# **The Evolving Medical Neighborhood**
## Acute Care *Outside* the Medical Home

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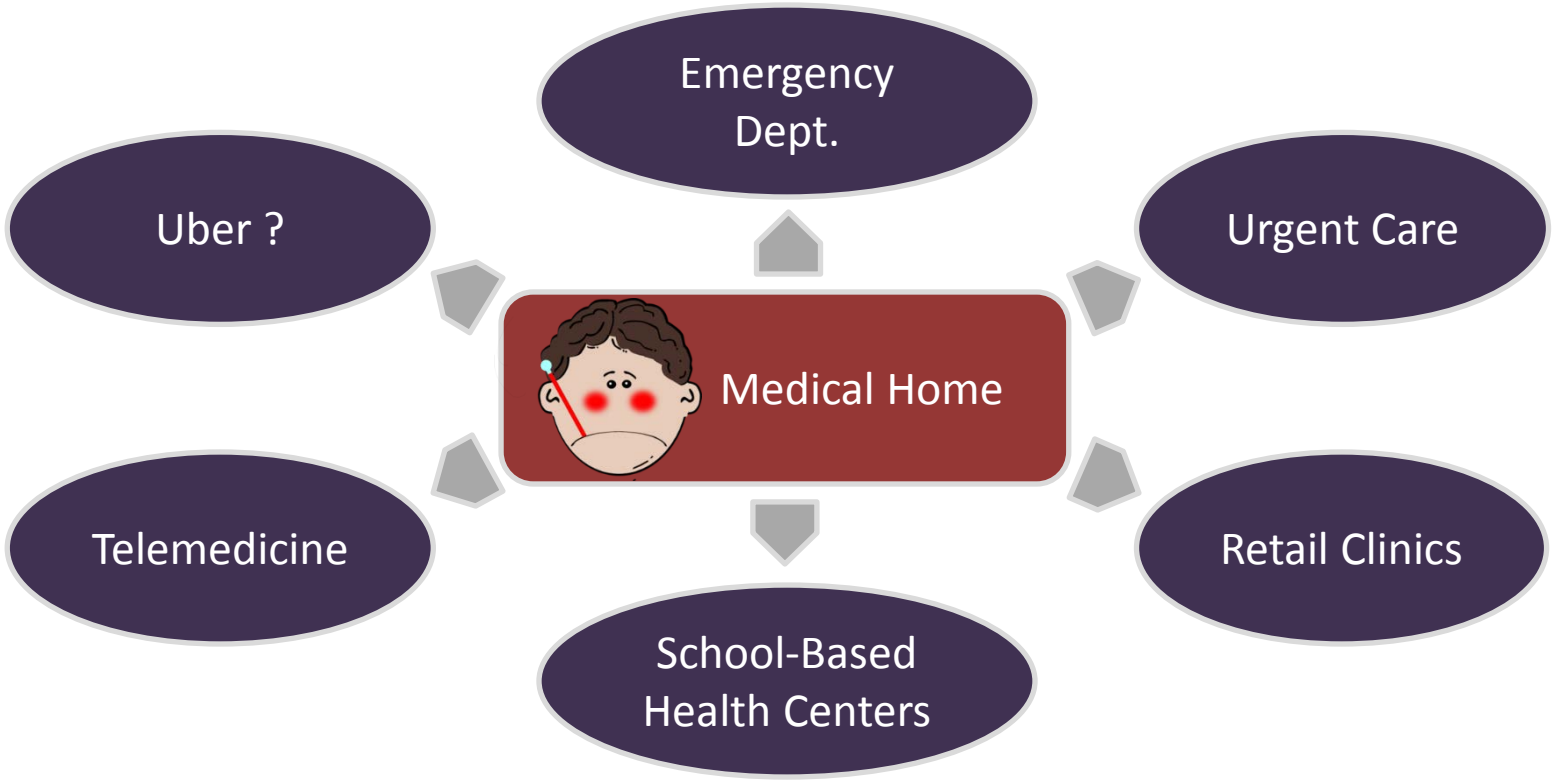
Regional Medical Director, PM Pediatrics
Pediatric Emergency Physician

# Objectives

- To discuss evolving trends in pediatric acute care
- To differentiate various models (personnel, practice standards, care spectrum, and regulations)
- To discuss how pediatricians can advocate for communications and integration with the medical home

# Why are we talking about this?



# From the New York Times (April 2016)

"My wife and I both work. When one of our children wakes up complaining of a sore throat, we could begin the ritual stare-down to determine which of us is going to have to wait for the doctor's office to open, make the phone call, wait on hold, schedule an appointment (which will inevitably be in the middle of the day)…sit in the waiting room (surrounded by sick children), get the rapid strep test, find out if the child is infected and then go to the pharmacy…

…Or, one of us could just take the child to a retail clinic on the way to work and be done in 30 minutes."

*Carroll, AE. "The Undeniable Convenience and Reliability of Retail Health Clinics, NYT, 4/12/16*

# Medical Neighborhood

CONVENIENCE CARE part 1

# EVOLUTION OF ACUTE CARE

# Doc, Can You Help Me?

# The Traditional Pediatric Model (1950s->)

House Calls


Office Visits


After-Hours


HURRY UP!
CAN I SEE?
200 WATT OK, DOC?
HEY!
BAM
BONES AND STUFF
BATHROOM IN HERE?
E.R. (GOOD LUCK)
YES, JUST HURRY!
HEY! I'M NEXT!
CHOO!
HOT PIZZA!
ALL SET, DUDE?
EMT
SAY AGAIN, WHAT?

# OVERCROWDING IN THE ER


# 1980's


**ED-based FastTrack (RTU/urgent care)**

EMSC Emergency Medical Services for Children NATIONAL RESOURCE CENTER

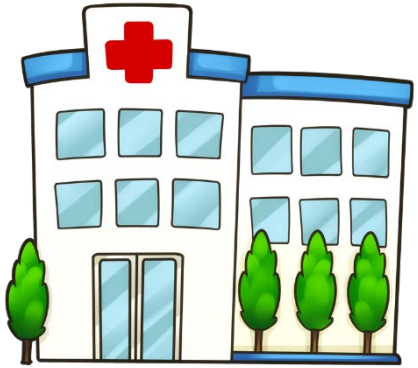
THE AMERICAN ACADEMY OF PEDIATRICS

**COPEM SOEM**

**Pediatric Emergency Medicine**

# 1990’s

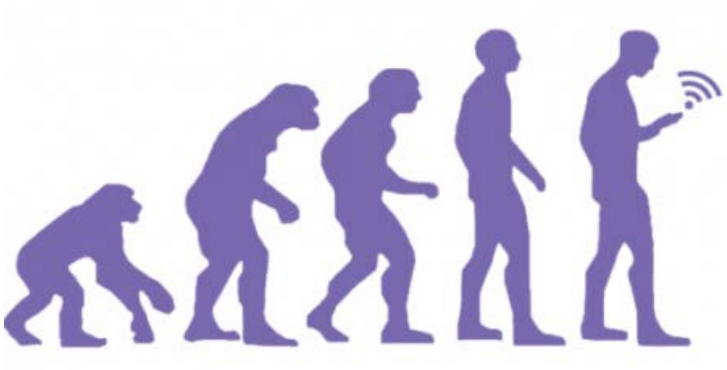

**Internet**
**& Dr. Google**



**Free Standing**
**Urgent Cares**

# 2000’s

**Retail-Based Clinics**

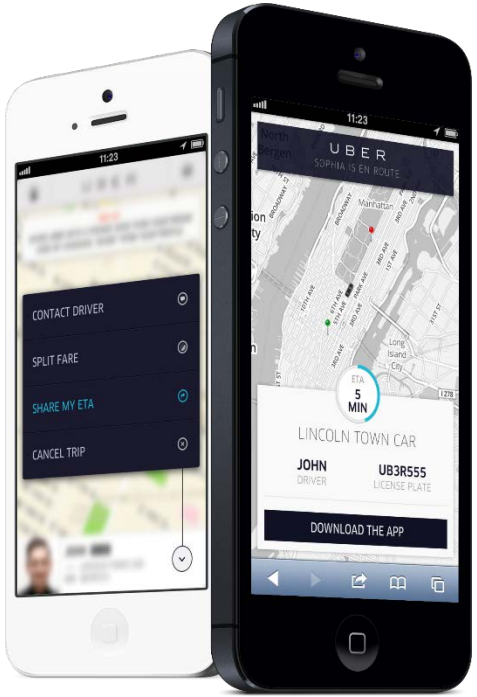


**Mobile Access**

# Today

TELEMEDICINE


Uber Health



# Key Drivers

CONSUMER DEMAND

COST SAVINGS

CONVENIENCE

# Consumer Demand


- Consumers like choices
- Expectation that services will be as responsive and accessible as other service industries
- ↑high-deductible plans make consumers more wary of costs
- Desire for “one-stop shopping”

# Cost Savings

13-27% of all ED visits could be shifted to urgent or retail care leading to a savings of **$4.4 billion annually**.[1]

| | Retail Clinic | Primary Care | Urgent Care | ED |
|---|---|---|---|---|
| Mehotra 2009* | $110 | $166 | $156 | $570 |
| Thygeson 2008** | $104 | $159 | $154 | $383 |

*Treatment of otitis media, pharyngitis, and UTI based on claims data from a large health plan using health plan reimbursements and patient copayments[2]

[1] *Weinick RM - Health Affairs 2010*

[2] *Convenient Care Options in NYS, Chang, et al., United Hospital Fund, 2015*

CONVENIENCE CARE part 1

# RETAIL-BASED CLINICS

# Retail Growth

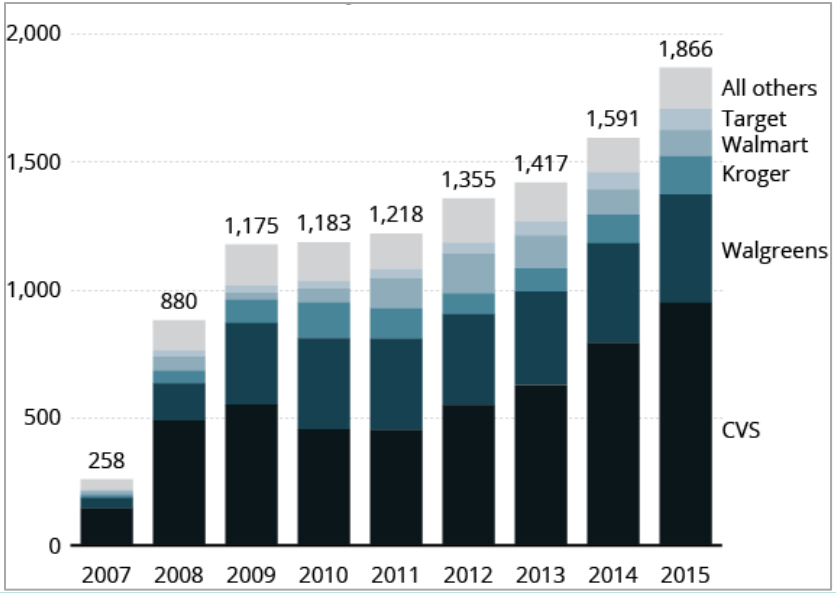
CVS Health minute clinic

healthcare clinic Walgreens

CLINIC KAISER PERMANENTE

The Clinic at Walmart

Kroger The Little Clinic Convenient Neighborhood Medical Care



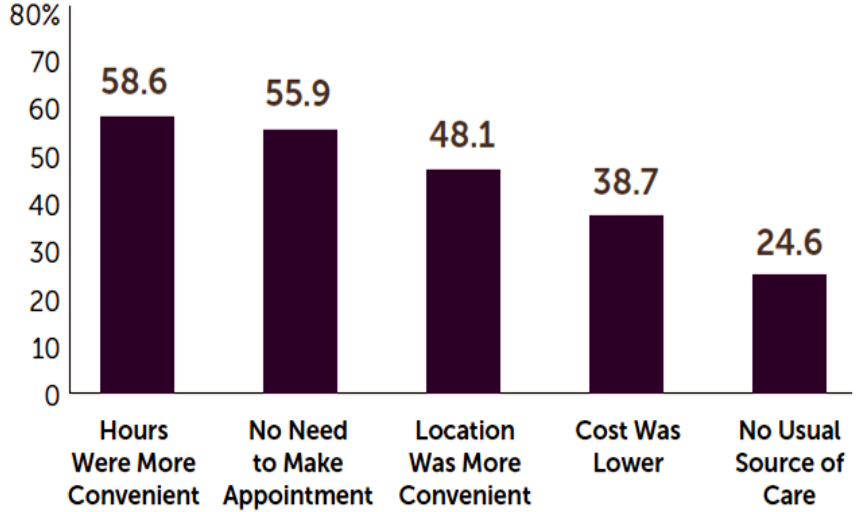

>10 million visits

# What is Retail Based Care?

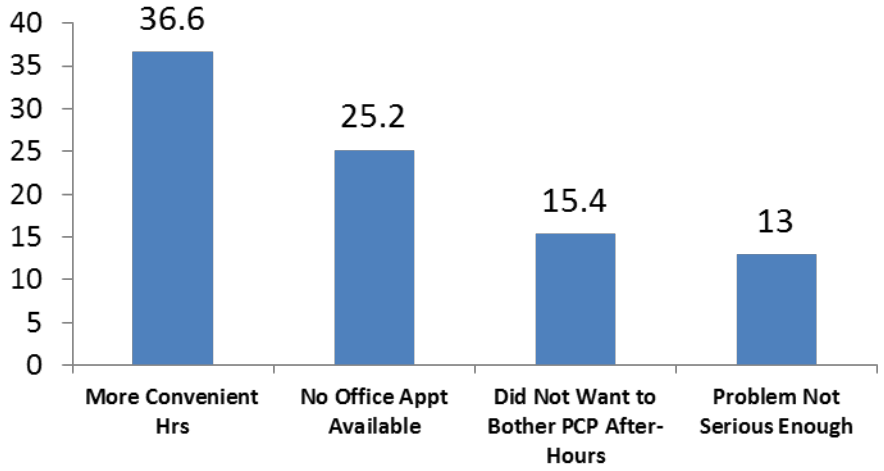

- Most retail care sought by adults
- Very protocol driven
- Limited scope
  (>90% are 10 simple conditions)
- Staffed by Mid-Level Practitioners (NP's, PA's)

# Why Seek Retail Care?

Reasons for Seeking Care at Retail Clinics (2010)




Reasons for ***Pediatric*** Care at Retail Clinics (2012)




50% between 8a and 4p

53% did NOT have a PCP

Note: Categories are not mutually exclusive; respondents could select multiple categories.
Source: HSC 2010 Health Tracking Household Survey

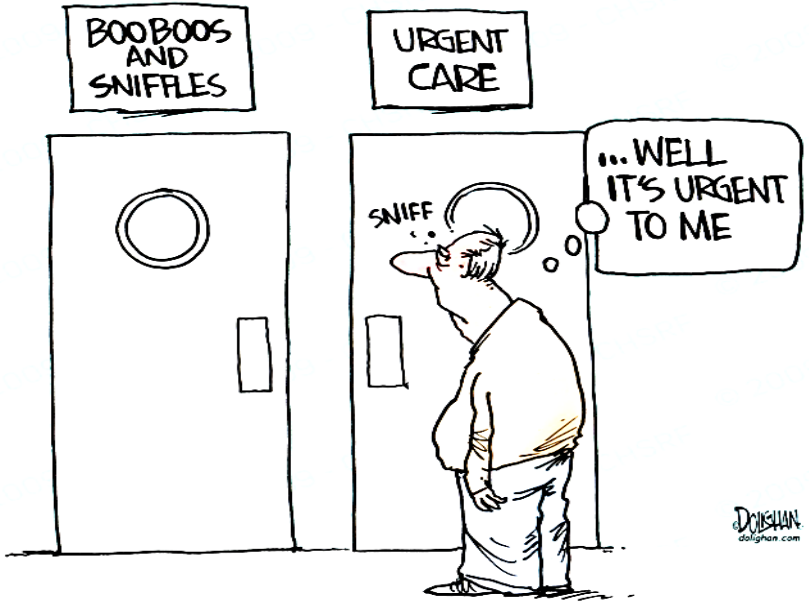
1. Parents' Experiences With Pediatric Care at Retail Clinics, *JAMA Pediatrics*, Sept 2013
2. Retail Clinics, Primary Care Physicians, And Emergency Departments: A Comparison Of Patients' Visits, *Health Affairs*, Sept 2008

# Where is Retail Care Going?


- More comprehensive services
- Increasing affiliation with health systems (linked EHR's)
- Some are exiting the market (Walgreens, Target)

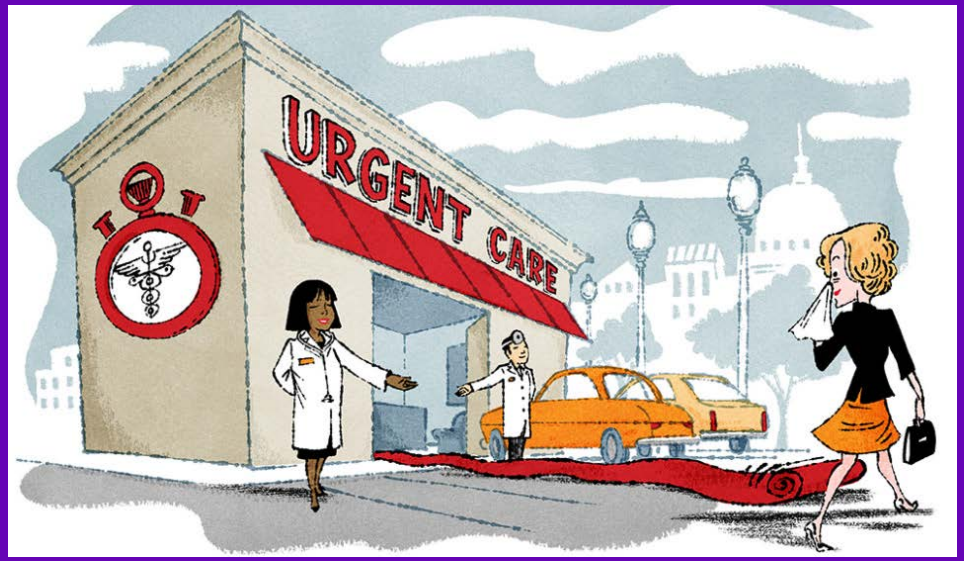
# Limitations of Retail Care

- ? Communications with medical home
- Very regimented care protocols
- Potential bias for medication dispensing



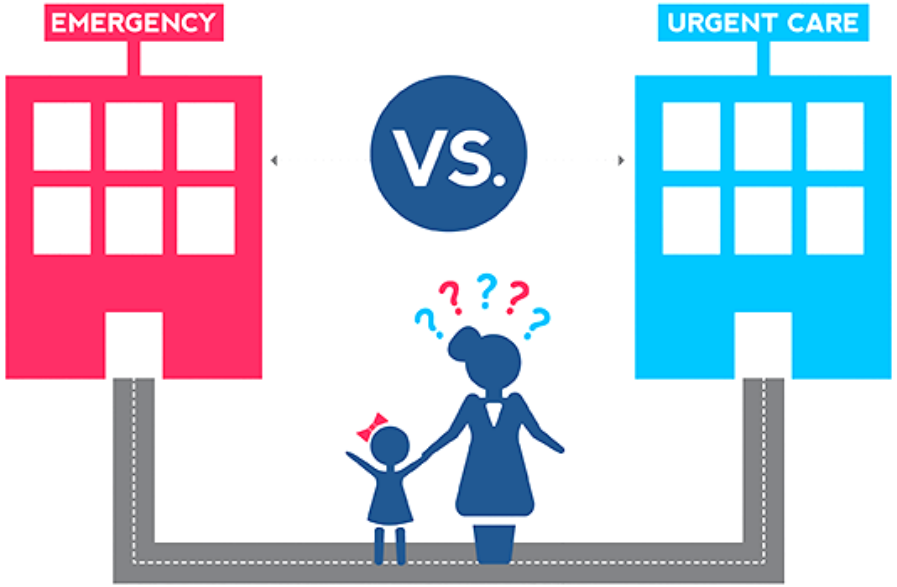
CONVENIENCE CARE part 2

# URGENT CARE



# Evolution of Urgent Care


Doc in the Box




ED Alternative

# Competition or Complement?

"Urgent care centers complement primary care and help put resources in the right places. Urgent cares not only improve access, but liberate primary care providers to do what they do best: preventive medicine and chronic care management. Primary care practices can focus on prevention and wellness and the ongoing treatment of chronic disease."

*–David Meyers, MD*

**Chief Medical Information Officer**

**Agency for Healthcare Research and Quality (AHRQ)**

Medical Economics [May 25, 2016]

# Big Brands, Big Backers

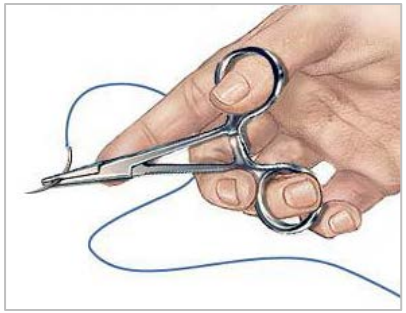
| Provider | Ownership* | Centers |
|---|---|---|
| Concentra | Select Medical Corporation / WCAS | 292 |
| MedExpress | OPTUM | 175+92 |
| U.S. HealthWorks | Dignity Health | 162 |
| american family care — The Right Care. Right Now. | Independent | 148 |
| NextCare URGENT CARE | EEF | 135 |
| FASTMED URGENT CARE — personal care in your neighborhood | ABRY PARTNERS | 114 |
| Patient First | Independent | 62 |


URGENT CARE or
EMERGENCY CARE?
How do you know whether you should go to an urgent care center or the hospital ED?
LEARN MORE

# Clinical Spectrum in UC

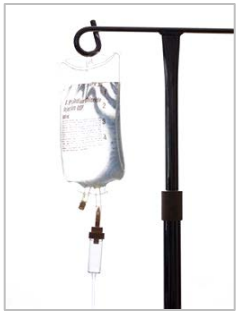
Radiography

Laboratory



Sterile Procedures

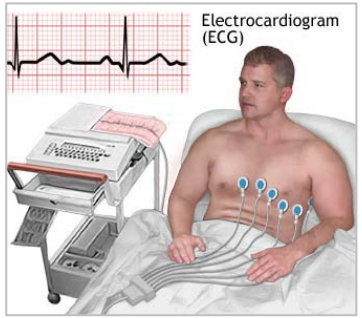
Fracture Care



IV Fluids

# Clinical Spectrum in UC

Respiratory




EKG

Observation

Physicians (EM, IM, Family, Peds, PEM)
+
Mid-Level Practitioners (NP's, PA's)
Nurses; XR Techs; Medical Assistants

# UC as Intermediary Care


Community Triage

EMS Inbound
TRANSPORT TEAM Outbound

# Specialty Urgent Care

ORTHOPAEDIC URGENT CARE

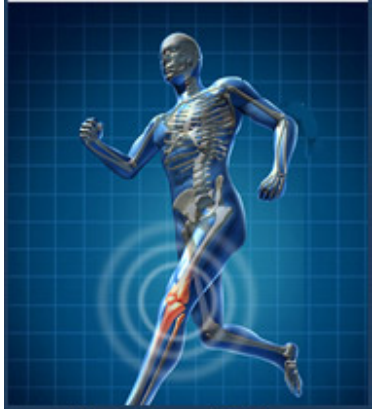
WALK-IN CARE FOR BONE & JOINT INJURIES

GO ORTHO

Urgent Care for Aches, Breaks and Sprains

OrthoCare

WALK-IN URGENT ORTHOPEDIC CARE



Monday - Friday
8:00 am to 7:00 pm

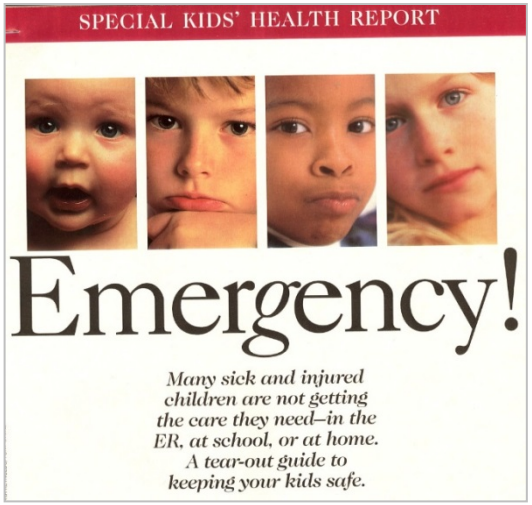
Saturday - 9am to 1pm

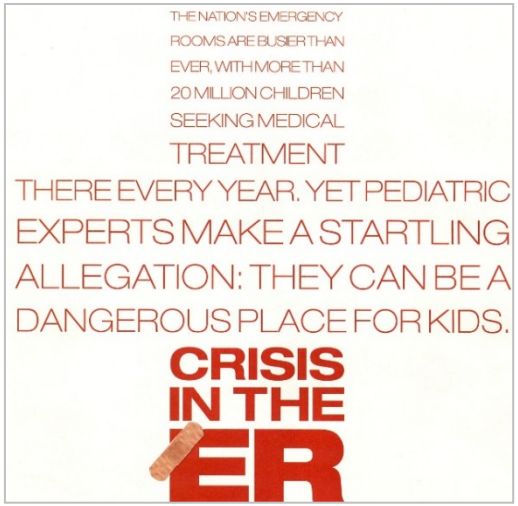
OrthoNOW

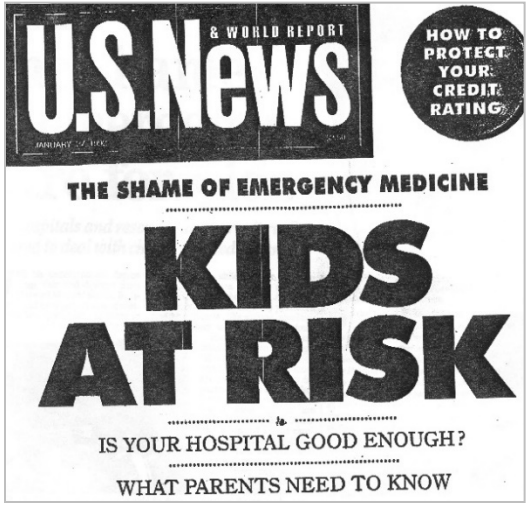
because injuries™ don't happen by appointment

ORTHOPEDIC URGENT CARE

# Is *Pediatric* Urgent Care Different?




Pediatric expertise & procedural competence

Open later, kid-friendly environment

**Most patients HAVE primary care home**

**More focus on EMERGENCY care than primary care**

# Where is *Pediatric* Urgent Care Now?

- 319 facilities in 35 different states
  - 150 hospital-affiliated
  - 130 freestanding, privately owned
  - 16 closed in past year
- Volumes at some exceed 35,000/year

*"Well-managed freestanding UC can enhance the provision of urgent services to children, be integrated into the medical community, and provide a safe effective adjunct to the medical home. Staff should be trained in pediatrics, have pediatric guidelines and be equipped and prepared for emergencies"* **–AAP Position Statement 2014**

# What's Next for *Pediatric* Urgent Care

- Pediatric readiness…?
- Education….?
- Fellowship / Accreditation….?
- Standards, benchmarking, research…?




# Limitations of UC?

- Some have primary care overlap
- No advanced imaging
- Limited ability for complex chronic diseases
- Inability to do conscious sedation
- Accreditation
- Closing times and room capacities limit observation capabilities

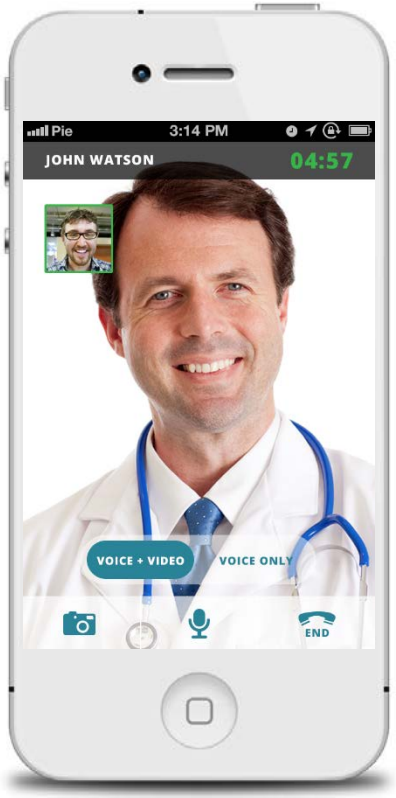
CONVENIENCE CARE part 3

# DIRECT-TO-CONSUMER TELEMEDICINE

# Telemedicine (direct-to-consumer)

**American Well**


**Doctor On Demand**

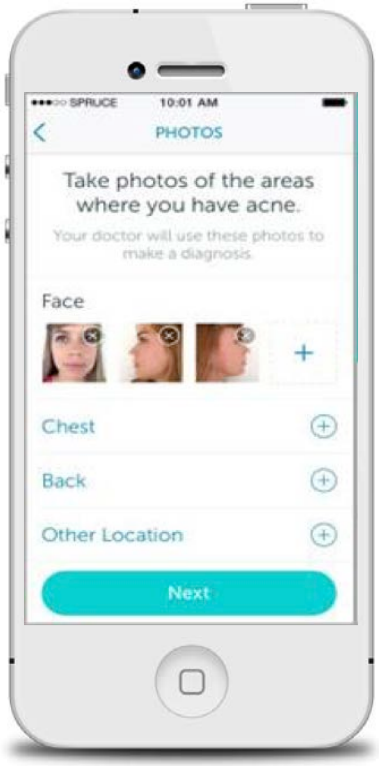


# Tele-Specialists (direct-to-consumer)

**Spruce**

*$40/visit*

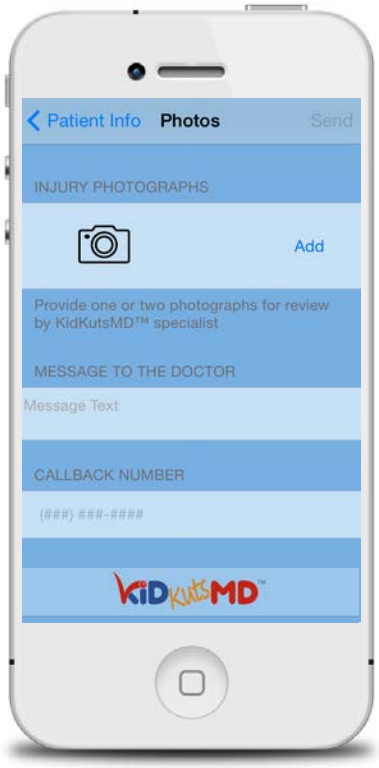
*DERM*




**KidKutsMD**

*Lac Repair*
*In the AM*

*PLASTICS*



# Telemedicine FACTS

- 70-74% of consumers would rather have an online video visit to obtain a prescription than travel to their doctor's office

Dermatology

Tobacco Cessation

General Health

Behavioral Health

# From the Experts

*"The patient-consumer wants to access primary care on their terms, not those of the health care industry. Telemedicine is a tool that will transform health delivery for the better."*

**– Bill Frist, MD (former senator)**

*Bill Frist. Health Affairs. July 23, 2015*

# Telemedicine – Access and Surge


Survey of 1,700 customers who used the CVS telemed service found that 95% were "highly satisfied" with the encounter, and 35% said they preferred a telehealth visit over an in-person visit with a doctor.

# Telemedicine Outcomes

- **Cost Effectiveness**
- **Patient Satisfaction**
- **Access**
- **Care Quality**
  - 90% medical issue resolution by the end of the call[1]
  - 91% of health outcomes similar or better via telehealth[2]

[1]*Teladoc website*
[2]*Wade VA et al. BMC Health Serv Res 2010*

# Telemedicine Concordance

Research

Original Investigation

## Choice, Transparency, Coordination, and Quality Among Direct-to-Consumer Telemedicine Websites and Apps Treating Skin Disease

Jack S. Resneck Jr, MD; Michael Abrouk; Meredith Steuer, MMS; Andrew Tam; Adam Yan; Ivy Lee, MD; Carrie L. Kovarik, MD; Karen E. Edison, MD

Editor's Note

**IMPORTANCE** Evidence supports use of teleconsultation for improving patient access to dermatology. However, little is known about the quality of rapidly expanding direct-to-consumer (DTC) telemedicine websites and smartphone apps diagnosing and treating skin disease.

**OBJECTIVE** To assess the performance of DTC teledermatology services.

**DESIGN AND PARTICIPANTS** Simulated patients submitted a series of structured dermatologic cases with photographs, including neoplastic, inflammatory, and infectious conditions, using regional and national DTC telemedicine websites and smartphone apps offering services to California residents.

**MAIN OUTCOMES AND MEASURES** Choice of clinician, transparency of credentials, clinician location, demographic and medical data requested, diagnoses given, treatments recommended or prescribed, adverse effects discussed, care coordination.

**RESULTS** We received responses for 62 clinical encounters from 16 DTC telemedicine websites from February 4 to March 11, 2016. None asked for identification or raised concerns about pseudonym use or falsified photographs. During most encounters (42 [68%]), patients were assigned a clinician without any choice. Only 16 (26%) disclosed information about clinician licensure, and some used internationally based physicians without California licenses. Few collected the name of an existing primary care physician (14 [23%]) or offered to send records (6 [10%]). A diagnosis or likely diagnosis was proffered in 48 encounters (77%). Prescription medications were ordered in 31 of 48 diagnosed cases (65%), and relevant adverse effects or pregnancy risks were disclosed in a minority (10 of 31 [32%] and 6 of 14 [43%], respectively). Websites made several correct diagnoses in clinical scenarios where photographs alone were adequate, but when basic additional history elements (eg, fever, hypertrichosis, oligomenorrhea) were important, they regularly failed to ask simple relevant questions and diagnostic performance was poor. Major diagnoses were repeatedly missed, including secondary syphilis, eczema herpeticum, gram-negative folliculitis, and polycystic ovarian syndrome. Regardless of the diagnoses given, treatments prescribed were sometimes at odds with existing guidelines.

**CONCLUSIONS AND RELEVANCE** Telemedicine has potential to expand access to high-value health care. Our findings, however, raise concerns about the quality of skin disease diagnosis and treatment provided by many DTC telemedicine websites. Ongoing expansion of health plan coverage of these services may be premature. Until improvements are made, patients risk using health care services that lack transparency, choice, thoroughness, diagnostic and therapeutic quality, and care coordination. We offer several suggestions to improve the quality of DTC telemedicine websites and apps and avoid further growth of fragmented, low-quality care.

**Author Affiliations:** Department of Dermatology, and Philip R. Lee Institute for Health Policy Studies, University of California, San Francisco School of Medicine, San Francisco (Resneck); University of California, San Francisco School of Medicine, San Francisco (Abrouk, Steuer, Tam, Yan); Pasadena Premier Dermatology, Pasadena, California (Lee); Department of Dermatology, University of Pennsylvania, Philadelphia (Kovarik); Department of Dermatology, University of Missouri, Columbia (Edison).

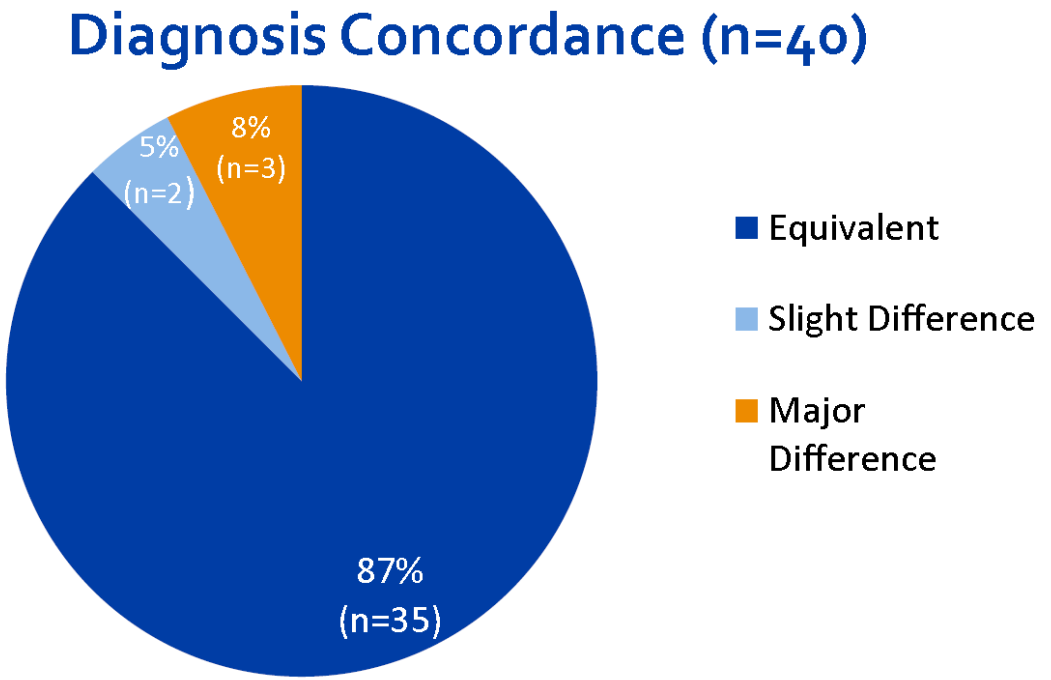
**Corresponding Author:** Jack S. Resneck Jr, MD, Department of Dermatology, University of California, San Francisco, Box 0316, San Francisco, CA 94143-0316 (resneck@derm.ucsf.edu).

JAMA Dermatol. doi:10.1001/jamadermatol.2016.1774
Published online May 18, 2016.

- Major diagnoses missed
  *--syphillis, eczema herpeticum, PCOS*
- Treatments at odds with existing guidelines
- 10% offered to communicate with PCP
- When photographs alone were inadequate, failed to ask important history questions

# Telemedicine Concordance

- Mordechai Raskas, MD
- 40 patients sought CNMC ED care for rash
- Compared diagnostic and treatment concordance between telemedicine and live encounters




*The 3 missed diagnoses were varicella, scarlet fever, and scabies.

# Telemedicine Limitations

- Insurance parity
- State-to-State differences
- General acceptance
- Quality metrics
- Technology and connectivity
- Chronic care > Acute care

CONVENIENCE CARE part 4

# DISRUPTIVE MODELS

# CVS & Curbside


# The On-Demand Doctor

| | heal | pager | MEDZED | retrace health | TRUE NORTH |
|---|---|---|---|---|---|
| **SERVICE** | For a flat fee of $99, the service promises to send a doctor in under an hour | Dispatches doctors or nurses via Uber for $200 per urgent-care visit; $75-$100 for a wellness check | Nurse conducts initial visit and can video chat with doctor; $150 for an urgent-care house call; prices vary | Nurse practitioners consult via video for $50 or in-person visit for $200; $50 per month for unlimited visits | Responds to non-emergency 911 calls; offers on-scene care instead of ER visit; $200-$300 |
| **CITY/STATE** | Los Angeles, San Francisco and Orange County, Calif. | New York City, San Francisco | Atlanta, New York City | Minneapolis, Wisconsin and North Dakota | Denver |

Startups Vie to Build an Uber for Health Care; Wall Street Journal (Aug 2015)

# In Your Home

# Today's Home Visit


Wifi

Customizable

Ergonomic

MED ZED

Re-imagining the House Call

**BackPACT**

- Tablet
- Digital Stethoscope
- Multiple Lenses/Optics
- Ultrasound Unit
- 2 lead EKG
- Basic Supplies

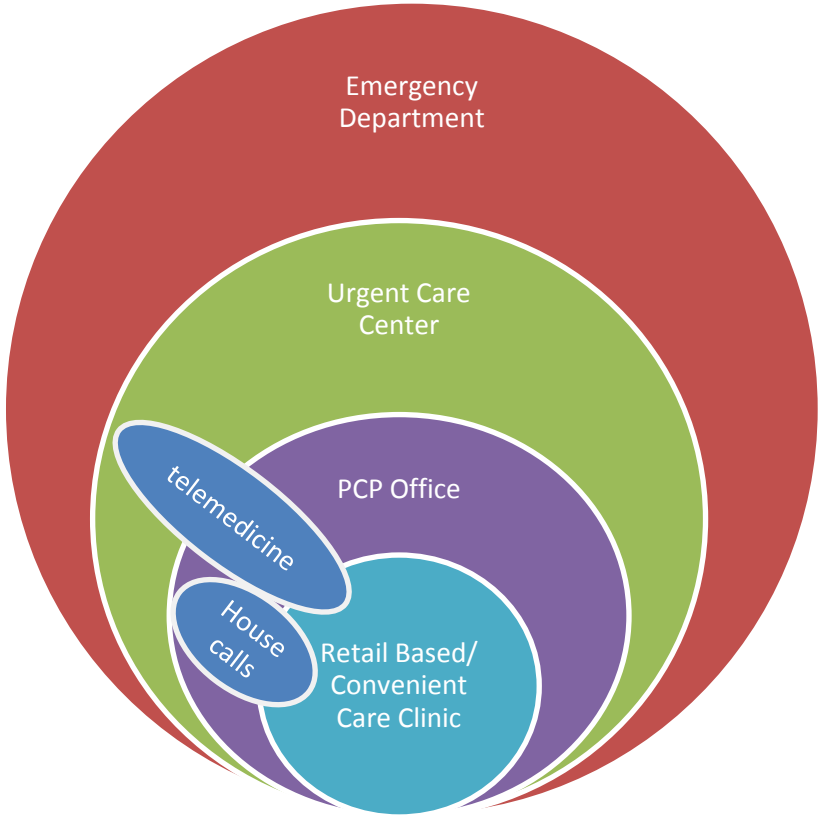
Take Home Thoughts

# WHERE DOES THIS LEAVE US ?

"The computer says I need to upgrade my brain to be compatible with the new software."

# The Evolving Medical Neighborhood

New AAP Statement on Acute Care coming soon!



# Uber's Message for Healthcare

Providers have 3 choices for the changing landscape

The NEW ENGLAND JOURNAL of MEDICINE

**Uber's Message for Health Care**

Allan S. Detsky, M.D., Ph.D., and Alan M. Garber, M.D., Ph.D.

Unreliable service, inconvenience, uncomfortable surroundings, and high prices make customers unhappy, and given the opportunity, they will go elsewhere. Uber, Silicon Valley's response to the shortcomings of urban taxi and limousine services, has managed to upend an established industry by offering an appealing alternative. Uber's technology-enabled incursion into a highly regulated market suggests that if consumers gain enough from a new solution, it can overcome powerfully entrenched economic and political interests. Is U.S. health care ripe for disruption by a medical Uber?

Taxi service was vulnerable to disruption because poor (some would say archaic) service had been established as the norm, in part because it was difficult for higher-quality alternatives to fill the gap. The taxi industry would seem to exhibit the key characteristics of a highly competitive market. It has many sellers, each of which is too small relative to the overall market to affect prices by withholding or expanding its own supply of rides. But in most cities, taxis and limousine services have operated as regulated monopolies for decades. Most jurisdictions, claiming to be shielding suppliers from ruinous competition that would drive prices below the costs of doing business and protecting consumers from unsafe equipment and untrained drivers, have restricted licenses to specific vehicle owners. Such regulation has limited the supply of cabs (thereby increasing the price above true costs of providing rides, leading to excess profits that economists call "monopoly rents") while requiring the industry to meet prescribed standards.

Since 2009, when it was founded to develop technology to help would-be riders find transportation, Uber has become a rider–driver matching service. Crucially, the drivers did not have to be established, full-time limo or taxi drivers. The company has grown rapidly, spreading to more than 150 U.S. cities and 58 countries, with an estimated valuation of $62.5 billion.*3 This growth came at the expense of Uber's traditional competitors, eroding the earnings of many people who drove taxis and limousines in the regulated part of the sector and driving down the monetary value of their licenses. In Toronto, the average selling price of a "cab plate" fell from $360,000 in September 2012 to $153,867 a year later and $118,239 in 2014.* The concurrent increase in Uber's valuation is a measure of the transfer of monopoly rents to Uber from license holders all over the world.

With so much at stake, license owners and their drivers have fought back, putting enormous political pressure on government officials who had previously protected their monopoly rents. Although Uber has lost some battles, it has won many others and has shown that it will aggressively defend its ability to operate in cities worldwide.

Health care delivery may seem far less vulnerable to disruptive change than taxi services. Any would-be health care disrupter confronts a web of regulations, contractual obligations, interlocking financial interests, and providers' political influence — hospitals are often a congressional district's largest employers. Market power and outright monopoly, often reinforced by insurer and hospital consolidation, licensing, and other regulations, characterize health care provision in many parts of the country and can discourage the entry of new competitors. Furthermore, an alternative service would face a relative price disadvantage if it didn't qualify for health insurance coverage. Strategies for delivering lower-cost alternatives by using non-

806 N ENGL J MED 374;9 NEJM.ORG MARCH 3, 2016

The New England Journal of Medicine

1. Ignore innovators and hope for the best

2. Call for increasing regulation to make it harder for innovators to enter the market

3. Welcome, enable, and embrace it….but adapt your existing model OR compete on quality and efficiency

# Trends and Thoughts

- Consumers will continue to direct health care
- Retail care will evolve, provide more comprehensive care and telemedicine services
- Urgent care is consolidating into group of larger players
- Accountable care will grow, risk-sharing will increase

# Care Coordination & Communication

Two-way communication with the medical home is a MUST !

# SUMMARY

- Acute care services outside the medical home are increasing. No matter how convenient, trust and care quality are paramount

- There is a wide spectrum of pediatric acute care delivery. Learn and connect with the providers in your community to understand their services

- Advocate for two-way communications with the medical home