1	
2	DR. KELI SIQUEIROS SANTOS-PARKER (Orcid ID : 0000-0002-2773-9775)
3	MISS ALEXANDRA HIGHET (Orcid ID : 0000-0002-4733-2825)
4	DR. JOHN RICHARD MONTGOMERY (Orcid ID : 0000-0001-7751-231X)
5	DR. GLENN KHAM WAKAM (Orcid ID : 0000-0002-0950-9554)
6	
7	
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12	telehealth in transplant
13	Authors: Santos-Parker KS ¹ , Santos-Parker JR ¹ , Highet A ¹ , Montgomery JR ² , Wakam G ² ,
14	Sonnenday CJ ² , Waits SA ²
15	
16	ORCIDs:
17	Keli Santos-Parker – 0000-0002-2773-9775
18	Jessica Santos-Parker – 0000-0001-5625-9968
19	Alexandra Highet – 0000-0002-4733-2825
20	John Montgomery – 0000-0001-7751-231X
21	Glenn Wakam – 0000-0002-0950-9554
22	Chris Sonnenday – 0000-0002-1632-6529
23	Seth Waits - 0000-0001-6570-5288
24	
25	
26	Affiliations:

27 1. University of Michigan Medical School, Ann Arbor, MI

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- 28 2. Department of Surgery, Section of Transplantation, University of Michigan, Ann Arbor, MI
- 29 Corresponding author email: waitss@med.umich.edu
- 30 Abbreviations: COVID-19, coronavirus disease 2019

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37	To the Editor:

On March 17, 2020, the Centers for Medicare & Medicaid Services invoked sweeping
expansions to the nation's telehealth capacity, authorizing providers to bill for telehealth visits
with Medicare beneficiaries at cost parity to in-person visits, eliminating deductibles and
waiving penalties for non-HIPAA compliant communication platforms.¹ While issued on a
temporary and emergency basis, this policy provides an opportunity for the transplant
community to explore permanent telehealth infrastructure.

44 Before the COVID-19 pandemic, our center's long-term goal was to increase utilization of 45 telehealth to 20% of patient visits over 5 years. COVID-19 has forced us to adapt rapidly. In 2019 we performed 5 telehealth visits per month – in March 2020 alone we performed 184, 46 and have had over 475 telehealth visits in April. We moved the majority of our low-acuity 47 48 patient visits to video or phone and are working on transitioning required transplant education 49 classes to an interactive, virtual format. During the rapid expansion we have been stressed by 50 network traffic, availability of compatible technology, and billing concerns, yet we are 51 overcoming these barriers and have made lasting progress through a team-based approach to 52 patient and provider education and technical support.

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- 54 Long-term transplant telehealth plans at our institution were motivated by evidence that
- 55 transplant telehealth programs may reduce costs, shorten time to initial evaluation and waitlist

placement, improve quality of life, and decrease readmissions following transplant.^{2,3} While
these long-term goals still exist, the rapid roll-out has demonstrated additional benefits. Our
video care teams are able to frequently check-in on patients with acute medical and surgical
issues and reinforce education on challenges like polypharmacy or low health literacy.
Anecdotally, patients have been enthusiastic participants and have experienced no known
adverse events. We are learning and honing best practices each day but will need to be rigorous
in our interpretation of data and mindful of barriers.

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As with any change in care delivery, telehealth services must not create or further disparities 64 65 for the most vulnerable populations. Utilization of telehealth requires at a minimum access to a 66 smart phone and/or internet. Demographic factors including education, age, language, and 67 culture may all impact telehealth accessibility. At the same time, some of the greatest 68 disparities in the transplantation process occur with waitlist access. Distance from a transplant 69 center has been associated with increased mortality.⁴ If implemented carefully, telehealth may 70 increase access to our rural patients and reduce travel-related time and financial costs. There is 71 also evidence that implementing telehealth measures focused on patients of lower 72 socioeconomic status, creating tools accessible across broad ranges of literacy, and aiming for 73 universal access to technology may allow telehealth expansion to be a solution rather than a 74 barrier to access.⁵

As we move past COVID-19, our department is committed to advancing our infrastructure for telemedicine-based transplantation care. A crisis is an impetus for transformative change, and the current pandemic should be seen as an opportunity to move telehealth forward. We can use this sudden change as a stimulus to discard outdated policies and innovate for the good of our patients.

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Author