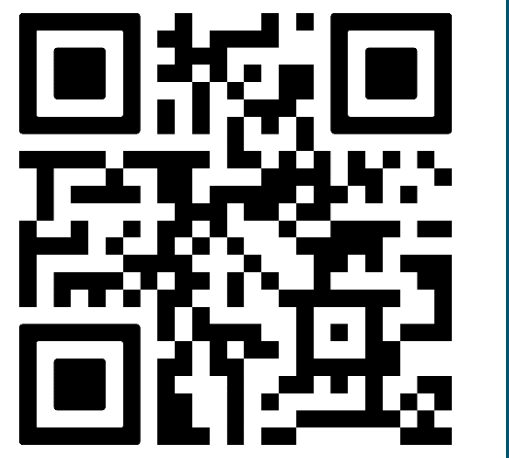


# RWD106 | Characterizing Telehealth Utilization from Administrative Claims in the US using a Standardized Definition

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## Background

- In response to the disruption of in-person healthcare visits during the Covid-19 pandemic in the US, public and private payers expanded their coverage and reimbursement for telehealth (TH) services starting March 2020
- As a result, use of TH has increased sharply both in Medicare<sup>1</sup> and commercially insured<sup>2,3</sup> populations in the US and new research is needed to evaluate the effectiveness of medical care delivered via TH<sup>4</sup>
- Administrative claims are an important source of real-world data that could be used for TH-focused research. Existing research is using a wide variety of TH definitions and identification algorithms, which limits cross-study comparisons

## Objectives

- To create a standardized definition of TH utilization from administrative claims
- To investigate trends in TH utilization in a large US commercially insured and Medicare Advantage/Supplement population

## Methods

- This was a retrospective study using medical claims from the HealthCore Integrated Research Database<sup>®</sup> (HIRD) between January 01, 2006, and August 31, 2021
- The HIRD contains longitudinal claims and eligibility data from 14 geographically diverse states across the US that represent members in all 50 states with either commercial or Medicare Advantage/Supplement insurance
- Researchers accessed data in the format of a limited data set for which data use agreements were in place with the covered entities in compliance with the Health Insurance Portability and Accountability Act Privacy Rule
- We evaluated the utilization of TH in an outpatient setting over time using a combination of place of service codes, CPT codes, CPT modifiers, and certain TaxIDs from known TH providers (see **Table 1**). Presence of at least one code was used to classify a claim as TH. A subset of codes (marked with a \*) were used to identify audio-only TH visits
- Outpatient services were classified using a modification of the original Berenson-Eggers Type of Service (BETOS) categorization<sup>5</sup> involving 10 mutually exclusive categories
- All analyses were descriptive

**Table 1. Codes used to identify outpatient TH services**

Code type	Code list
CMS Place of service <sup>6</sup>	'02'
CPT codes	'98966*', '98967*', '98968*', '98969', '98970', '98971', '98972', '99366', '99367', '99368', '99371', '99372', '99373', '99421', '99422', '99423', '99441*', '99442*', '99443*', '99444', '99446', '99447', '99448', '99449', '99451', '99452', '99453', '99454', '99457', '99458', '0188T', 'G0406', 'G0407', 'G0408', 'G0425', 'G0426', 'G0427', 'G0459', 'G0508', 'G0509', 'G2010', 'G2012', 'G2061', 'G2062', 'G2063', 'Q3014', 'T1014', 'S0320', 'G0071', 'G0181', 'G0182', '0488T', '0074T', '0488T', '0206T', '93050', '96120', '96146'
CPT modifiers	'GT', 'GQ', 'G0', '95'
TaxIDs	[Confidential]

\* Indicates codes used to identify audio-only TH visits (total of 6 codes)

## Results

- The analysis included 44,254,035 claims associated with 9,211,928 unique health plan members. Approximately 87% were commercially insured, 6% had Medicare Advantage plans, and 5% Medicare Supplement plans (other Medicare plans accounted for the rest)
- In 2019/2020/2021, the share of outpatient claims designated as TH was 0.1%/4.8%/4.4%
- Over the 15-year study period, 56% of TH claims occurred in 2020 and an additional 39% through August 2021 (see **Table 2**)

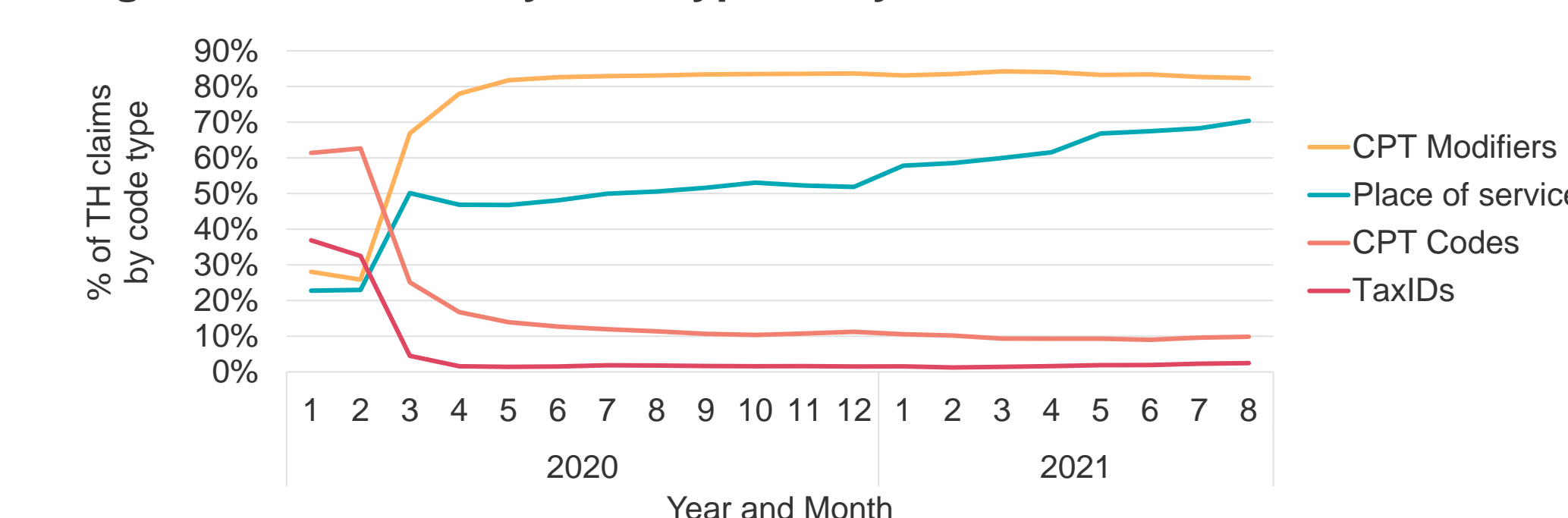
**Table 2. Number and % of TH claims by year**

Year	TH Claims	% of total TH claims
2006	10,905	0.02%
2007	12,960	0.03%
2008	19,467	0.04%
2009	25,599	0.06%
2010	27,315	0.06%
2011	34,179	0.08%
2012	40,062	0.09%
2013	48,032	0.11%
2014	67,180	0.15%
2015	97,300	0.22%
2016	166,103	0.38%
2017	280,323	0.63%
2018	530,921	1.20%
2019	668,610	1.51%
2020	24,837,079	56.12%
2021*	17,388,000	39.29%
Total	44,254,035	100.00%

\* Through August

- The majority of claims were identified as TH through use of CPT modifiers. The share of claims with a designated TH place of service code increased from 50% to 70% since March 2020 (see **Figure 1**)

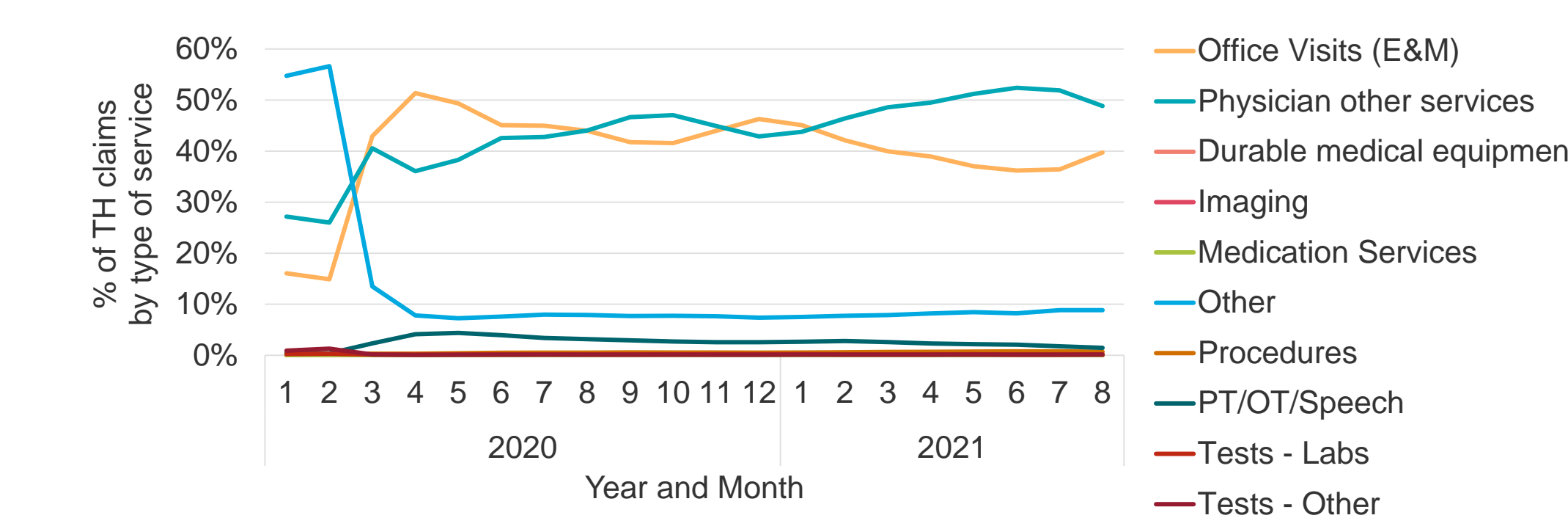
**Figure 1. TH claims by code type and year/month**



Note: A claim can have more than one code type for TH identification; the categories listed in the figure are not mutually exclusive and can sum to more than 100%

- The composition of TH claims across BETOS categories changed at the start of the pandemic, with most falling under *Office Visits (Evaluation & Management)* and *Physician Other Services* (e.g., CPT codes associated with hospital and home visits; specialist visits) since that point (see **Figure 2**)

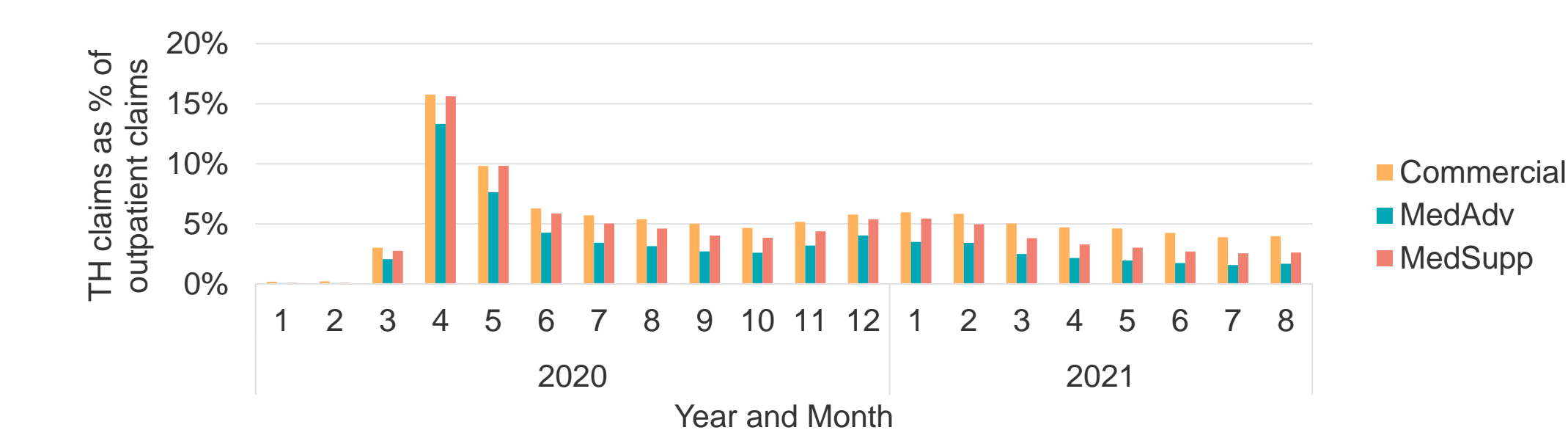
**Figure 2. TH claims by outpatient type of service category and year/month**



E&M, Evaluation & Management; OT, Occupational Therapy; PT, Physical Therapy  
The "Other" category contains all services not included in the remaining 9 categories. Claims in this category experienced a brief spike at the end of 2019 and start of 2020 due to increased use of online TH providers (the same providers that are also tracked by the TaxIDs in our TH definition).

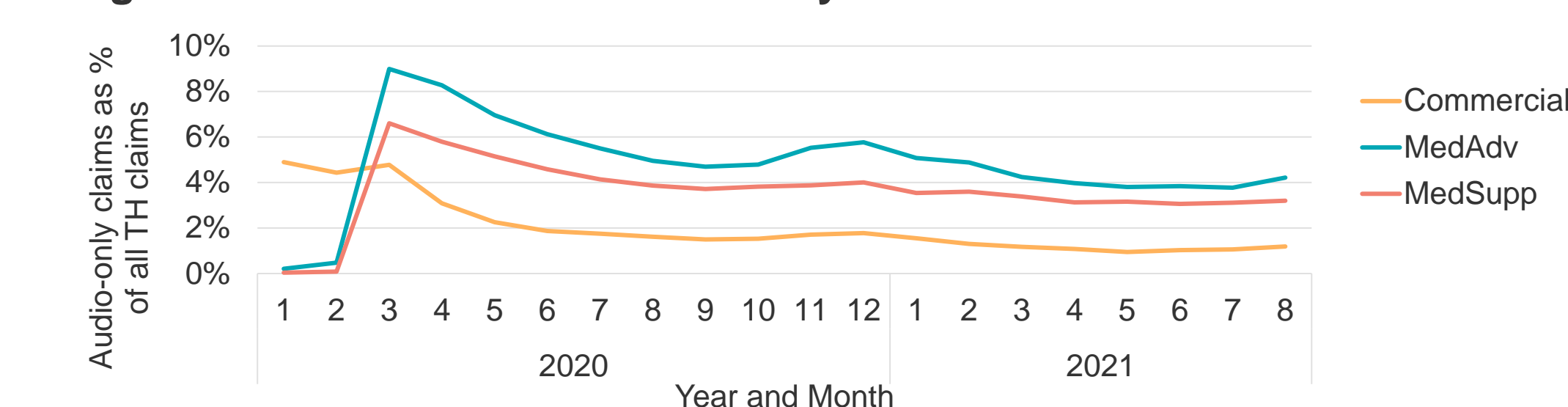
- Utilization was slightly higher among commercially-insured compared to Medicare Advantage patients (see **Figure 3**)

**Figure 3. Prevalence of TH use by line of business and year/month**



- During the entire study period, approximately 2.3% of TH claims were for audio-only visits based on submitted codes. Distributions by line of business in 2020/2021 are shown in **Figure 4**

**Figure 4. Prevalence of TH audio-only visits**



Note: CMS enacted a policy change effective March 2020 that introduced coverage for telephone E&M services.<sup>7</sup>

## Limitations

- Benchmarking of this TH definition against external data (e.g., from medical records) has not been performed
- This study is limited to patients with private health insurance coverage who are more likely to be of working age (30-64 years), which could limit the generalizability of the results
- Findings should be interpreted considering the caveats commonly associated with administrative claims database analyses, including potential coding errors and incomplete data

## Conclusions

- We created a standardized definition to identify TH using claims data
- Consistent with prior reports, TH utilization increased substantially following onset of the Covid-19 pandemic in conjunction with increased coverage and reimbursement for the service
- The definition will be revisited regularly to account for health care policy and coding changes (such as the new place of service code 10 = *Telehealth Provided in Patient's Home* introduced by CMS in January 2022<sup>8</sup>)
- Incorporation of TH utilization via a standardized definition is an essential tool for all health economic and outcomes research studies evaluating time periods from 2020 and beyond

## References

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- RA, MG, BE, VW are employees of HealthCore, Inc. (a wholly owned subsidiary of Anthem, Inc.), which conducts health services research with both internal and external funding, including a variety of private and public entities. MG and VW are shareholders of Anthem, Inc.
- ES is an employee and shareholder of Anthem, Inc.