Developing A Virtual Health Strategy

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Meet Sg2

Sg2, a MedAssets company, is the health care industry’s premier provider of market data and information.

Our analytics and expertise help hospitals, health systems, and leading suppliers understand market dynamics and capitalize on opportunities for growth.

Sg2 OFFERINGS

- Powerful Analytics
- Data Resources
- Unmatched Expertise and Intelligence
- Industry-Leading Consulting
Sg2 Defines Virtual Health Very Broadly

**Virtual Health**

Connected care services—including clinician-to-clinician, provider-to-patient and consumer-driven interactions—across a spectrum of **electronically** enabled consultative, direct patient care, educational and self-management services; encompasses a **range of different terminologies**, including telemedicine, telehealth, e-health and mobile health.
Breadth of Virtual Health Drives New Value Opportunities

**Tele-“specialty”**
- Virtual conferencing

**Virtual consults**
- Urgent care
- Specialty care

**Mobile apps**
- Social media
- Geo-tagged devices
- Patient web portals
- Online support groups

**Clinic to Clinician**
- eICU
- eED

**Provider to Patient**
- Remote monitoring
- Virtual medication management
- Telehealth kiosks

**Consumer Driven**
- Personal activity monitors
- Patient scheduling apps
- Quality and price transparency tools

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Key Enterprise-Level Strategic Imperatives

**Margin Management**
Optimize cost per case. Maximize revenue opportunities. Minimize readmission penalties.

**Key Measures**
- Readmission rates
- Cost per case
- Length of stay

**Clinical Scale**
Leverage a limited pool of clinicians across sites and strategically deploy specialists.

**Key Measures**
- Time to diagnosis and/or treatment
- Physician supply/demand by specialty

**Channel Access**
Create new and manage existing entry points to both acquire and retain patients.

**Key Measures**
- Network leakage
- New patient visits

**Care Continuity**
Facilitate streamlined throughput and transitional care. Activate patients for effective self-management.

**Key Measures**
- Discharge disposition
- Medication compliance rates

**Market Expansion**
Extend services beyond existing footprint to capture share and grow regional reach.

**Key Measures**
- Service area mapping
- Competitor market share
- Demographic trends
- Patient origin analysis

**Consumer Focus**
Enhance conveniences in time and geography to appeal to newly empowered consumers.

**Key Measures**
- Patient travel times
- Consult response time
- Net promoter scores (new/returning)

**Business Model Innovation**
Establish new products and/or revenue channels.

**Key Measures**
- Percentage of revenue from novel sources
- Revenue per full-time equivalent

**Population Health Management**
Trigger early interventions and curtail suboptimal utilization.

**Key Measures**
- Total cost of care
- Avoidable utilization
Significant Growth Opportunities in Virtual Setting Over Next 5 Years

2015 Site of Care Volumes and 5-Year Forecast, Adults
US Market, 2015–2020

In 2020, 7% of all E&M visits will be delivered in a virtual care setting.

Note: The analysis excludes 0–17 age group. Other includes nonhospital locations such as OP rehab facilities, psychiatric centers, hospice centers, Federally Qualified Health Centers and assisted living facilities. ASC = ambulatory surgery center; E&M = evaluation and management; SNF = skilled nursing facility. Sources: Impact of Change® v15.0; HCUP National Inpatient Sample (NIS). Healthcare Cost and Utilization Project (HCUP), 2012. Agency for Healthcare Research and Quality, Rockville, MD; IMS LifeLink® PharMetrics Health Plan Claims Database, 2011, 2013; The following 2013 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; The Nielsen Company, LLC, 2015; Sg2 Analysis, 2015.
E&M Visits in the Virtual Setting in 2025 by Service Line

Orthopedics: 6%
Spine: 8%
Cancer: 6%
Cardiovascular: 19%
Medicine/Surgery: 71%
Neurosciences: 13%
Women’s Health: 5%

Note: Analysis excludes ages 0–17. Surgical procedures include endoscopy and major procedures.
Provider and Consumer Acceptance Is Growing

**Specialty Video Consults Physicians Find Most Valuable**

- Dermatology
- Psychiatry
- Infectious Disease
- Pain Management
- Neurology
- Cardiology
- Rheumatology
- Gastroenterology
- Sports Medicine
- Oncology

**Willingness to Have a Video Visit**

- 64% Willing
- 36% Not Willing

**Interest in Telehealth Peaks in Ages 18–44**

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Expect an Increase in the Number of Large Employers Offering Virtual Health in 2016

Survey responses from 140 of the largest companies in the US

- 48% offering virtual health services currently
- 74% plan to offer virtual services in 2016
- 81% to offer nurse coaching for condition management
- 73% to offer nurse coaching for lifestyle management

Key Strategy: Consumer Focus
Virtual Visits Cut Costs, Improve Access to Care for Low-Acuity Conditions

MOST COMMON DIAGNOSES FROM VIRTUAL CONSULT

- Sinusitis
- Cold/flu/pertussis
- Urinary tract infections

$35 to $50
Average cost virtual consult

$136 to $176
Average cost for in-person consult

1.3
Average number of virtual health visits/patient/year

PATIENT ISSUES RESOLVED DURING INITIAL VIRTUAL CONSULT

83% of the time

Source: Yamamoto D. Assessment of the Feasibility and Cost of Replacing In-Person Care With Acute Care Telehealth Services. December 2014. Confidential and Proprietary © 2015 Sg2
Key Strategy: Clinical Scale
Remote Specialist Consults Reduce Disparities, Expand Reach

MEDICAL UNIVERSITY OF SOUTH CAROLINA, CHARLESTON, SC

Reduce patient time spent traveling for follow-up

<table>
<thead>
<tr>
<th>Reduce patient time spent traveling for follow-up</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000 to $1,500 per site for computer and software license</td>
</tr>
<tr>
<td>360 virtual consults</td>
</tr>
<tr>
<td>Saved 53,000 miles of travel (142 miles per patient)</td>
</tr>
<tr>
<td>Each patient saves about 2.8 hours per visit</td>
</tr>
</tbody>
</table>

Source: Sg2 Interview With Medical University of South Carolina, February 2015.
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Key Strategy: Care Continuity
| Aimed at patients undergoing transplants, anticoagulation therapy or oral anticancer therapy | **$300** iPad mini given to patient, loaded with Partners-developed app | Patients take iPad home, return at 30-day check-up | Cost avoidance is major benefit of program | **5%** Improvement in oral chemo adherence = $35 to $40 million in savings |

*Source: Sg2 Interview With Partners HealthCare, March 2015.*

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Key Strategy: Channel Access
CARECLIX AND THE STATE OF MARYLAND

- HIPPA-compliant software fully integrated with EMRs and complete with prescription and lab ordering capabilities
- CareClix e-clinic Telemedicine Stations deployed at public schools throughout Maryland
  - Nurses assist students in school-based clinics.
  - Remote connection to physicians at local hospitals
  - Student’s parent may join online exam room via smart phone.
  - Translation services are available.

Source: CareClix Telemedicine announces release of telemedicine work stations in Maryland school system [press release]. October 1, 2014.
**CASE STUDY**

Virtual Visit Kiosk Pilot Targets School Employees

**MAYO CLINIC, ROCHESTER, MN**

- Partnered with HealthSpot to place kiosk in Minnesota middle school
- Targeting employees to reduce staff absenteeism costs to school
- Expansion of program at 2 Mayo campuses

Image used with permission from HealthSpot.

Key Strategy: Margin Management
### Annual Pediatric Referrals From Community Hospitals

<table>
<thead>
<tr>
<th>Partner Hospital</th>
<th>Pre-Telemed</th>
<th>Post-Telemed</th>
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<tbody>
<tr>
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<tr>
<td>B</td>
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<td>1.9</td>
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<tr>
<td>P</td>
<td>0.5</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>142.6</strong></td>
<td><strong>284.6</strong></td>
</tr>
</tbody>
</table>

- **With local virtual health partnerships, annualized referrals increased from every site.**
- **Annual revenue per remote hospital increased by >$125,000 in the postdeployment period.**

Source: Sg2 Interview, February 2015.
AVERA HEALTH, SOUTH DAKOTA

Allows organizations to implement virtual health without incurring all up-front costs

6 to 9 months to develop programs, another 6 months to implement them

Served 209 hospitals and clinics in 8 states

Saved $143 million in health care costs

15% growth rate on average


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Virtual Health is Here to Stay
Acceptance increases but growth variable by clinical area and geography.

Competition Increases
A focus on consumerism and patient satisfaction is driving growth in direct-to-consumer programs.

Building the Business Case
While cost avoidance remains main financial driver, explore potential opportunities for direct revenue generation.
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