

A doctor in a white coat is looking at a large computer monitor. The doctor is wearing a stethoscope and has their hands near the monitor. The monitor displays a medical image, possibly an X-ray or scan. The background is a light, neutral color.

Telemedicine: Smarter Health through Telehealth

Senator Bill Frist, M.D.

National Institute for Health Care Management
(NIHCM) Foundation Webinar

**The Virtual Visit:
How Telehealth is Reshaping Care Delivery**

June 12, 2015

Smarter Health through Telehealth



1. Problems with Current Healthcare Landscape



2. A Solution: Telemedicine



3. A Case Study: Teladoc



1. **Problems** with **Current** **Healthcare** **Landscape**

The Problem: Lack of Access

80%

Of adults discharged from ER were there due to lack of access to other provider.

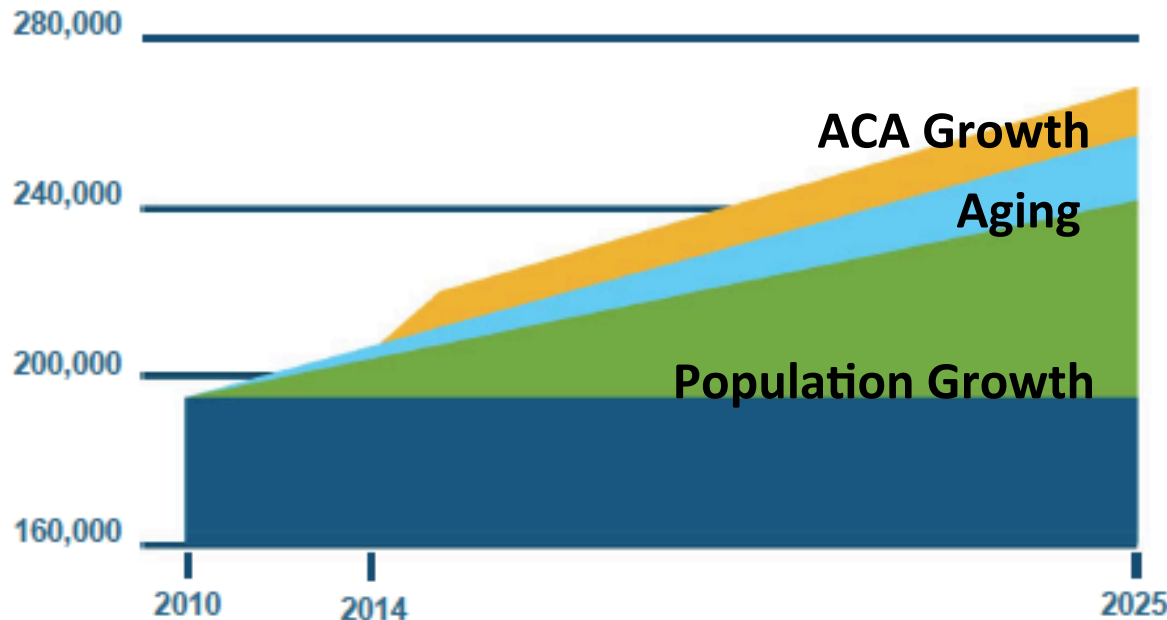
What if they had another option...

“Emergency Room Use Among Adults Aged 18-64: Early Release of Estimates From the National Health Interview Survey”, Renee M. Gindi, Ph.D.; Robin A. Cohen, Ph.D. and Whitney K. Kirzinger, M.P.H., Division of Health Interview Statistics, National Center for Health Statistics, January-June 2011

The Problem: Physician Shortage

Standard population growth, the higher percentage of the population that is > 65 years old and the increased demand for PCPs from the newly insured together project a 25% increased need for physicians over the next 10 years.

YEARLY PCP VISITS



ADDITIONAL PCPs NEEDED



52,000

Additional PCPs
needed by 2025

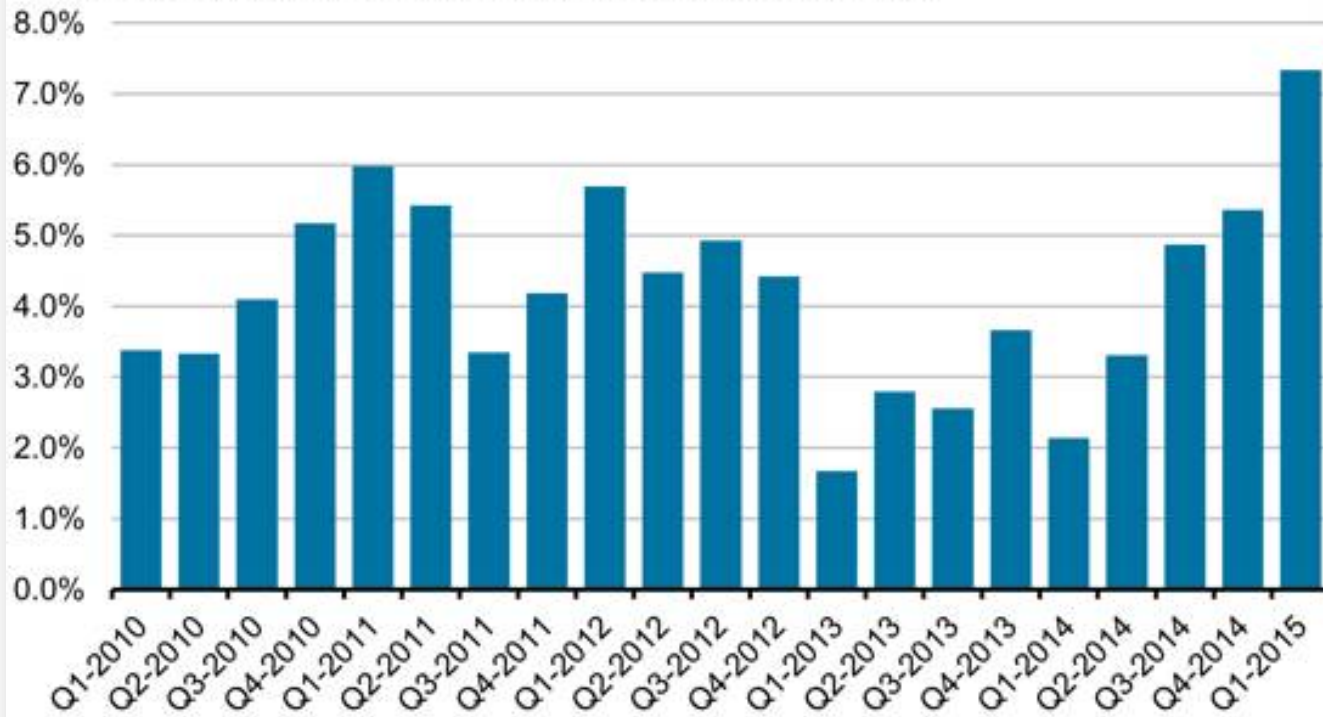
"Projecting US Primary Care Physician Workforce Needs: 2010-2025"; Stephen M. Petterson, PhD, Winston R. Liaw, MD, MPH, Robert L. Phillips Jr, MD, MSPH, David L. Rabin, MD, MPH, David S. Meyers and Andrew W. Bazemore, MD, MPH; November/December 2012

The Problem: The Cost of Care

We spend over \$3 trillion annually on healthcare, which makes up about 20% of the U.S. GDP. Now that the economy is recovering, consumers are beginning to use more physician and outpatient services again – meaning our spending is once again growing.

Picking Up Speed

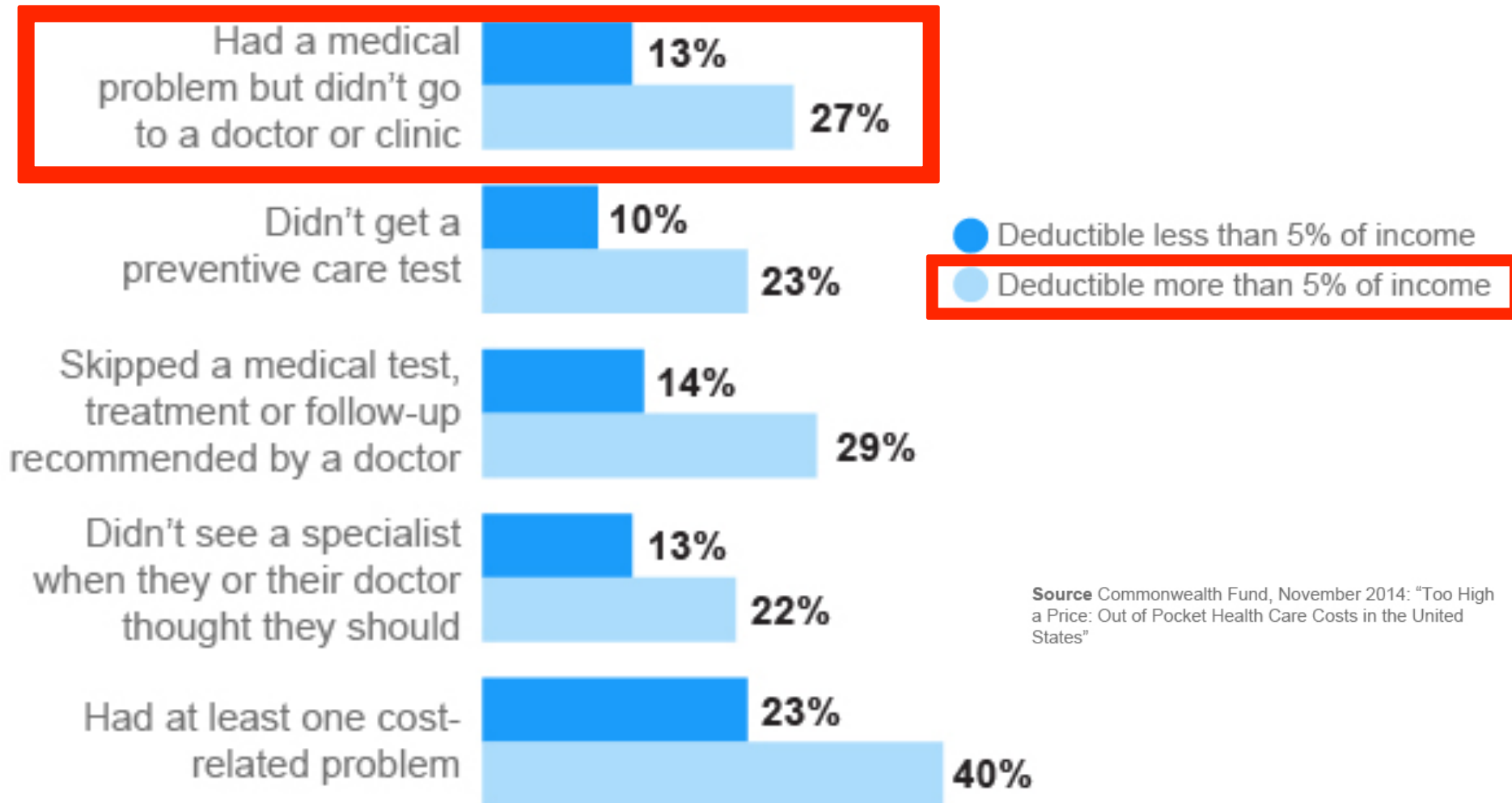
Year-over-year growth in health-services spending by quarter.



Source: Kaiser Family Foundation analysis of Quarterly Services Survey | WSJ.com

The Problem: Out of Pocket Costs

More than 1 in 4 Adults with Higher Deductibles Skip Care





2. A Solution: **Telemedicine**

A Solution: Telemedicine

Telemedicine revolutionizes how consumers use the healthcare system by delivering remote access to affordable, high quality care – when, where, and how each patient chooses.



Timely access



Lower cost



Quality care

What is Telemedicine?

- Telemedicine is NOT the practice of medicine.
- Telemedicine is a tool that allows physicians to practice medicine for the benefit of patients who are located remotely.
- This can be done via
 - Phone and pictures
 - Video chat
- It is up to the individual physician to determine whether the **standard of care** can be met for the diagnosis and treatment of a given medical condition remotely.
- There is robust quality measures in medical literature supporting remote telehealth care.



Telemedicine Market Potential

Lack of Affordable Access Creates Demand:

- **62mm Americans** without a PCP
- **~80% of ER visits** when patient not admitted due to lack of access
- **33% of all office visits** are addressable with telehealth (417mm of 1.25bn total per year)

Employers are Increasingly Relying on Telemedicine:

- **71% of employers** with more than 1,000 employees to offer telehealth by 2017
- Towers, Watson Study estimates telehealth can save employers **\$6bn per year**

Telehealth Market Seeing Record Growth:

- Various market research organizations peg the telehealth market growth rate between **18-30% per year**.
- Telehealth market generated annual revenue of **\$9.6 billion in 2013**, and is expected to grow to **\$38.5 billion in revenue by 2018**

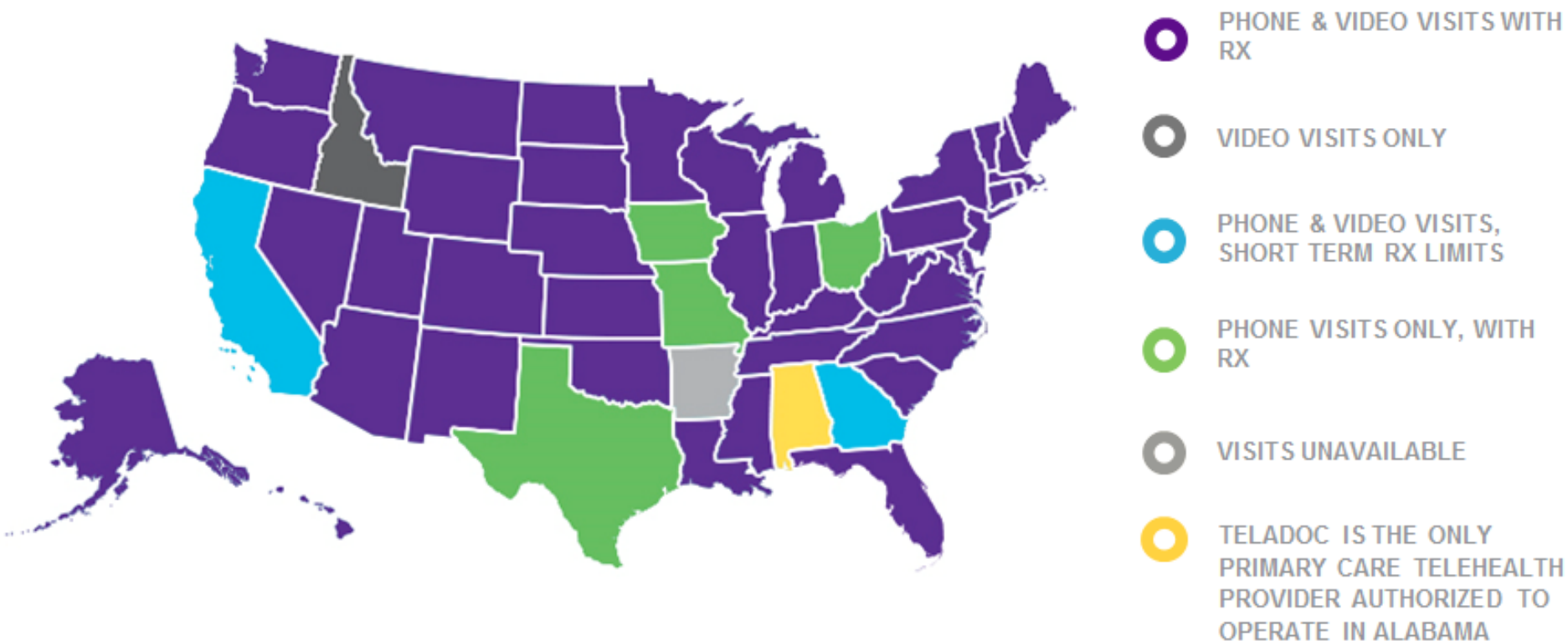
Increased Consumer Interest

Attitudes toward telehealth technologies in the U.S. have also undergone a significant shift in recent years.

According to a recent survey by Cisco:

- 76% of patients **prioritize access** to health care services **over the need for human interactions** with health care providers
- 70% of patients are **comfortable communicating with their health care providers via text, email or videos**, in lieu of seeing them in person

Telemedicine is a limited tool in some states due to differing laws



Specific State Regulations

Limiting Telemedicine

In-Person Visit: Requiring an in-person exam and visit before any remote follow up is allowed

- This negates the ability to offer a telemedicine solution.
- The Federal State Medical Board and the AMA do not agree an in-person visit is required.
- There are no data demonstrating improved patient outcomes from a telemedicine encounter following an in-person visit versus an encounter without one.


Licensure laws for NPs and MDs: Can only practice medicine in the state where licensed



3. A Case Study: Teladoc

Disclaimer

The following information is solely for illustrative purposes, and in no way constitutes an offer to sell or the solicitation of an offer to buy securities in any jurisdiction.



The Process

- Step 1 – Complete medical history
- Step 2 – Request consult
- Step 3 – Talk with a physician
- Step 4 – Resolve the issue
- Step 5 – Continuity of care
- Step 6 – Settle up

The screenshot displays the Teladoc patient portal. At the top left is the Teladoc logo. The top right shows a user greeting: "Welcome, Jonathan David Potter" and navigation links for HOME, LOGOUT, FAQ, and CONTACT US. Below the logo is a navigation bar with tabs for Overview, My Medical History, My Family, My Account Information, and My Message Center. A prominent blue button labeled "Request a Consult" is on the right. The main content area features a large banner with a doctor's photo and the text "I can see you now". Below the banner are three quick links: "What I can do for you", "How to make the most of your consult", and "Antibiotic Awareness". To the right of the banner is a "Complete Your Profile!" section with a "Congratulations!" message stating "Your profile is 100% complete." and a "Now, About Your Family..." section with an "UPDATE FAMILY MEMBERS" link. Below the banner is a "My Message Center" section showing "0 New Message(s) / Response(s)" and "You have no messages". Below that is a "My Consultation History" section showing "No Consultation History". At the bottom is a "Have Questions?" section with links to "Do I Talk To 'Real Doctors'?", "What Are Some Of The Common Conditions Teladoc Treats?", and "Can Teladoc Handle My Emergency Situations?". A "Quick Links" sidebar on the right contains links for "Request a Consult", "View Invoices", and "Print ID Card".

Most Frequent Uses

Top 10 Diagnoses



- Sinus Problems
- Urinary Tract Infection
- Pink Eye
- Bronchitis
- Upper Respiratory Infection
- Nasal Congestion
- Allergies
- Flu
- Cough
- Ear Infection

Prescription Management



- Electronic prescribing or by phone
- Frequency of prescribing lower than same diagnoses when comparing best provider practices
- Patient education and physician reminders for appropriate use
- No prescribing of DEA-controlled substances, medication for psychiatric illness, or lifestyle drugs (i.e. erectile dysfunction, diet).
- Generic drugs are automatically recommended

February 2014 RAND Study published in *Health Affairs*



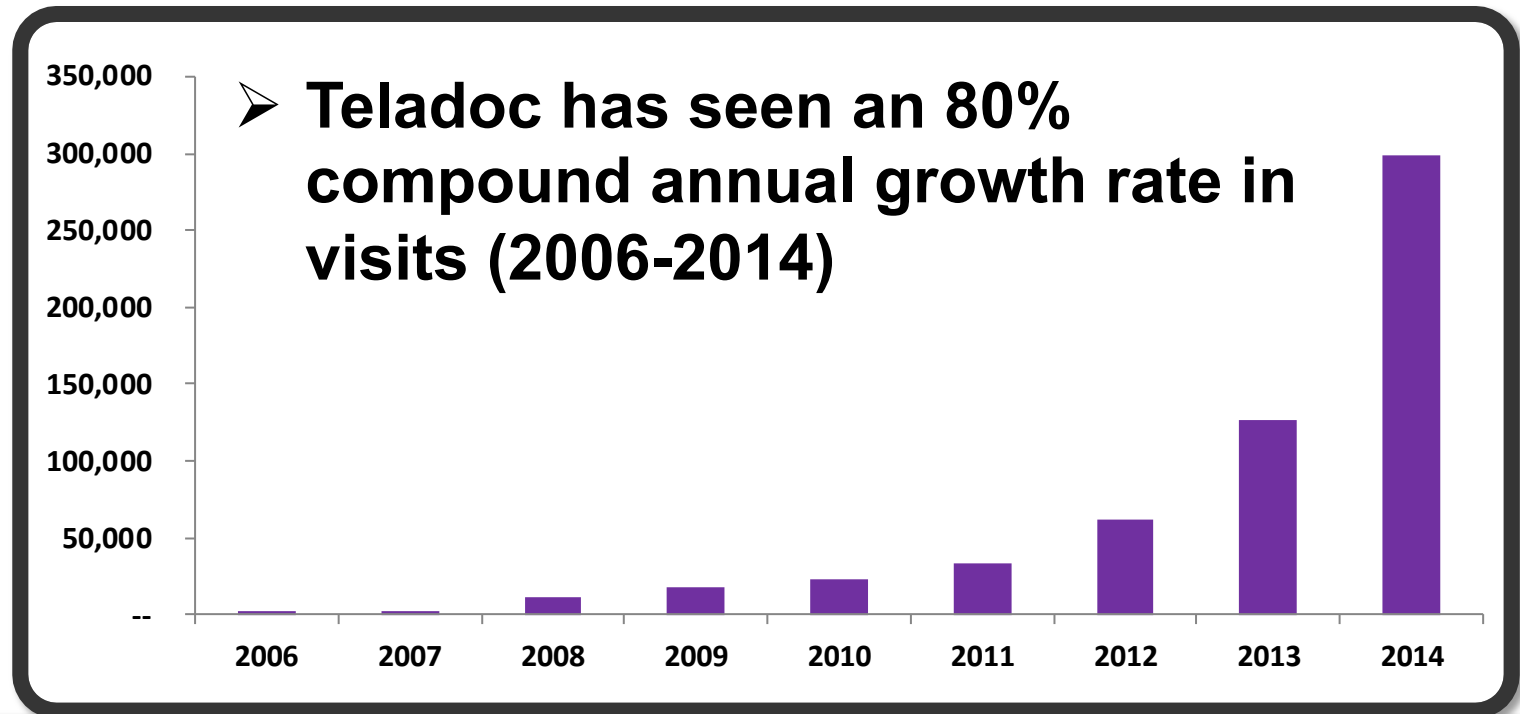
34% of Teladoc visits occurred on **weekends and holidays**, vs. **8%** for office visits and **36%** for ED visits.

6% of Teladoc visits resulted in a **follow-up visit** for the same or similar condition, in contrast to **13%** of office and **20%** of ED visits.

21% of Teladoc visits were made by patients who had **not accessed health care** in the previous year.

25% of patients who did not have a telehealth service benefit **actually went to the emergency room** as their next best alternative for care.

Teladoc Growth in Members and Visits



Why the Growth?



Consumers are demanding more convenient care

Employers & plans looking for new ways to reduce costs

Telehealth offerings are more sophisticated

User satisfaction with telehealth is very high

The Take Home:

The **patient-consumer has spoken**, and they want to access primary care on their terms, not those of the healthcare industry.

Telemedicine offers this opportunity with **maximal convenience to the consumer**, with **equal quality** and a **much reduced cost**.

This is a true cost savings to employers and health plans: **In 2015, 52% of large employers plan to offer telemedicine in their health plans.**

Telemedicine **transforms** health delivery.