing and conducting pharmacoeconomic studies
› 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: 0835-9999-19-050-L04-P
(2 hours, application-based activity)

2:30-2:45  Break

2:45-4:15  Designing and conducting pharmacoeconomic studies (continued)

4:15-4:30  Complete daily evaluation
7:30-8:00 am  Continental breakfast
8:00-10:00  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: 0835-9999-19-051-L04-P
(2 hours, application-based activity)
10:00-10:15  Break
10:15-11:30  Application of pharmacoeconomic data in the “real world”
  › Describe use and limitations of pharmacoeconomic data in decision making
ACPE Program Number: 0835-9999-19-052-L04-P
(1.25 hours, knowledge-based activity)
11:30-11:45  Break
11:45-12:30 pm  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: 0835-9999-19-053-L04-P
(.75 hours, knowledge-based activity)
12:30-12:45  Post-test
  › Complete post-test to identify knowledge change
ACPE Program Number: 0835-9999-19-054-L04-P
(.25 hours, knowledge-based activity)
12:45-2:15  Applying concepts/Pharmacoeconomic study presentations
  › Present pharmacoeconomic studies and discuss with faculty and participants the project, considerations, methodologies utilized, and results
  › Evaluate strengths and weaknesses of study designs
ACPE Program Number: 0835-9999-19-055-L04-P
(1.5 hours, application-based activity)
2:15-2:30  Complete daily evaluation and close of program
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.

Guest Faculty

Denise Erickson, PharmD, BCPS
Senior Director, Clinical Pharmacy Services, Banner Health

Stacie Hudgens, MSc
CEO, Strategic Lead, Regulatory & Access 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
Location

The program will be held at Lodge on the Desert, 306 North Alvernon Way, a boutique hotel situated on 5 acres in mid-town Tucson with charming hacienda-style accommodations.

For hotel information and to make reservations click here. Please note that rooms will only be held until August 23, 2019, 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.

Registration

Register online at https://events.pharmacy.arizona.edu/healthoutcomes

Registration fee:  
- $2,750 Professionals  
- $1,750 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, daily breakfast, lunch, and refreshments, a Tuesday evening group dinner, 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 $450 cancellation fee) will be available for cancellations received in writing by September 1, 2019.

*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 520-626-3106 or continuinged@pharmacy.arizona.edu. Requests should be made as early as possible to allow time to arrange the accommodation.

For further information:

Office of Continuing Education  
The University of Arizona College of Pharmacy  
Email: continuinged@pharmacy.arizona.edu