Developing a Telemedicine Business Strategy

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Discussion Roadmap

• Defining Telehealth and Telemedicine
• Benefits of Telemedicine
• Regulatory Environment
• Service Delivery Models
• Strategic Planning Process
• Results & Implementation
Disclosure

I have no relevant financial or nonfinancial relationships within the organizations, products, or services referenced or described in this presentation.
Defining Telemedicine

- Electronic processing
- Exchange, storage, retrieval
- All virtual health information and services

- Clinical services
- Non-clinical services (i.e., health education, health promotion, health maintenance)

- Remote clinical services
- Resolving a Chief Complaint
- Individual patient interaction
Telehealth Terminology

Telecare
Virtual Medicine
e-Visit
Connected Health
e-Health
Why Telemedicine?

- Increased access to care
- Improved compliance
- Enhanced coordination & quality of care
- More convenient access to timely treatments
- Capacity expansion

- Reduced transfers/readmits
- Avoided unnecessary test and procedures
- Reduced costs and travel for patients and providers
## Telehealth Toolbox

<table>
<thead>
<tr>
<th>Relevant Modalities</th>
<th>Use Cases</th>
<th>Investment Required</th>
</tr>
</thead>
</table>
| **Videoconference**          | • Professional Consultation  
• Diagnosis and Treatment  
• Education and Engagement  
• Ongoing monitoring & Care Coordination | • Need software, secure internet access for patients  
• Home and hospital-based technology |
| **Asynchronous Store-and-Forward** | • Diagnosis and Treatment                                                  | • Need additional bandwidth, storage space  
• Can replace non-urgent phone calls and visits |
| **Remote Device**            | • Education and Engagement  
• Ongoing monitoring & Care Coordination                                     | • More expensive hardware investment  
• Used for high-risk patients in non-hospital site |
| **Telephone**                | • Professional Consultation  
• Ongoing monitoring & Care Coordination                                     | • Little tech investment, requires proper staffing  
• Used for pre-visit triage |
| **Patient Portal**           | • Education and Engagement                                                  | • High security needs require significant investment  
• Must integrate EHR |
| **Mobile App**               | • Education and Engagement                                                  | • Minimal hardware investment for providers  
• Complex security and data storage issues |
How Does It Work?

**Originating Site**
*Location of Patient*

Digital Video or Images

**Distant Site**
*Location of Provider*

Image Source: South Central Telehealth Resource Center; “Telehealth 101” Presentation, 2016
Regulatory
Environment
# CMS Coverage Requirements

## Core Eligibility Requirements for CMS Reimbursement

<table>
<thead>
<tr>
<th>Geographic Location of Originating Site</th>
<th>Type of Health Provider at Distant Site</th>
<th>Type of Institution for Originating Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Must be provided to an eligible beneficiary in an eligible site</td>
<td>Physician</td>
<td>Office of a physician or practitioner</td>
</tr>
<tr>
<td>Site must be located in:</td>
<td>Nurse practitioner</td>
<td>Hospital</td>
</tr>
<tr>
<td>1. A Health Professional Shortage Area outside of a Metropolitan Statistical Area</td>
<td>Physician assistant</td>
<td>Critical access hospitals</td>
</tr>
<tr>
<td>2. A rural census tract (even within a MSA)</td>
<td>Nurse midwife</td>
<td>Rural health clinic</td>
</tr>
<tr>
<td>3. A county outside of an MSA</td>
<td>Clinical nurse specialist</td>
<td>Federally Qualified Health Centers (FQHCs)</td>
</tr>
<tr>
<td></td>
<td>Clinical psychologist and clinical social worker</td>
<td>Skilled nursing facility</td>
</tr>
<tr>
<td></td>
<td>Certified registered nurse anesthetist</td>
<td>Hospital-based dialysis center</td>
</tr>
<tr>
<td></td>
<td>Registered dietitian or nutrition professional</td>
<td>Community mental health center</td>
</tr>
</tbody>
</table>

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**Are You Eligible?**

Visit the HRSA “Medicare Telehealth Payment Eligibility Analyzer” [website](http://datawarehouse.hrsa.gov/telehealthAdvisor/telehealthEligibility.aspx).

Parity: comparable coverage and reimbursement for telemedicine-provided services to that of in-person services.
Practicing Across State Lines

Licensing Can Be a Problem for Telehealth Programs

General State Licensure Requirements

Electronic Interaction
- License in physician’s state and patient’s state

Prescribing Medication
- License in physician’s state and patient’s state, compliance with accepted practice standards
  - In-person encounter
  - Physical examination

Common Exceptions¹

- Physician-to-physician consultations
- Education purposes (teaching and demonstrations)
- Intern/Residential training
- Medical emergencies or natural disasters
- Licensure by endorsement, mutual recognition, or reciprocity: formal agreements by multiple state licensure boards allowing certain physician privileges without licensure

What Providers Should Do

- If you interact electronically with patients in other states or prescribe medication across state lines, establish licensure in those other states.
- Follow the American Medical Association’s up-to-date information on licensure requirements across all states and jurisdiction.
- Help physicians, nurses, and other allied health professionals navigate the process of obtaining medical licenses by providing tips sheets, FAQs, and written institutional policies on telemedicine.

¹ Differs by state.

HealthIT.gov, “Are there state licensing issues related to telehealth?” http://www.healthit.gov/providers-professionals/faqs/are-there-state-licensing-issues-related-telehealth
State of Tennessee

Two bills passed in 2015, **HB 1895** and **SB 1223**, established telemedicine practice standards.

**Highlights**

- Law requires private insurers and Medicaid to reimburse for video conference and store-and-forward telemedicine services
- Fax, telephone, and email/secure messaging are not considered telemedicine
- ERISA plans are exempt
Service Delivery Models

- Acute
- Ambulatory
- Remote Patient Monitoring
- Consumer
# Current Service Lines

<table>
<thead>
<tr>
<th>Acute</th>
<th>Ambulatory</th>
<th>RPM</th>
<th>Consumer</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Pharmacy</td>
<td>• Autism Intervention</td>
<td>• Cardiology</td>
<td>• Discussion, but no current activity</td>
</tr>
<tr>
<td>Hospital</td>
<td>• Cardiology</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge</td>
<td>• Care Coordination</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consults</td>
<td>• Hearing &amp; Speech</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Neurology</td>
<td>• MFM Genetic Counseling</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Peds ECHO and EEG reads</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Psychiatry</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Sleep Apnea</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Vascular Surgery Triage</td>
<td></td>
<td></td>
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</tbody>
</table>
Snapshot: Teleneurology

Service Description
• Hospital-based consult service available via contract to any hospital
• 24/7 coverage for all neurology conditions; not just stroke
• iPads are used for video exams; no expensive equipment required

Impact
• 9 partner hospitals
• 1,800+ consults since February 2014
• 85% of patients remain at the partner hospital
Snapshot: Genetic Counseling

Service Description
Outpatient
Maternal Fetal Medicine
Patients
Cisco Jabber Video is used for counseling sessions

Impact
1 remote clinic; add’l sites identified
66 average miles saved for provider round trip
1.5 hours average time saved for patients (not coming to main campus)
98% patient satisfaction
In Development

Hospital-Based Services
• ICU Consults
• Emergency Medicine Consults
• Infectious Disease Consults and Infection Control Support
• Psychiatry Consults

Ambulatory Initiatives
• Allergy
• Endo/Diabetes
• ENT Telephonic Visits
• Maternal Fetal Medicine
• Pain Management
• Pediatric Specialties
Where do we go from here?
Telemedicine Strategic Planning Process
Multidisciplinary Committee

VUMC Strategic Development assembled an internal committee to guide the process.

Committee represented the following departments:

• Administration (Adult and Pediatric)
• Business Development
• Finance
• Health IT
• Procurement
• Quality
Consultant Engagement

Benefits of involving a consulting firm:
- Access to market/industry trends and data
- Advanced analytics
- Objectivity
- Ability to influence change

Vanderbilt engaged Sg2 Consulting to lead our telemedicine strategic planning efforts.
Strategic Planning Process

**Stakeholder Interviews**
Patients, Affiliate Hospitals and Physicians, VUMC Leadership

**Data Collection**
Market Data, VUMC Institutional Data, National & Regional Trends

**Identification of Opportunities**
Prioritize and Build Framework

**Roadmap Development**
Finalize opportunities, develop ROI, create tactical plan
Questions?
Thank You!

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