How New Technologies Will Change Health Care in the Next Five Years

Aneesh Chopra has disclosed that he receives salary from a commercial interest, CareJourney.
The Health Internet Era: How New Technologies will Change Healthcare in the Next Five Years

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On July 4, 1776, the weather in Philly was clear and mild with a high of 76 degrees.

% of Beneficiaries Receiving Breast Cancer Screens Following AWVs

2017-18 Analysis of CMS FFS Data

<table>
<thead>
<tr>
<th>Total Beneficiaries Receiving a Breast Cancer Screen</th>
<th>Had Preventive Service</th>
<th>Total Beneficiaries Receiving an AWV</th>
<th>% Total Beneficiaries Receiving AWV</th>
</tr>
</thead>
<tbody>
<tr>
<td>5,435,911</td>
<td>20,286,930</td>
<td>27%</td>
<td></td>
</tr>
<tr>
<td>1,682,682</td>
<td>20,286,930</td>
<td>8%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Beneficiaries Receiving Screen Following AWV</th>
<th>Total Beneficiaries Receiving AWV</th>
<th>% Total Receiving AWV</th>
</tr>
</thead>
<tbody>
<tr>
<td>899,681</td>
<td>1,682,682</td>
<td>53%</td>
</tr>
</tbody>
</table>

Woman aged <74, AWV between Jan-Oct ‘17; follow-up 1 year post AWV

Source: http://celebrating200years.noaa.gov/foundations/climate_data/image1.html; whitehouse.gov; CareJourney analysis of CMS “VRDC”
Entering the “Health Internet” Era

In a 10/09 speech, Kapor called for a “health internet,” a less complex, more open, “light federal approach” that would encourage an early critical mass of users to participate; PCAST added the need for a “universal exchange language” in 2010 report.
Consumer Directed Exchange Scaling

A growing list of healthcare institutions support health records on iPhone, enabling you to view important data such as immunizations, lab results, medications, and vitals directly in the Health app.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Performance</th>
<th>Exclusion</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-copy of health information</td>
<td>93%</td>
<td>54%</td>
</tr>
<tr>
<td>E-copy of discharge instructions</td>
<td>93%</td>
<td>53%</td>
</tr>
</tbody>
</table>
Bipartisan Regulation on Data Sharing

1. Consumer Directed Exchange the preferred “HIE” method

2. “Net Neutrality”-like approach to connecting physician, payer apps

3. Government-sponsored Plans required to share claims, clinical data

4. Hospitals required to share real-time discharge notifications to physicians

5. Industry challenged to move faster on standardizing the entire HIPAA “designated record set”
Earning Consumer Trust to Access Data

Using Medicare’s Blue Button 2.0, we can quickly transfer your prescription info and estimate your drug costs.

Blue Button 2.0 securely connects Humana with up to four years of your Medicare Parts A, B and D claims data. Your prescription list will be built using your current year of data. You have full control over how your protected health information (PHI) can be used. Your identity and authorization are controlled through tools on MyMedicare.gov.

Note: because this involves PHI, only the potential plan member can complete this.

Let’s connect you to MyMedicare.gov to price your prescriptions!

Sign in to MyMedicare.gov to continue
Enter your User name and Password and sign in to MyMedicare.gov to continue.

User name: BBUser29989
Password: 

By accessing this system, you agree to our Terms and Conditions. Read more

Humana wants permission to access your Medicare data.
Humana will be able to:
- Access your Medicare claims data.
- Access your personal details like your name, address, and age.
- Share your Medicare data on their systems.
- Get updates to your Medicare data unless you revoke access.

Understand the risks:
You have the right to share your health information, but there may be risks. Be sure to review the app’s Privacy Policy and Terms and Conditions. You can revoke an app’s access to your data at any time by logging in to your MyMedicare.gov account or calling us at 1-800-631-4227.

Allow | Deny

Looking for Medicare Supplement plans?
If you’re looking for Medicare Supplement plans, call a licensed sales agent at 1-888-204-4062 TTY 711.
Segmenting Patients for Better Outreach

Proportion of Total Potentially Preventable Spending, by high-Cost Subpopulation

Total potentially preventable spending by Medicare subpopulation, percent

### “Under the Hood” Economics

#### OCM active cancer population by frailty segments: spend, utilization and quality metrics

<table>
<thead>
<tr>
<th>Risk segment</th>
<th>Annualized patient count</th>
<th>Spend distribution ($M)</th>
<th>PMPY ($)</th>
<th>Avoidable IP visits¹ (%)</th>
<th>TCM Compliance (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frail elderly</td>
<td>339</td>
<td>Inpatient: $26.8M</td>
<td>79,150</td>
<td>10%</td>
<td>11%</td>
</tr>
<tr>
<td>Under 65 (disabled, ESRD)</td>
<td>217</td>
<td>Outpatient: $13.9M</td>
<td>64,018</td>
<td>12%</td>
<td>9%</td>
</tr>
<tr>
<td>Major complex chronic conditions</td>
<td>883</td>
<td>Home Health: $47M</td>
<td>53,276</td>
<td>12%</td>
<td>12%</td>
</tr>
<tr>
<td>Minor complex chronic conditions</td>
<td>260</td>
<td>Part B: $7.9M</td>
<td>30,297</td>
<td>8%</td>
<td>8%</td>
</tr>
<tr>
<td>Simple chronic conditions</td>
<td>261</td>
<td>Part B DME: $6.9M</td>
<td>26,342</td>
<td>2%</td>
<td>8%</td>
</tr>
<tr>
<td>Healthy group</td>
<td>4</td>
<td>Hospice: $0.1M</td>
<td>32,329</td>
<td>NA</td>
<td>NA</td>
</tr>
</tbody>
</table>

¹ Avoidable IP visit here is defined as presence of AHRQ PQI measure during an IP stay.

PMPY ($):
- Frail elderly: $79,150
- Under 65 (disabled, ESRD): $64,018
- Major complex chronic conditions: $53,276
- Minor complex chronic conditions: $30,297
- Simple chronic conditions: $26,342
- Healthy group: $32,329

Amounts in millions ($M)

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Adding More Health Data “Channels”

Public Channel/Preview and Publish

- Common Clinical Data Set
- Cancer Data Set
- Open Notes
- Imaging
- Interactive Care Plan
- Discharge Notification
- Remote Patient Monitoring

Source: Roku; HL7 Argonaut Project
After dramatic reduction in aircraft manufacturing following WWI, then-Secretary Hoover encourages *industry collaboration* on engine, wing standards, commercialized on popular DC-3, Boeing 247
Better Navigation Support for Patients

**Transitional Care Management Services**
Medicare may cover these services if you’re returning to your community after a stay at certain facilities, like a hospital or skilled nursing facility. You’ll also be able to get an in-person office visit within 2 weeks of your return home.

**Link: ADT Feed + Scheduling**

**Yearly "Wellness" visits**
If you’ve had Medicare Part B (Medical Insurance) for longer than 12 months, you can get a yearly "Wellness" visit once every 12 months to develop or update a personalized prevention plan.

**Link: Care Plan open data standard**

**Diabetes prevention program**
Medicare Part B (Medical Insurance) covers a diabetes prevention program once if all of these conditions apply to you:
- You have a hemoglobin A1c test result between 5.7 and 6.4%, a fasting plasma

**Link: Clinical Data Set + Supplier Database**
Health Information Fiduciaries