Challenging Our Assumptions about Telehealth

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Begin challenging your own assumptions. Your assumptions are your windows on the world. Scrub them off every once in while, or the light won't come in.

Alan Alda

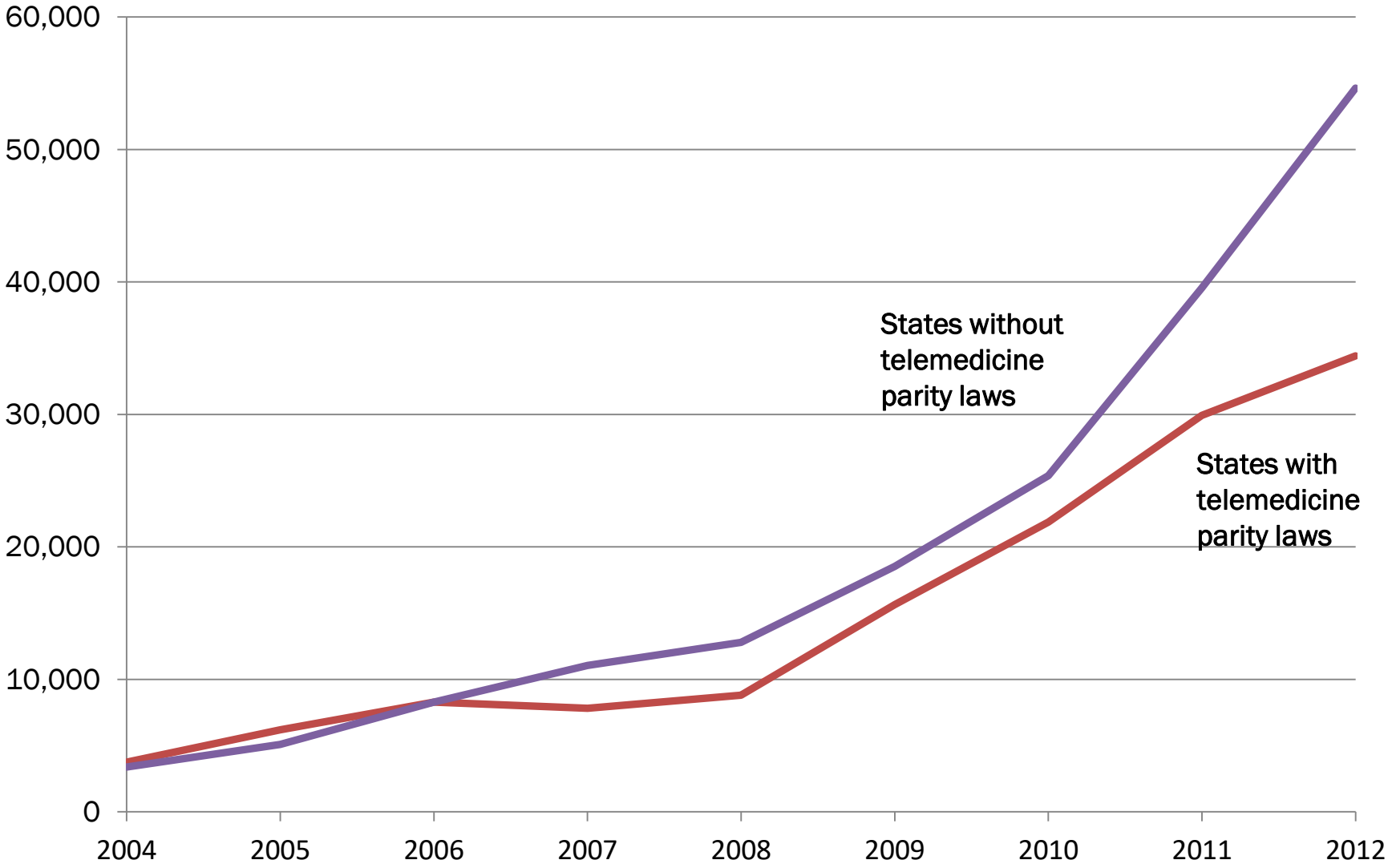
Assumption

The Key is Telemedicine Parity Laws

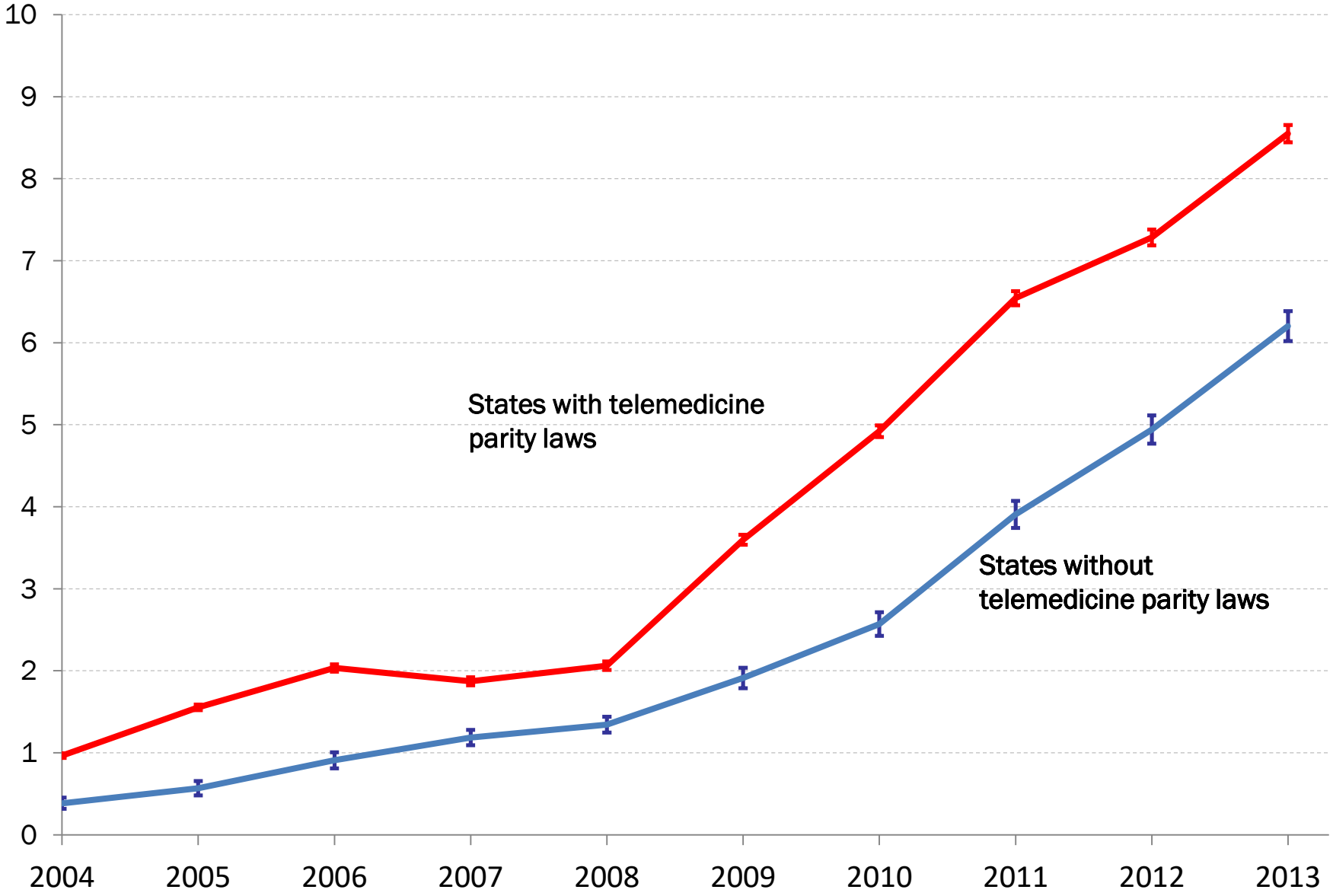
"To ensure greater adoption of this technology, with patient health and safety at the forefront, Congress must keep pace and update the outdated policies governing this new health care delivery system."

- Peter Welch (D-VT)

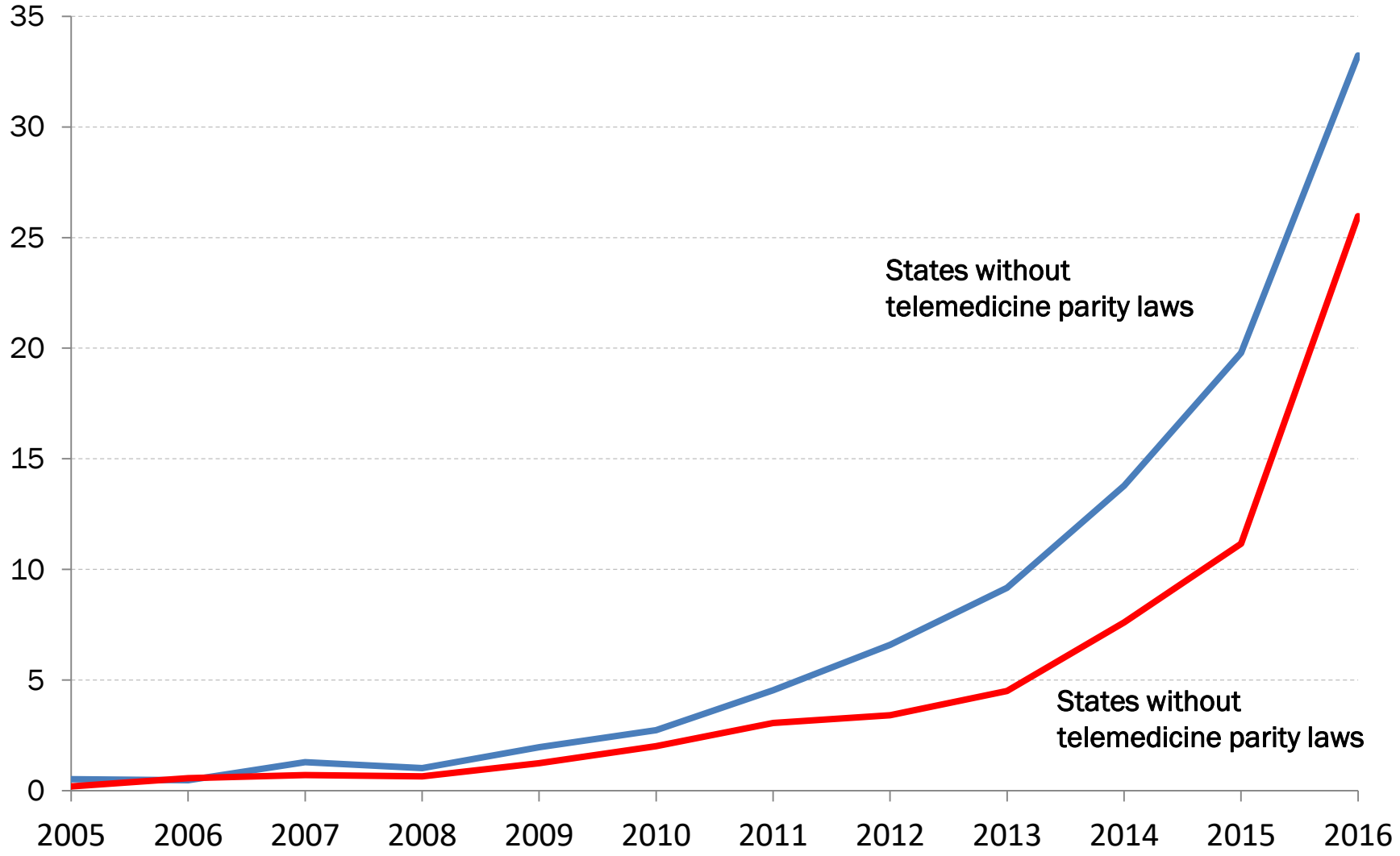
Telemedicine Visits per Year in Medicare



Telemedicine Visits per 1000 Rural Medicare Beneficiaries



Telemedicine Visits per 1000 Enrollees in a Large National Insurer



Why?

- Health systems do not yet see a sufficient market
- “Necessary but not sufficient”
- Lag for these laws to have an effect
- Medicare is the “big gorilla” that drives change

Assumption

Telemedicine will decrease disparities in care

Those more likely to use telemedicine will be those in rural areas, poorer, underrepresented minorities, lack access, sicker

RESEARCH LETTER

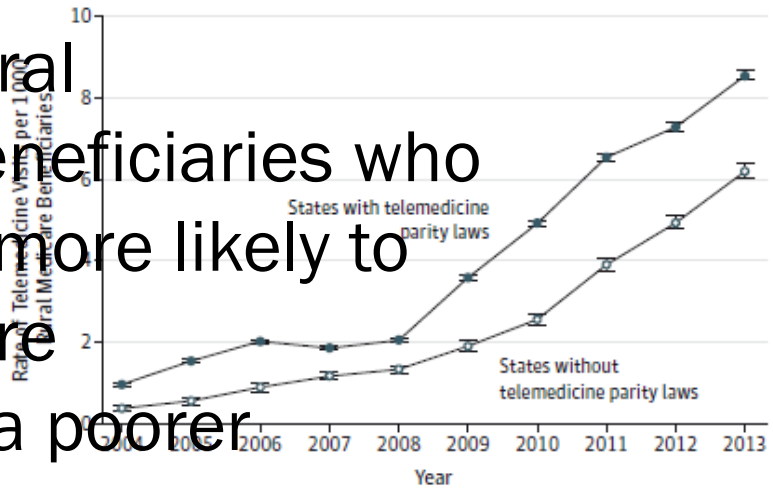
Utilization of Telemedicine Among Rural Medicare Beneficiaries

Telemedicine may increase access and improve quality, particularly in rural areas. Because inadequate reimbursement may limit telemedicine use, 29 states have passed telemedicine parity laws mandating that commercial insurers reimburse telemedicine visits.[1,2] In contrast, Medicare limits telemedicine reimbursement to select live video encounters with the patient at clinic or facility locations and a Better Access legislation has been proposed to expand Medicare telemedicine coverage. To inform the debate regarding telemedicine expansion, we describe trends in telemedicine utilization in Medicare from 2004-2013.

Methods | Using claims from a 20% random sample of traditional Medicare beneficiaries, we defined telemedicine visits as all encounters with a GT (via interactive audio and video telecommunications system) or GQ (via asynchronous telecommunications system) modifier on the Current Procedural Terminology code or a telemedicine-specific code (G0425-7, G0406-8, G0459) to a rural beneficiary (29% of all beneficiaries) using Medicare's definition of rural.[3]

We categorized the visit reason using the first diagnosis code and the location (eg, facility or outpatient clinic). We characterized visits by beneficiary Medicare eligibility category (age, disability, end-stage renal disease), number of chronic illnesses, and the median family income of the ben-

Figure. Rates of Telemedicine Visits per 1000 Rural Medicare Beneficiaries in States With and Without Telemedicine Parity Laws in 2011, 2004-2013[a]



Error bars indicate 95% CIs.

[a] The 12 states with a telemedicine parity law enacted by 2011 were included in the parity law cohort regardless of when the law was enacted. The states are Louisiana (enacted 1995), California (1996), Oklahoma (1997), Texas (1997), Hawaii (1999), Kentucky (2000), Colorado (2001), Georgia (2006), Maine (2009), New Hampshire (2009), Oregon (2009), and Virginia (2010).[5]

Rural beneficiaries who received a 2013 telemedicine visit were more likely to be younger than 65 years, have entered Medicare due to disability, have more comorbidities, and live in a poorer community compared with those who did not receive a telemedicine visit (Table).

Compared to other rural beneficiaries, rural beneficiaries who receive telemedicine more likely to be disabled, have more comorbidities, live in a poorer community

Research

Original Investigation

Effect of Teledermatology on Access to Dermatology Care Among Medicaid Enrollees

Compared to other enrollees, rural beneficiaries who receive teledermatology younger, healthier, and received care for less serious dermatologic conditions

Lori Uscher-Pines, PhD; Rosalie Malsberger, MS; Lane Burgette, PhD; Andrew Mulcahy, PhD; Ateev Mehrotra, MD

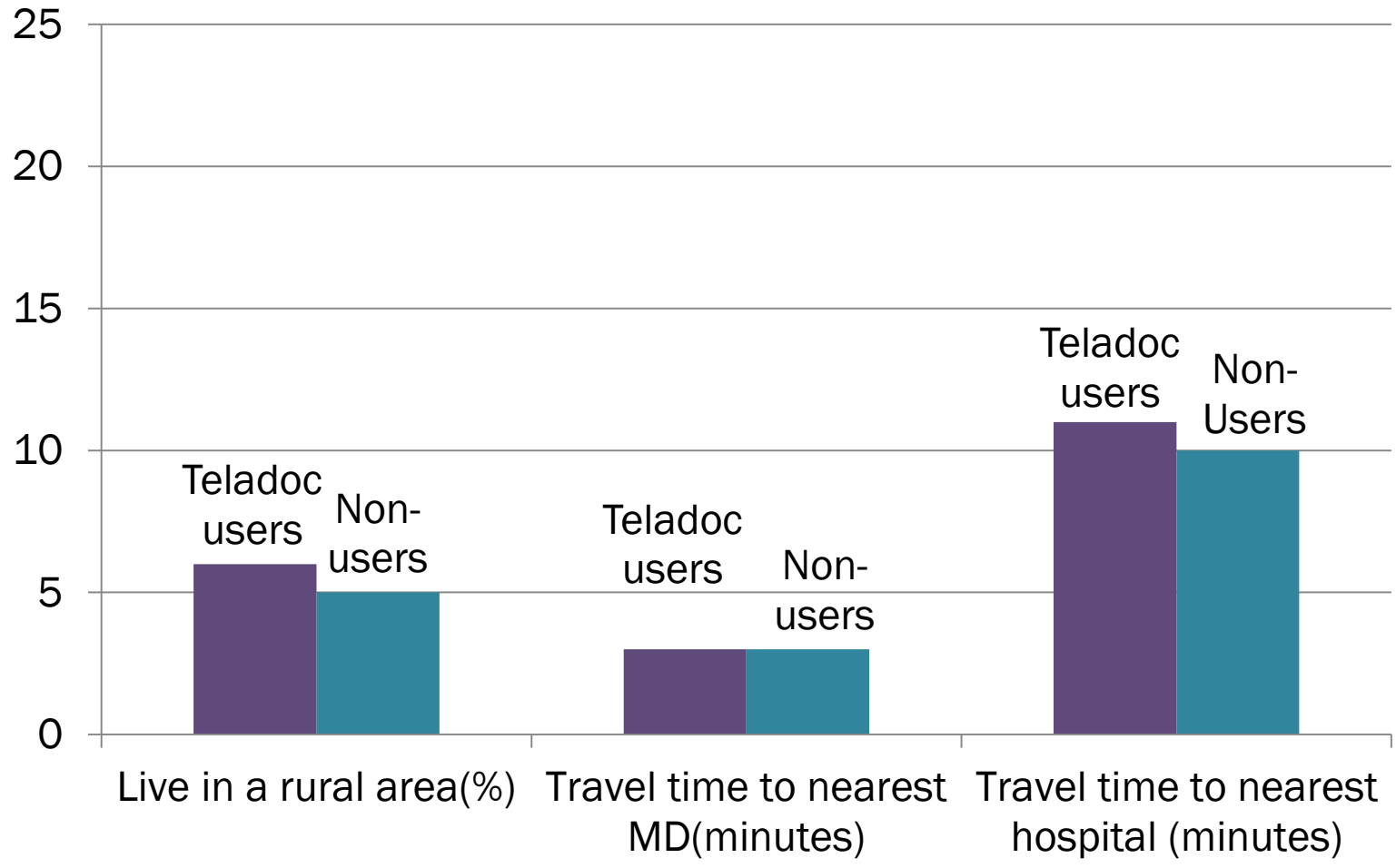
IMPORTANCE Access to specialists such as dermatologists is often limited for Medicaid enrollees. Teledermatology has been promoted as a potential solution; however, its effect on access to care at the population level has rarely been assessed.

OBJECTIVES To evaluate the effect of teledermatology on the number of Medicaid enrollees who received dermatology care and to describe which patients were most likely to be referred to teledermatology.

DESIGN, SETTING, AND PARTICIPANTS Claims data from a large California Medicaid managed care plan that began offering teledermatology as a covered service in April 2012 were analyzed. The plan enrolled 282 801 patients in California's Central Valley, including 108 480

Supplemental content at jamadermatology.com

Users of Direct-to-Consumer Telemedicine



Telemedicine & E-health, 2015

Disparities in Enrollment and Use of an Electronic Patient Portal

Mita Sanghavi Goel, MD MPH[1], Tiffany L. Brown, MPH[1], Adam Williams, BS[1], Romana Hasnain-Wynia, PhD[2], Jason A. Thompson, BA[1], and David W. Baker, MD MPH[1]

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"There were large disparities in enrollment by race and ethnicity, with only one quarter of whites failing to enroll compared to almost half of blacks.

BACKGROUND: With emphasis on the meaningful use of electronic health records, patient portals are likely to become increasingly important. Little is known about patient enrollment in, and use of, patient portals after explicit invitation from providers.

OBJECTIVES: To examine enrollment in, and use of, an electronic patient portal by race/ethnicity, gender and age.

DESIGN: Observational, cross sectional study.

PARTICIPANTS: Patients with attending physicians seen at one urban, academic primary care practice between May 2008 and October 2009 who received electronic orders inviting their participation in an electronic patient portal.

MAIN MEASURES: (a) Enrollment in the patient portal, (b) Solicitation of provider advice among enrollees, (c) Requests for medication refills among enrollees.

KEY RESULTS: Overall, 69% of 7,088 patients enrolled in the patient portal. All minority patients were significantly less likely to enroll than whites: 55%

KEY WORDS: race/ethnicity; disparities; Electronic Health Record; patient portal.

J Gen Intern Med 26(8):[illegible]

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INTRODUCTION

Recently, the Department of Health and Human Services released their final regulations for "meaningful use." One of its core objectives is providing electronic information to patients upon request, which is consistent with strategies favored by many stakeholders to increase patient engagement in their health and health care.[1,2] This objective can be achieved in a variety of ways, including sharing data between the provider's electronic health record (EHR) and a personal health record (PHR) or by providing patients with an electronic entry point to the EHR itself (i.e., a "tethered"

Who uses telehealth?

- Medicare
  - Poorer, disabled
- Medicaid population
  - Younger, healthier
- DTC telemedicine
  - Equal access, less plugged into system
- Patient portals
  - Less likely to be minorities

Telehealth & Access

- Depends on how introduced
  - Offered to all vs. targeted
  - Patient initiated
- Rural / poor / underserved
  - Limited broadband
  - Computer literacy
  - Knowledge of new care options

Health Affairs Blog

HEALTH EQUITY

ASSOCIATED TOPICS: QUALITY

Telehealth Alone Will Not Increase Health Care Access For The Underserved

Lori Uscher-Pines and Ateev Mehrotra

December 15, 2016

Limited Provider Supply

- Load balancing
- Making care more efficient
- Bringing in new providers or encouraging them to work more hours

Assumption

Telemedicine decreases spending

Current Telemedicine Technology Could Mean Big Savings

Towers Watson expects a 68% increase in the number of employers offering telemedicine in 2015

August 11, 2014 | UNITED STATES

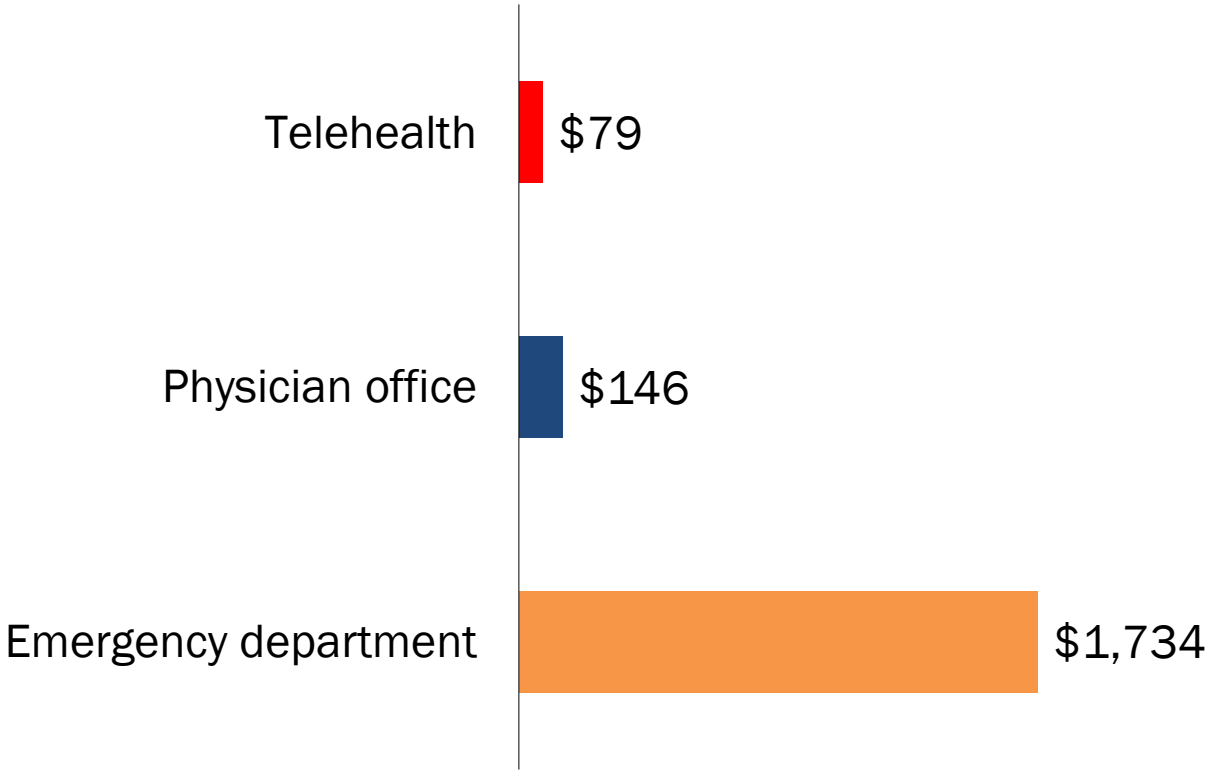
ARLINGTON, VA, August 11, 2014 — Telemedicine could potentially deliver more than $6 billion a year in health care savings to U.S. companies, according to analysis by global professional services company Towers Watson (NYSE, NASDAQ: TW). An illustration of the program's possibilities, achieving this level of savings would require all employees and their dependents to use the technology-enabled interactions available today in place of face-to-face visits to the doctor, urgent care center or emergency room (for appropriate medical problems).

Does Telemedicine Save Money? Depends (in part) on Impact on Overall Utilization

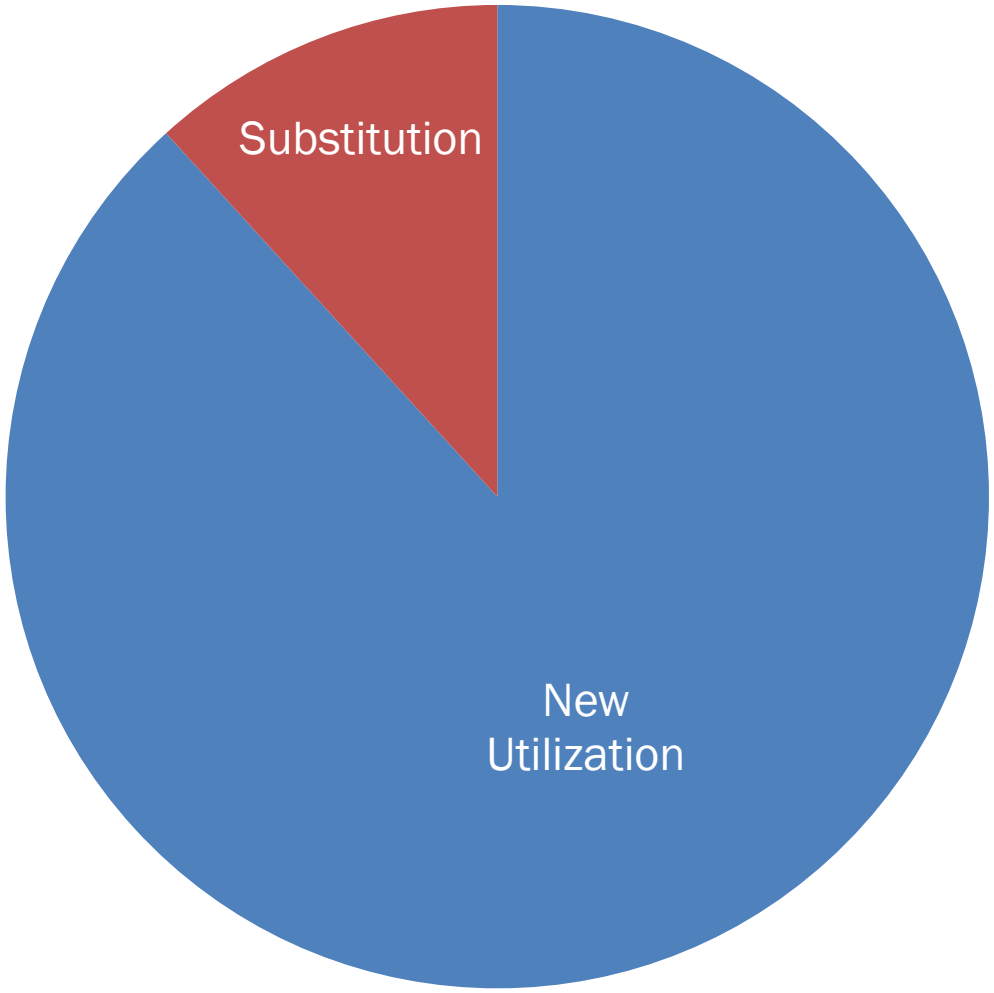
- Substitution
  - Using telemedicine instead of in-person
  - No change in overall utilization

- New Utilization
  - Using telemedicine instead of staying home
  - Increase in overall utilization

DTC Telehealth episodes of care for ARI are less expensive



88% of DTC Telemedicine Visits for ARI Represent New Utilization



Money vs. Value

- Does telemedicine improve value?
- Improves health
- Relative costs
- Downstream impact

Assumption

Quality of Telemedicine is equal to in-person visits

Original Investigation

Variation in Quality of Urgent Health Care Provided During Commercial Virtual Visits

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IMPORTANCE Commercial virtual visits are an increasingly popular model of health care for the management of common acute illnesses. In commercial virtual visits, patients access a website to be connected synchronously—via videoconference, telephone, or webchat—to a physician with whom they have no prior relationship. To date, whether the care delivered through those websites is similar or quality varies among the sites has not been assessed.

OBJECTIVE To assess the variation in the quality of urgent health care among virtual visit companies.

DESIGN, SETTING, AND PARTICIPANTS This audit study used 67 trained standardized patients who presented to commercial virtual visit companies with the following 6 common acute illnesses: ankle pain, streptococcal pharyngitis, viral pharyngitis, acute rhinosinusitis, low

Invited Commentary
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Supplemental content at
jamainternalmedicine.com

RESEARCH LETTER

ONLINE FIRST

A Comparison of Care at E-visits and Physician Office Visits for Sinusitis and Urinary Tract Infection

Internet capabilities create the opportunity for e-visits, in which physicians and patients interact virtually instead of face-to-face. In e-visits, patients log into their secure personal health record internet portal and answer a series of questions about their condition. This written information is sent to the physicians, who make a diagnosis, order necessary care, put a note in the patients' electronic medical records, and reply to the patients via the secure portal within several hours. E-visits are offered by numerous health systems and are commonly reimbursed by health plans.[1,2] They typically focus on care for acute conditions, such as minor infec-

Physicians were less likely to order a UTI-relevant test at an e-visit (8% e-visits vs 51% office visits; $P<.01$) (**Table**). Few sinusitis-relevant tests were ordered for either type of visit. For each condition, there was no difference in how many patients had a follow-up visit either for that condition or for any other reason (Table).

Physicians were more likely to prescribe an antibiotic at an e-visit for either condition. The antibiotic prescribed at either type of visit was equally likely to be guideline recommended. We looked at possible explanations for the lower office visit antibiotic rate (Table). Among UTI office visits, the antibiotic prescribing rate was 32% when a urinalysis or urine culture was not ordered compared with 61% when a urinalysis or urine culture was ordered.

During e-visits for both conditions, physicians were less likely to order preventive care. Among patients with an e-visit for either condition, we tracked where they received care for any subsequent visits. Among e-visit patients, there were 147 subsequent episodes of sinusitis or UTI. Among these episodes, 73 (50%) were e-visits.

Underuse of Appropriate Testing

- 8% testing of urine at eVisits vs. in-person visits for UTI
- Urine cultures for recurrent UTI only 34% of visits
- Guideline-recommended x-rays for ankle pain 16% of visits

Other Considerations with Quality

- Is video always better?
- Telemedicine is not monolithic
  - Tremendous variation across 8 telemedicine providers
- In-person care is often poor quality
  - Quality of care is only 55%
  - More than a third of outpatient antibiotic prescriptions at in-person visits are judged unnecessary

Challenging Assumptions

- Key is telemedicine parity laws
- Telehealth decreases disparities
- Telehealth decreases spending
- Quality of telemedicine is equal to in-person visits