

Assessing the equity of reach: virtual medical visits among asthma patients during the COVID-19 pandemic

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HOW WE EVALUATED VIRTUAL VISITS

Context: COVID-19 required healthcare to rapidly adapt from **in-person** to **virtual** visits.

Question: Did a shift to virtual visits adversely impact access to preventive care among **demographically diverse** asthma patients?

Methods: We used the **RE-AIM** framework to examine the **equitable reach** and **representativeness** of virtual asthma visits.

BACKGROUND

The global pandemic caused by the rapid spread of Severe Acute Respiratory Syndrome Coronavirus 2 necessitated a rapid shift from in-person to virtual delivery.

- ✓ Virtual health may help bridge the asthma healthcare access gap, but the **extent that this varied across race and ethnicity**, is unknown.



METHODS

We evaluated the transition to virtual asthma visits across ethnically and racially diverse patients receiving asthma care services at Kaiser Permanente Colorado (KPCO), an integrated healthcare setting.

SETTING & POPULATION

- ❖ KPCO had an existing infrastructure for virtual care (email, telephone, video visit, or chat-with-the-doctor) prior to the pandemic.
- ❖ KPCO members diagnosed with persistent asthma through International Classification Diagnostic Codes using electronic medical records.

ANALYTIC PLAN

- ❖ **Analyses:** Logistic regression with adjusted the model using covariates (age, sex, income, education, and pre-pandemic healthcare utilization).

QUANTITATIVE FINDINGS

- Race or ethnicity were not significantly associated with higher or lower use of virtual care visits

Race/ethnicity	Odds Ratio	Confidence Interval
Latinx	1.02	0.87-1.18
White (ref)		
Asian	0.98	0.66-1.45
White (ref)		
Black/African American	1.16	0.92-1.46
White (ref)		
Other race	0.89	0.69-1.15
White (ref)		
Unknown race	0.85	0.61-1.18
White (ref)		

RE-AIM FRAMEWORK

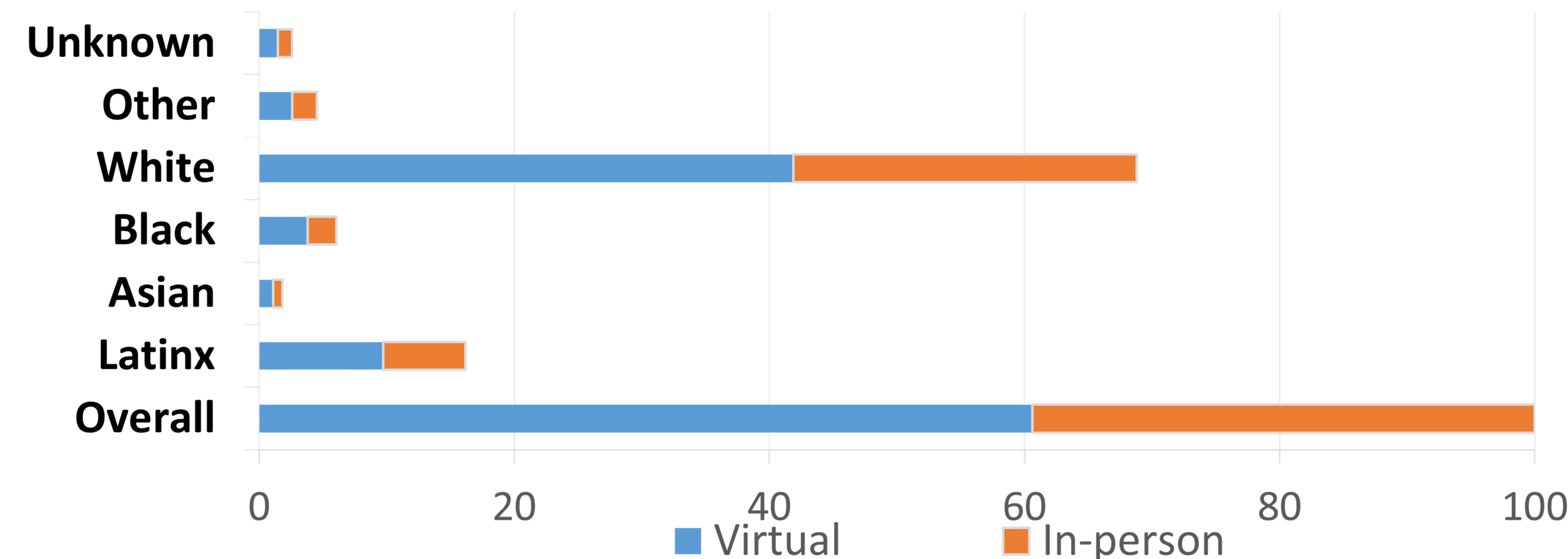
We used the RE-AIM¹ framework to examine the **equitable reach and representativeness** of virtual asthma visits among patients in an integrated healthcare system during the pandemic.



RESULTS

- Of 5796 asthma patients, 60.6% used virtual care

Percent of virtual and in-person healthcare by race and ethnicity during pandemic, March - October 2020



CONCLUSIONS AND IMPLICATIONS

- ❑ **Limitation:** Conducted within one integrated healthcare system of employed and highly educated membership
- ❑ **Limitation:** Comparing any versus no virtual care may underestimate the extent of and reasons for use
- ❑ Within an integrated health care system with existing virtual visit options, use of virtual asthma care visits **did not differ by race or ethnicity**
- ❑ Imperative to assess virtual healthcare access and use across multiple health conditions, organizations without existing capacity for virtual medical care and in those with access barriers

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