

# 21st Century House Calls: Improving Quality and Access to Care for Medically Complex Patients

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The Institute of Medicine of Chicago

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# HCCI

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# Learning objectives

1. Describe modern-day house calls and their value to patients, care-givers, clinicians, health systems and society
2. Understand the Independence at Home Medicare Demonstration
3. Learn the challenges and rewards of starting a house call program

# The Decline of the House Call



*House calls to the elderly—a vanishing practice among physicians. NEJM 12/18/97:*

- 1930: 40% of visits
- 1950: 10% of visits
- **1996 984,000 house calls (< 0.5%)**

# Three Reasons for the Decline

1. Increased office/hospital based technology
2. Fear of increased liability
3. Financial disincentives

# The Resurgence of the House Call



"This is the Mother of All Housecalls!"

## *Trends in House Calls to Medicare Beneficiaries*

JAMA 11/16/05: 1998-2004

- **43% increase to 2,060,039** (0.9% of EM services)
- 2,659,358 house calls in 2014
- **↑97% in domiciliary visits** (Assisted Living Facilities) from 1,579,197 in 2006 to 3,105,522 in 2014 (overtook house calls)

# Three Reasons for the Resurgence

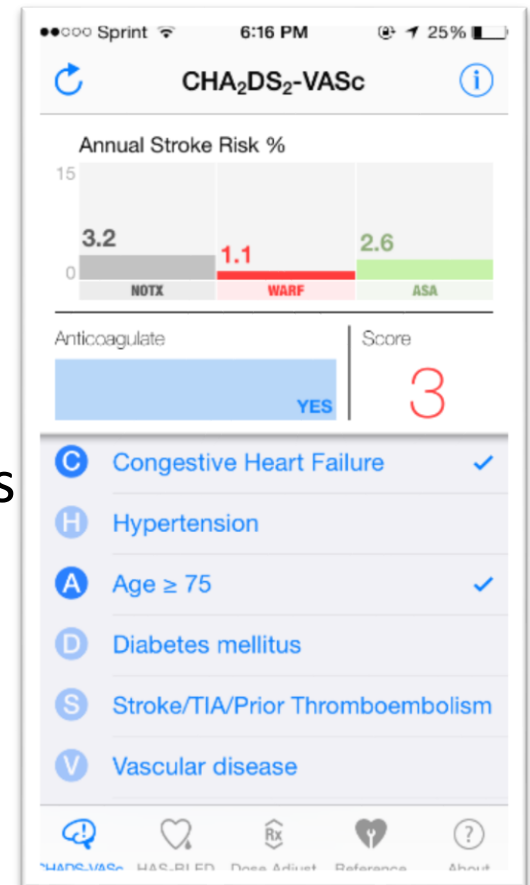
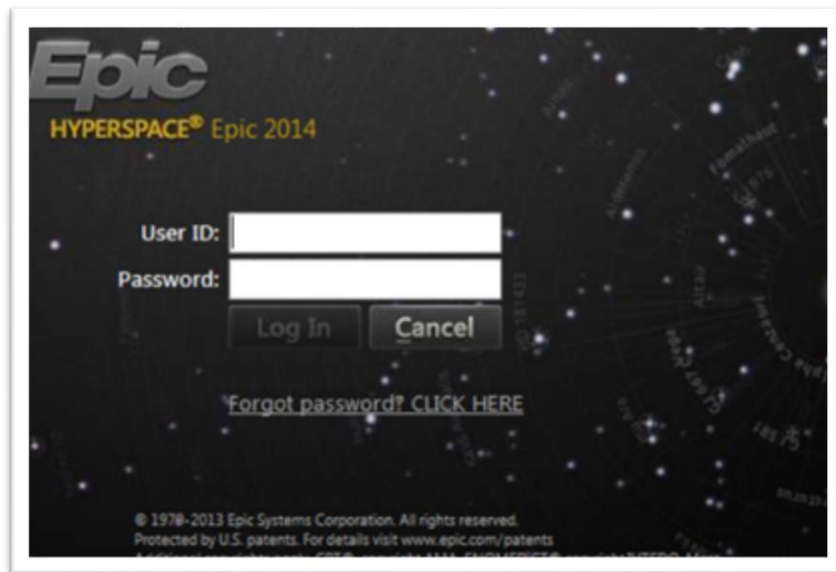
1. Improves the quality of life of homebound patients
2. Improves the quality of life of caregivers
3. Decreases health care costs: enables patients to remain at home, avoid expensive ED visits, hospitals & nursing homes

# The Modern-Day House Call

- Home-based medical (primary) care
- Team-based care typically MD or NP led
- “Home-limited” vs. “home-bound” patients
- High-technology enabled

# Smart Phone Technology

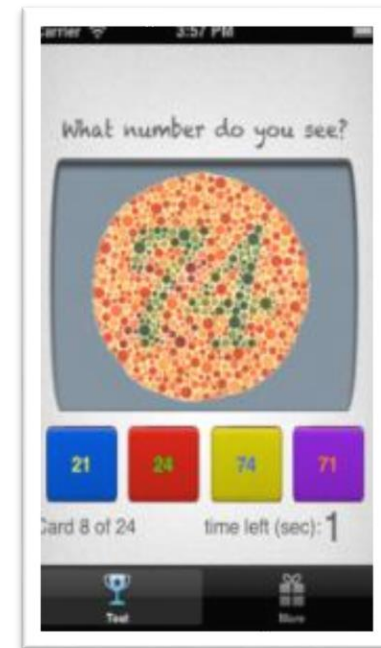
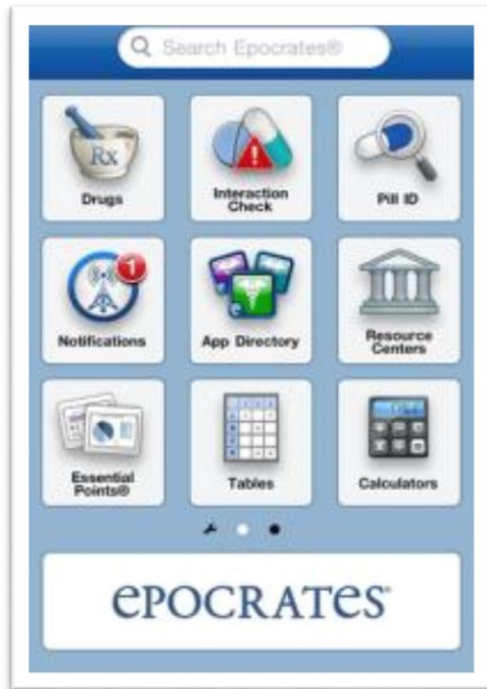
- Electronic Medical Records
- Search engines, Google and others
- Photos/Scans
- Accessibility to patient, staff, other providers





# Smart Phone Technology

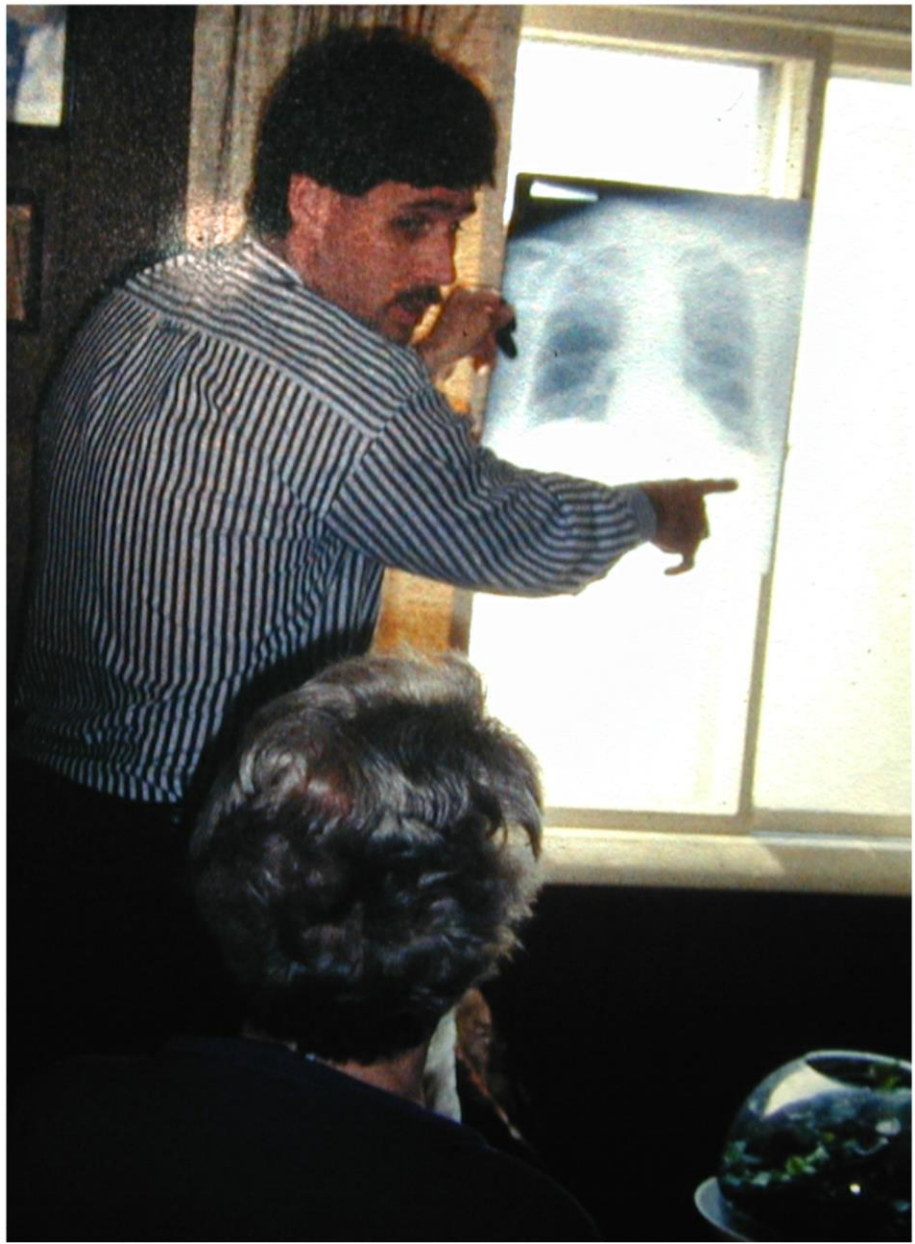
- Mobile apps







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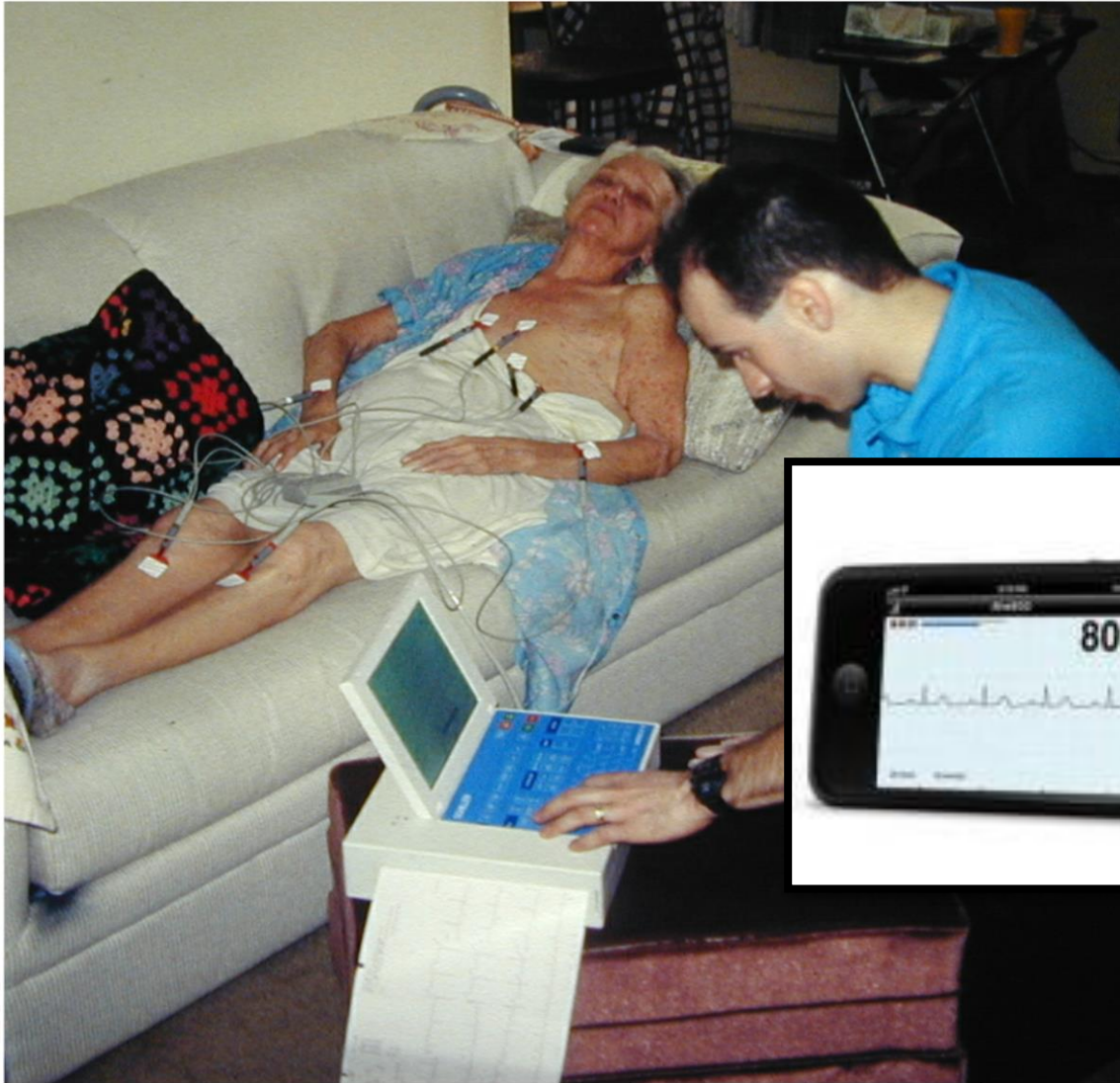
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- *Is Pocket Mobile Echocardiography the Next-Generation Stethoscope?*

*A Cross-sectional Comparison of Rapidly Acquired Images With Standard Trans-thoracic Echocardiography.*

Ann Intern Med  
7/2011;155:33-38



Liability not a barrier

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# Medicare House Call Codes/Payments

<b>1997 New</b>	<b>1997</b>	<b>1998 New (Min)</b>	<b>1998</b>	<b>2016</b>	<b>IHFS<sup>2</sup></b>
99341	\$62.51	99341 (20)	\$57.53	\$55.50	\$27.95
99342	\$77.71	99342 (30)	\$77.58	\$79.84	\$37.40
99343	\$101.62	99343 (45)	\$110.19	\$131.04	\$54.90
		<b>99344<sup>1</sup></b> (60)	\$140.50	\$183.68	\$70.55
		<b>99345<sup>1</sup></b> (75)	\$166.24	\$222.70	\$85.55
<b>1997 Estab.</b>	<b>1997</b>	<b>1998 Est. (Min)</b>	<b>1998</b>	<b>2016</b>	<b>IHFS<sup>2</sup></b>
99351	\$46.66	99347 (15)	\$45.43	\$55.85	\$24.25
99352	\$59.37	99348 (25)	\$65.54	\$84.86	\$31.30
99353	\$74.80	99349 (40)	\$94.92	\$129.25	\$47.50
		<b>99350<sup>1</sup></b> (60)	\$136.00	\$179.38	\$68.85

1 Additional 1998 higher level Medicare house call codes

2 IHFS: Illinois Healthcare and Family Services Medicaid Rates

Shaded payments are most frequently used house call codes

Note: Medicare Payments vary by locality. These are for Locality 15.

Place of Service Code for Home = 12

# Domiciliary (Assisted Living) CPT Codes/ Payments

<b>2005 New</b>	<b>2005</b>	<b>2006 New (Min)</b>	<b>2006</b>	<b>2016</b>	<b>IHFS<sup>2</sup></b>
99321	\$43.19	99324 (20)	\$62.80	\$55.85	\$18.60
99322	\$60.92	99325 (30)	\$91.76	\$81.28	\$26.70
99323	<b>\$75.00</b>	99326 (45)	\$132.71	\$140.35	\$34.85
		<b>99327<sup>1</sup></b> (60)	<b>\$174.47</b>	<b>\$187.26</b>	<b>\$42.95</b>
		<b>99328<sup>1</sup></b> (75)	\$215.85	\$218.76	\$51.05
<b>2005 Estab.</b>	<b>2005</b>	<b>2006 Estab. (Min)</b>	<b>2006</b>	<b>2016</b>	<b>IHFS<sup>2</sup></b>
99331	\$38.14	99334 (20)	\$48.73	\$60.87	\$16.00
99332	<b>\$48.30</b>	99335 (30)	<b>\$76.88</b>	<b>\$95.96</b>	<b>\$21.00</b>
99333	\$59.10	99336 (40)	<b>\$118.22</b>	<b>\$135.70</b>	<b>\$26.05</b>
		<b>99337<sup>1</sup></b> (60)	\$173.63	\$194.42	\$31.05

1 Additional 2006 higher level Medicare house call codes

2 IHFS: Illinois Healthcare and Family Services Medicaid Rates

Shaded payments are most frequently used house call codes

Note: Medicare Payments vary by locality. These are for Locality 15.

Place of service code = 13



# Home-Based Medical Care's Perfect Storm

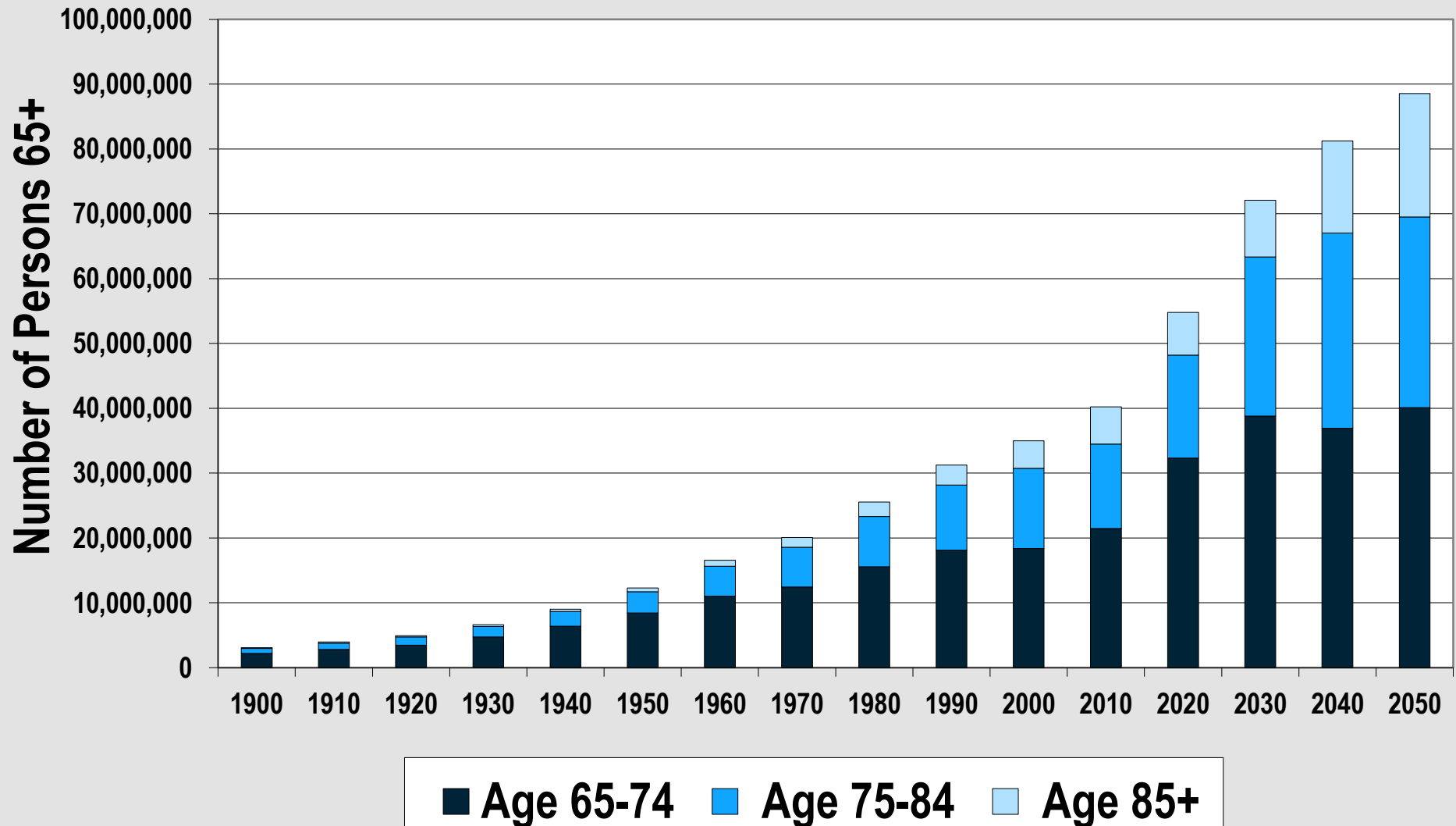
1. Demographics
2. The Medicare and Medicaid Fiscal Crisis
3. Health Care Reform
4. Federal Rebalancing Legislation
5. Evidence: Clear case for the value of Home-Based Medical Care
6. Quality End-of-Life Care

*Full Article: [hccinstitute.org](http://hccinstitute.org)*

# 1. Demographics: Aging Society

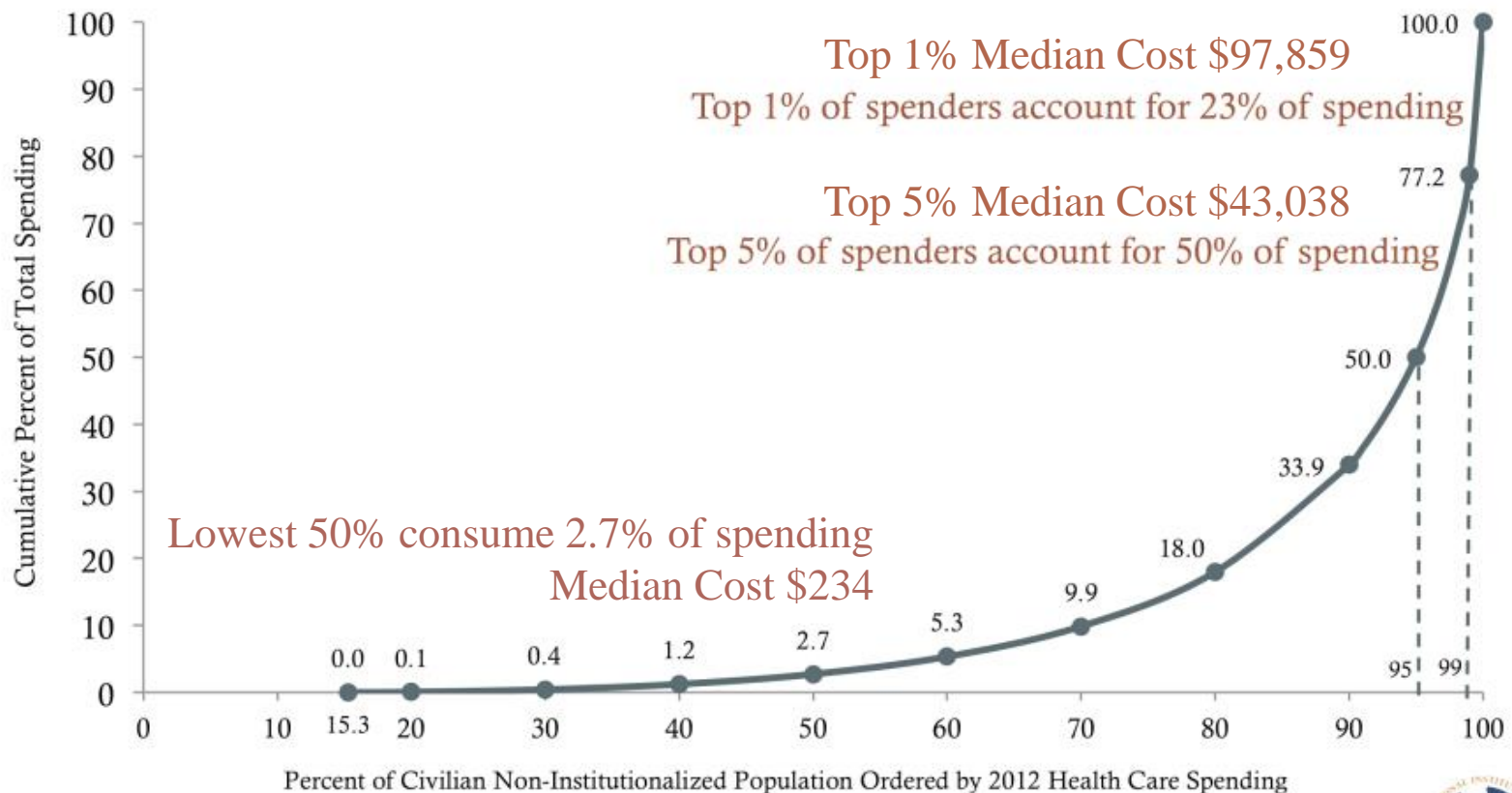
## Population 65+ by Age: 1900-2050

Source: U.S. Bureau of the Census



## 2. The Medicare & Medicaid Fiscal Crisis

### Health Spending Is Very Highly Concentrated Among the Highest Spenders



### 3. Health Care Reform: Affordable Care Act

- Readmission Penalties
- Shift from fee-for-service “volume based” payments to “value based” payments through Medicare Shared Savings Program (several Accountable Care Organization models) and the Bundled Payments for Care Improvement Initiative
- Independence at Home Medicare demonstration program

## Health Care Reform: ↓ Readmissions / Value-Based Care

- 5/14/09 – 2/18/11
- 1 year, 9 months (645 days)
- 44 Emergency Department Visits (avg 16 days between visits)
- 27 Hospitalizations—over half required ICU days (avg 25 days between stays)
  
- HCP First Visit 3/2/11 (365 Days)
- Expected: 25 ED Visits, 15 Hospitalizations
  
- **Actual: 1 ED visit + 1 Hospitalization (May 2011)**

**Estimated Savings \$176,000**  
**(\$1,500/ED visit; \$8,000/hospitalization)**

# Independence at Home Demonstration

1. Focuses on the highest cost Medicare beneficiaries (10% of Medicare beneficiaries with  $\geq 5$  chronic conditions account for 2/3rds of Medicare spending)
  1.  $\geq 2$  chronic conditions
  2. Emergent hospitalization in past year + post acute care services
  3. Functional dependence ( $\geq 2$  ADL deficiencies) and frailty
2. Holds IAHH provider organizations strictly accountable for three performance standards
  1. Minimum savings of 5%
  2. Good outcomes commensurate with the beneficiary's condition
  3. Patient/caregiver satisfaction

# Independence at Home Demonstration

- Savings beyond 5% are split 80% Practice / 20% Medicare
- IAH Results
  - First Year (ending 5/13, released 6/15): \$25 million savings; \$3,070 savings/beneficiary
  - Second Year (ending 5/14, released 8/16): \$10 million savings; \$1,010 savings/beneficiary
  - Improved quality
    - ↓ hospital readmissions and emergency department use
    - ↑ 48 hour hospital f/u; Medication reconciliation; Advance Directives



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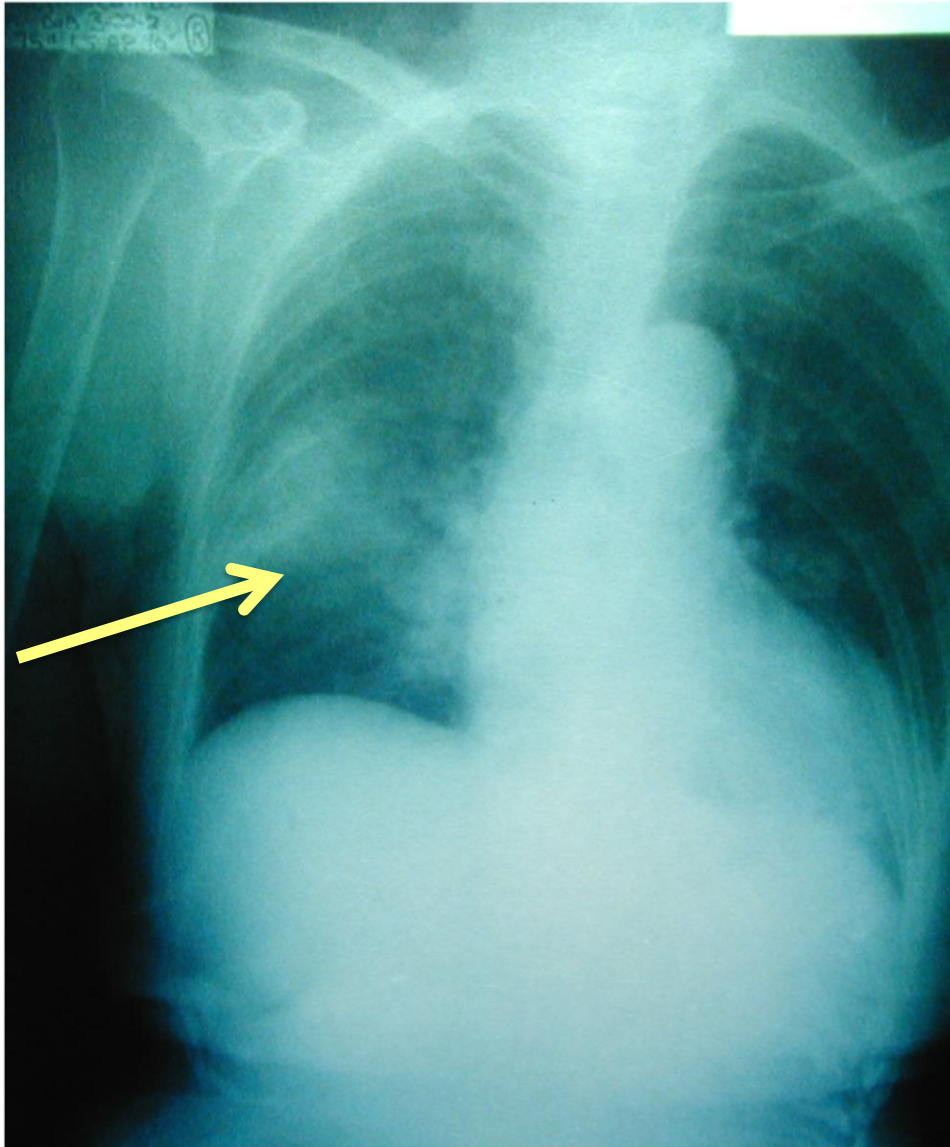




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# IAH legislation introduce July 6, 2016 S. 3130

## IN THE SENATE OF THE UNITED STATES

Mr. MARKEY (for himself, Mr. CORNYN, Mr. BENNET, and Mr. PORTMAN) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

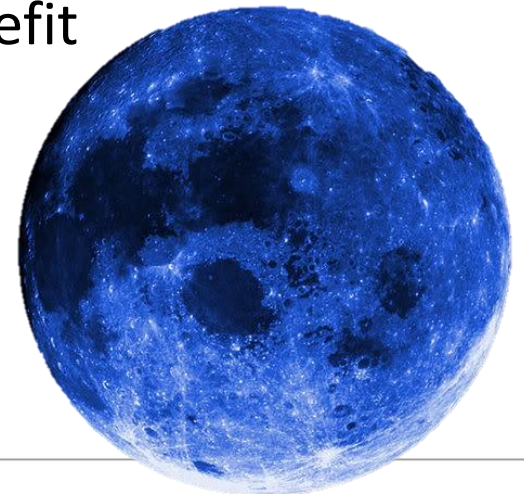
## **A BILL**

To amend title XVIII of the Social Security Act to provide for a permanent Independence at home medical practice program under the Medicare program.

1 *Be it enacted by the Senate and House of Representa-*  
2 *tives of the United States of America in Congress assembled,*

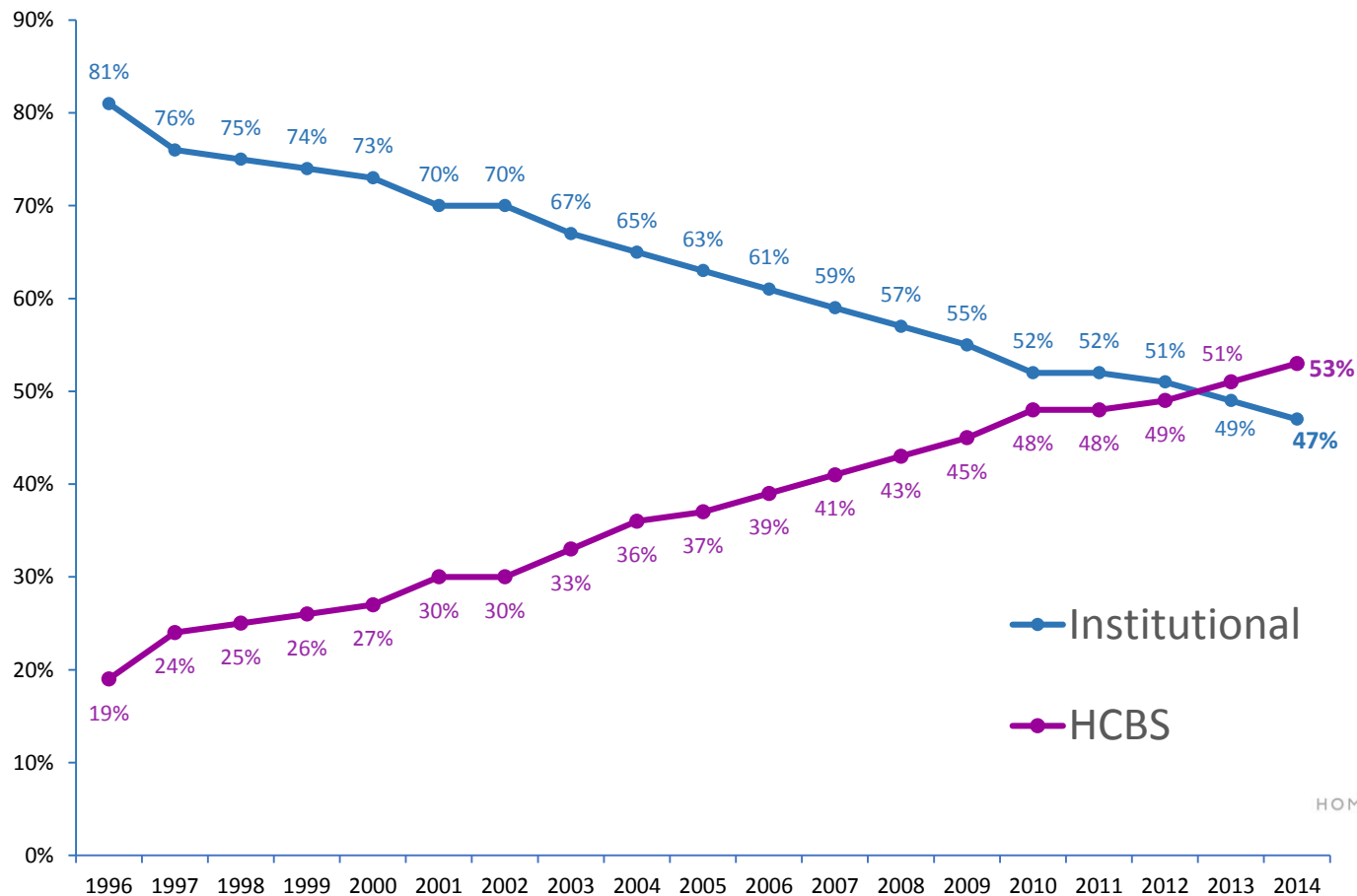
# New Medicare Benefits

- 1972 End-Stage Renal Disease (Dialysis)
- 1986 the Medicare Hospice benefit (temporary 1982)
- 1997 PACE (Program of All-Inclusive Care for the Elderly)
- 2006 Medicare Part D prescription drug benefit
- 2016 or 2017 Independence at Home??



## 4. Federal Rebalancing Legislation

- Federal Rebalancing Legislation including Money Follow the Person (MFP) and the Balancing Incentive Program (BIP)





## 5. Evidence for the value of HBMC

### Costs of Care Before vs During HBPC for 2002

(per patient per year) \*includes HBPC cost

	Before HBPC	During HBPC	Change
Total Cost of VA Care			
Hospital			
Nursing home			
Outpatient			
All home care	\$2488	\$13,588*	<b>\$11,100 (+ 460%)</b>

# Costs of Care Before vs During HBPC for 2002

(per patient per year) \*includes HBPC cost

<b>N=11,334</b> <b>\$103,048,728</b>	<b>Before HBPC</b>	<b>During HBPC</b>	<b>Change</b>
Total Cost of VA Care	\$38,228	\$29,136*	<b>-\$9,092 (- 24%)</b> <b>P &lt; 0.0001</b>
Hospital	\$18,868	\$7026	<b>\$11,842 (- 63%)</b>
Nursing home	\$10,382	\$1382	<b>\$9000 (- 87%)</b>
Outpatient	\$6490	\$7140	<b>\$650 (+ 10%)</b>
All home care	\$2488	\$13,588*	<b>\$11,100 (+ 460%)</b>

# Evidence Supports Better Care at Lower Costs

- 2006 9,425 newly enrolled HBPC comparing VA + Medicare costs
  - **6,951 dually enrolled MC + VA: ↓ costs 13.4%**
  - **↓ VA costs 16.7%; ↓ Medicare costs 10.8%;**
  - **↓ Hospitalizations 25.5%**
  - **↑ Patient and caregiver satisfaction (highest in VA)**
- Washington DC 722 HBPC cases vs. 2,161 controls over two years
  - **17% lower Medicare Costs (\$8,477 savings per beneficiary over 2 years; \$6.1 million total savings)**
  - **↓ Hospitalizations 9% ; ↓ ED 10% ; ↓ SNF 27%**
  - **↑ Primary care visits; ↑ Home health; ↑ Hospice**

*Better Access, Quality and Cost for Clinically Complex Veterans with Home-Based Primary Care; Edes, et al JAGS 10/14; Effects of Home-Based Primary Care on Medicare Costs in High-Risk Elders; DeJonge, et al JAGS 10/14*

## 6. End-of-Life Care

- 25.1% of the \$556 billion Medicare dollars goes to care in last year of life  
Riley, Lubitz; *Health Services Research* 4/2010
- From 2000 to 2009 deaths increased at home 30.7% to 33.5% and decreased at hospitals from 32.6% to 24.6%, use of hospice increased from 21.6% to 42.2%
- **BUT:**
  - ICU stays in last month increased from 24.3% to 29.2%
  - Hospitalizations in last 3 months of life increased from 62.8% in 2005 to 69.3% in 2009
  - Short hospice stays (<3 days) increased 22.2% to 28.4% (40.3% were preceded by hospitalization with ICU stay)

Teno; *Change in End of Life Care for Medicare Beneficiaries*  
JAMA 2/2013

# End-of-Life Care

## HomeCare Physicians Patient Deaths 2003-2015

	Number	Percentage
Total	2,477	100%
<b>Home</b>	<b>1,847</b>	<b>75%</b>
Hospital	473	19%
Nursing Home	120	5%
Unknown	37	1%

# HomeCare Physicians and End-of-Life Care

- 2015: 230 deaths
  - 80% (184) died at home (compared to 33.5% nationally)
  - 76% (175) where on hospice (compared to 42% nationally)
  - Average length of stay 1.9 years (the highest cost years)
  - Median length of stay 1.2 years
- Decreased hospital mortality
  - 2015: 230 deaths
    - 184 (80% at home); Expected = 33.5% = 77; **Thus 107 additional deaths at home than expected** decreasing hospital mortality rate
    - Central DuPage Hospital had 239 deaths in 2015









# Home Centered Care Institute



Mission: National expansion of house call programs / workforce



Mission: To expand home-based medical care through education and training in collaboration with national experts

## Research Partners



# Chicago Network & Learning Collaborative

- Coalition of health systems, academic programs, house call programs, social service agencies and providers
- Dedicated to ensuring the most vulnerable area residents receive excellent care through a sustainable delivery model
- Quarterly events
- Next Meeting: September 29, 2016 | 10—2 pm | RUMC
  - West Health Institute: Research Project and Initial Findings
  - Bridge Program: Improving Linkage
  - Michael Gelder: The State of HCBS in Illinois
  - To register, visit HCCI website

# The House Call Project

- Growing the Successful House Call Program
  - November 3-4, 2016 | HCCI, Schaumburg, IL
  - Key Content Areas
    - Clinical Care/Operations
    - Practice Management
  - 24-Month continuing support
    - Webinars
    - Online Modules
    - Virtual office hours



## Our Next Presenters

- Javette Orgain, MD & John Hickner, MD
- Challenges and Rewards of House Call Program Development