Evaluating a Primary Care Telehealth Program for Individuals Experiencing Homelessness

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Background

- More than 2 million people in the US experience homelessness each year
- Nearly 4,000 South Carolinians go without a home on any given night
- Individuals experiencing homelessness (IEH) are:
 - **3 to 6 times** more likely to experience illness
 - 4 times more likely to be hospitalized
 - **3 to 4 times** more likely to die prematurely



- IEH encounter barriers to healthcare access and challenges in all domains of the social determinants of health
- Telehealth is a promising approach to improve access for this population



Objectives

- To compare care delivered in person versus via telehealth for nonemergent primary care, using questions adapted from the previously validated Service User Technology Acceptability Questionnaire (SUTAQ)
- Main outcome measures:
 - 1. Demographics and health needs of local IEH
 - 2. Telehealth acceptability for patients and providers
 - 3. Impact of telehealth on healthcare access
 - 4. Telehealth feasibility for patients and providers



Setting

- The CARES 529 Meeting Street Clinic is a collaboration between the Medical University of South Carolina (MUSC) Department of Family Medicine and Military Community Connections Navigation Center
- The Navigation Center provides a variety of resources for IEH
- Family medicine physicians see patients at the CARES 529 Meeting Clinic on-site in-person or via telehealth to the site







Methods

- Paper needs assessment survey for Navigator Center clients assessing demographics, health information, technology access
 - Descriptive statistics for all questions
 - Chi-square analysis
 - by race (Black vs. Non-Black)
 - By age (<50 yo vs \geq 50 yo)



Methods

- Electronic surveys for patients and providers after in-person and telehealth visits to characterize care experience and visit outcomes
 - Descriptive statistics for all questions
 - Chi-square by visit type (telehealth vs in-person) for all visit experience related questions
 - Questions regarding the patient and not the visit itself, only first visit considered



Client Demographics

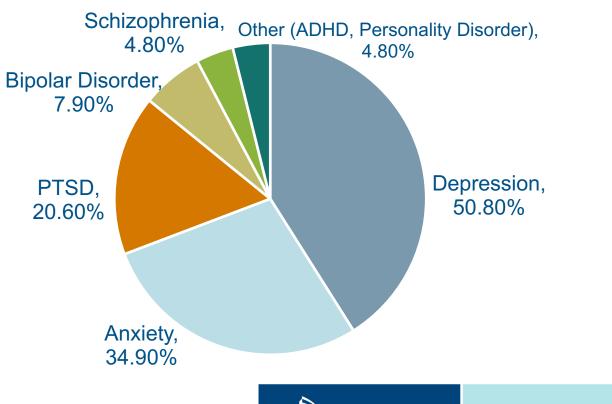
<u>Race</u>	Percent	<u>Gender</u>	Percent
Black	55.6%	Male	50.8%
White	22.2%	Female	44.4%
Other (Native American, Multiracial, Hispanic)	18.0%	Non-Conforming	3.2%
Declined to Answer	3.2%	Declined to Answer	1.6%

n=63

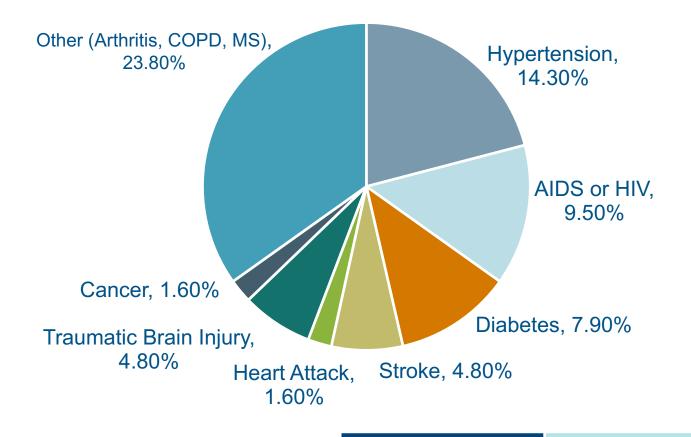


• 58.7% of Clients Reported a Mental Health Challenge (n=63)

*Clients could select more than one Mental Health Challenge



• 52.4% reported physical health challenges





- 52.4% did not have insurance
 - 54.3% without insurance for more than one year
- 38.1% used the ED for their healthcare
 - 75.9% had been to the ED in the past year
 - 17.5% reported not getting healthcare
- Nearly one third (35.2%) had been hospitalized in the past year
 - 32.9% of those hospitalized spent more than a week in the hospital



- 71.4% interested in at least one primary care health service
 - Smoking cessation, chronic medical problem management, cancer screening, nutrition counseling
- 77.8% had access to the internet
 - 50.8% had access to a mobile phone
 - 71.4% had access to a computer
- No significant difference by race or age with Chi Square



Results: Patient Survey

Patient Survey Results by Visit Type

Patient response	<u>Telehealth</u> <u>Visit</u> (n=55)	<u>In-Person</u> <u>Visit</u> (n=71)	<u>P-value</u>
Would Recommend	96.4%	98.6%	0.582
Made Easier to Contact a Doctor	96.4%	97.1%	1.0
Can Be Used For Regular Health Care	90.9%	94.3%	0.505
Improved Health	90.9%	85.7%	0.420



Results: Patient Survey

Source of care without access to CARES 529 Meeting Street Clinic

	<u>In-Person</u>	<u>Telehealth</u>	
Would Not Have Gotten Care	36.6%	38.2%	
Emergency Department	40.8%	27.3%	
Doctor's Office	14.1%	18.2%	
Urgent Care	4.2%	10.9%	
Other	2.8%	5.5%	
		p=0.158	



Results: Patient Survey

- 77.2% would be comfortable contacting a doctor via e-visit
 - 40.4% via a video visit from their phone
 - 24.6% in-person
- 49.1% would feel comfortable receiving information about their health via text messaging
 - 43.9% mailed letter
 - 7.0 % in-person





Results: Provider Surveys

<u>Providers</u>	<u>Telehealth</u> <u>Visit</u> (n=64)	<u>In-Person</u> <u>Visit</u> (n=29)	<u>P-value</u>
Agree/Strongly Agree: Able to Communicate Adequately with Patients	98.4%	93.1%	0.230
Agree/Strongly Agree: Made a Positive Impact on Patients Health	92.2%	69.0%	0.009



Results: Provider Surveys

- 76.6% telehealth visits providers disagreed that visits would have been better if done in person
- Only 2.2% of patients were referred to the hospital or ED





Discussion: Needs Assessment

- High incidence of physical and mental health problems
- Lack of health insurance
- Suboptimal access to and utilization of medical care
- ED utilization, hospital admissions, not getting care,
- High rates of technology access
- Desire for primary care services



Discussion: Patient & Provider Surveys

• Telehealth and in-person visits rated similarly in their ability to provide needed care regardless of chief complaint

 E-visits and text messaging noted as preferred communication options



Discussion: Limitations

• Generalizability

- Inability to link surveys
 - Capture experience of each visit and maximally protect
 anonymity
- Providers with different experience levels



Discussion: Future Directions

- Explore use of e-visits
- Explore use of cellular phones for communications
- Incorporation of telehealth education





Conclusion

- Telehealth is a healthcare delivery method that is feasible, is accepted by patients and providers, and increases access to healthcare for the IEH population
- Using telehealth to increase access to care has the potential to reduce disparity in health outcomes for this vulnerable population and modify high cost and high risk healthcare utilization patterns



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