Retail: A Platform for Digitally Enabled Consumer Health

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Objectives

I will NOT be focusing on:

1. The forces driving the rapid growth of Digital Health
2. How Digital Health will change “EVERYTHING”
3. Intriguing new technologies, apps, wearable, devices, etc.

My objectives are to:

1. Explore where value can be created by Digital Health – for consumers, providers, and payors
2. Examine viable business models for Digital Health – based on these value propositions
3. Share how Walgreens is using these principles to leverage Digital Health: *to improve health, wellness, and our business*
Aligning Digital Health Interventions with the Continuum of Health Care Needs

- Health, Fitness and Wellbeing
- Self Diagnostics and Health Testing
- Acute Care
- Chronic Care & Aging

Continuum Of Care

- Self managed
- Coached, monitored and managed
# Digital Health Scenarios and Value Creation

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Improved Wellness/Fitness</td>
<td>Diagnosis or self-monitoring of a condition</td>
<td>Convenience, lower cost care</td>
<td>“Management by Exception”</td>
</tr>
</tbody>
</table>

- **Minimal to Little ST Cost Impact**
- **Few Solutions with Cost Impact**
- **Lower ST costs (e.g. telemedicine)**
- **Potential ST Cost Impact** (ex: Heart Failure, fall prevention for seniors)

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How Payors Assess the Value of mHealth

1. Existence of a “accepted” or established CPT code?
   • Ex: 2015 CMS Final Rule proposes expanded telemedicine coverage

2. Impact on “net short term total medical spend?”
   • Lower unit cost for equivalent service
   • Short team ROI on total medical spend = 12 to 18 months
     – Must reduce hospital admits to generate significant savings

3. Impact on quality scores with strong financial incentives?
   • MAPD STARS ratings –5% bonus potential from CMS

If the solution doesn’t meet one of these 3 criteria: payor reimbursement is highly unlikely
Other Business Models

1. Providers as payors – ACOs & Integrated Health Systems
   - **Value Proposition #1:** *Lower ST medical costs*
     - **Challenge:** Providers are very hesitant to invest in new technology solutions as major incentive is still the FFS model
   - **Value Proposition #2:** *Increase referrals/market share*

2. B2C: Consumer pays for the solution
   - **Major value propositions are:**
     - **Convenience:** ex: Telemedicine for acute medical problems
     - **Solving a compelling health problem**
     - **Lower out-of-pocket costs:** (ex: telemedicine in some cases, BP checks)
     - **Perceived impact on health/wellness:** wearables, health apps.
Wellness, Fitness, and Health Education

1. Explosion of wearables, apps, sensors, etc.

2. Functionalities:
   - Data collection (steps, calories burned, weight, sleep)
   - Tracking and feedback
   - Competition
   - Gamification
   - Measurement of outcomes (weight loss, sleep, posture)
   - Social media/community interactions

Very limited data that supports the effectiveness of these technologies to improve health and wellness
Consumers believe wearables will help them achieve their health goals

**56%** Believe that the average **life expectancy** will grow by 10 years because of wearable-enabled monitoring of our vital signs

**46%** Believe wearable technology will **decrease obesity** by allowing us to monitor our nutrition and exercise

**42%** Believe the average person’s **athletic ability** will improve **dramatically** as wearable technology monitor and fine-tunes our sports progress

*Source: HRI/CIS Wearables consumer survey 2014*
More than 60% of consumers are willing to use a wearable if it is free. Or better than free.
Core beliefs on impact of mHealth for Wellness, Fitness, Health, and Education

1. Changing and maintaining health behaviors is extremely difficult

2. Wearables, apps, devices can generate initial consumer engagement

3. Engagement typically decreases rapidly over time - unless the health problem is urgent or critical

4. Continued use can be reinforced with rewards:
   - Cash value awards/points – *universal health currency*
   - Gamification (badges, competition, etc.)

5. Improving health outcomes usually requires digital AND the availability of trusted human support
Balance Rewards for healthy choices™ helps people adopt healthy behaviors, including exercise and tobacco cessation - by integrating incentives with in-store and digital support.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Points/Milestone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Set first healthy goal&lt;sup&gt;2&lt;/sup&gt;</td>
<td>250 points/fat goal</td>
</tr>
<tr>
<td>Link a device or app&lt;sup&gt;4&lt;/sup&gt;</td>
<td>250 points/device or app</td>
</tr>
<tr>
<td>Walk, run or cycle</td>
<td>20 points/mile</td>
</tr>
<tr>
<td>Frequent activities</td>
<td>20 points/daily log</td>
</tr>
<tr>
<td>Weight tracking</td>
<td>20 points/daily log</td>
</tr>
<tr>
<td>Blood pressure test</td>
<td>20 points/test</td>
</tr>
<tr>
<td>Blood glucose test</td>
<td>20 points/test</td>
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Connecting wearables, apps and rewards into the largest connected device/consumer platform

**App Partners**
- RunKeeper
- Lose It!
- myfitnesspal
- mapmyfitness

**Device Partners**
- Withings
- iHealth
- fitbit
- JAWBONE

24+ Device Partners
Built on small-step methodology

We support and reinforce behavioral change by:

1. Encouraging goal setting
2. Providing health information
3. Tracking progress
4. Rewarding healthy behaviors and commitments
Largest Connected Wellness Ecosystem of Any Healthcare Retailer

800,000 active users
1.5 million goals set
73 million miles logged
250,000 users through connected devices/ Apps
1.4 billion points awarded
Once signed up, people stay engaged with the program.

Retention of active Balance Rewards for healthy choices™ members with connected device*1

<table>
<thead>
<tr>
<th>Months</th>
<th>Percentage of people still active</th>
</tr>
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<tbody>
<tr>
<td>1</td>
<td>93%</td>
</tr>
<tr>
<td>2</td>
<td>62%</td>
</tr>
<tr>
<td>3</td>
<td>77%</td>
</tr>
<tr>
<td>4</td>
<td>69%</td>
</tr>
<tr>
<td>5</td>
<td>65%</td>
</tr>
<tr>
<td>6</td>
<td>70%</td>
</tr>
<tr>
<td>7</td>
<td>72%</td>
</tr>
<tr>
<td>8</td>
<td>69%</td>
</tr>
<tr>
<td>9</td>
<td>71%</td>
</tr>
<tr>
<td>10</td>
<td>71%</td>
</tr>
<tr>
<td>11</td>
<td>72%</td>
</tr>
<tr>
<td>12</td>
<td>72%</td>
</tr>
</tbody>
</table>

*Active defined as having logged an activity in the past 30 days
Significant weight loss

In 2014, a study was conducted with 100,069 participants during a 180-day period. Of those participants, 45,839 (45.8 percent) tracked activities and 6,198 (6.2 percent) logged weight measurements.  

- 100% of participants lost an average of 3.3 pounds.
- 27.2% of participants lost more than 6.0 pounds.
- 16.5% of participants lost more than 10.0 pounds.

Participants who logged at least 1 mile a day lost an average of 3.7 pounds.
Our Digital Platform Drives Improved Outcomes

Email reminder increase PDC by 2.6 percentage points  

Diabetic patients are 5.4 percentage points more adherent  

Hypertensive patients are 2.5 percentage points more adherent  

Participants lost an average of 3.3 lbs  

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### BRhc™: Emerging Data on Impact on Weight Gain During Smoking Cessation

<table>
<thead>
<tr>
<th></th>
<th>Lost or Maintained Weight</th>
<th>Gained Weight</th>
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<tbody>
<tr>
<td><strong>BRhc™ NRT users</strong>*</td>
<td>74%</td>
<td>26%</td>
</tr>
<tr>
<td><strong>BRhc™ tobacco quitters</strong></td>
<td>89.0%</td>
<td>11.0%</td>
</tr>
<tr>
<td><strong>Benchmark for tobacco quitters</strong></td>
<td>80%</td>
<td>20%</td>
</tr>
</tbody>
</table>

74% - 89% of BRhc™ members in the smoking cessation program lost or maintained body weight, compared to just 20% of members in a benchmark study.

* According to a Walgreen Co. data on file. Weight maintenance was defined, in accordance with research guidelines, as staying within ± 2.5% of initial body weight, and weight loss as losing over 2.5% of initial body weight.

** According to a NIH Publication.
Digital Health Advisor helps with goal achievement

- Powered by WebMD
- **Customized goals and action plans** support lasting lifestyle changes
- Interactive programs for:
  - Emotional health
  - Exercise
  - Nutrition
  - Smoking cessation
  - Weight management
  - Diabetes
- Participants earn Balance® Rewards points for making progress
Pharmacy Chat team trained to coach members to engage in healthier lifestyle choices

• Pharmacy Chat team trained in health coaching
• Participants are given support resources
• Topics with support:
  – Fitness
  – Nutrition
  – Smoking cessation
  – Weight management

Hi! My name is Mary S., Pharmacist. How may I help you?

Tom: Are there any medications that can help me quit smoking?
Mary S., Pharmacist: Congratulations on your decision to make healthy choices. Walgreens has a wide range of nicotine replacement products over the counter from patches to gum. There are also inhalers, which are prescription items.
Tom: Any other information that would be helpful for me?
Mary S., Pharmacist: There are Government Quit Lines available to help with individual coaching and medication help at: [http://smokefree.gov/talk-to-an-expert](http://smokefree.gov/talk-to-an-expert), or you can call 1-800-784-8669.

Tom: Any other advice?
Mary S., Pharmacist: In the beginning it will be difficult so start slow and small and try to solidify a good habit. This will form a good foundation for additional progress. Do not be discouraged by initial failures or hiccups, this is expected. I wish you much success on making healthy choices.
Telemedicine: Mobile Pharmacist Support, Prescription Management, and NP/Physician Virtual Visits

Adding virtual clinician visits to the Walgreens app flow allows consumers to access a clinician or pharmacist from anywhere.....

Current App: Mobile Refill and Pharmacy Chat
WebMD DHA and Symptom Checker
MDLIVE Choose clinician
Telemedicine Visit with Walgreens NP or MD Live Physician
Summary

1. Digital Health provides multiple value propositions to consumers, payors, providers, and Walgreens.

2. **Understanding the value linkages is key:**
   - **Payors** rarely fund D-Health; Health unless there is an existing CPT code or proven impact on short-term total medical costs.
   - **Providers** may value increased referrals/volume.
   - **Consumers value:** perceived impact on health/wellness, convenience of care delivery - but only at low prices.

3. Walgreens “omni-channel” platform: including mHealth tools, virtual clinical support, connected devices, and economic rewards with *Balance Rewards*, is generating intriguing early results.

4. This platform is powerful in terms of scale of use and level of long term engagement.