

### **AVALON HEALTH ECONOMICS**

# Avalon Health Economics: Overview of Capabilities

John Schneider, PhD, Andrew Briggs, DPhil, & Cara Scheibling Avalon Health Economics LLC 26 Washington Street, 3<sup>rd</sup> Floor, Morristown, NJ 07932 (862) 260-9191 | www.AvalonEcon.com

# Capabilities

- Avalon Health Economics LLC ("AHE") was formed in 2013 by a group of experienced academic and industry health economists and associates, bringing together three existing consulting practices.
  - All three AHE Principals—John Schneider, Cara Scheibling, and Andrew Briggs-- worked together as part of Oxford Outcomes from 2009-2013.
- We are small and focused, and provide high-value real-world health economics consulting and research services relying on unparalleled industry knowledge and experience, accurate and defensible research, and attentive project management.
  - Focus: Full spectrum of health economics & outcomes research (HEOR) services, with special focus on economic modelling, modelling alongside clinical trials, study design, novel uses of clinical data, and real-world evidence
  - Clients: Pharmaceutical companies, medical device companies, non-profit organizations, law firms



# Avalon Scope of Services

Our main focus is **Health Economics and Outcomes Research (HEOR)** for life sciences companies, including pharmaceuticals, biotech & medical devices

We also provide related health industry services in policy analysis, litigation support, and business analytics & strategy.

The "core" linking these activities is our strong base in HEOR methodology, statistics, and data analysis, and our proven track record in communicating research in the form of reports and published peer-reviewed articles. This is also the core of what we call our HEOR Analytics practice area, which focuses on applying advanced statistical methods to novel analyses of clinical and economic data.

HEOR &
Reimbursement
Analysis for Life
Sciences

Methodological Core:
Health Economics,
Outcomes Research &
Statistics Methodology

Litigation
Support &
Policy Analysis



# Core & Support Teams

Core Leadership
John Schneider, PhD
Andrew Briggs, DPhil
Cara Scheibling, BA







Supporting Team
Katherine Dick, BS
Shawn Davies, MA
Alexis Doyle, MA
Jacie Cooper, BS
Sabrina Chmelir, BS





Scientific Advisors

James Robinson, PhD

Philipp Schuetz, MD, MPH

Pengxiang Li, PhD







# Capabilities: Avalon Scope of Services Along the Product Development Lifecycle

Avalon's services include a wide variety of offerings across the product development continuum in pharmaceuticals, diagnostics, and medical devices.

**Product Development Cycle** 

Early Developmen Cycle	t Core Analysis	Market Analysis
<ul> <li>Clinical studies</li> <li>Market sizing</li> <li>Epidemiology</li> <li>Cost-of-Illness studies</li> <li>Conceptual models</li> <li>Return on investment</li> <li>Likely 'to-market' issues</li> <li>Literature reviews</li> <li>Systematic reviews</li> <li>Meta-analysis</li> <li>Payer research</li> </ul>	<ul> <li>Clinical studies</li> <li>Cost-effectiveness</li> <li>Budget impact analysis</li> <li>Hospital value analysis</li> <li>Cost impact analysis</li> <li>Payer research</li> <li>Payer choice models</li> <li>Patient-reported outcomes</li> <li>Social media sentiment</li> <li>Publications</li> <li>Conference presentations</li> <li>Communications</li> <li>Value dossiers</li> </ul>	<ul> <li>Regulatory studies</li> <li>Market access</li> <li>Pricing &amp; reimbursement</li> <li>Payer research</li> <li>Payer engagement</li> <li>Payer choice models</li> <li>Real-world data analysis</li> <li>Publications</li> <li>Conference presentations</li> <li>Communications</li> <li>Value dossiers</li> </ul>

# Types of Clients & Engagements

### Pharmaceuticals

- Examples include mostly all of the large pharmaceutical companies, in the U.S. and abroad
- We have also worked with a number of smaller biotechnology companies.

HEOR Analytics, Literature Reviews, Meta-Analyses, Study Design, Conceptual Models, Cost Effectiveness Models, Budget Impact Analyses, HTA Advising/Submissions

## Medical Devices and Diagnostics

- Examples include a mix of large, mid-sized, and small medical device and diagnostics companies
- We have also worked with smaller "start up" healthcare companies developing novel technologies

Literature Reviews, Study Design, Value Propositions, Conceptual Frameworks, Cost-Impact Models, Cost Effectiveness Models, Budget Impact Analyses, Payer & Purchaser Research,



# Areas of Specific Expertise

Avalon has experience across most therapeutic areas, and has conducted a wide variety of studies of pharmaceuticals and medical devices

### **Pharmaceuticals**

- Extensive experience across a wide range of therapeutic areas, including oncology, diabetes, COPD, CHF, cardiology, orthopedics, rare and orphan diseases, ophthalmology, dermatology, asthma, respiratory infections, infectious diseases, gastroenterology, and many others.
- Extensive participation in ISPOR methodology workgroups (e.g., Task Force on Modelling Methods)
- Extensive participation on HTA panels and Advisory Boards

### **Medical Devices & Diagnostics**

- Avalon has developed specific expertise in the economics of diagnostics, and has been regularly teaching the course "The Economics of Diagnostics" at the annual ISPOR meetings
- Development of cost-impact and hospital value models for presentation to health system supply chain purchasers
- Design of health economics elements in clinical studies
- Payer and purchaser research



# Examples of how our HEOR consulting has helped our **Pharmaceutical** clients:

- Built numerous economic models of pharmaceuticals across a wide range of therapeutic areas
  - ✓ Models designed for European HTA, including NICE
  - ✓ Models designed for U.S. markets & included with AMCP dossiers
  - ✓ Helped advance the literature on economic modeling methodology (e.g., modeling alongside clinical trials; dealing with uncertainly; optimal model design; etc.)
- Advised clients on study design, statistical analysis plans, & data analysis strategies
  - ✓ Development of HEOR measures (e.g., patient-reported outcomes; measures of resource use) for planned clinical studies
  - ✓ Assessment of statistical analysis plans and data analysis strategies
- Special projects
  - ✓ Optimal design of outcomes-based contracts
  - ✓ Exploration of disease causality using Mendelian randomization
  - ✓ Regression analysis of clinical trial data to assess confounding factors for EQ5D scores



# Examples of how our HEOR consulting has helped our **Medical Device** clients:

### Alternative solution to bariatric surgery

- ✓ Assess coverage & reimbursement issues
- ✓ Generate economic evidence to support reimbursement

### Neuromodulation device for reversing heart failure

- ✓ HEOR evidence plan contributed to their \$92 million fund raising round
- ✓ CMS approved our health economics data collection plan for reimbursement purposes
- ✓ Helped increase clinical trial enrollment with our HEOR evidence
- ✓ Currently building a economic models to support reimbursement, marketing and sales efforts

### Coronary artery disease and early heart failure diagnostic test

- ✓ Developed HEOR evidence for securing reimbursement, market access and a drug partnership for all indications
- ✓ Generation of white papers, reports, manuscripts, & conference abstracts

### Large visualization diagnostic devices manufacturer

- ✓ Help develop HEOR capability in-house; generate background & training materials
- ✓ Analysis of Medicare claims data
- ✓ Development of economic models of laparoscopic vs. robotic surgery
- ✓ Generation of white papers, reports, manuscripts, & conference abstracts



### What Makes Avalon Different?

### Four ways in which Avalon differs, and will always differ, from other HEOR vendors:

- 1. Academic and methodological strength. Our Principals and Directors have deep knowledge and experience in the academic side of economic valuation. Academic rigor is increasingly important as payers and purchasers raise their standards and expectations for economic evidence
- 2. Again, unlike some of the larger HEOR vendors, our senior staff members (including Project Directors and Senior Consultants) are materially and regularly involved with all projects.
- 3. We are small and will remain smaller than our competitors. Our Principals & staff have worked at larger firms, and we understand some of the problems associated with "big box" vendors. Avalon is a small "boutique" firm, with exceptionally experienced & qualified leaders who want to be involved in all of the work.
- 4. Avalon steadfastly focuses on three simple management & operational principles: **Pay attention** to the client and their needs; **Keep it simple**; more complex solutions are not always the ones that deliver the most value to our clients; **Focus on the audience** developing "cookie cutter" approaches to value stories is not always the best approach



## Contact Us

### Morristown

26 Washington Street, 2<sup>nd</sup> and 3<sup>rd</sup> Floors

Morristown, New Jersey 07960

+1 862.260.9191

info@avalonecon.com | www.AvalonEcon.com

### London\*

16 Upper Woburn Place Bloomsbury, London WC1H 0BS

\*via our Acaster-Lloyd collaboration

