Top Three Lessons
From the Past Decade

Emily Cox, RPh, PhD
Vice President, Research
A Spectacular Decade for Learning

Express Scripts Commercial Clients, Traditional Drug Trend

Outcomes Conference 2010
Three Key Lessons

1. Evidence matters
2. Alignment matters
3. Behavior matters
A Decade of Our Evidence Drives Your Decisions Today

Landscape

Impact of behavior

ESI Evidence

Drug specific

Program specific
High Level of Variation by State
Anti-Diabetic Medications

2000

2006

Outcomes Conference 2010
3-Tier Copays Reduce Costs Without Compromising Outcomes

2001

Effect of a Three-Tier Prescription Copay on Pharmaceutical and Other Medical Utilization

Kathleen A. Fairman, MA


2003

Retrospective, Long-Term Follow-Up Study of the Effect of a Three-Tier Prescription Drug Copayment System on Pharmaceutical and Other Medical Utilization and Costs

Kathleen A. Fairman, MA, Rochelle R. Henderson, MA, Express Scripts, Inc., Maryland Heights, MO

2008: Lowering Copays Only Modestly Increases Adherence

Is There a Cost - Quality Trade-off in Health Care?
2010: The Safety of Generic Anti-Epileptic Drugs

Original article
Acute epilepsy exacerbations in patients switched between A-rated anti-epileptic drugs
Good Evidence Needs Good Methods

Target patients with MPR < 60%

Randomized control group

Initial Conclusion: Highly successful intervention

Final conclusion: No impact when compared to control group

Pre MPR: 50
Post MPR: 63
For Better Insights, Demand Good Evidence

### Three Simple Questions to Ask When Evaluating Program Effectiveness

- How did they control for natural transitions (e.g., regression to the mean)?
- Was the control group comparable?
- Were program costs included?
Three Key Lessons

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Newer Can Be Better
Outcomes Conference 2010

Newer Isn’t Always Better

Radiology

Coronary CT Scans

Bone Marrow Transplant for Metastatic Breast Cancer
Newer Often Looks Great at First

The cost of newer isn’t better

0% 20% 40% 60% 80% 100%

Market Share


COX-2s NSAIDs

Outcomes Conference 2010
Pharmaceutical Product Life Cycle

- Introduction
- Acceptance
- Patent Expiration

Time

Use
The Pharmaceutical Landscape
Early 2000

<table>
<thead>
<tr>
<th>Market Share</th>
<th>6 Months Pre-expiration</th>
<th>12 Months Post-expiration</th>
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Normalized Baseline

- Prozac
- Generics
- Total

Outcomes Conference 2010
The Pharmaceutical Landscape
Today

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Market Share

- Prozac
- Generics
- Total
- Simva Total

Normalized Baseline

"The Power of Us"
Three Key Lessons

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## The Evolution from Patient to Health Care Consumer

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<tr>
<td>Decision making</td>
<td>Passive</td>
<td>Active</td>
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<td>Role of physician</td>
<td>Paternalistic</td>
<td>Advisor</td>
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<tr>
<td>View of medical treatment</td>
<td>“Leave it to the pros”</td>
<td>“What are my options?”</td>
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<td>Source of Information</td>
<td>Professionals</td>
<td>Seekers</td>
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Moving to a New Normal
The effects of framed communication and distribution channel

Effects are multiplicative, not incremental

Fraction switching to lower-cost option

0% 10% 20% 30% 40% 50%

Formulary Change Only
What Will Lead Us to Optimal Outcomes at the Lowest Cost?

- The last mile in better health outcomes
- More medical technology delivered with greater delivery intensity?
- Our ability to influence behavior
Better Insights Provide Better Value

Evidence matters
- Financial incentives work...but limited
- You don’t have to give up quality to save money
- How you measure matters

Alignment matters
- Newer isn’t always better
- The Power of Us

Behavior matters
- Influencing change requires a new way of thinking