Visit Trends & Factors Associated with Video Visit Uptake for Persons with HIV

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Background: Early Pandemic Telehealth Uptake Uneven
Clinical Data on Disparities in Usage

- UPenn primary care & subspecialty outpatient visits[1]
  - Less telehealth: older, Asian, limited English proficiency (LEP)
  - Less video: older, female, Black, Latinx, lower income

- UPenn Cardiology & GI clinics[2,3]
  - Phone not video: Black, female, older, lower income, LEP
  - Less likely to use online portals: Black, older

- MGH Cardiology[4]
  - Less video: older, lower income, public insurance, Black, Latinx

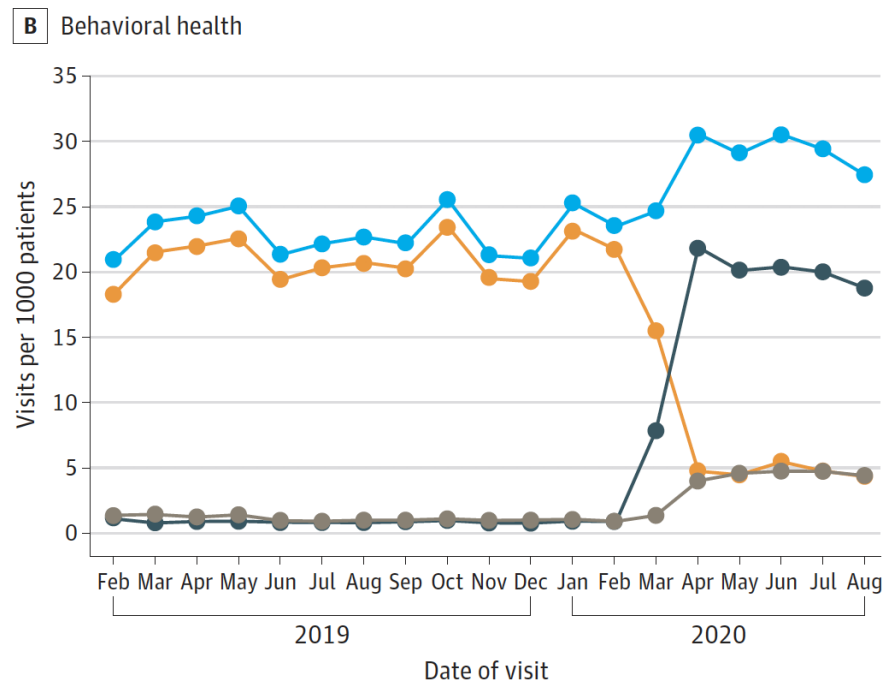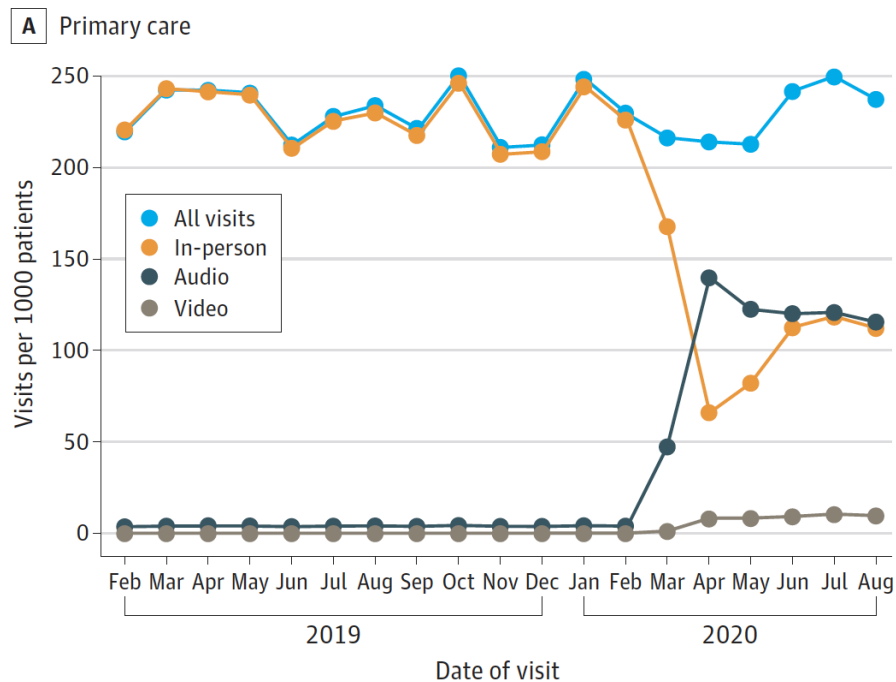1. Eberly LA et al. JAMA Netw Open 2020.
2. Eberly LA et al. Circulation 2020.
3. Serper M et al. Gastroenterology 2020.
4. Brown et al. Eur Heart Journal 2021.

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Recent Explosion in Telehealth
Data from California Federally Qualified Health Centers

Figure. Primary Care and Behavioral Health Visits per 1000 Patients by Visit Type From February 2019 Through August 2020

A Primary care

B Behavioral health

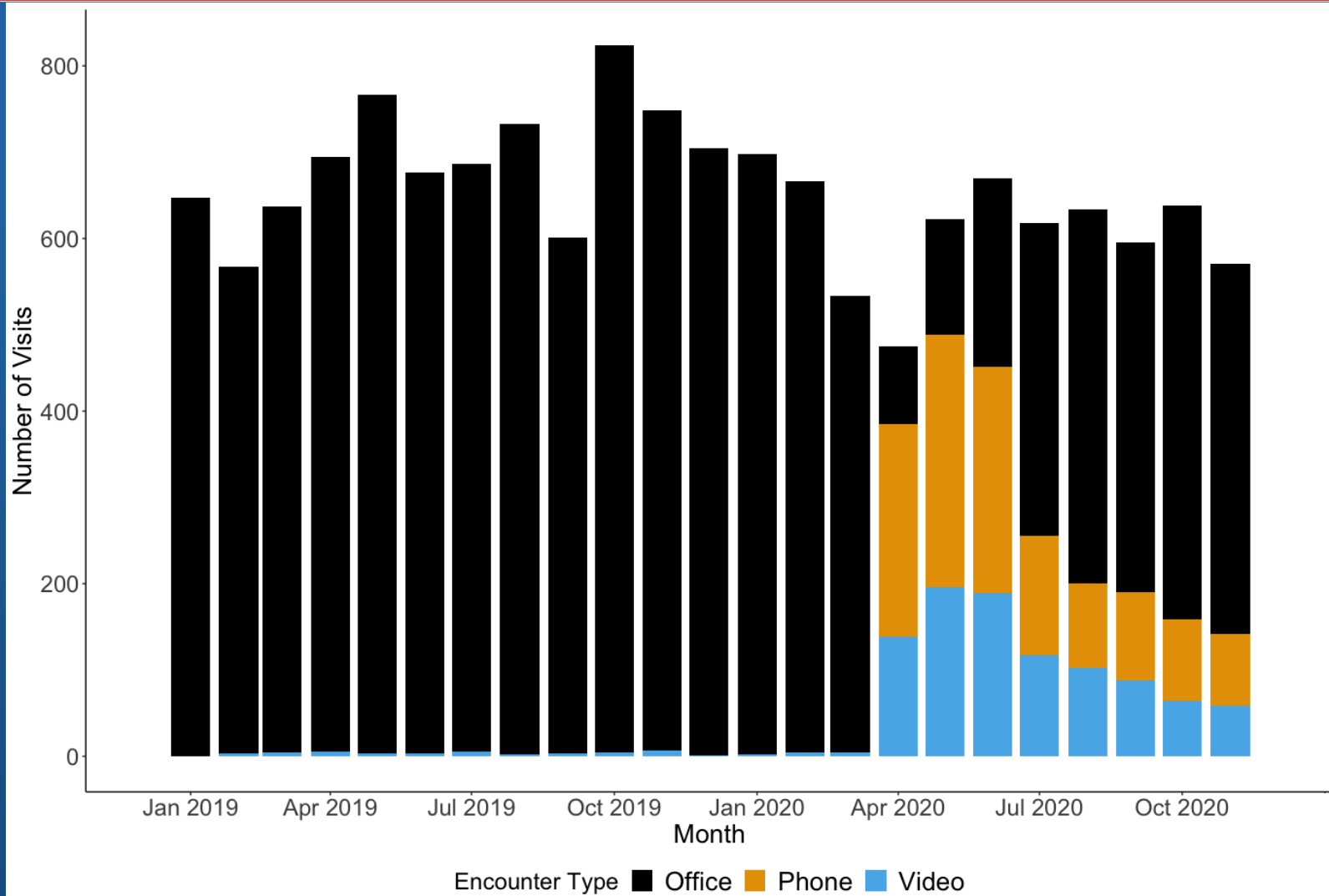Legend: All visits, In-person, Audio, Video

Uscher-Pines L et al. JAMA 2021.

- Methods:

  - Identified cohort of patients engaged in care prior to the pandemic ($\geq$2 visits w/in 24 months prior to March 15, 2020)

  - Of those patients, identified those who had a visit during the pandemic (March 15, 2020 to December 31, 2020)

  - Recorded visit type based on billing code

  - Collected demographic factors from EPIC and a social work database (age, sex, gender identity, race, ethnicity, language, housing status, insurance) and history of MyChart portal login

  - Logistic regression to assess factors associated with at least one video visit during the study period

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Visit Types By Absolute Count
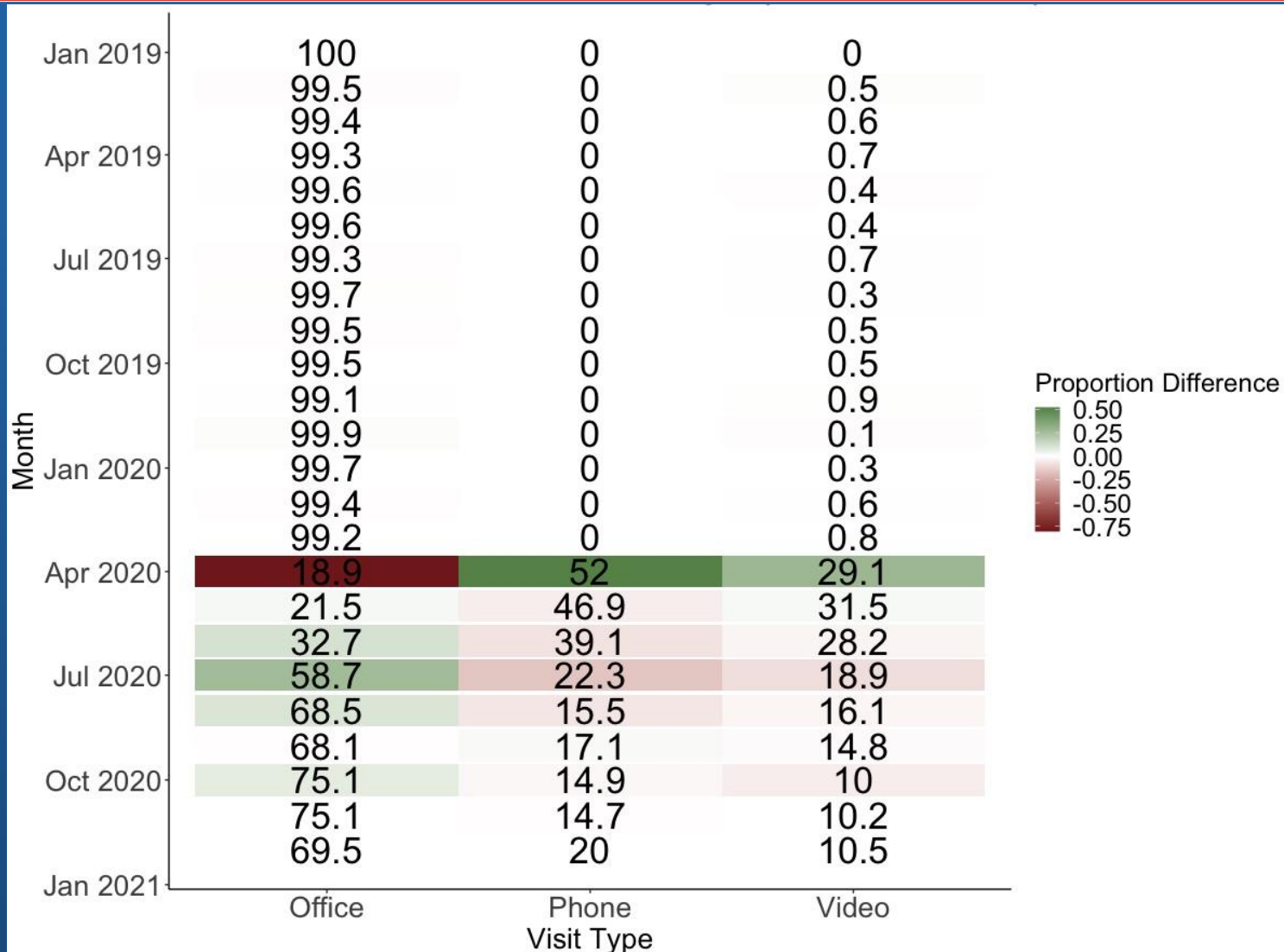## HMC Madison Clinic

Visit Types By Percentage
HMC Madison Clinic

Table 1. Patient characteristics.

Category	Variable	No video (%)	Video (%)	Overall (%)	P value
Number		1503	737	2240	
Age	Median (IQR)	51 (40, 58)	48 (38, 56)	50 (40, 57)	**< 0.001**
	Under 35	210(14)	129(17.5)	339(15.1)	**< 0.001**
	35 to 50	488(32.5)	266(36.1)	754(33.7)	
	50 to 65	674(44.8)	297(40.3)	971(43.3)	
	Above 65	131(8.7)	45(6.1)	176(7.9)	
Race	White	795(52.9)	441(59.8)	1236(55.2)	**< 0.001**
	Black	503(33.5)	195(26.5)	698(31.2)	
	Unknown	56(3.7)	48(6.5)	104(4.6)	
	Asian/Pacific Islander	110(7.3)	43(5.8)	153(6.8)	
	Other	39(2.6)	10(1.4)	49(2.2)	
Insurance	Private	545(25.1)	326(43.1)	871(29.7)	**< 0.001**
	Medicaid	538(24.7)	210(27.8)	748(25.5)	
	Medicare	328(15.1)	148(19.6)	476(16.2)	
	Self-pay	92(4.2)	53(7)	145(4.9)	
Sex	Female	285(19)	153(20.8)	438(19.6)	0.3415

Table 1. Patient characteristics.

Category	Variable	No video (%)	Video (%)	Overall (%)	P value
Gender	Non-cisgender	25(1.7)	10(1.4)	35(1.6)	NA[1]
Ethnicity	Not Hispanic or Latino	1223(81.4)	581(78.8)	1804(80.5)	0.9095
	Hispanic or Latino	224(14.9)	104(14.1)	328(14.6)	
	Unavailable or unknown	56(3.7)	52(7.1)	108(4.8)	
Language	English	1266(84.2)	672(91.2)	1938(86.5)	0.1315
	Spanish	87(5.8)	33(4.5)	120(5.4)	
	Other	150(10)	32(4.3)	182(8.1)	
Patient portal login	Yes	439(29.2)	337(45.7)	776(34.6)	**< 0.001**
Housing status	Permanent	1308(87)	641(87)	1949(87)	0.4402
	Unstable	97(6.5)	37(5)	134(6)	
	Temporary	59(3.9)	30(4.1)	89(4)	
	Unknown	39(2.6)	29(3.9)	68(3)	

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Table 2. Results of Multivariate Analysis
Factors Associated with ≥1 Video Visit

Variable	Unadjusted OR	Adjusted OR	Adjusted OR lower CI	Adjusted OR upper CI	P value
Age, years					
35 to 50	0.89	0.90	0.68	1.19	0.400
50 to 65	0.72	0.75	0.57	0.99	**0.025**
Above 65	0.56	0.56	0.35	0.88	**0.010**
Race					
Asian or Pacific Islander	0.70	0.71	0.48	1.03	**0.045**
Black	0.70	0.81	0.65	0.99	**0.018**
Other	0.46	0.50	0.23	0.99	0.055
Unknown	1.80	1.71	0.07	44.31	0.679
Patient portal login	2.04	1.80	1.48	2.19	**< 0.001**
Insurance status					
Medicaid	0.65	0.73	0.58	0.91	**< 0.001**
Medicare	0.75	0.92	0.70	1.20	0.410
Self-pay	0.96	1.01	0.69	1.47	0.948

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Conclusions

- Main findings:
  - Video visit uptake modest (now stable around 10% of visits)
  - Phone visit use higher than expected
  - Social determinants of health associated with video visit use
  - Patient portal login strongly associated with video visit use

- Limitations:
  - Couldn't compare by: gender identity, income, geography
  - Doesn't address why the disparities in video visit use exist

- Next steps:
  - Patient survey (awareness of options, preference, satisfaction)
  - Interventions to improve access

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