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

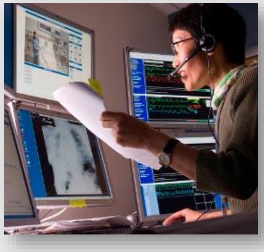
Breadth of Virtual Health Drives New Value Opportunities

- Tele-“specialty”
- Virtual conferencing

- Virtual consults
  - Urgent care
  - Specialty care

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

Clinician to Clinician | **Provider to Patient** | **Consumer Driven**



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- eICU
- eED

- Remote monitoring
- Virtual medication management
- Telehealth kiosks

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

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

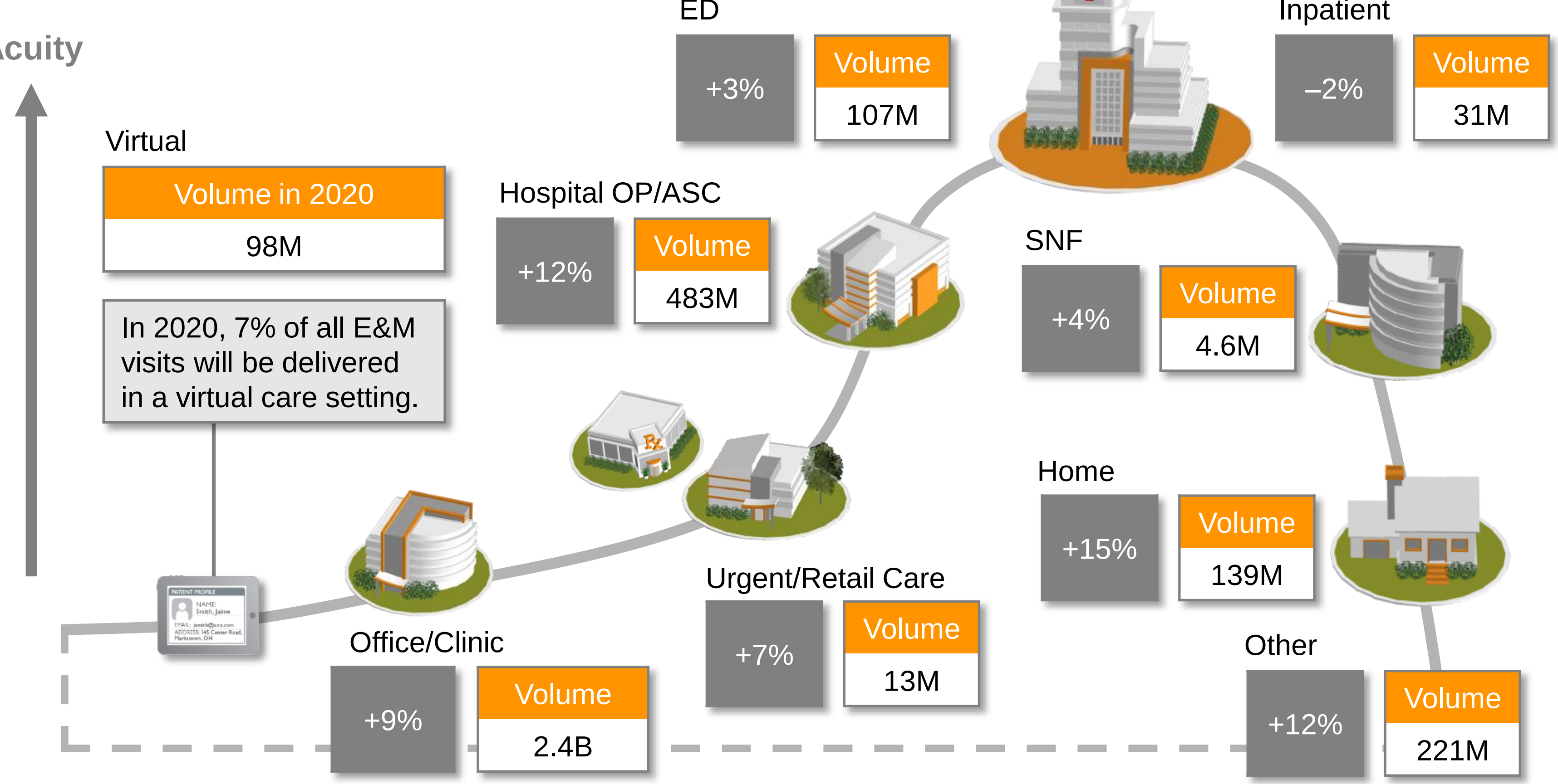
Population Health Management
Trigger early interventions and curtail suboptimal utilization.

Key Measures
- Total cost of care
- Avoidable utilization

Significant Growth Opportunities in Virtual Setting Over Next 5 Years

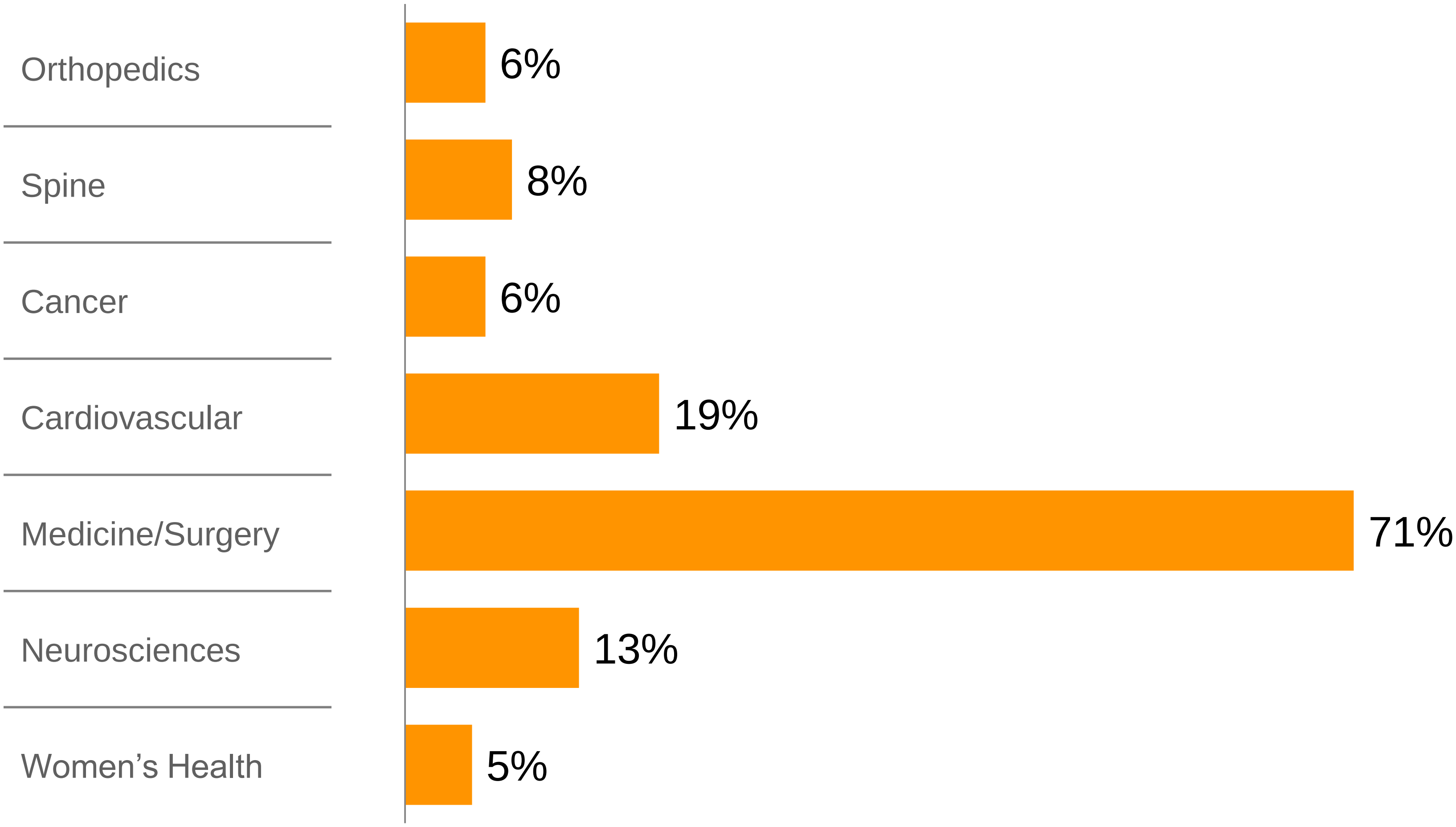
2015 Site of Care Volumes and 5-Year Forecast, Adults

US Market, 2015–2020



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.

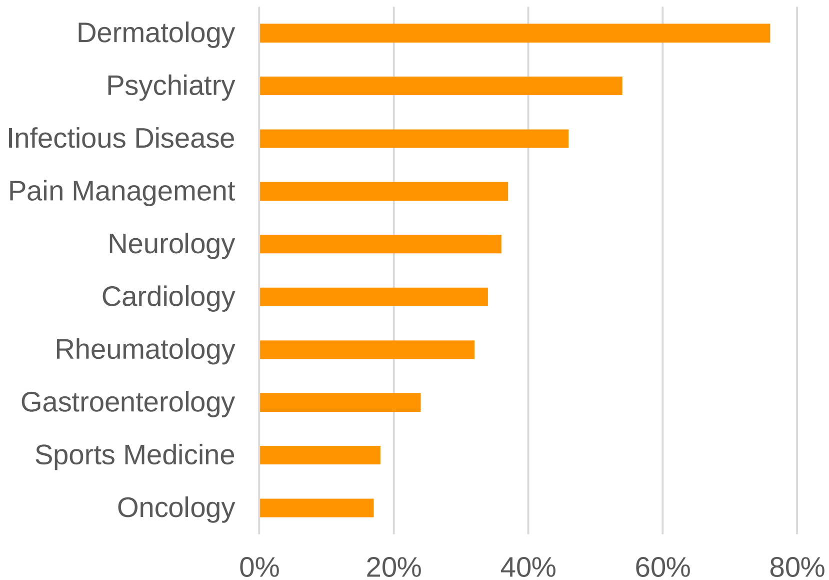
E&M Visits in the Virtual Setting in 2025 by Service Line



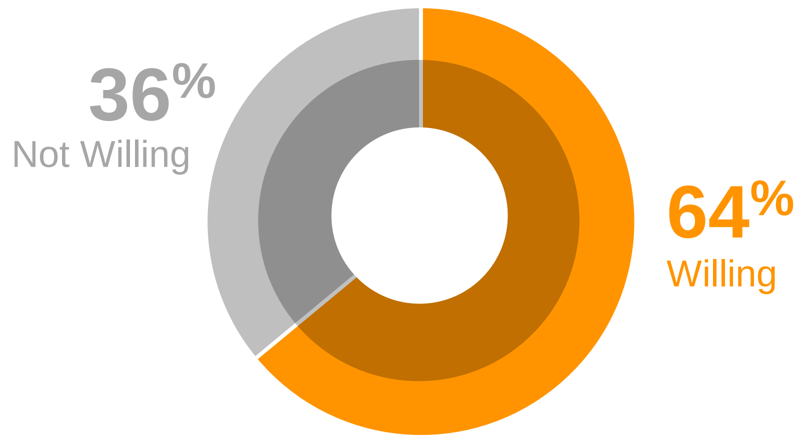
Note: Analysis excludes ages 0–17. Surgical procedures include endoscopy and major procedures.
Sources: Impact of Change® v15.0; IMS LifeLink® PharMetrics Health Plan Claims Database, 2011, 2013; The following 2013 CMS Limited Data Sets (LDS): Carrier, Denominator, Home Health Agency, Hospice, Outpatient, Skilled Nursing Facility; The Nielsen Company, LLC, 2015; Sg2 Analysis, 2015.

Provider and Consumer Acceptance Is Growing

Specialty Video Consults Physicians Find Most Valuable



Willingness to Have a Video Visit

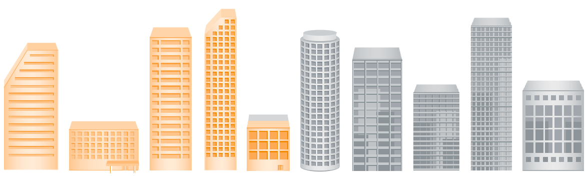


Interest in Telehealth Peaks in Ages 18–44

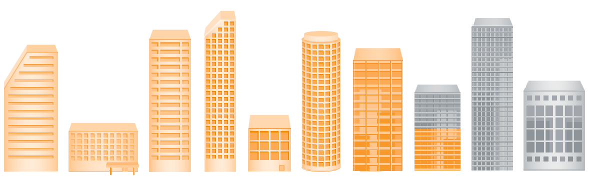
Source: American Well. Telehealth Index: 2015 Physician Survey; 2015 Consumer Survey.

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

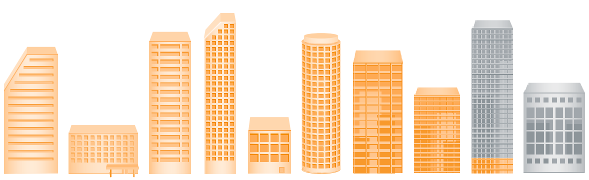
Survey responses from 140 of the largest companies in the US



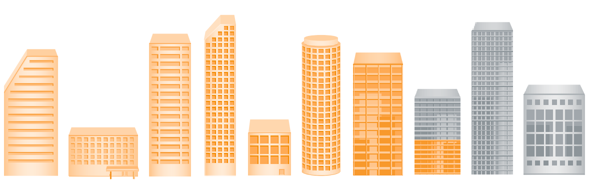
48% offering virtual health services currently



74% plan to offer virtual services in 2016



81% to offer nurse coaching for condition management



73% to offer nurse coaching for lifestyle management

Source: National Business Group on Health, 2015.

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.

Key Strategy: Clinical Scale

CASE STUDY

Remote Specialist Consults Reduce Disparities, Expand Reach

MEDICAL UNIVERSITY OF SOUTH CAROLINA, CHARLESTON, SC

Reduce patient time spent traveling for follow-up

\$1,000 to \$1,500 per site for computer and software license

360 virtual consults

Saved 53,000 miles of travel (142 miles per patient)

Each patient saves about 2.8 hours per visit

Source: Sg2 Interview With Medical University of South Carolina, February 2015.

Key Strategy: Care Continuity

CASE STUDY | iPad and App Guide Self-Management, Generate Savings

PARTNERS HEALTHCARE, BOSTON, MA

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.

Key Strategy: Channel Access

CASE STUDY | Technology Platforms Integrate With EMRs, Allow Prescription and Lab Ordering

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

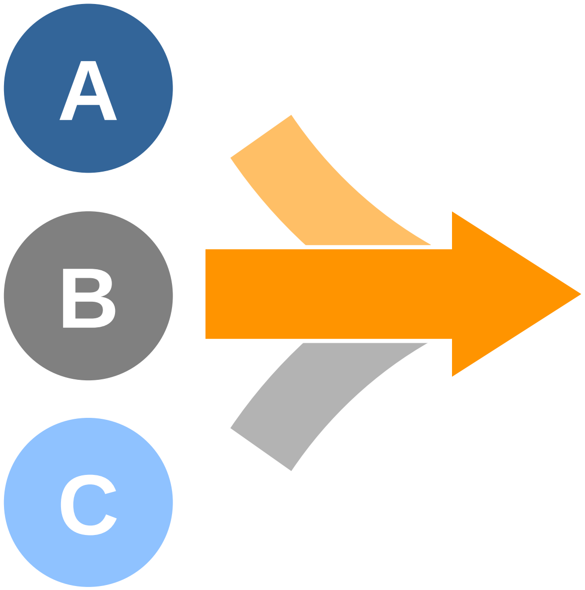
Image used with permission from HealthSpot.

Source: Tahir D. Mayo Clinic expands kiosk virtual-visit pilot to local school. Modern Healthcare. December 30, 2014.

Key Strategy: Margin Management

CASE STUDY | Reducing Unnecessary Transfers Drives Revenue to Community Partners

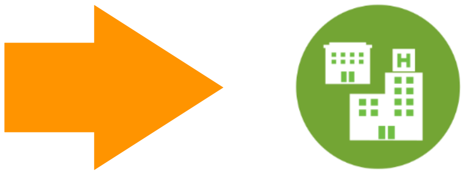
Community Hospital Virtual Health Partners



+ 13 more...

Annual Pediatric Referrals From Community Hospitals		
Partner Hospital	Pre-Telemed	Post-Telemed
A	18.0	22.1
B	29.7	40.2
C	1.2	5.6
D	0.0	0.2
E	4.5	9.3
F	0.0	3.4
G	9.2	13.1
H	0.7	2.7
I	0.0	77.3
J	40.9	58.9
K	0.0	3.1
L	35.0	40.4
M	0.9	2.4
N	0.0	2.0
O	1.9	2.2
P	0.5	1.8
Total	142.6	284.6

Children's Hospital



- 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.

CASE STUDY

Avera Scales Virtual Health and Takes It B2B

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

B2B = business to business. **Source:** Sg2 Interview With Avera Health, March 2015.

TAKEAWAYS

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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