Formulate Your Virtual Care Plan

GA HIMSS

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Disclosure

No Conflicts of Interest
Definitions and Concepts

Telehealth or Telemedicine?
Sometimes used interchangeably

Two distinct definitions:
* Telemedicine = billable interactive clinical services
* Telehealth = broader definition of distance health activities, including clinical remote monitoring
A Quarter Of Healthcare Providers Make Strides In Telemedicine/Telehealth: KPMG Poll

May 12, 2016
Three-quarters are still in early stages or have not embarked on virtual care program, as challenges persist.

One-Third Of Healthcare Providers Use Remote Monitoring, ‘Virtual Care’ As Telemedicine Evolves: KPMG Survey

April 19, 2017
Challenges seen in business case for virtual care, but care access emerges as priority.
CIOs plan the majority of capital investment over the next three years to be (figures rounded):

- EMR system optimization (38 percent)
- Accountable care/population health technology (21 percent)
- Consumer/clinical and operational analytics (16 percent)
- Virtual/telehealth technology enhancements (13 percent)
- Revenue cycle systems/replacement (7 percent)
- ERP systems / replacement (6 percent)
Why We Need Telehealth

We need telehealth as:

- boomer population / older generations age
- we face provider shortages
- care between visits becomes increasingly important for managing patient health

With telehealth, we can meet these challenges by:

- Increasing access to care
- Increasing quality of care
- Reducing overall cost of care
The consumer version of “telehealth” should be both easy to imagine and easy to use.

Consumer uses a smartphone, tablet or desktop to engage a doctor in real time.

Cost is more affordable and saves a trip to a walk-in clinic or local urgent care.
So what’s the hold up?

**Technology** making telehealth possible is just one part of a three-legged stool that includes:

- improving **access** to healthcare
- managing **reimbursement** issues

New technology comes with challenges:

- What happens when the patient has trouble using their device?
- Who do they contact?
- Can the hospital help desk provide the support they need?
- Does the patient’s wireless network support high-speed communication?
- What if they don’t have an appropriate device?
Patients get best care from the providers who:
- know them best
- have full access to their records
- established relationship / trust

Most communities have **access** issues – the second leg of the stool
- need for additional providers (mental health or specialists)
- lacking appointment slots
- social needs (transportation, child care)
For patients to access regular medical care, physicians need the third leg of the stool in place:

- **Reimbursement** model for telehealth that allows clinicians to get paid in the same way as they do for a face-to-face visit with a patient in the office.
Only **FOUR** pre-requisites!

1. Originating site must be a brick and mortar hospital, clinic, office, SNF, or dialysis site
2. Originating Site must be a rural area and a Primary Care or Mental Health HPSA (Health Professional Shortage Area)
3. Must use synchronous audio and video (no store and forward)
4. You can only bill the services / codes provided
Use the Calculator to Determine Payment (or Not)

Source: https://datawarehouse.hrsa.gov/tools/analyzers/geo/Telehealth.aspx
CMS Telehealth Payments

* 17.6 Million in 2015
* 28.7 Million in 2016 (Up 28%)

Perspective:
* CMS Budget is >600 Billion
* In 2001 CBO estimated telehealth Cost of $150 Million over first 5 yrs.
96% of large employers will make telehealth services available in states where it is allowed

- 56% plan to offer telehealth for behavioral health services, more than double the percentage of 2017

- Nearly 20% of employers experiencing telehealth employee utilization rates of 8% or higher

- Increase in the use of value-based benefit design to steer employees toward telehealth (18% in 2018 vs. 16% in 2017).

Source: Large Employers’ 2018 Health Care Strategy and Plan Design Survey
Legislation is Coming!

- **S.870 - Creating High-Quality Results and Outcomes Necessary to Improve Chronic (CHRONIC) Care Act of 2017**
  - Sen. Hatch, Orrin G. [R-UT] (Introduced 04/06/2017)
  - Passed Senate; House - 09/27/2017 Referred to the Committee on Ways and Means et.al.
  - Expands Medicare Advantage coverage of Telestroke, Chronic Care

- **S.1016 - CONNECT for Health Act of 2017**
  - Sen. Schatz, Brian [D-HI] (Introduced 05/03/2017)
  - Senate - 05/03/2017 Read twice and referred to the Committee on Finance
  - Expands Telestroke, Remote dialysis, ACO reimbursement

Source: https://www.congress.gov/bill/
DEPARTMENT OF VETERANS AFFAIRS

38 CFR Part 17
Authority of Health Care Providers To Practice Telehealth

* Proposes to amend medical regulations by standardizing delivery of care by VA health care providers through telehealth
* Ensures VA health care providers provide the same level of care to all beneficiaries, irrespective of the State or location

Source: Federal Register / Vol. 82, No. 189 / Monday, October 2, 2017 / Proposed Rules
More CMS Coverage in 2018?

2018 Proposed Medicare Physician Fee Schedule (PFS) rule

- Proposed on 07/21/2017
- Comment period ended September 11, 2017

New proposed telehealth codes

- CPT 90785: Interactive complexity
- CPT 90839 and 90840: Psychotherapy for crisis
- CPT 96160 and 96161: Health risk assessment
- HCPCS G0296: Visit to determine low dose computed tomography eligibility
- HCPCS G0506: Care planning for chronic care management
Impact of Change® Growth Forecast

Outpatient Visits Forecast
US Market, 2010−2020

Utilization (Billions)

Outpatient Visits (E/M+E-Visits) +43%
E-Visits
E&M Visits +31%


Analysis excludes ages 00-17, and includes only E/M and e-visits.
E/M = evaluation and management.
Sources: Impact of Change® v9.0; Pharmetrics; CMS; Sg2 Analysis, 2010.

Utilization Forecast

<table>
<thead>
<tr>
<th>Service Lines With the Highest Volume of E-Visits</th>
<th>E-Visit Utilization Rate, 2020 (Per 1,000 Pop)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Medicine</td>
<td>307</td>
</tr>
<tr>
<td>Cardiology</td>
<td>154</td>
</tr>
<tr>
<td>Endocrine</td>
<td>118</td>
</tr>
<tr>
<td>Pulmonary</td>
<td>110</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Diseases With the Highest Proportion of E-Visits</th>
<th>Proportion of All Visits That Are E-Visits, 2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contraception</td>
<td>34%</td>
</tr>
<tr>
<td>Hypertension</td>
<td>29%</td>
</tr>
<tr>
<td>Urinary Tract Infection</td>
<td>28%</td>
</tr>
<tr>
<td>Otitis Media</td>
<td>27%</td>
</tr>
</tbody>
</table>
Intel Paragon XP/S 140 (1994) = 143.4 gigaflops
Snapdragon 820 >400 gigaflops!

* gigaflop * is a billion floating-point operations per second
The evolution of technology adoption and usage

% of U.S. adults who ...

Source: Surveys conducted 2000–2016. Internet use figures based on pooled analysis of all surveys conducted during each calendar year.

PEW RESEARCH CENTER
## Technology or Electronic Health Management Tools Used

<table>
<thead>
<tr>
<th>Tool</th>
<th>US TOTAL</th>
<th>18-34</th>
<th>35-44</th>
<th>45-54</th>
<th>55-64</th>
<th>65-74</th>
<th>75+</th>
</tr>
</thead>
<tbody>
<tr>
<td>Websites</td>
<td>57%</td>
<td>54%</td>
<td>56%</td>
<td>58%</td>
<td>61%</td>
<td>55%</td>
<td>56%</td>
</tr>
<tr>
<td>Mobile phone/tablet app</td>
<td>33%</td>
<td>48%</td>
<td>37%</td>
<td>30%</td>
<td>19%</td>
<td>16%</td>
<td>2%</td>
</tr>
<tr>
<td>Electronic health records</td>
<td>27%</td>
<td>22%</td>
<td>23%</td>
<td>29%</td>
<td>32%</td>
<td>38%</td>
<td>31%</td>
</tr>
<tr>
<td>Wearable technology</td>
<td>21%</td>
<td>26%</td>
<td>25%</td>
<td>21%</td>
<td>15%</td>
<td>9%</td>
<td>9%</td>
</tr>
<tr>
<td>Social media</td>
<td>21%</td>
<td>32%</td>
<td>19%</td>
<td>21%</td>
<td>13%</td>
<td>9%</td>
<td>7%</td>
</tr>
<tr>
<td>Smart scales</td>
<td>13%</td>
<td>20%</td>
<td>16%</td>
<td>8%</td>
<td>11%</td>
<td>5%</td>
<td>4%</td>
</tr>
<tr>
<td>Remote consultation</td>
<td>12%</td>
<td>11%</td>
<td>13%</td>
<td>9%</td>
<td>11%</td>
<td>18%</td>
<td>11%</td>
</tr>
<tr>
<td>Online support communities</td>
<td>12%</td>
<td>16%</td>
<td>11%</td>
<td>13%</td>
<td>10%</td>
<td>6%</td>
<td>9%</td>
</tr>
<tr>
<td>Remote monitoring</td>
<td>8%</td>
<td>13%</td>
<td>8%</td>
<td>5%</td>
<td>6%</td>
<td>5%</td>
<td>7%</td>
</tr>
<tr>
<td>Other</td>
<td>2%</td>
<td>1%</td>
<td>0</td>
<td>3%</td>
<td>2%</td>
<td>2%</td>
<td>2%</td>
</tr>
<tr>
<td>None</td>
<td>10%</td>
<td>7%</td>
<td>6%</td>
<td>10%</td>
<td>13%</td>
<td>18%</td>
<td>20%</td>
</tr>
</tbody>
</table>

**BASE:** USES TECHNOLOGY TO MANAGE HEALTH
Q625 (Q126) Which of the following technology or electronic health management tools have you used to manage your health in the past year?

**NOTE:** unweighted data

Accenture Digital Engagement Survey - 2016
Technology or Electronic Health Management Tools Used

- **Websites**: 57% (2016), 55% (2014)
- **Mobile phone/tablet app**: 16% (2016), 33% (2014)
- **Electronic health records**: 27% (2016), 32% (2014)
- **Wearable technology**: 9% (2016), 21% (2014)
- **Social media**: 14% (2016), 21% (2014)
- **Smart scales**: 10% (2016), 13% (2014)
- **Remote consultation**: 12% (2016), 12% (2014)
- **Online support communities**: 10% (2016), 12% (2014)
- **Remote monitoring**: N/A (2016), 8% (2014)
- **Other**: 2% (2016), 2% (2014)
- **None**: 10% (2016), 22% (2014)

*BASE: USES TECHNOLOGY TO MANAGE HEALTH (2014 n=1806; 2018 n=1434)
Q525 (Q126) Which of the following technology or electronic health management tools have you used to manage your health in the past year?
NOTE: unweighted data*
Which Location Would You Prefer?
Which Location Would You Prefer?
Advantages of Virtual or In-Person Visits

Percent Ranking Top 3 for In-Person and Virtual

**CONSUMERS**
- Providing quality care to patients: 68% (Virtual), 11% (In-Person)
- Diagnosing problems faster: 48% (Virtual), 29% (In-Person)
- Engaging patients in decisions: 50% (Virtual), 17% (In-Person)
- Reducing adverse events: 32% (Virtual), 20% (In-Person)
- Accommodating physicians’ schedule: 41% (Virtual), 21% (In-Person)
- Providing timely care to patients: 42% (Virtual), 25% (In-Person)
- Accommodating patients’ schedules: 52% (Virtual), 18% (In-Person)
- Reducing medical costs to patients: 58% (Virtual), 15% (In-Person)

**DOCTORS**
- Providing quality care to patients: 81% (Virtual), 7% (In-Person)
- Diagnosing problems faster: 54% (Virtual), 15% (In-Person)
- Engaging patients in decisions: 50% (Virtual), 20% (In-Person)
- Reducing adverse events: 43% (Virtual), 12% (In-Person)
- Accommodating physicians’ schedule: 37% (Virtual), 30% (In-Person)
- Providing timely care to patients: 49% (Virtual), 22% (In-Person)
- Accommodating patients’ schedules: 80% (Virtual), 8% (In-Person)
- Reducing medical costs to patients: 62% (Virtual), 7% (In-Person)

BASE: ALL QUALIFIED RESPONDENTS (2016 n=2226)
Q760 (D1035) From the list below, please select the top three advantages of in-person patient visits and the top three advantages of remote or virtual visits.
*2015 Accenture Doctors Survey (n=601)
Telemedicine Modalities

Stepwise Workflow and Implementation

Patient Messaging
- Telephone

Asynchronous Care
- Tele-Consults
- E-visits

Synchronous Care
- Video Visits
- Point to point consults

Remote Monitoring
- Home monitoring
- Personal Devices
- eICU
Case Study: Virtual Care and Panel Sizes at MGH Beacon Hill

- More than 20% of Patients had 5+ chronic visits a year
- Goal: shift 2 visits to virtual visits
- Over 6 months, 15% of office visits shifted to online care
- 29% increase in available time (access!)
E-visits have potential to enhance primary care delivery via cost reductions and larger panel sizes without sacrifices in quality of care

E-visits improve ability for patients to contact their providers directly

E-visits triggered additional office visits (6%), contrary to expectations that they serve as a substitute

E-visit adoption linked to about a 15% reduction in new patient visits

Direct-To-Consumer Telehealth May Increase Access To Care But Does Not Decrease Spending

* Claims Based Review of 300K Patients
* 88% of Patients had NEW utilization via telehealth
* Net annual spending increased $45 for telehealth users for acute upper respiratory infection

*Health Affairs* March 2017 vol. 36 no. 3 485-491
Based on proportions of respondents interested in telehealth.

Amwell: Doctor Visits 24/7
American Well
Everyone

INSTALL

500 THOUSAND Downloads 4.1 Medical Similar

See a doctor anytime. Doctors are available 24/7, no appointment needed.

READ MORE

Amwell brings the doctor to you, Review profiles and choose a doctor, See a video
American Well 2014 Survey

How much should online visits cost compared to an in-person visit?  

5% Less  22% More  11% About the same  62% Not Sure

Cost of care

<table>
<thead>
<tr>
<th>Service</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emergency Room</td>
<td>$750</td>
</tr>
<tr>
<td>Urgent Care</td>
<td>$140</td>
</tr>
<tr>
<td>PCP</td>
<td>$95</td>
</tr>
<tr>
<td>Telehealth</td>
<td>$49</td>
</tr>
</tbody>
</table>

American Well Consumer data, 2014
Would You Change Providers?

Would switch doctors based on availability of online visits

Would switch doctors based on availability of online visits

American Well Consumer Data, 2014
Case Study: Acute Care E-Visits

- Patient initiated
- Asynchronous
- No overhead
- Reimbursable
- Low time commitment
E-Visits vs. Medical Advice Messages

**E-Visits**

- Related to:
  - Conditions that require physician evaluation
  - Include chronic disease management
- Handled by physicians
- Can include orders
- Can lead to billable advice

**Medical Advice Messages**

- Related to:
  - Recent office visits
  - Medication instructions
  - Test result follow-up
  - General health updates
- Handled by nurses or medical assistants
- No reimbursement
Benefits of E-Visits

- Providers connect with a patient even when schedules conflict
- Providers can be reimbursed for e-visits
- Providers and patients can review e-visits at any time
- Patients do not have to travel to receive medical advice
- E-visits can reduce in-person visits for routine follow-up so focus can shift to more complex patient needs
Prerequisites for E-Visits

* Patient must have an active patient portal account
* Patients must have an existing relationship with the provider
* E-visits must be initiated by the patient to get reimbursed
* A fee of $35 is associated with the visit
Process Flow

- Patient logs into Patient Portal
- Selects E-visit
- Answers Questionnaire
- Provider Reviews Encounter
- Follow up message / prescription if indicated
Ongoing Results

* High patient satisfaction
* High provider satisfaction
* No negative impact to office
* Providers want to expand
Success requires Local Ownership

* Physician Leadership Buy-In
* Physician Champions
* Involved Physician Practices – Education!
* Identify Patient Expectations and start to change patient culture around phone messages / care
Providers are the Educators

**Most Patients Learn About Telemedicine From Their Physicians**

- **53%** Offered By My Physician
- **28%** Offered By My Insurance Company
- **15%** Found Out About It On My Own
- **4%** Found Out About It Some Other Way

Patients are Receptive!

**Majority Of Patients Open To Televisits**

- Would Not Consider Scheduling A Televisit: 29%
- Have Scheduled A Televisit: 18%
- Would Consider Scheduling A Televisit: 53%

**Majority Of Patients Thought Televisit Was Better**

- Worse Than Office Visit: 5%
- Better Than Office Visit: 54%
- Same As Office Visit: 41%

Organizational Priority of Telehealth Opportunities

- Align telehealth strategy with organization strategy
- Examine feasibility, timing, and potential ROI
- Consider the stepwise nature of implementation
- What is our competition doing in this space (are we competing / leading / following)?
- Get started!
VA goes virtual!
ALL sites across the US live by Fall 2017

https://www.telehealth.va.gov/
How To Implement

Based on proportions of respondents interested in telehealth.
Based on proportions of respondents interested in telehealth.
Quick Steps To Implement

Based on proportions of respondents interested in telehealth.
Keep It Simple!
Takeaways

* Progress can be SLOW
* Even with great solution, must continue ongoing education of patients on use of the technology
* Tremendous potential for organizations to gain now or lose soon (what is your competition doing?)
* Need champion(s)
  * Must promote telehealth locally
  * Workgroup to prioritize future work / use cases
Based on proportions of respondents interested in teleheatlh.
Blue skies ahead

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