Understanding Trends in Telehealth Use: An All-Payer Claims Analysis in Maine

New England Rural Health Association
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RESEARCH QUESTIONS

Research Questions

- Who is using telehealth (TH) services in Maine?
- What are the trends in use of TH services in Maine?
- What are the barriers and facilitators to providing and using TH services in Maine?

INTRODUCTION

The Maine Context

- Maine has TH-friendly coverage policies
  - “A” rating from the American Telemedicine Association
  - Relatively early adopter of coverage parity law for private insurers (2009)
  - MaineCare has limited restrictions on patient setting, covered services, and eligible providers
- Maine was one of the first states to establish an all-payer claims database

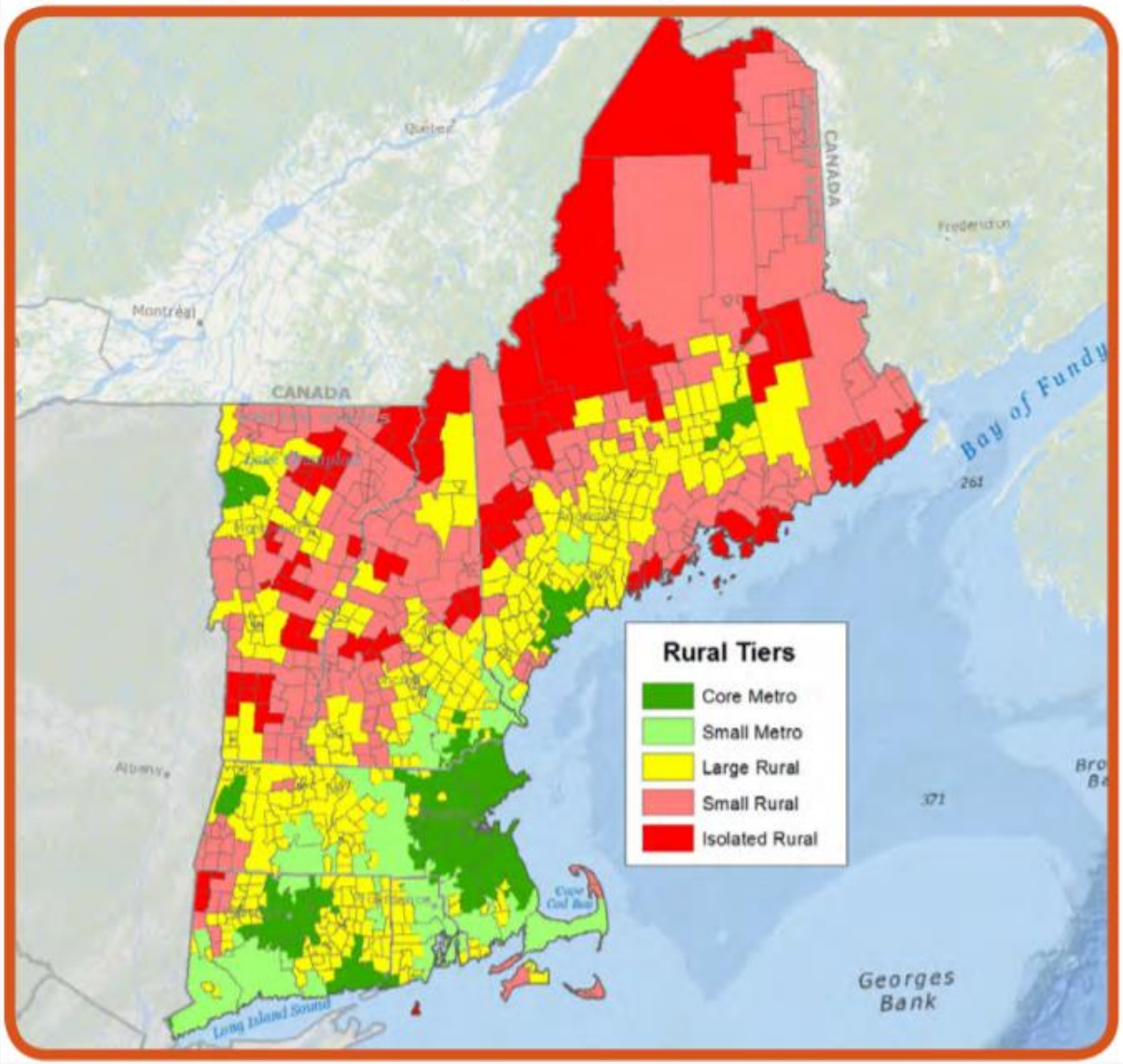
METHODS

Quantitative Analyses

Data Sources

- 2008-2016 All-Payer Claims Database
  - Includes claims from commercial insurance carriers, Medicare, MaineCare, third party administrators, pharmacy benefits managers, and dental benefit managers
  - Includes over 237M medical claims between 2008-2016
  - Identified TH claims using modifiers (GT & GQ) and TH-specific CPT codes
- Rural-Urban Commuting Area Codes (RUCAs)

Figure 1 - Map of Revised New England Rural Definition



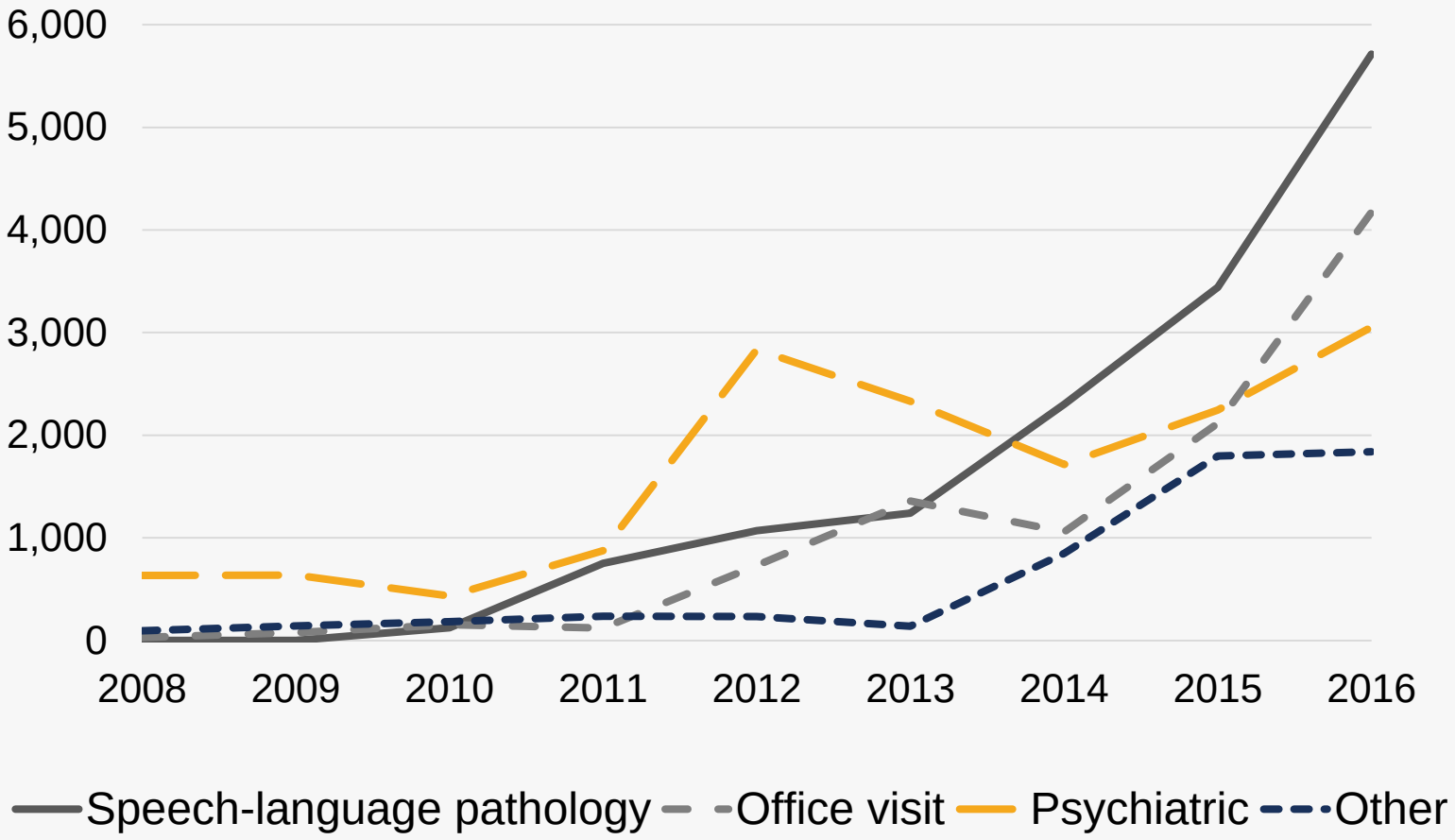
Source: Rural Data For Action, A Comparative Analysis of Health Data for the New England Region. New England Rural Health Roundtable. Second Edition, October 2014

Qualitative Analyses

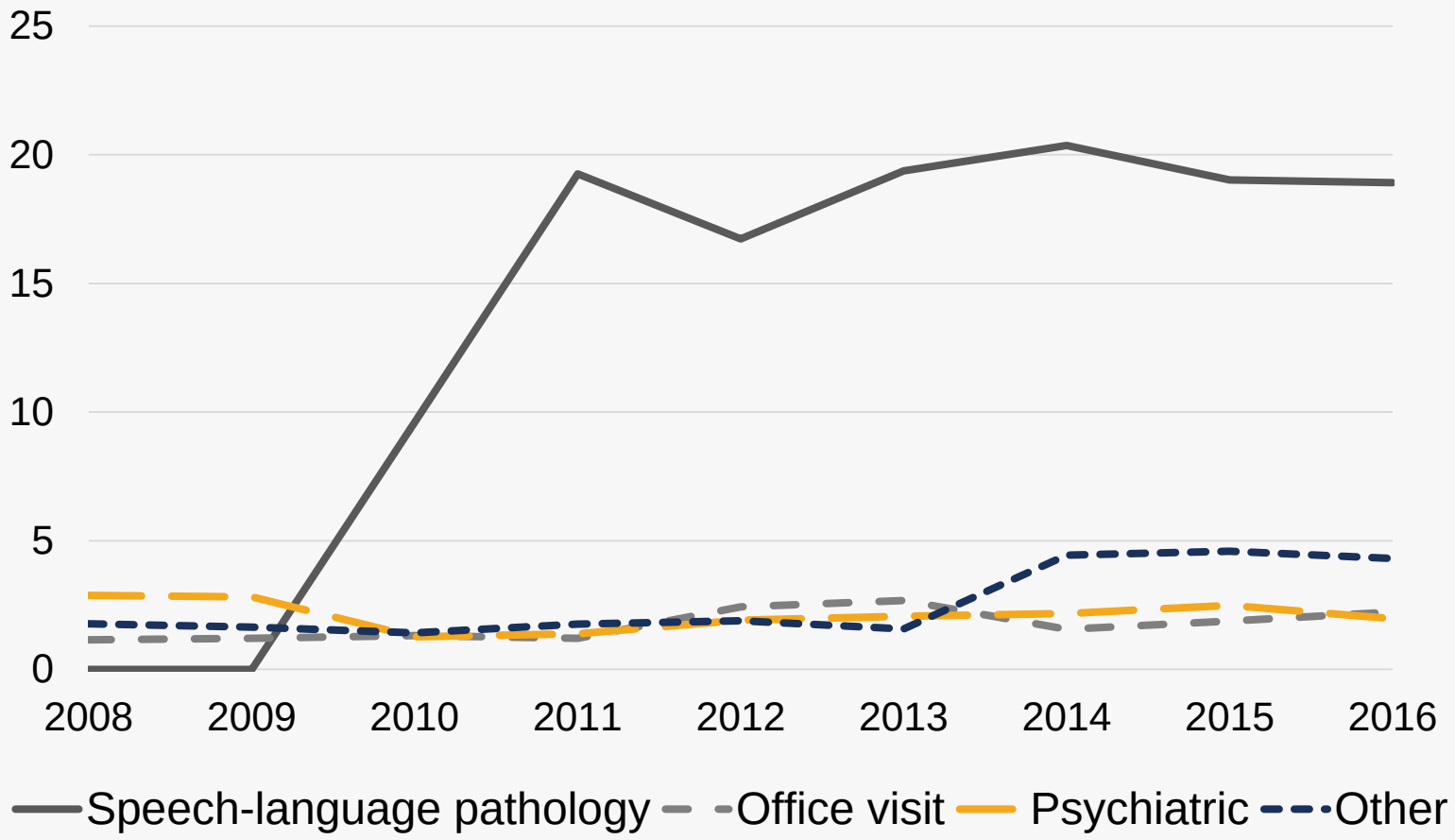
- Interviewed 16 people from 14 organizations during spring and summer 2019
  - Programmatic, technical, and/or clinical leaders representing health systems, independent hospitals, FQHCs, and home health agencies
- Developed coding structure based on the literature and on initial interview coding
- Coded interviews using Nvivo 12 (QSR International) and identified themes and illustrative quotes

RESULTS

Telehealth claims by visit type and year, 2008-2016



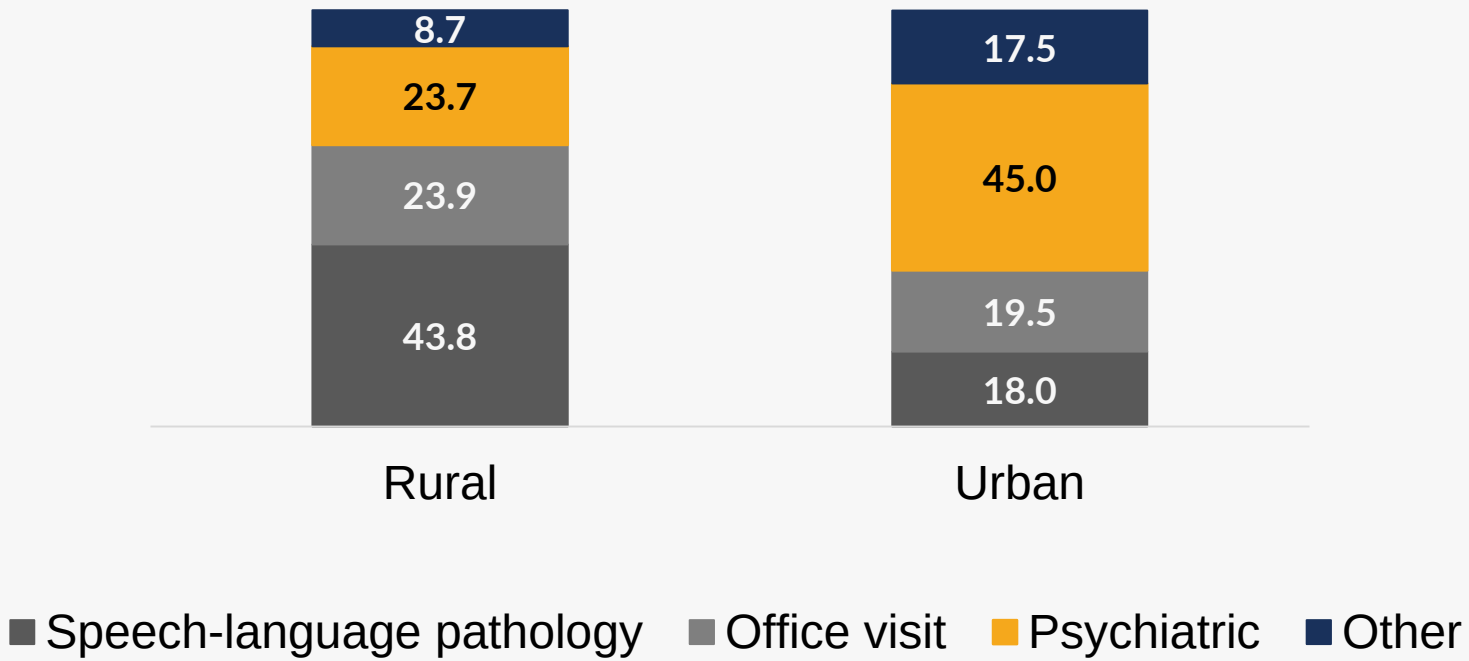
Telehealth claims per person, by visit type and year, 2008-2016



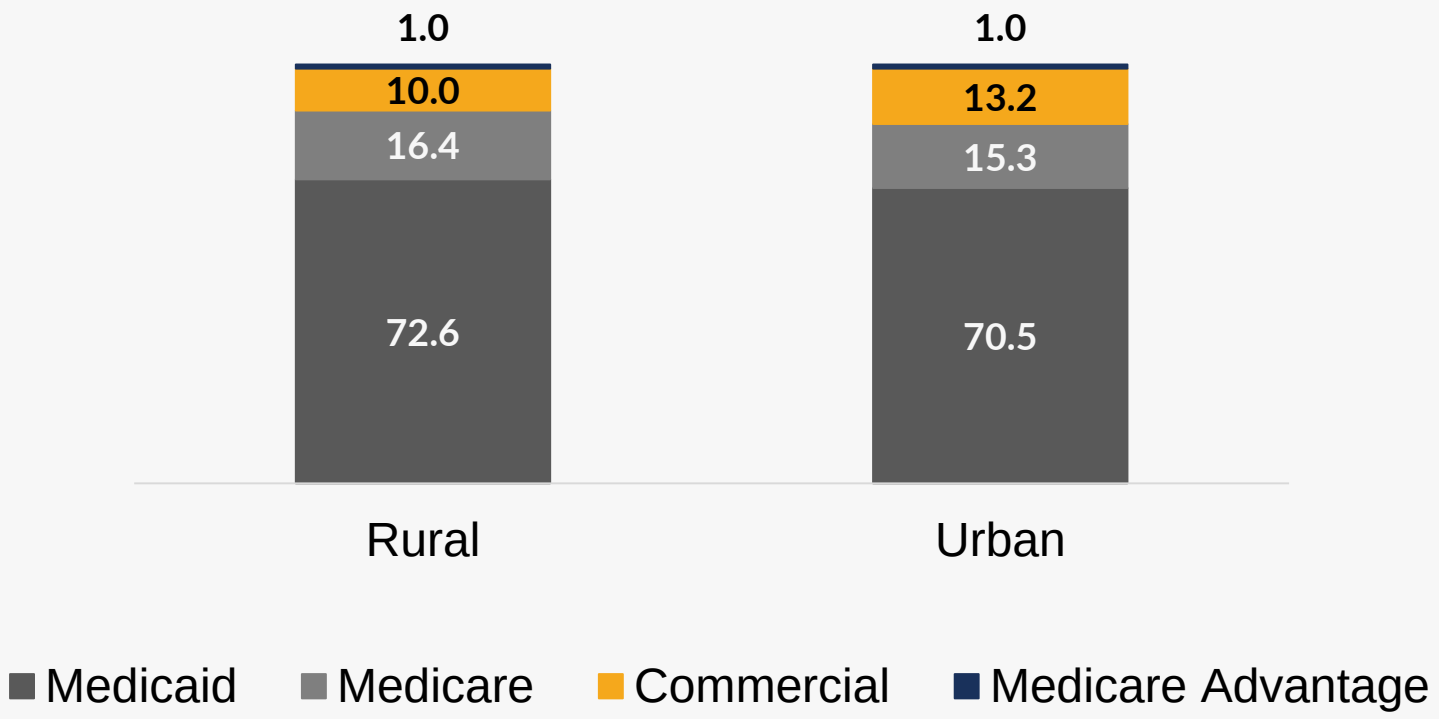
Characteristics of telehealth users in Maine, by rurality of patient residence

Characteristic	Isolated small rural (N = 2,294)	Small rural (N = 2,602)	Large rural (N = 998)	Rural total (N = 5,894)	Urban (N = 7,738)
Age (years), mean	39.8	38.0	41.0	39.2	32.9
Under age 18	28.0	28.3	21.7	27.1	32.1
18-64	52.6	54.4	58.7	54.4	60.0
65 and over	19.5	17.4	19.6	18.6	7.8
Sex					
Female	58.2	57.1	59.8	58.0	55.8
Male	41.9	42.9	40.2	42.0	44.2
Payer					
Medicaid	50.0	54.8	43.9	51.1	59.8
Medicare only	8.6	5.5	5.1	6.7	2.7
Commercial only	14.5	7.2	18.3	11.9	15.9
Medicare Advantage	1.5	1.4	5.7	2.1	1.4
Medicare + Commercial	4.0	2.2	2.5	3.0	1.1
Dual (Medicaid + Medicare)	20.9	28.1	23.3	24.5	18.7
Dual + Commercial	0.5	0.9	1.2	0.8	0.5

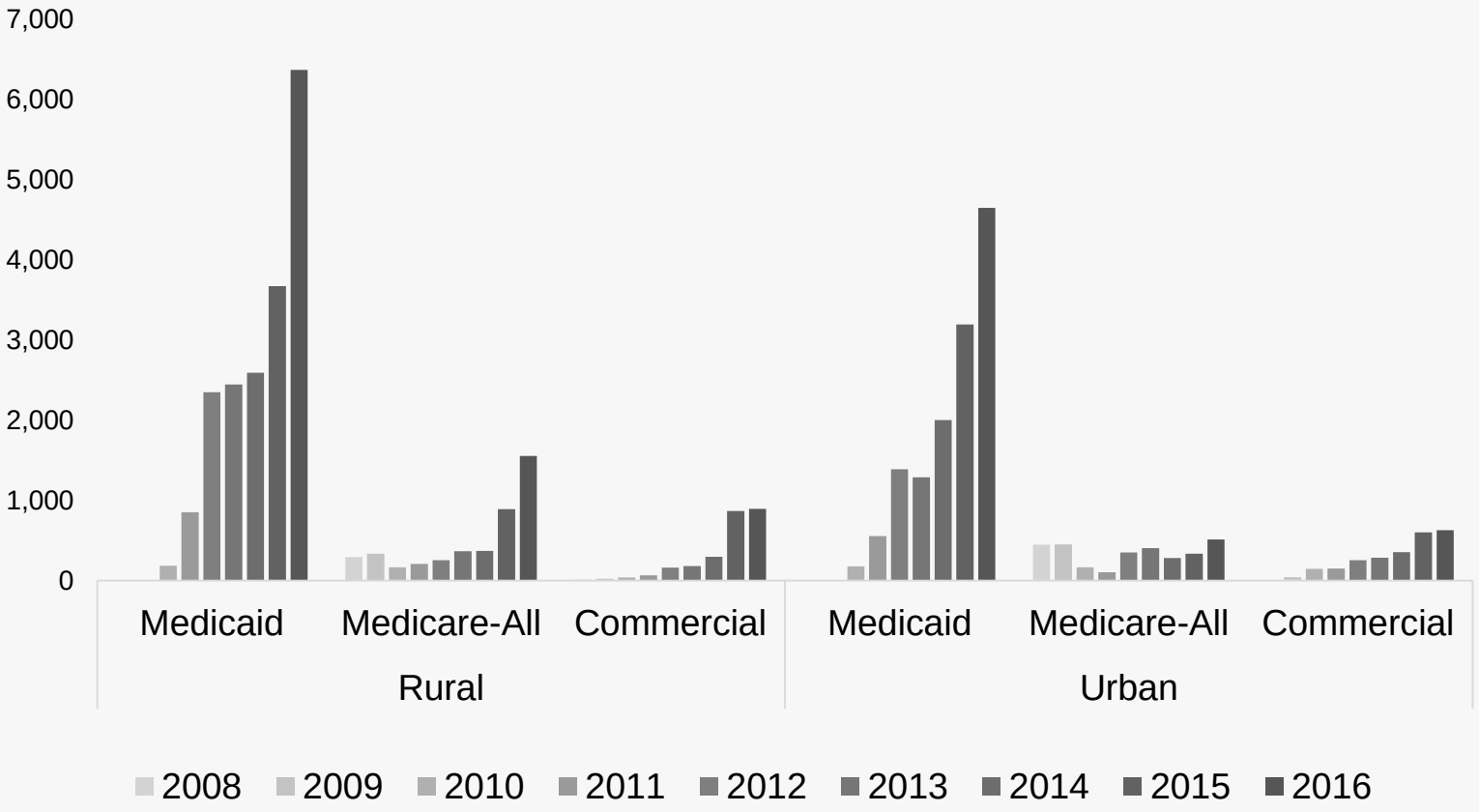
Visit type of telehealth claims in Maine, by rurality of patient residence



Payer of telehealth claims in Maine, by rurality of patient residence



Number of claims by primary payer and rurality of patient residence, 2008-2016



Using claims to address use of Telehealth services in Maine

- Limitations
  - SUD-related claims have been redacted since 2014
  - Some payers not included (VA, Tricare)
  - Zip codes associated with provider NPI
- Inconsistent billing for TH services

Using claims to address use of Telehealth services in Maine (cont'd)

Reimbursement complexity drives inconsistent billing for TH services

- HCOs have developed other arrangements
- HCOs are under-billing for certain services

Using claims to address use of Telehealth services in Maine (cont'd)

- *"It's a **whole different process** to bill for telehealth than it is for an office visit."*
- *"If you don't have the **right modifier in the claim** to identify it as telehealth—and that can happen very easily—it will be denied."*
- *"The commercial plans typically don't pay the originating fee. Some of them do, but not all of them. **It's hit or miss.** What's frustrating for people is **it's not the same rules for everybody and that gets really confusing**."*

Factors Driving Telehealth Adoption and Use

- Patient benefits
- Benefits to health care organizations
- Mutual benefits

Factors Driving Telehealth Adoption and Use (cont'd)

Patient Benefits

- *"[Telehealth] is part of our access improvement initiative to make sure we look at these telehealth solutions to help us **expand access to folks out in the rural areas**. Again, travel times, weather and whatever social determinants may prevent them from making the trip in, that's a big piece of why we're doing this."*
- *"So in a lot of ways telehealth gets started because there's a need and you think about the rest later. Certainly we knew that MaineCare was allowing telehealth and there was that awareness, but I don't think it necessarily drove people to jump into it. **Really everything came from patient need.**"*

Factors Driving Telehealth Adoption and Use (cont'd)

Benefits to Health Care Organizations

- *"[Telehealth] allows us to **retain more patients here instead of having to transfer them** to other locations all the time."*
- *"When you live in these rural communities…all the services we use telehealth for we don't have. So it's actually been an important thing for these smaller facilities …because **we're not fiscally able to support getting some of these specialty services nor are we able to attract those providers that provide that services to an area like ours**…"*
- *"We all know it's **good for the bottom line** if you can treat somebody before it becomes an emergency."*

Factors Driving Telehealth Adoption and Use (cont'd)

Mutual Benefits

- *"We're still going to keep patients out of the ED so it's a **savings to the insurance companies and the healthcare system** overall as well as a **convenience for the patients**"*
- *"…[With] remote patient monitoring, there is the technology available to allow patients to monitor their blood pressure, whether or not they took their medications, etc., etc. These are things that can **save patients from hospitalization, save patients' lives**. So to fail to provide it to our patients is really almost unacceptable in today's age"*

Factors Driving Telehealth Adoption and Use (cont'd)

- Pro-Telehealth MaineCare policies
- Clinical champions, leadership and front-end providers/conveners
- Grant funding, especially for smaller organizations

Factors Driving Telehealth Adoption and Use (cont'd)

Pro-Telehealth MaineCare Policies

- *"Maine has really, really been **very supportive of telehealth**. It has not grown out as fast as I would have anticipated but that was a big factor. If we had to jump through a lot of hoops and barriers you'd give up."*
- *"We have a **parity law** here of 100%, like Massachusetts it's like 75%. We can go to a patient's home if the video kicks off, for MaineCare, you can go to a phone call and still get reimbursed for it. […] Somebody's lobbied for that, put that through. Maine is really, really good for that, leveling the playing field."*

Factors Driving Telehealth Adoption and Use (cont'd)

Clinical Champions, Leadership and Front-End Providers/Conveners

- *"Somebody that **champions** a project is somebody that really has the desire the make the project work, has the capacity to make it work, but is also invested in making it successful for the delivery of care, and that is almost always physicians."*
- *"You need **buy-in from the CEO and the CMO** because they're the ones that can make something work. If you don't have their buy-in it's not worth the effort."*
- *"Ultimately the **people who will be using the technology need to be embracing it** and driving the adoption of it."*

Factors Driving Telehealth Adoption and Use (cont'd)

Grant Funding

- *"If it wasn't for the **USDA RUS grants**, I think that would have slowed down telehealth enormously."*
- *"First, these **hospitals probably would not have done telehealth if they hadn't received this grant** because the equipment can be cost prohibitive for a smaller hospital, for any size hospital. It's expensive."*

Factors Impeding Telehealth Adoption and Use

- Reimbursement
- Workforce and personnel
- Technological and resource constraints

Factors Impeding Telehealth Adoption and Use (cont'd)

Reimbursement

- *"I think the geographical rules for Medicare, that throws a lot of people off, and it discourages people. Then they had different rules for FQHCs. They couldn't be an originating site. People just get frustrated and say, 'why do it?' If it gets so confusing that people don't know and everybody is so tight with their budgets and risk averse that way,* ***they just feel it's not predictable and reliable*** *then I just can't invest in this."*

Factors Impeding Telehealth Adoption and Use (cont'd)

Workforce and Personnel

- *"**They don't have time to be messing around** with passwords, and figuring out billing for these, and making preauthorization calls, if needed. It needs to be just like they walk into the room and there's the patient, we have our discussion, we put in labs, we go, education, and next steps. Then we go on from there. We're not there yet."*
- *"If your paycheck every week is dependent on how many patients you see and **you don't get to bill on these visits**, that's a hard sell."*

Factors Impeding Telehealth Adoption and Use (cont'd)

Technology and Other Resources

- *"We're just finishing up a project to put a network port in all our patient rooms because our **wireless was not reliable** to give a good patient experience every time. When you're a provider trying to be convinced to adopt telemedicine and it doesn't work the first time you try it—or it works three out of five times—that's not good enough. **It needs to work every time."***
- *"There are so many different **technology things changing on a daily basis** that it's really confusing."*
- *"Sometimes it's just **administrative bandwidth** and sometimes a **capital cost** […] so that can be an extra barrier. **I found that more likely to happen in a financially challenged, deeply rural practice**."*

Indications of Growth in TH

- All organizations interviewed were piloting or otherwise pursuing TH
- Some had terminated TH initiatives
- Many affirmed the strategic importance of TH to their organizations

*"Obviously the **value-based equation** if we transition to that, that would make a difference, because then people would be more open to it because we know that that type of visit is certainly a lot cheaper than an office visit."*

The Road to Telehealth and Digital Health Use

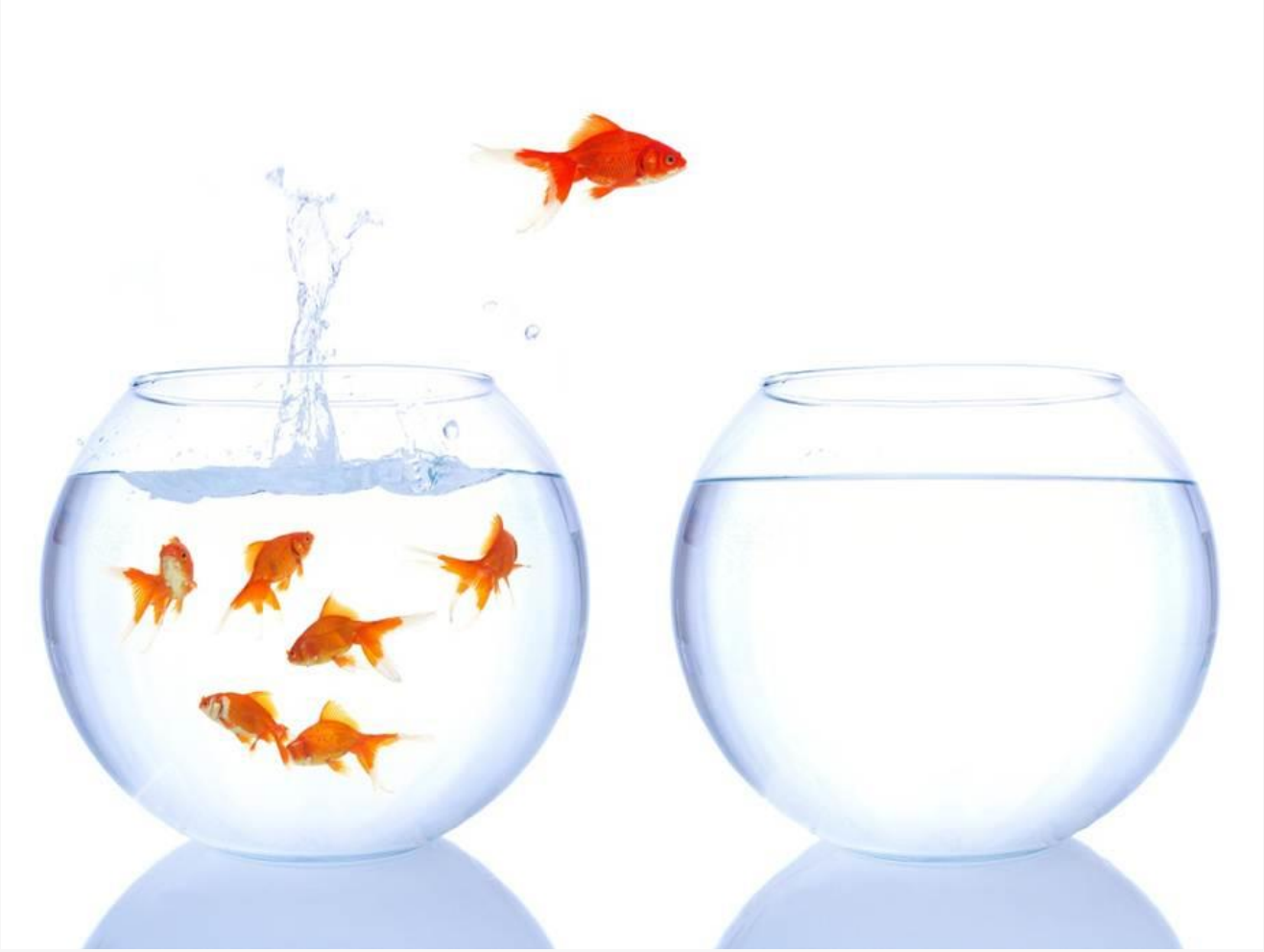
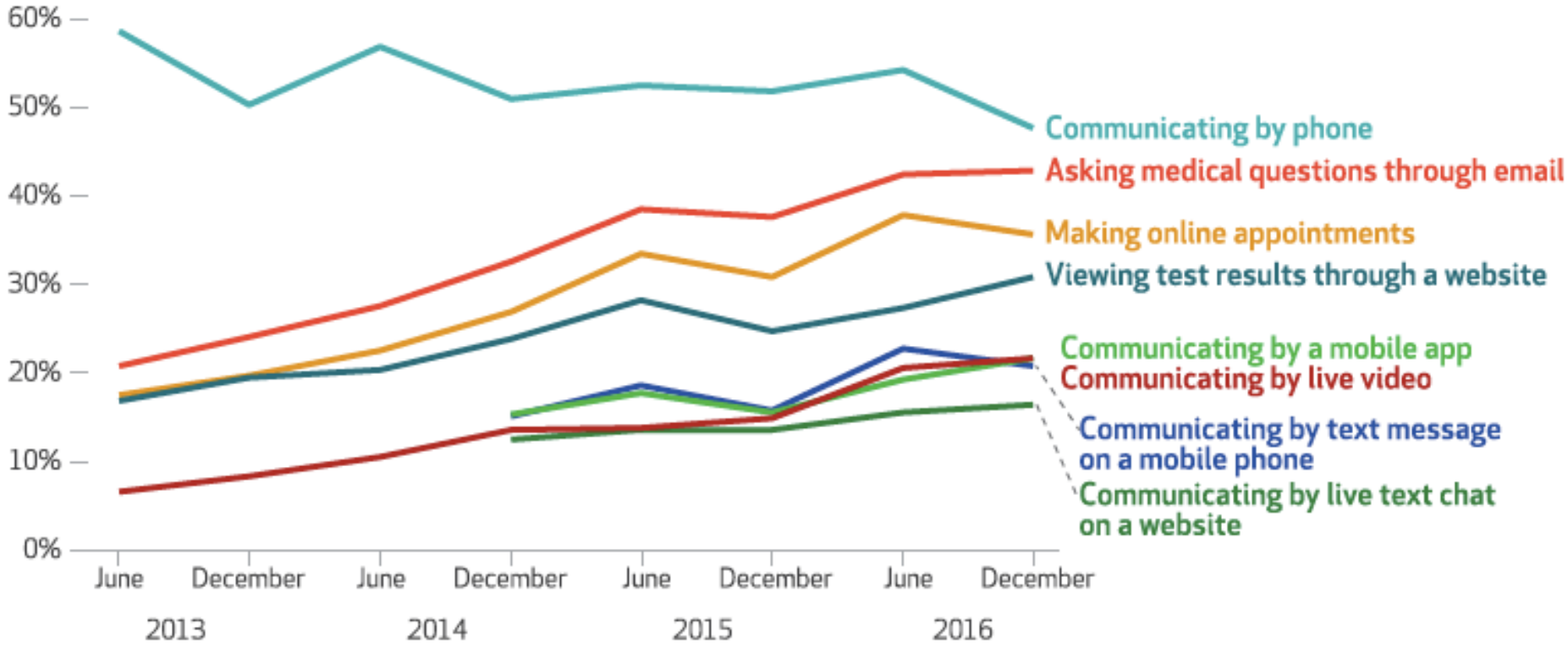


EXHIBIT 1

Rates of consumers' use of telehealth, by type of use, 2013–16



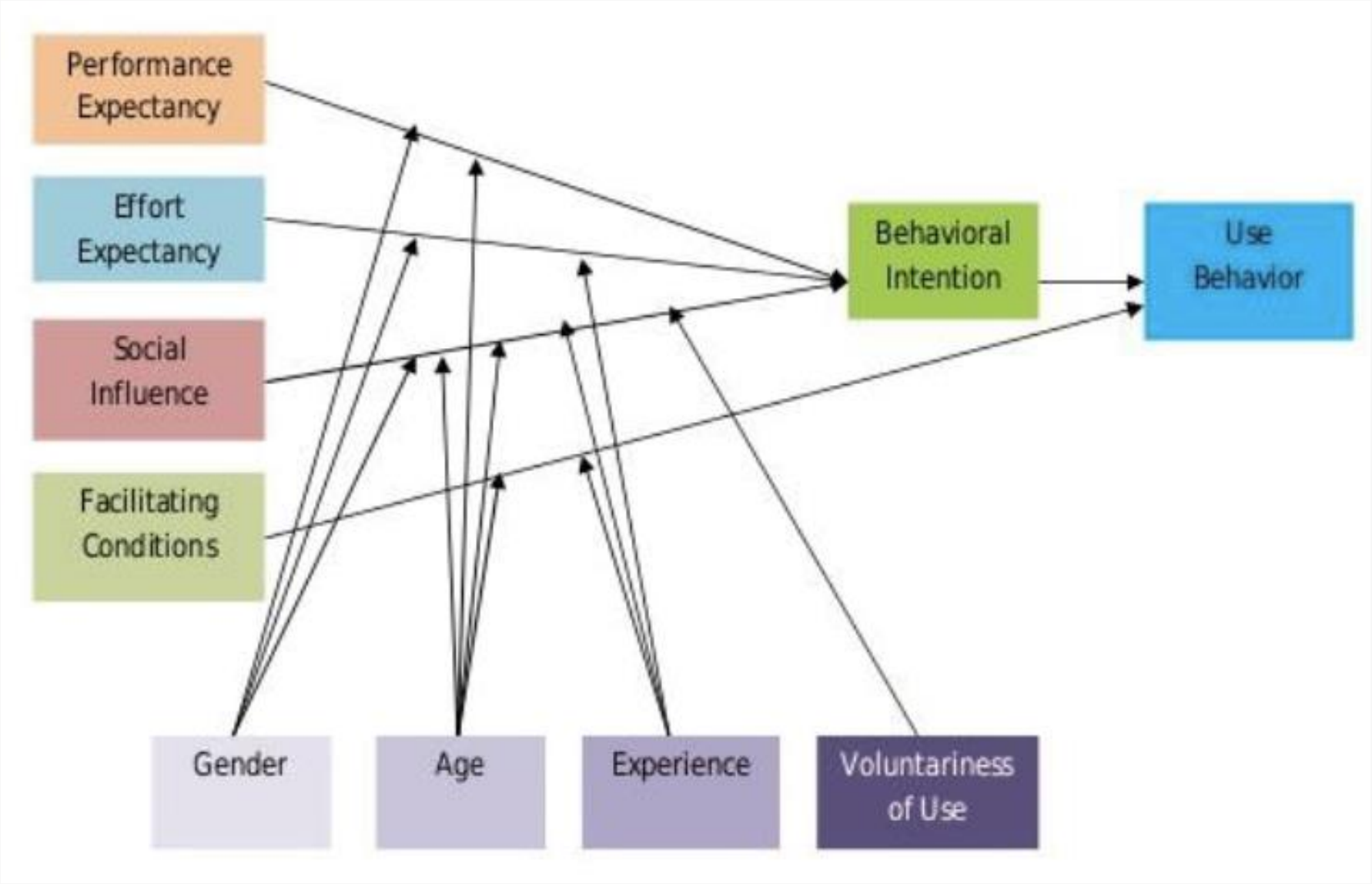
SOURCE Authors' analysis of data from the Consumer Survey of Health Care Access of the Association of American Medical Colleges.
NOTES "Communicating" means communicating with a provider. Examples of live video are Skype and FaceTime.

Park J et. al, Health Affairs December 2018

Technology Acceptance

- How do users think about telehealth?
- How easy is it to use?
- What's needed for success?

Unified Theory of Acceptance and Technology (UTAUT)



Technology-Fit Factors

Clinicians

- Value, Value..
- Early Adopters
- Workflow
- Organization

Patients

- Value…. via Clinicians!
- Ease of Use
- Digital Inclusion

Health professionals should be involved as social agents to frame home telehealth services as useful and beneficial, as this will raise acceptance among the users.

DISCUSSION

How do our findings resonate with your experience?

How are policies or other factors in your state affecting telehealth adoption and use?

What will telehealth look like in 5 years and will claims represent this journey?

What has to happen for telehealth to be routine?

Thanks!

Any questions?

Feel free to contact us:

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