Establishing A Successful Telehealth Business Model in Australia

Evolution or Revolution

Presentation for Flinders University Medical Device Partnering Program by Natasha Gulati
Healthcare Industry Needs to Extend Beyond Advancing Clinical Standards of Care

**Problem Industry is Structured to Solve**

**Leading Causes of Death in Australia, 2013**

- Coronary Heart Disease, 12.2%
- Cancer, 16.8%
- Dementia and Alzheimer, 10.1%
- Cerebrovascular Diseases, 8.9%
- COPD, 4.0%
- Diabetes, 2.8%
- Others, 45.2%

**Problem Industry Needs to Solve**

- High Cost of Catastrophic Care Can Bankrupt Individuals and Health System
- Hospitals Facing Insolvency, Need To Change Processes of Care Delivery
- Current Approach to Information Systems and Management Do Not Deliver Value to Clinicians and Patients

Source: AIHW, Frost & Sullivan
5 Transformations Driving Opportunities in Healthcare

Wellness, Prevention and Reducing the Impact of Chronic Disease

Re-imagining Care Delivery

Changing Customer Roles

Moving From Product To Platform

Value-based / Patient-centered / Outcome-based Models Driving Incremental and Disruptive Innovation
Six Big Themes: Moving From Product to Platform

Data vs Information
- Value not derived from collecting data, but in the conversion into insights and change in process or behavior

Building the Ecosystem
- Forming partnerships with key stakeholders is critical to establishing a functional platform

Monetization Strategies
- Failure to define monetization models key factor behind the majority of market exits

Security
- Apprehension over data security is one of the major impediments to large scale deployment of analytics and connected platforms.

Decision Support
- Automating non-critical decisions and documentation
- Providing AI support to make sense of increased volume of lower value data

Integration is King
- Institutions and consumers will increasingly value integrative solutions that reduce fragmentation of information and processes

Source: Frost & Sullivan
The decentralization of care delivery enables anytime/anywhere access, and optimization of outcomes and costs that is changing customer expectations.

Depending on location, wait times to see a clinician can range from days to weeks, or even months. Through virtualization, the majority of routine care can happen within seconds or minutes.

As opposed to discrete interactions, the provision of healthcare is moving to a model where information is being transmitted and shared in real time between individuals and caregivers.

Errors resulting from misdiagnosis of issue, procedural errors, and errors in medication administration are all easily avoidable with IT and sensor based tools to provide guidance and support.

Rather than the one-size-fits-all approach, care will increasingly be customized in infinite variations to best tune the approach to the individual and their family.

The most innovative companies in healthcare are improving quality of treatment while simultaneously collapsing extraneous tasks and costs tied to legacy processes.

Source: Frost & Sullivan
Clinical Relevancy Requires Focus on Diagnosis, Monitoring, Guidance, and Prevention

Healthcare Spending by Type of Activity, Global, 2007–2025

Source: Frost & Sullivan
The Largest Consumers of Healthcare Resources are Often The Ones with Least Financial and/or Social Support

A Significant Proportion of their Healthcare Needs can be Served at Home at Lesser Cost

Government Expenditure on Aged Care Programs & Services (AUD Bn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Expenditure (AUD Bn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2012-2013</td>
<td>13.6</td>
</tr>
<tr>
<td>2013-2014</td>
<td>14.8</td>
</tr>
<tr>
<td>2014-2015e</td>
<td>16.1</td>
</tr>
</tbody>
</table>

Government Health Expenditure by Disease Condition

- Cardiovascular diseases, 10.4%
- Oral health, 9.7%
- Mental disorders, 8.6%
- Others, 71.3%

Source: Frost & Sullivan
Expected Reforms in the Australian Healthcare System

Shift towards Care Coordination and Value-Based Care Delivery models

- Government focus on high-cost care only across both public and private insurance
- Optimize expenditure on medical services and pharmaceuticals

Source: Frost & Sullivan
Chronic Disease Management is a Core Market that can Address This Issue

CDM Technology Platform
Revenue in Australia (AUD Mn)

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue (AUD Mn)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2016</td>
<td>14.4</td>
</tr>
<tr>
<td>2020</td>
<td>20.9</td>
</tr>
</tbody>
</table>

Reimbursement reform to support home monitoring devices and services

Improvements in technology usability and affordability

Evolution of Primary Care

Technologies to Support Primary Care Will be a Key Area of Focus

Note: USD 1 = AUD 1.3364; Source: Frost & Sullivan
Providing Seamlessly Integrated Care Requires Sustainable Telehealth Ecosystems

Business Model Components

- Patient
- Medical Technology and/or Telehealth Vendor
- Supporting ICT Vendors
- Healthcare Provider
- Care Worker and/or Care Planner
- Payor and/or Insurer
- Industry Regulators

Source: Frost & Sullivan
### Consumerism in Healthcare: Layers to Personalization of Health and Wellness Platforms

<table>
<thead>
<tr>
<th>Clinical Support</th>
<th>Financial Planning</th>
<th>Resource Accessibility</th>
<th>Social Considerations</th>
<th>Behavioral Considerations</th>
<th>Personal Expectations</th>
<th>Other Barriers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### Automated and Ongoing
- Data Integration
- Analysis
- Reporting
- Communication and Alerts

#### Engage Patients

#### Define Population

#### Identify Care Gaps and Stratify Risks

#### Measure Outcomes

#### Manage Care

80%-90% of health outcomes are determined by what happens outside of the walls (and view) of the care provider.

Keys to patient engagement:
- Two-way Communication
- Education
- Collaboration
- Shared Decision Making
- Empowerment

Source: The Institute for Health Technology Transformation, 2013; and Frost & Sullivan
Frost & Sullivan, the Growth Partnership Company, works in collaboration with clients to leverage visionary innovation that addresses the global challenges and related growth opportunities that will make or break today’s market participants. For more than 50 years, we have been developing growth strategies for the Global 1000, emerging businesses, the public sector and the investment community. Is your organization prepared for the next profound wave of industry convergence, disruptive technologies, increasing competitive intensity, Mega Trends, breakthrough best practices, changing customer dynamics and emerging economies? Contact Us: Start the Discussion