Patient Adherence

*Innovation through Personalization*

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Non-Adherence to Medication Is a Critical Issue

1 out of 3 people never fill their prescriptions.

Nearly 3 out of 4 Americans don’t take their medications as directed.

Nearly 45% of the population has one or more chronic conditions that require medication.

More than 1/3 of medication-related hospital admissions are linked to poor adherence.

Costs Americans $290 Billion Per Year.

4. 2006 NCPA survey on adherence (conducted by the Polling Company)
5. American College of Physicians
THE IMPACT IS SIGNIFICANT

Increasing adherence can do more to improve health outcomes than any single medical treatment improvement.

Patients Are Not Actively Managing Their Health

The Unengaged Patient

Healthcare providers want patients to take a more active role in their own care because it leads to lower costs and better outcomes. A review of 31 national surveys suggests it has been an elusive goal.

50% Medicare patients who usually don’t bring a list of questions to doctor’s appointment

60% Adults who don’t tell health professionals they have drug allergies unless specifically asked

30% Adults who have never compared a medication they received from a pharmacist against doctor’s order

61% Americans who don’t maintain their own medical record (paper or electronic)

Source: Center for Advancing Health, 2010
For certain chronic conditions, adherence to treatment recommendations is spotty, according to a survey of privately insured adults age 21 to 64.

Percent who strongly agree they follow treatment regimens carefully

Source: Employee Benefit Research Institute, 2008; Center for Studying Health System Change, 2008; Judith H. Hibbard and Peter J. Cunningham
But Believe Pharmaceutical Companies Can Help

Over \( \frac{3}{4} \) of patients believe pharma companies should offer services that complement medication...

...and are most receptive to assistance when beginning treatment.

<table>
<thead>
<tr>
<th><strong>Currently taking</strong></th>
<th>Long-term medication</th>
<th>Short-term medication</th>
<th>Lifestyle medication</th>
<th>Total Audience</th>
</tr>
</thead>
<tbody>
<tr>
<td>When you are about to start taking the medication (examples of assistance or support: where to find the product, help determining if the medicine is right for you, information on taking the product, financial)</td>
<td>75%</td>
<td>69%</td>
<td>74%</td>
<td>74%</td>
</tr>
<tr>
<td>When you are thinking about switching (examples of assistance or support: comparison with alternative medicines, financial assistance/discounts)</td>
<td>53%</td>
<td>47%</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>When you are already on a medication (examples of assistance or support: information on side effects, adherence assistance, finding patients with the same health issue)</td>
<td>48%</td>
<td>52%</td>
<td>49%</td>
<td>50%</td>
</tr>
<tr>
<td>There are no circumstances under which I find it appropriate or desirable for a pharmaceutical company to provide me assistance or support</td>
<td>24%</td>
<td>31%</td>
<td>26%</td>
<td>27%</td>
</tr>
</tbody>
</table>

Source: Accenture Life Sciences: “Great Expectations: Why Pharma Companies Can’t Ignore Patient Services”

Accenture retained Coleman Parkes Research to conduct an online survey of 2000 respondents in the US between September and October, 2013. Respondents were 18 years or above, with annual household income of $25K or above, and currently taking a short-term medicine (e.g., antibiotics or migraine medication), a long-term medicine (such as those for treatment of diabetes or high blood pressure), or a lifestyle medicine (e.g., birth control pills or erectile dysfunction therapies).
Our Approach to Patient Adherence

**Patient Understanding**
Gain a deeper understanding of our patients’ needs, attitudes, and behaviors along their treatment continuum

**Program Customization**
Keep it personal with support across channels, including nurses to engage patients based on their adherence profile

**Stakeholder Integration**
Merge relevant data sources to provide actionable information to key stakeholders in a timely manner
Novartis Best Practice

> Patient Segmentation Model
> Patient Experience
> Behavioral Psychology Applications
Patient Segmentation Model

- Research with thousands of patients helped us identify 4 discrete patient segments based on needs, attitudes, and behaviors, including adherence.
- 7-question typing tool was identified to classify patients into these groups.
- Model was validated across the following disease states: Hypertension, MS, Psoriasis, Transplant, Oncology, Congestive Heart Failure, and COPD.
Augments our understanding of the patient with disease state experience over time, uncovering the moments that matter to effectively manage engagement.

**Life Pre-Diagnosis and Diagnosis**

1. **Life Before Condition**
   - Activities, emotions, relationships, goals

2. **Disease Presentation**
   - Symptoms, early resources utilized, duration, and impact

**Initial Treatment**

3. **Getting Diagnosed**
   - Duration, diagnostics used, HCP engagement, early understanding of the condition, resources

4. **First Treatment Decision**
   - Treatment conversations, options offered, HCP-driven vs. patient-driven decision

5. **Initial Treatment Experiences**
   - First dose, emotions and expectations for treatment, side effects

**Living with the Condition**

6. **Troubleshooting**
   - Access issues, titration, lack of support

7. **Maintenance**
   - Perception of condition over time, treatment stabilization and routine, monitoring, HCP role

8. **Relapse/Progression**
   - Return of symptoms, emotions, shift in perception, treatment cessation or switching, HCP role

9. **The Future**
   - Hopes, goals, and fears, unmet needs, relationships (interpersonal and HCP)
Behavioral Psychology Application

Leverages proven psychology principles to shape our interventional techniques at the segment level

**HOW CAN WE BEST DIMENSIONALIZE OUR SEGMENTS?**

**5-Factor Model**
First, we deepen our understanding of the segments and add texture to them based on 5 Factor Model personality mapping.

**HOW DO WE BEST CONNECT WITH OUR SEGMENTS?**

**Drivers of Connection**
Once each segment is characterized via personality mapping, we can identify the best way to connect with them given their unique personality traits.

**HOW DO WE BEST MOTIVATE BEHAVIOR CHANGE?**

**Motivational Interviewing Approach**
Once we understand how to connect with each segment, we can select the most relevant Motivational Interviewing approach to improve adherence.
INNOVATIVE SUPPORT EFFORTS

Novartis Best Practice

> Nurse Support Program
> Get on Track Program™
> Podhaler™ Pro Mobile App
Engaging Nurse Adherence Programs

Motivating patients across disease states to ensure proper therapy engagement and follow-through with HCP
Award Winning Get on Track Program™

Engaging hypertensive patients with relevant “nudges” and technology
Offering patients and caregivers customized therapy and CF lifestyle-based support

Innovation driving strong integration with customers

Be a Pro
Resources on how to take TOBI® Podhaler™ (Tobramycin Inhalation Powder) properly, including helpful videos and tips

Talking Points
Pointers on how to talk about the condition with others and how to organize questions to HCPs

Support
Access to helpful tools and support, including treatment reminders, and to PodCare+™ support

Ask a Pro
Answers to treatment-related questions
UNLOCKING DATA

Novartis Best Practice

> Health Care Professional Feedback Loop
Captures refill metrics for a more informed dialogue among key stakeholders (HCPs, Patients) to yield improved adherence.

**EXPECTED RESULTS**

- **Better dialogue** between HCP and Patient
- **Engages more care teams** with data that is in line with their interests
Helping *patients* stay motivated to maintain healthy behaviors is critical.

Through customization of message, channel, and resources, we can play an important role in the delivery of health care.
THANK YOU