



# **Comparative Effectiveness Research**

Informing Public and Private Payer Decision-Making Brian Sweet, Chief Pharmacy Officer June 24, 2010



# **How Evidence Begins**





## The Evidence Gap Real-World Effectiveness

	Efficacy (Clinical Trial Data)	Effectiveness (Real-World Data)		
Objective	Does it work under ideal circumstances	Does it work under <u>usual</u> circumstances		
Setting / Design	Controlled clinical trial	Real-world clinical practice		
Purpose	Regulatory approval (FDA)	Drug performance in real-world		
Intervention or treatment	Fixed regimen	Flexible regimen		
Comparator	Placebo	Active comparator/usual care		
Subjects	Homogenous/highly selective (stringent inclusion/exclusion criteria)	Heterogeneous / any subjects		
Compliance	High	Low to High		
Outcomes	Clinical endpoints (e.g. BP, HbA1c, LDL)	Example: Cardiovascular events, hospitalizations		
Internal Validity	High	Low		
External Validity (generalize to other populations)	Low to medium	Medium to high		



# **Real-World Adherence is Much Lower** than Clinical Trial Adherence

100	Psych	Alz.	Anti-	HMGs	DM	ACEI	ARB	Plavix
90		Dz.						
80								69%
70						<b>F7</b> 0/	61%	
60				49%	50%	57%		
50		45%	<b>46%</b>					
40	34%							
30								
20								
10								
0								



WellPoint's Position on Comparative Effectiveness Research Enables Physician-Patient Dialogue

### Helps enable better informed decisionmaking

- Compare risks, benefits, and effectiveness of available treatment options
- What is best for a patient's health and financial situation?

### **Create true health care choices**

### **Translate clinical evidence into action**

- Disseminate clear information to public
- Provide decision-support to physicians





# Why Should We Care About Comparative Effectiveness Research?

#### Helps us understand...

- **Sub-populations**
- **Real-world experiences**

### **Outcomes that matter most to patients**

- Which drugs prevent me from having a bone fracture?
- Which blood pressure drugs reduce my risk of heart attack?
- Which cholesterol drugs reduce my risk of a heart attack?





# **Goal of Outcomes-Based Formulary**

The goals of our Outcomesbased Formulary are to provide our members with drugs and therapies that will help:

- Improve clinical health outcomes
- Improve quality of life
- Improve productivity at work, school, and leisure activities
- Reduce total cost of care (pharmacy and medical)

A more expensive medication can be less expensive if the member's health is improved, resulting in use of less healthcare resources

- Improved health outcomes
- Reduced emergency room visits
- Reduced hospitalizations



#### **Promote Evidence-Based Medicine (Critical Review of the Clinical Trial Data)**

 We <u>critically review</u> the clinical trial data to determine if the study is of sufficient quality to be used for decision-making. Poor quality studies may have misleading results, and therefore are not used for decision-making.

#### **Evaluation of the Clinical Value of a Drug**

 High quality evidence is used to determine if a drug is <u>favorable</u>, <u>comparable</u>, or <u>unfavorable</u> to another drug. We provide drugs that will help result in better outcomes for our members.

#### **Determine Real-World Outcomes and Total Cost of Care**

 We conduct analyses using <u>integrated pharmacy, medical, and lab data</u> from one of the largest claims databases in the world. We are able to determine which drugs are most likely to result in favorable outcomes in a "real-world" setting.

#### **Advance Health Care Quality and Improve Outcomes**

 We combine high-quality clinical trial data and real-world outcomes data to provide our members with drugs that will result in optimal outcomes (i.e. clinical, quality of life, productivity, and total cost of care).



# Outcomes-Based Formulary Committee Overview



Clinical appropriateness FIRST Financial considerations SECOND



# Outcomes-Based Formulary Osteoporosis

### **Compared to Drug A and Drug B:**

- Compliance lowest for Drug C
- Drug C had higher fracture rates
- Total cost of care (pharmacy plus medical) higher for Drug C

By analyzing pharmacy/medical costs, fracture risk and compliance, we determined clients could save up to \$1,000 per member per year – for each member with osteoporosis using Drug A or Drug B instead of Drug C which remains a Tier 3 drug.

#### **Bisphosphonate Drugs: Total Costs One Year**





# **Comparative Effectiveness:** Asthma Controller Medication

- Clinical trials established inhaled steroids as most effective treatment
- Convened national experts to study "real world" member experience
- HealthCore findings on oral meds
  - Higher compliance
  - Reduced asthma-related emergency room visits and hospitalizations
  - Higher overall cost due to cost of drugs
- Singulair<sup>®</sup> to remain in tier 2; remove prior authorization
- Best outcomes from members compliant on therapy





Comparative Effectiveness Research Expected Results

### Improved decision-making by payers and providers

- Improve clinical, economic, and member outcomes
- Increase utilization and market share of "better" performing drugs

### Improved population-based outcomes

- Improved quality of care
- Improved quality of life (member perspective)
- Improved productivity (employer/societal perspective)
- Lower total cost of care (pharmacy and medical)

### Improved patient targeting for select therapies



**Overview of Comparative Effectiveness Research Guidelines** 

# First health plan to publish Comparative Effectiveness Research guidelines

- Create consistency in evaluation of Comparative Effectiveness Research
- Provide guidance to pharmaceutical companies

**Guidelines include criteria for Comparative Effectiveness Research and observational studies (OBS)** 

Comparative Effectiveness Research and OBS may provide data from "real-world" setting

OBS data may be used when randomized, controlled trial data is unavailable



# WellPoint Comparative Effectiveness Research Guidelines Study Evaluation and Study Rating

#### Data will be reviewed and evaluated to answer the following:

- Does the study have scientific credibility?
  - Bias elimination
- Is the study relevant to WellPoint population?
  - Demographics, co-morbidities, current clinical practice patterns
- Are the results valid?
  - Study meets all or most evaluation criteria

#### Studies will be rated as useful, possibly useful or not useful

**Comparative Effectiveness Research guidelines can be found** as in the press release



# Comparative Effectiveness Research WellPoint's Rating

CER and Observational Data Usefulness Rating	Criteria for Evaluation of a Comparative Effectiveness Research or Observational Study
Useful	<ul> <li>Scientifically credible and appropriate methodology used, AND</li> <li>Relevant to the WellPoint population and includes all relevant treatment comparators, AND</li> <li>Meets ALL specified criteria requirements and the results are valid</li> </ul>
Possibly Useful	<ul> <li>Scientifically credible and methodology is appropriate, AND</li> <li>Relevant to the WellPoint population and includes relevant treatment comparators, BUT</li> <li>Only meets SOME of the specified criteria requirements and there is some uncertainty around the results</li> </ul>
Not Useful	<ul> <li>Not considered scientifically credible, OR</li> <li>Not relevant to the WellPoint population or does not include relevant treatment comparators, OR</li> <li>Not meet the specified criteria requirements such that the results are deemed invalid</li> </ul>



# **CER Data Sources**

### "Identifying and Eliminating the Roadblocks to Comparative Effectiveness Research," NEJM, June 2, 2010

- Roadblocks in this study and anticipated road blocks:
  - Differing drug copays, which can impact results
  - Masking drug identities to patients
  - Coordinating logistics among hundreds of insurance plans for studies involving patients of all ages



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