

E-HEALTHCARE DELIVERY – HOW RETAIL MEDICINE IS CHANGING IN THE USA

FAISAL M. RAHMAN, PH.D.

Founding Dean and Professor
The Graham School of Management
Saint Xavier University
Chicago, IL, USA

President/CEO
APAC Group of Healthcare Companies
Illinois and Indiana, USA

E-LEADER BERLIN CONFERENCE
Chinese American Scholars
Association
Berlin, Germany
June 6-8, 2017

“The business of medicine is inefficient, expensive and right for disruption”

Fortune Magazine, May 1, 2017

Status of Healthcare in USA today – confusion and turmoil

Ongoing Legislative and Political Battle

- Affordable Care Act/Obamacare is still the law
 - Being dismantled through fund cuts and directives
- American Health Care Act/Trumpcare
 - Stuck in US Senate



Healthcare in the United States

US Healthcare is Unique

- Only developed country without national health insurance
- Best place for complicated illnesses
- Most expensive in the world

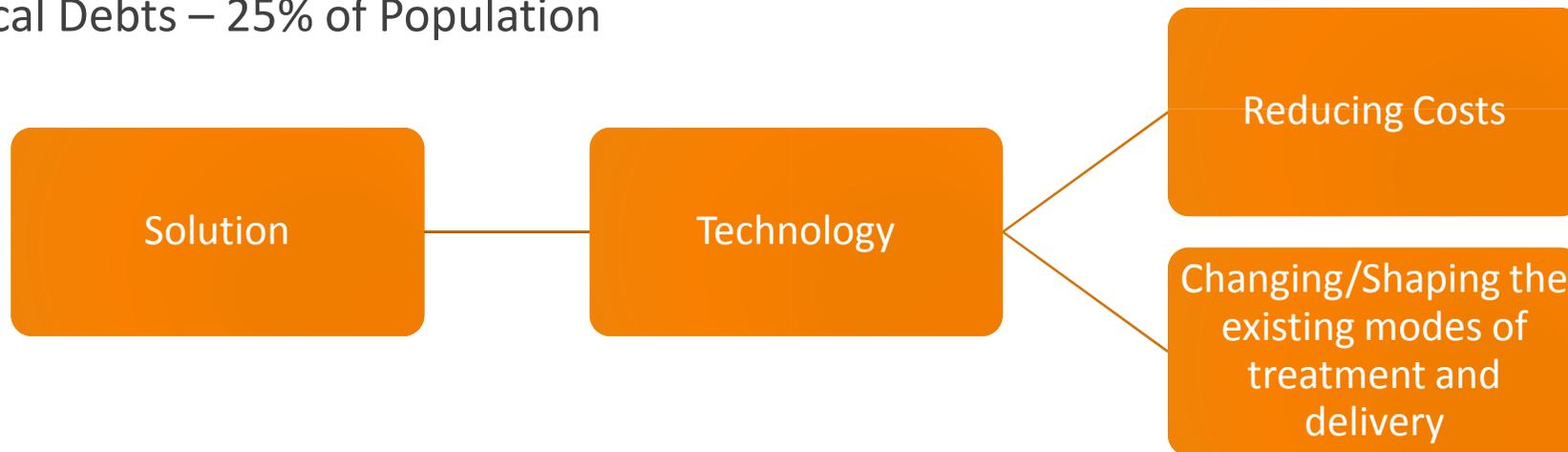
Stakeholders	Concerns
Patients	Access and costs
Physicians	Quality of care & declining income
Hospitals	Staying relevant and profitable
Businesses	High costs/competitiveness
Pharma	Maintaining “status quo”
Insurance	Profits without risks
Government	Cost Reduction

Politicians – *“Is healthcare a right?”*

Challenges in US Healthcare

1. High Costs/US Competitiveness
2. Access
3. Shortage of Doctors
4. Medical Debts – 25% of Population

United States spends 2-3 times more on healthcare than other developed countries but outcome data is mediocre.



Examples

Surgery – Migration from inpatient to outpatient
New diagnostic tests and super drugs
“Customizing” Treatment

Focus of Retail Medicine

Retail Medicine – Healthcare delivered at consumer/patient level

High costs and technology are changing the traditional model of patients going to the doctors' offices and hospitals

Trends

- Increasing use of physician extenders
- Urgent care centers versus Hospital ERs
- Clinics at pharmacies and shopping malls

Consumer expectations are in conflict with healthcare trends

CONSUMERS ARE MORE ACCESSIBLE & CONNECTED

80%+ of adults <50 years old **have smartphones** & are connected¹

1/3 of consumers have a health, fitness or **medical app**, 2x vs 2013²

LACK OF ACCESS IS DRIVING COSTLY CHOICES

Avg **wait time** for a first visit with a psychiatrist: 25 days³

65M people live in **primary care desert**⁴

71% of employer sponsored ER visits are **unnecessary**⁵

Telemedicine: The opportunity

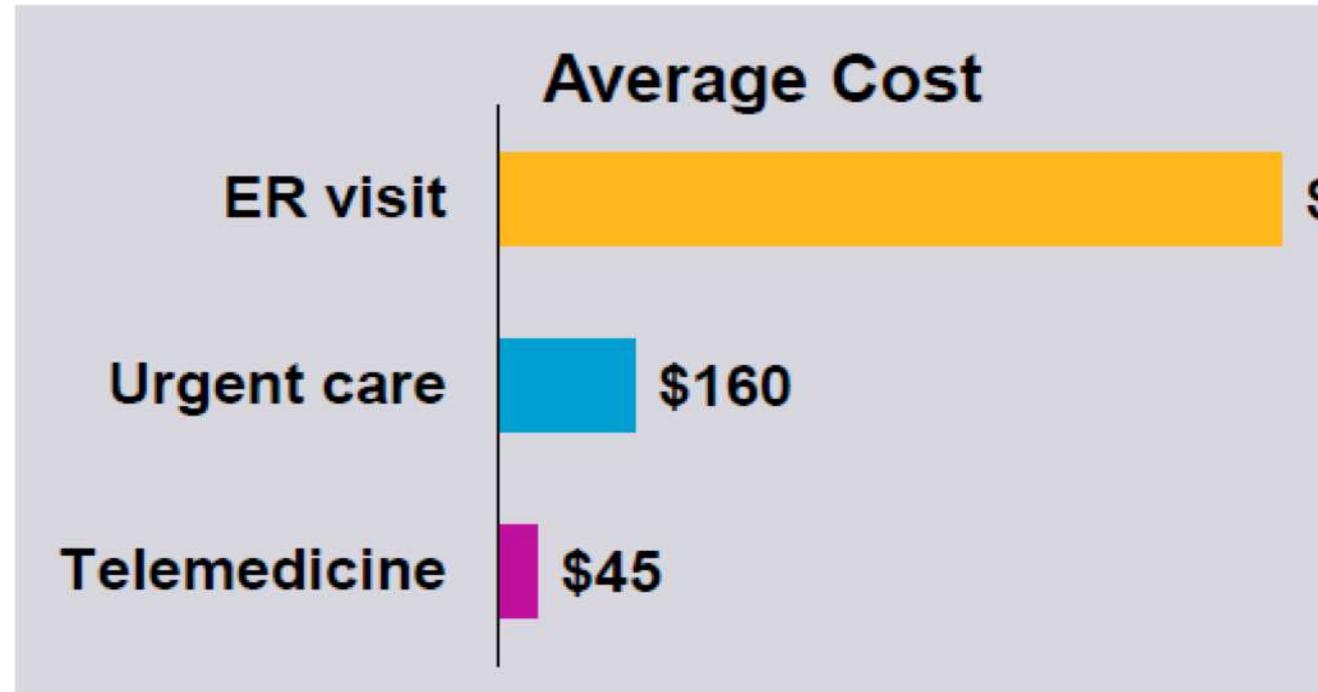
Access

Appropriate setting

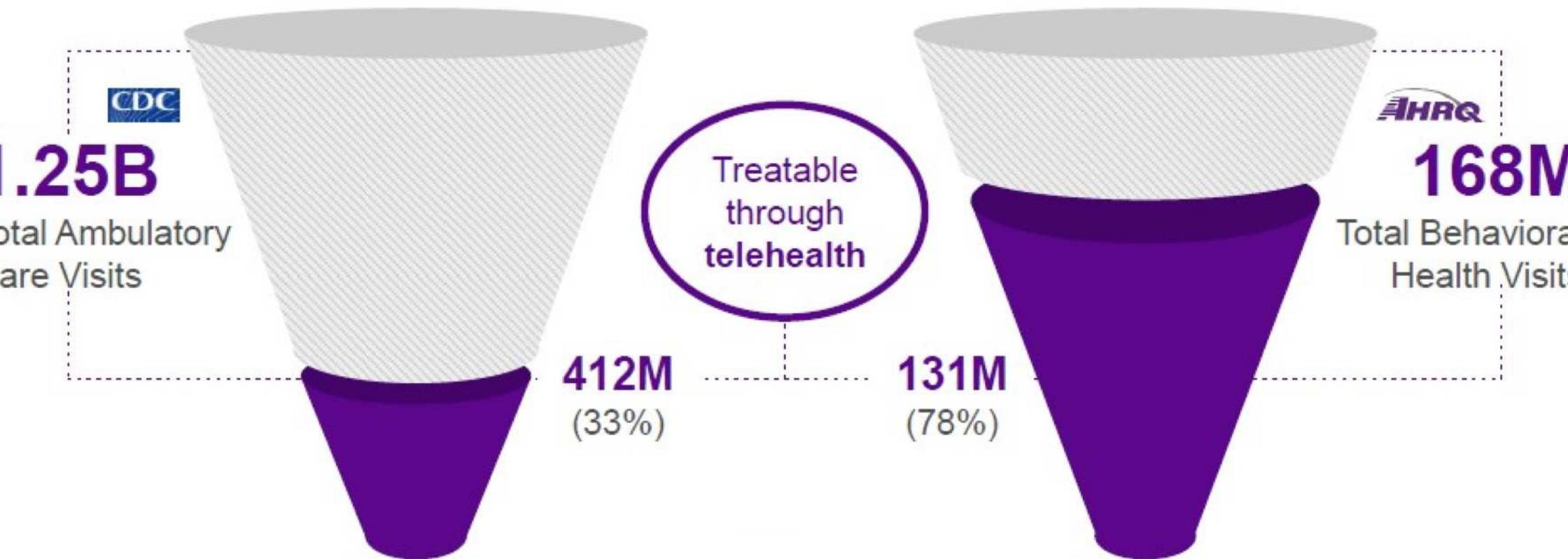
Most-effective

Consumer-oriented

Convenient



A solution with the potential to deliver meaningful impact



Patients Want Choice



Phone



Mobile App

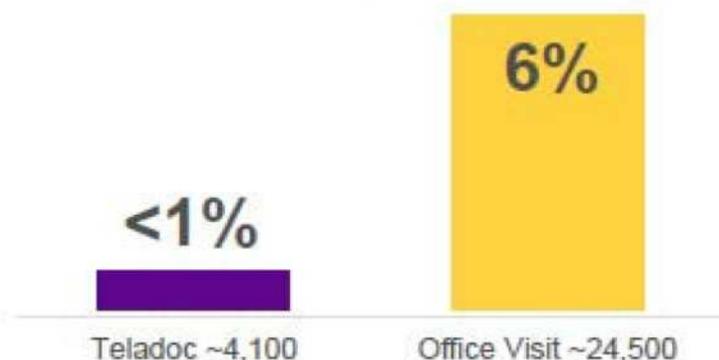


Web

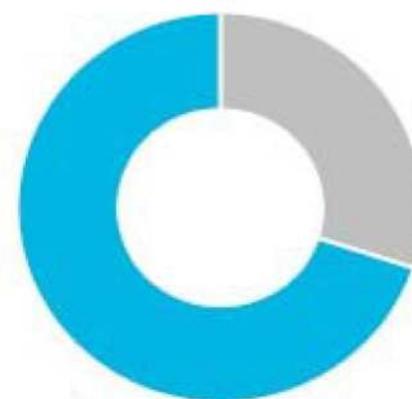


Video

Teladoc vs. Office Visit No-Show Comparison¹



Type of Consult Patients Choose



30%

“Visualized” via video and/or uploaded HD Images

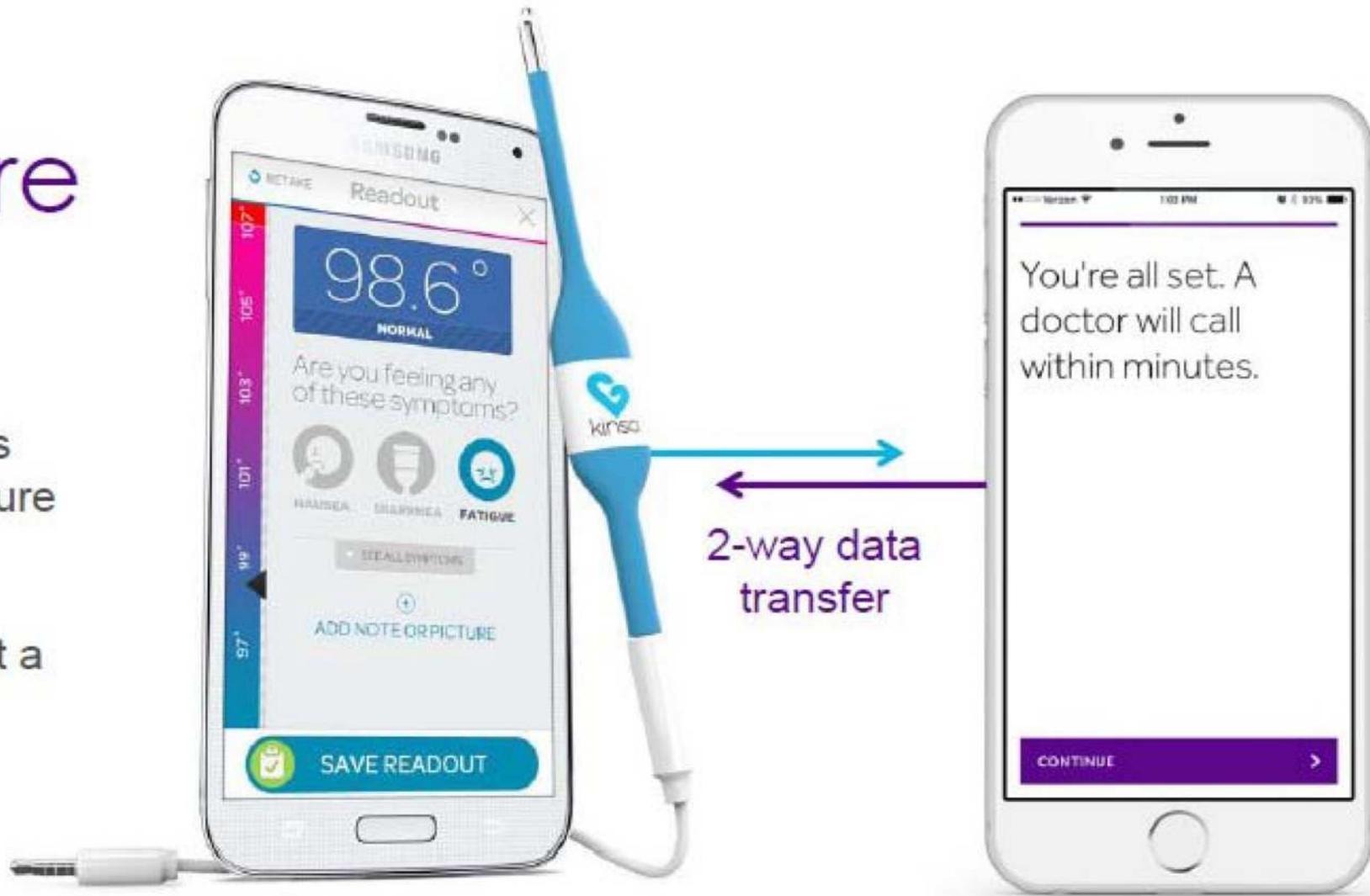
70%

Telephonic

Access, Choice and Convenience Lead to Utilization

The Future is now

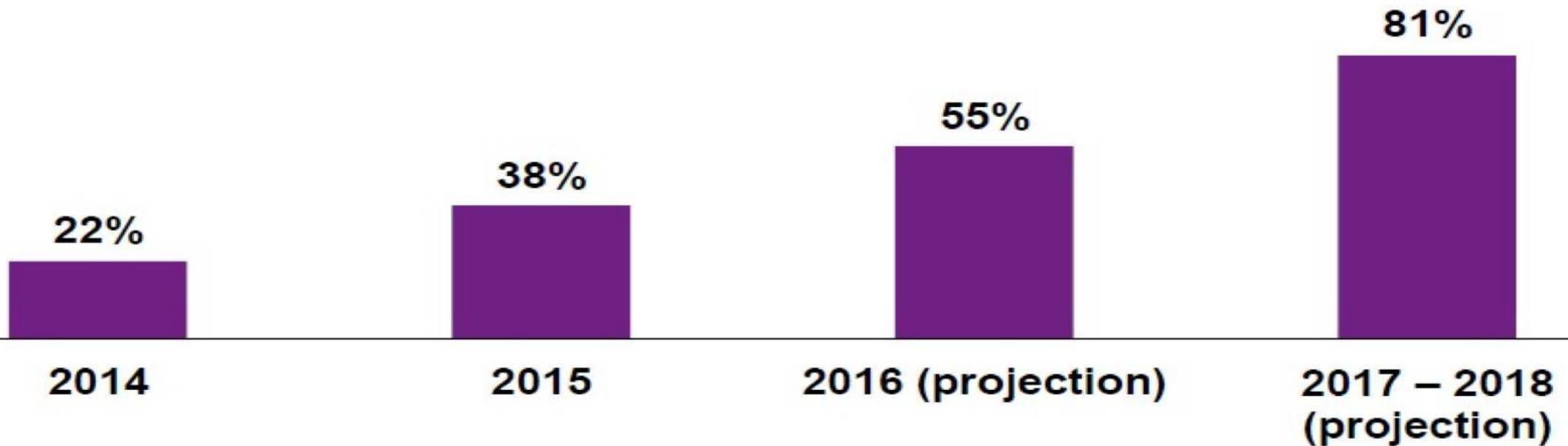
A connected digital thermometer provides longitudinal temperature data to the Teladoc physician, prompting consumers to request a Teladoc visit.



Increasing Acceptability

Telemedicine offer rates

Employers Offering Telemedicine



Only Teladoc delivers these episodes of-care savings

\$191
Teladoc savings vs. office visit

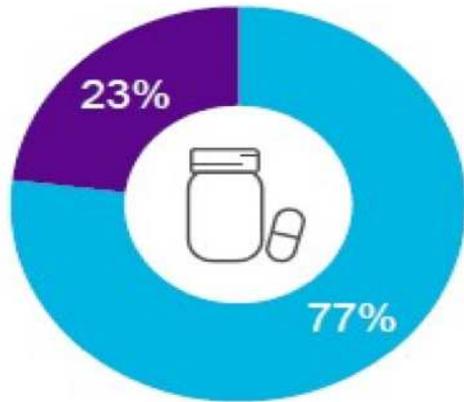
\$2,661
Teladoc savings vs. ER visit

\$673
Teladoc savings vs. weighted average (office visit & ER visit)

Episode of care includes initial encounter and any subsequent utilization of follow up office visits, hospitalization, or ER visit, resulting from initial encounter within a 30 day window for same and related diagnoses. Weighted Average is based on redirection rates determined using member utilization of bricks and mortar services: 75% OV; 20% ER; 5% Do Nothing

Clinical Quality

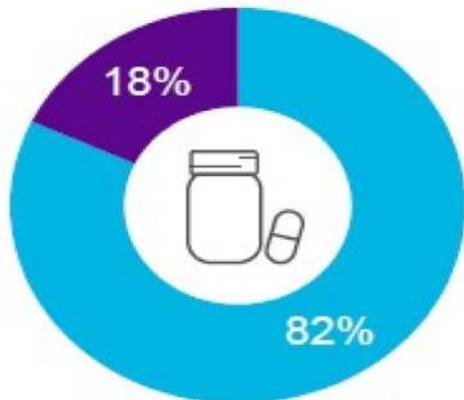
Prescribing Patterns Similar to Office Visit



Teladoc

77% result in an Rx¹

- Compliant with CDC antibiotic prescribing guidelines
- Overall prescribing rates at/below national average for similar diagnoses within bricks and mortar practices
- No prescribing of DEA controlled substances or life-style drugs

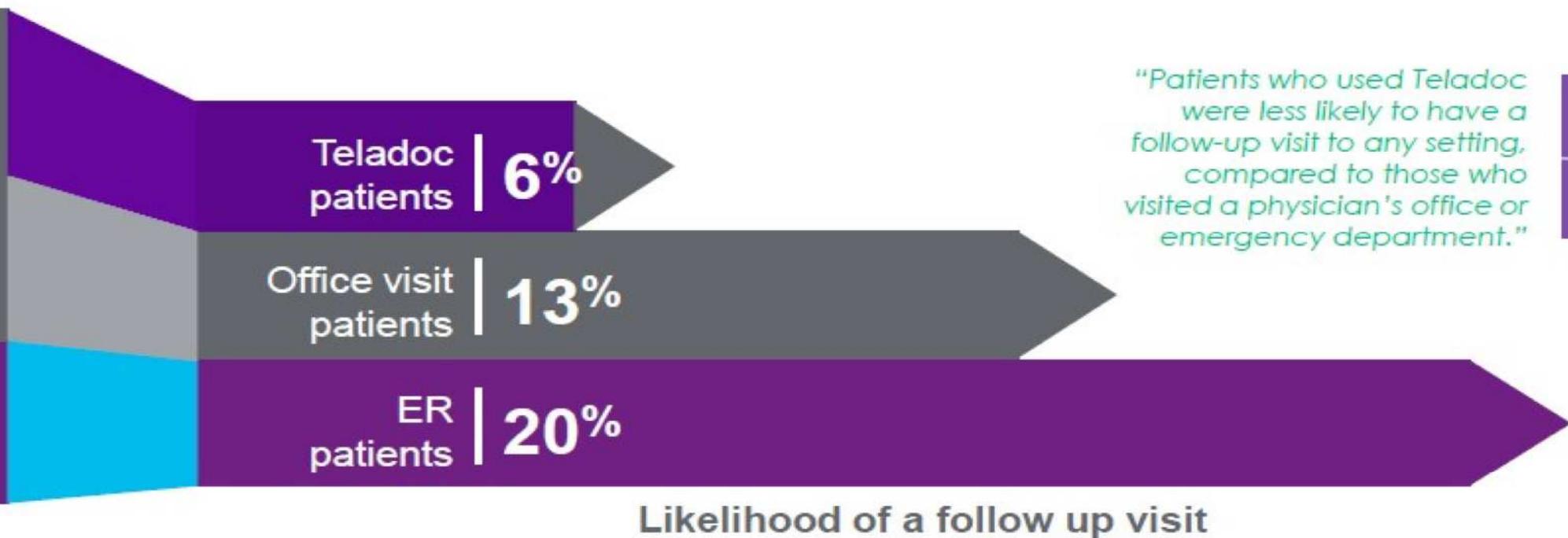


Office Visit

82% result in an Rx²

Clinical Quality

An independent study revealed...



"Patients who used Teladoc were less likely to have a follow-up visit to any setting, compared to those who visited a physician's office or emergency department."



Clinical Quality

Exceptional patient satisfaction



95%

Patient Satisfaction¹
82% industry standard²

90%

Would Use It Again¹

92%

Resolution Rate¹

Clinical Quality

One study looked at the quality of care for remote orthopedic consultations using telemedicine. They performed a randomized controlled trial (RCT) with two parallel groups: video-assisted remote consultations at a regional medical center (RMC) as an intervention versus standard consultation in the outpatient clinic at the University Hospital of North Norway (UNN) as a control.

The results of the study found that the sum score of the specialist evaluation was significantly lower (i.e. better) at UNN compared to RMC (1.72 versus 1.82, $p = 0.0030$).

The study supports the argument that it is safe to offer video-assisted consultations for selected orthopedic patients. They did not find any serious events related to the mode of consultation. They also state that further assessments of the economic aspects and patient satisfaction are needed before we can recommend its wider application.

Clinical Quality

An article looking at the patient use of email, Facebook, and physician websites to communicate with physicians found that a total of 37% of patients reported contacting their physicians via email within the last six months, and 18% via Facebook.

The paper highlights the considerable interests patients have in using Internet tools to communicate with their physicians. Given the importance that patients place on having access to their physicians, physicians and their institutions should consider how best to permit and reinforce the use of these channels.

Table 2 Interest and Use in Interacting with Physicians Online, by Mode

	Purpose	Email	Website	Mobile App	Facebook
Use (%)	Fill prescription	7	7	7	3
	Track health progress	4	4	6	3
	Access health information	5	7	3	3
Interest (%)	Fill prescription	46	51	41	16
	Track health progress	37	44	40	18
	Access health information	46	57	41	15

AVERAGE WAIT TIMES FOR A FAMILY MEDICINE DOCTOR APPOINTMENT, 2017

BOSTON



LOS ANGELES



PORTLAND, ORE.



MIAMI



ATLANTA, DENVER, DETROIT



SOURCE: MERRITT HAWKINS

Telemedicine will help reduce the overall wait times that patients experience when trying to schedule appointments with their physicians.

Telemedicine allows the doctor to be anywhere – which is not the case for our traditional health care system.

Other Emerging Trends

1. Algorithmic Medicine/IBM Watson
2. Next-Generation Capsules

Conclusion

- Technology is the force which is bigger than the market and is unstoppable.
- All stakeholders – from patients to payers – are beginning to accept the new paradigm.