Secondary First: Leveraging Secondary data for an effective Primary Research - ATU (Awareness, Trial & Usage in Pharma)

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&

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Secondary First Strategy: What is it?

“Use of customer level integrated data enhanced with hypothesis-driven research to improve brand strategy and tactics”

The Foundation:
A fully integrated, easily refreshed analytics data set created for each brand or therapy area

Improving these brand aspects:
• Brand Planning (including Awareness, Trial & Usage)
• Segmentation, Targeting & Call Planning
• Contract Strategy / ROI Measurement
• Patient Journey, persistence, referrals
“Secondary First” is a strategy for lowering research costs while increasing actionable customer insights.

**Typical Brand Spending on Physician Primary Research – Annually**

<table>
<thead>
<tr>
<th>Study Type</th>
<th>Spending</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positioning and product concept/attribute studies</td>
<td>$1.0M</td>
</tr>
<tr>
<td>Messaging/ad testing</td>
<td>$.5M</td>
</tr>
<tr>
<td>Attitude &amp; perception studies, ATU research</td>
<td>$1.5M</td>
</tr>
<tr>
<td>Market segmentation studies</td>
<td>$.5M</td>
</tr>
<tr>
<td>KOL research / studies</td>
<td>$.2M</td>
</tr>
<tr>
<td>Treatment or patient flow mapping</td>
<td>$.6M</td>
</tr>
<tr>
<td>Tracking, adoption, penetration studies</td>
<td>$1.1M</td>
</tr>
<tr>
<td>Loyalty, equity, satisfaction studies</td>
<td>$.4M</td>
</tr>
<tr>
<td>Sales rep effectiveness studies</td>
<td>$.8M</td>
</tr>
<tr>
<td>Other primary</td>
<td>$0.3M</td>
</tr>
</tbody>
</table>

**Strategies for Lowering Primary Spending**

- **Eliminate lower priorities**
  - Downside: less insight

- **Use secondary to replace or consolidate studies**
  - Result: more insights, less cost.

- **Reduce scope, such as fewer waves, shorter surveys, fewer respondents, questions**
  - Getting less with less

*IMS Health estimate, 2010, US brand spending*
SFATU is designed to drive more actionable insights from traditional primary studies

Classic Methodology:
Survey a few hundred prescribers to understand their awareness, trial and usage of therapies

Advanced Methodology:
Integrate customer level data for virtually all prescribers in the market to better understand influences and opportunities first

Secondary First ATU Goals:
• Join patient, prescriber, and payer data to show hard-to-identify influences
• Predict customers ready to increase prescribing for the brand
• Cut research expense by reducing / focusing primary research

Example of one study:
• 106,000 prescribers
• 735,000 primary diagnosed patients
• 111,000 secondary diagnosed patients
Secondary First identifies specific customer opportunities, improving actionability

- Identify usage patterns in the market
- Group prescribers
- Understand characteristics of groups
- Size groups according to usage
- Understand broader influences
- Locate each member of the group

Traditional primary ATU typically stops here

SFATU goes further to improve ability to act on insights
### Integrated Commercial Analytics Set

**Brings together customer level commercial HIPAA compliant data assets**

<table>
<thead>
<tr>
<th>Diagnosis</th>
<th>New Therapy Starts</th>
<th>Brand Switching</th>
<th>Add-on Therapy</th>
<th>Specialty</th>
<th>Hospital Affiliations</th>
<th>Group Practice Affiliation</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient Age, Gender, Ethnicity</td>
<td>Benefit Design, Formulary</td>
<td>Method of Payment</td>
<td>Medicaid or Medicare</td>
<td>Co-morbidities</td>
<td>Patient Adherence</td>
<td>Shared Patients with Specialists</td>
<td>Samples</td>
</tr>
<tr>
<td>Time to Initiate Therapy</td>
<td>Treatment Pathway</td>
<td>Line of Therapy</td>
<td>Brand Usage by Patient Type</td>
<td>Practice Size</td>
<td>Number of Patients</td>
<td>Product Class Usage</td>
<td>M&amp;E</td>
</tr>
<tr>
<td>Lab Tests</td>
<td>Channel Mix, Distribution</td>
<td>Brand Productivity</td>
<td>“Generic First” Approach</td>
<td>Primary Plans</td>
<td>Co-pays</td>
<td>Combo Usage</td>
<td>e-details</td>
</tr>
</tbody>
</table>

**Types of assets used:**

*Clinical Claims, APLD, PlanTrak, Affiliations, Labs, Promotion Data*
Integrates an extensive range of external and pharmaco’s HIPAA compliant patient de-identified data assets

List of hypotheses / interest areas:
1. Campaign to drive disease diagnosis is accelerating Brand A’s growth
2. Brand A utilization (and preference) is explained by certain patient types
3. Addressing certain reimbursement issues will contribute to significant incremental share
4. HCPs who start Brand A therapy earlier in the disease are more likely to use the brand regularly across patient types (or vice versa)
5. Regional differences in Brand A utilization are explained by patient characteristics and are not related to patient access
6. Recall of certain messages lead to higher Brand A utilization; lack of recall contribute to low utilization

Data Selections
- LifeLink patient level data
- Prescriber Dynamics Plan Level
- Xponent PlanTrak
- Rx Benefit Design
- Medical Claims
- Health Plan Data
- Integrated Promotion Services
- Health Care Organizational Spheres
- Rx Benefit Design
- Client Assets:
  - Call files
  - Lab Data
  - Meetings & Events
  - Custom Segment Flags

Metrics and report views are created that best test/validate each hypothesis
We can use multiple Managed Market data to create meaningful metrics at the physician level

<table>
<thead>
<tr>
<th>Prescriber Name</th>
<th>Product</th>
<th>12 month TRX (projected Data)</th>
<th>$0-$10</th>
<th>$11-$20</th>
<th>$21-$30</th>
<th>$31-$40</th>
<th>$41-$50</th>
<th>$50 and above</th>
<th>Approval Rate</th>
<th>Rejection Rate</th>
<th>Reversal Rate</th>
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</thead>
<tbody>
<tr>
<td>Shiraz Hasan</td>
<td>Exelon</td>
<td>500</td>
<td>10%</td>
<td>38%</td>
<td>5%</td>
<td>40%</td>
<td>5%</td>
<td>2%</td>
<td>90%</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Mike Venters</td>
<td>Exelon</td>
<td>500</td>
<td>5%</td>
<td>5%</td>
<td>75%</td>
<td>15%</td>
<td>0%</td>
<td>0%</td>
<td>94%</td>
<td>4%</td>
<td>2%</td>
</tr>
<tr>
<td>Susan Ryan</td>
<td>Exelon</td>
<td>500</td>
<td>13%</td>
<td>2%</td>
<td>5%</td>
<td>40%</td>
<td>27%</td>
<td>13%</td>
<td>81%</td>
<td>5%</td>
<td>14%</td>
</tr>
<tr>
<td>Kirti Rai</td>
<td>Exelon</td>
<td>500</td>
<td>12%</td>
<td>25%</td>
<td>50%</td>
<td>10%</td>
<td>2%</td>
<td>1%</td>
<td>79%</td>
<td>20%</td>
<td>1%</td>
</tr>
</tbody>
</table>

Tactics that can be deployed at the MD level

- Deploy more patient assistance programs with Susan Ryan and close the conversation with a message about how to deploy co-pay cards with those patients who are housed in those plans who have Co-Pay’s greater than $30
- Kirti Rai’s patients face greater controls at the POS than other MD’s……lets ask ourselves: Should we re-weight these physicians?
- With Mike Venters, there would appear to be no reason to deploy coupons or patient assistance
We could understand the distribution of Co-pay by Individual Physician

For top decile brand target physicians, it is possible to derive co-pay distributions for both product portfolios and individual products.

Illustrative

Distribution of Branded AAR Co-pay for Top Anti-Arrhythmia Prescribers

<table>
<thead>
<tr>
<th>Top 10</th>
<th>$0.01-$5.50</th>
<th>$5.51-$14.99</th>
<th>$15-$29.99</th>
<th>$30-$44.99</th>
<th>$45-$59.99</th>
<th>$60-$74.99</th>
<th>$75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Wendt (TN)</td>
<td>38%</td>
<td>17%</td>
<td>15%</td>
<td>4%</td>
<td>14%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Dr. Rashtian (CA)</td>
<td>32%</td>
<td>29%</td>
<td>19%</td>
<td>14%</td>
<td>10%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Dr. Mounir (LA)</td>
<td>62%</td>
<td>42%</td>
<td>6%</td>
<td>16%</td>
<td>12%</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>Dr. Beau (AR)</td>
<td>33%</td>
<td>12%</td>
<td>17%</td>
<td>17%</td>
<td>17%</td>
<td>19%</td>
<td></td>
</tr>
<tr>
<td>Dr. Gallagher (KY)</td>
<td>23%</td>
<td>6%</td>
<td>9%</td>
<td>19%</td>
<td>24%</td>
<td>7%</td>
<td></td>
</tr>
<tr>
<td>Dr. Chapman (WI)</td>
<td>19%</td>
<td>10%</td>
<td>38%</td>
<td>48%</td>
<td>7%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Dawkins (IN)</td>
<td>42%</td>
<td>48%</td>
<td>7%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Tomassoni (KY)</td>
<td>26%</td>
<td>16%</td>
<td>5%</td>
<td>21%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dr. Hawthorne (LA)</td>
<td>44%</td>
<td>3%</td>
<td>21%</td>
<td>19%</td>
<td>19%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: Wolters Kluwer Longitudinal Patient Data Jan-Dec 2007, Amundsen Group
For example, Analysis of Target Physicians in Florida

Comparing physicians in Sarasota and Miami shows the disparity in quality of access amongst physicians in certain geographies. Even in low quality access MSAs, some physicians have a high percentage of LIS patients with low branded co-pays.

Illustrative

Sources: Wolters Kluwer Longitudinal Patient Data Jan-Dec 2007 & Amundsen Group
Using PLD we could identify those physicians with different Medicare Part D Populations and message accordingly.

<table>
<thead>
<tr>
<th>Prescriber Name</th>
<th>Product</th>
<th>Commercial</th>
<th>Managed Medicaid</th>
<th>Medicaid</th>
<th>Cash</th>
<th>Medicare Part D</th>
<th>Standard Eligibles</th>
<th>Dual Eligibles</th>
<th>Low Income Subsidies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shiraz Hasan</td>
<td>Exelon</td>
<td>100</td>
<td>30</td>
<td>10</td>
<td>1</td>
<td>0</td>
<td>40</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Shiraz Hasan</td>
<td>Namenda</td>
<td>10</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>Shiraz Hasan</td>
<td>Aricept</td>
<td>50</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Shiraz Hasan</td>
<td>Razadyne</td>
<td>5</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
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Exelon Sales Rep:

“Dr. Hasan….Did you know that more than half your Medicare Part D Patients are Dual Eligible's and only pay $3.10 for their branded agents…most of your patients will never be exposed to a Donut Hole”

“Dr. Hasan….Less than 25 percent of your total patients population has the potential to be exposed to the Donut Hole”
For Both Physician 1 and Physician 2 only 25% of their patients are eligible for Co-Pay Assistance of Loyalty Programs (20% Commercial + 5% Cash)

59% of physician 1 & physician 2 business is Medicare Part D individually, however, 50% of physician’s 1 patients will pay low co-payments and not be subject to Coverage Gaps whereas 40% of physician’s 2 patient populations is potential subject to the coverage gap

Very different marketing messages need to be deployed at Physician 1 versus Physician 2

90% of these plans have no restrictions for Product X

59% of each physician’s patients are subject to the Medicare part D benefit
## Approach: generally involves 3 steps

### Preparatory:
Create Integrated Commercial Analytics Set

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<td>Combo Usage</td>
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1. **Get new views of customers and markets**
   - Be surprised by certain behavior patterns

2. **Prioritize opportunities and behavior groups**
   - Apply psychographics to “persons of interest”

3. **Adjust Sales & Marketing actions**
   - Create truly customer centric tactics
Step 1: Get a holistic view of customers & Markets

**Physician Characteristics**
- Physician Demographics
  - Age
  - Specialty
  - Education
  - Location
  - Type of Practice
- Physician Preferences
  - Prescribing
  - Adoption Tendency
- Physician Potential
  - High Decile Maintainer
  - Growth

**Patient Characteristics**
- Patient Demographics
  - Age
  - Ethnicity
  - Education
  - Income
  - Residence
- Patient Preferences
  - Attitudes
  - Beliefs
  - Willingness to Pay
- Patient Potential
  - Co-morbidities
  - Concomitant Drug Use

**Payer Characteristics**
- Plan Demographics
  - Plan Penetration
  - Plan Dominance
  - Plan Control
- Product Access
  - Formulary Position
  - Copay Differentials
  - Product Rejections
  - Patient Reversals

**Product Attributes and Usage**
Psychographic research identifies reasons for prescribing and how they can be influenced.

- It consists of two parts:
  1. Psychosocial Characteristics – the prescriber's cognitive style
  2. Belief Structure – the clinical content that drives prescribing behavior for a specific therapy class and/or specific brand

- Why it matters
  - By understanding the prescriber’s cognitive style and belief structure, a clear understanding of the prescriber’s motivation and reasons for writing are revealed. This is much more powerful to act on, since it is the “root cause” of market share.
Step 2: Find out how to change behavior…

Cognitive Style: Super Writers

- Theoretical: Down
- Economic: Down
- Aesthetic: Down
- Social: Up
- Political: Down
- Religious: Up
- Dogmatic: Yellow
- Machiavellian: Up
- Creative: Up

How they think about the disease and patients:

- Patient-driven mindset but for purely “clinical” consideration
- Actively assumes “patient” point-of-view about the disease
- Thoughtful, practical analysis of quality-of-life concerns
- But a dispassionate analysis
- Individualized solution; each patient a “new” case; independent decisions
- Great deal of interaction but detached from a personal standpoint; simply an exchange of information
- A professional, effective relationship
Step 2: Find out how to change behavior…

Belief Structure Statements  (Degree of Agreement/Disagreement)

DEPRESSION

• “There is something ‘unique’ about Prozac® in terms of patients’ clinical response” (Affect)
• “An elderly depressed patient should be treated differently than a younger patient” (Cognition)
• “As my experience with antidepressants has grown, I tend to match certain types of patients (lethargic, OCD, overweight) with specific SSRIs” (Behavior)
• “I use Zoloft® more than other SSRIs for the treatment of mild/moderate depression” (Behavior)
• “Any SSRI can be used for OCD and panic disorder” (Cognition)
• “Direct-to-consumer advertising regarding signs, symptoms and treatment of depression would be appropriate and acceptable to me” (Affect)
Step 2: Find out how to change behavior

- Cognitive Style/Belief Structure combination strongly suggests that the “Spotlight” should be focused on this ego-driven MD. “Doctor, you have the power to handle (disease).”

- Brand should be seen as a means to further this group’s personal image
Step 3: Take sales and marketing action

Based on slowing add on times, CBSA target lists generated and promotion plans adjusted

Example: Columbia, SC

<table>
<thead>
<tr>
<th>Prescriber</th>
<th>Specialty</th>
<th>MSA</th>
<th>Practice Type</th>
<th>Q3 Market NBRx</th>
<th>Q3 Brand A %</th>
<th>Brand of Choice</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidential</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IM</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>45</td>
<td>2%</td>
<td>Brand B</td>
</tr>
<tr>
<td>IM</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>32</td>
<td>4%</td>
<td>Brand B</td>
</tr>
<tr>
<td>Pulm</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>56</td>
<td>1%</td>
<td>Brand C</td>
</tr>
<tr>
<td>Pulm</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>34</td>
<td>0%</td>
<td>Brand B</td>
</tr>
<tr>
<td>IM</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>45</td>
<td>0%</td>
<td>Brand C</td>
</tr>
<tr>
<td>Allg</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>21</td>
<td>4%</td>
<td>Brand D</td>
</tr>
<tr>
<td>Pulm</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>19</td>
<td>5%</td>
<td>Brand B</td>
</tr>
<tr>
<td>Allg</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>33</td>
<td>11%</td>
<td>Brand C</td>
</tr>
<tr>
<td>Pulm</td>
<td>Columbia, SC</td>
<td>Group</td>
<td></td>
<td>71</td>
<td>7%</td>
<td>Brand B</td>
</tr>
</tbody>
</table>

Messaging and call planning focus on adjunctive therapy
# Potential Savings Associated with Secondary First

<table>
<thead>
<tr>
<th>Study</th>
<th>Objectives</th>
<th>Fit?</th>
<th>Cost Savings</th>
<th>Added Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATU</td>
<td>1. Track KPIs such as awareness, product perception and prescribing habits</td>
<td>Strong Fit</td>
<td>$300K-$350K</td>
<td>Yes, obtain deeper insights into behavior not picked up in surveys.</td>
</tr>
</tbody>
</table>
| Patient Chart Audit     | 1. Understand patient profiles across brands  
2. Compare profiles of brand prescribers vs. non prescribers  
3. Assess whether patient profiles are in line with indication and target profiles  
4. Understand source of business (e.g. switch, add, initiation)                                                                                                                                 | Excellent Fit | $225K-$250K   | Yes, link physician decisions / context to the patient data. Link lab values in select markets.                 |
| Benchmark Study         | Benchmarks other products having been subject to a label change                                                                                                                                               | Strong Fit | $50K          | Yes, broader identification of analogs, with full behavioral analyses.                                            |
| GP Impact Study         | Get insights how GPs react to label change. Obtain quantitative basis with segmentation to take business decision on resource allocation                                                                     | Excellent Fit | $100-$125K    | Yes, deeper understanding of physician prescribing tendencies across therapy areas.                             |
The goal of SFATU is to lower net spending on primary market research.

Potential / Targeted Net Savings Using SFATU

% Reduction in Net Spending

For semi-annual or quarterly ATUs, the net savings goal is 25-30%.

For large scale ATUs involving frequent waves and multiple specialties, the net savings target is 50%.

Brand’s Current Level of Investment in Primary ATU Research

For scale ATUs involving frequent waves and multiple specialties, the net savings target is 50%.
Conclusion: Managerial Implications

• **In-depth survey results and analysis and actionable insights**

• **Substantial cost reduction and better ROI for primary research**

• **Targeted messaging of physicians and improved SFE metrics**