

Virtual Visit Utilization for Acute Care at Atrius Health During COVID19

Vishal S. Arora, MD¹, Ruth Carretta, MPH², Yoni Dvorkis, MPH², Peter Hagan, MPH², Philip Ciampa, MD, MPH²

¹ Brigham and Women's Hospital, Department of Medicine, Boston, MA

² Atrius Health, Newton, MA

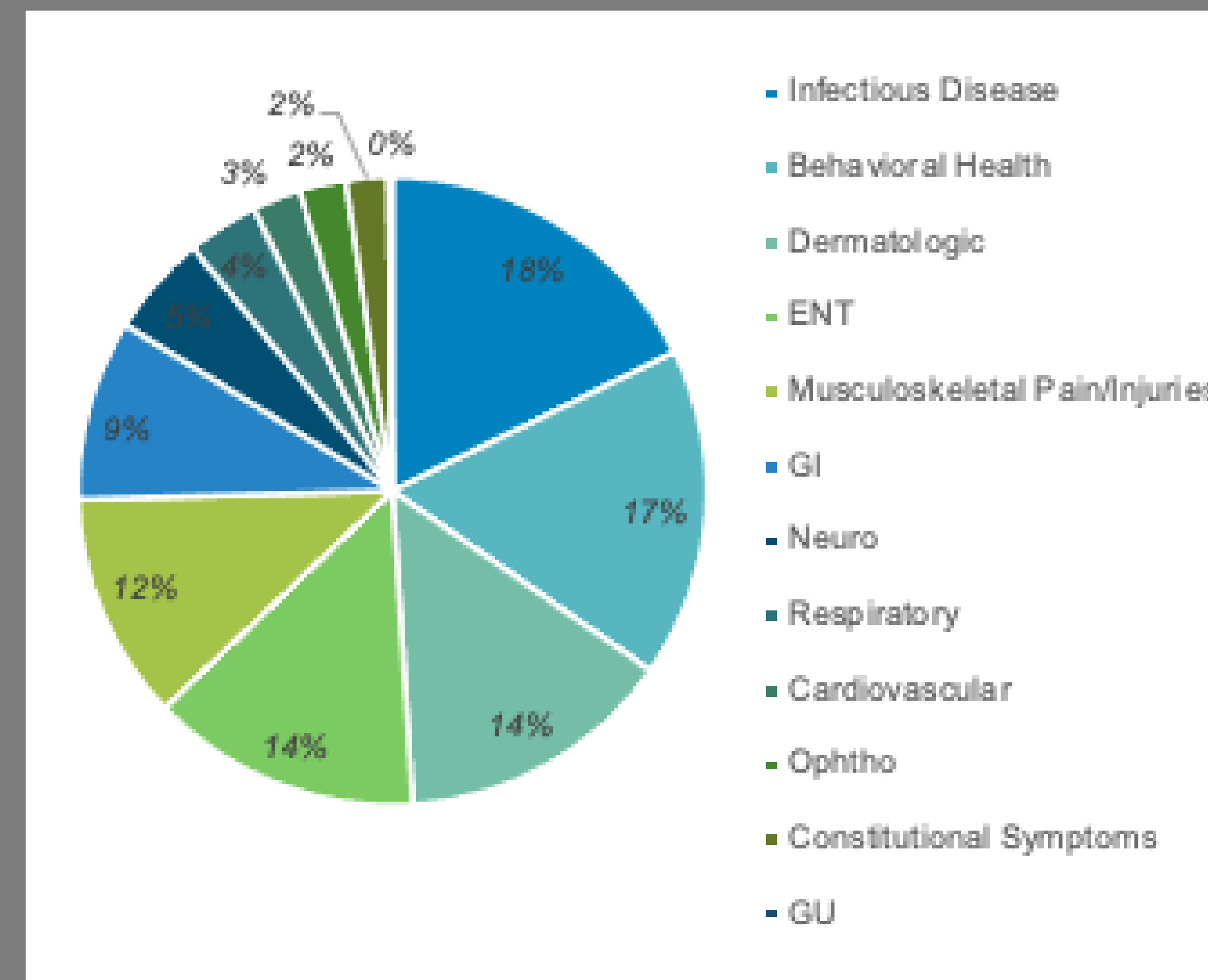
INTRODUCTION

- The COVID19 pandemic forced a paradigm shift in care delivery, promoting the rapid expansion of virtual care
- Atrius Health (AH) readily adopted virtual visits (VV) for acute care (AC) in the setting of the pandemic. VV consisted of both video-based and audio-only visits
- This study had two objectives:
 - Describe the type of virtual AC delivered by AH in the first year of the COVID19 pandemic
 - Compare characteristics of AH patients who used virtual AC, vs. the overall population of AH patients

METHODS

- All AH VV encounters were queried from March 2020-March 2021. The following inclusion criteria were applied:
 - AH patient with ≥ 1 visit in past 3 years
 - VV encounters met criteria as **acute care**, per clinical review criteria
 - VV was conducted by a billing provider
 - VV belonged to one of following service lines (SL): IM/FM, pediatrics, Ob/Gyn
- VV encounters were stratified into diagnosis subgroups, and by audio-only and video visits
- We compared patient demographics of VV users (for audio-only and video visits) to the general AH population to identify disparities in VV utilization

Virtual urgent care was most commonly used to evaluate infectious symptoms, behavioral health, and dermatologic complaints



Young (< 18) and Asian patients were underrepresented among users of virtual care

Age Group	Patients with VV Utilization		All AH Patients		Test of Equal Proportions
	# of Patients	% of Patients	# of Patients	% of Patients	P-Value
< 18yo	8,817	9.4%	107,425	20.1%	< 0.001
18-35yo	23,360	24.8%	138,478	26.0%	< 0.001
36-50yo	21,846	23.2%	105,061	19.7%	< 0.001
51-64yo	19,904	21.2%	95,468	17.9%	< 0.001
65-80yo	15,758	16.8%	70,646	13.2%	< 0.001
81+ yo	4,336	4.6%	16,161	3.0%	< 0.001
Ethnicity					
White	67,790	72.1%	359,851	67.5%	< 0.001
Black or African American	7,516	8.0%	41,478	7.8%	0.022
Asian	5,112	5.4%	45,997	8.6%	< 0.001
Hispanic or Latino	4,219	4.5%	22,243	4.2%	< 0.001
American Indian or Alaska Native	85	0.1%	499	0.1%	0.816
Native Hawaiian or Other Pacific Islander	45	0.0%	240	0.0%	0.766

RESULTS

- AH conducted ~142,000 acute care VV, with an average 0.8% no-show rate. 89% of patients had ≤ 2 visits. 70% of these visits used video
- The most common complaints for acute VV, whether audio-only or video, included infectious symptoms (18%), behavioral health (17%), and dermatologic complaints (14%)
- The racial breakdown of adult patients using VV was approximately similar to the AH patient population, except for Asian patients who were modestly underrepresented
- Older patients (65+) constituted 14% of video-based VV users, but 36% of audio only VV users
- Black patients constituted 7% of video-based VV users, but 10% of telephone-based VV users

DISCUSSION

- VV urgent care was used for a wide range of acute care complaints among adults in the setting of covid19—most commonly for infectious disease, behavioral health or dermatologic problems
- While there were not large disparities in virtual care access for older patients and across demographic populations of AH patients, Asian patients sought virtual care less
- Older patients, and Black patients were more likely to use audio-only visits to maintain access to care, which may be less effective at evaluating acute concerns than video visits
- Research is in progress to explore the quality of acute care VV, such as unplanned re-evaluations or misdiagnosis.