

Telehealth and Access Disparities in South Carolina

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MUSC Center for Telehealth

SOUTH CAROLINA
Telehealth
ALLIANCE

 **MUSC Health**
Medical University of South Carolina



2005-2009
Maternal Fetal
Telemedicine,
Telestroke, ICU,
Telepsych

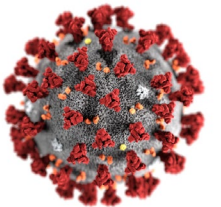
2013
State of SC
telehealth
investment; MUSC
Center for
Telehealth founded

2014
SCTA
founded;
headquartered
at MUSC

2017
Designated by
HRSA as a
National
Telehealth Center
of Excellence

2019
Awarded ATA's 2019
President's Award for
Transformation of
Health Care Delivery
(SCTA)

2020
Explosive growth of
telehealth in
ambulatory space
due to COVID-19



Health Resources & Services Administration



School-Based Health

127,000+
Remote patient monitoring
interactions

**Telehealth is happening
every day, all the time in
South Carolina.**

Tele-psychiatry

Nutritional
Counseling

2,000
Remote specialty interpretations

112,000+

Real-time video interaction

Infectious Disease

527
connected endpoints

Pediatric Critical Care

13,000+
Asynchronous telehealth
interactions

Tele-ICU

Diabetic Remote
Patient Monitoring

Maternal
Fetal
Medicine

Teleneurology

Outpatient Services

81,000+
Tele-ICU monitoring interactions

348K+

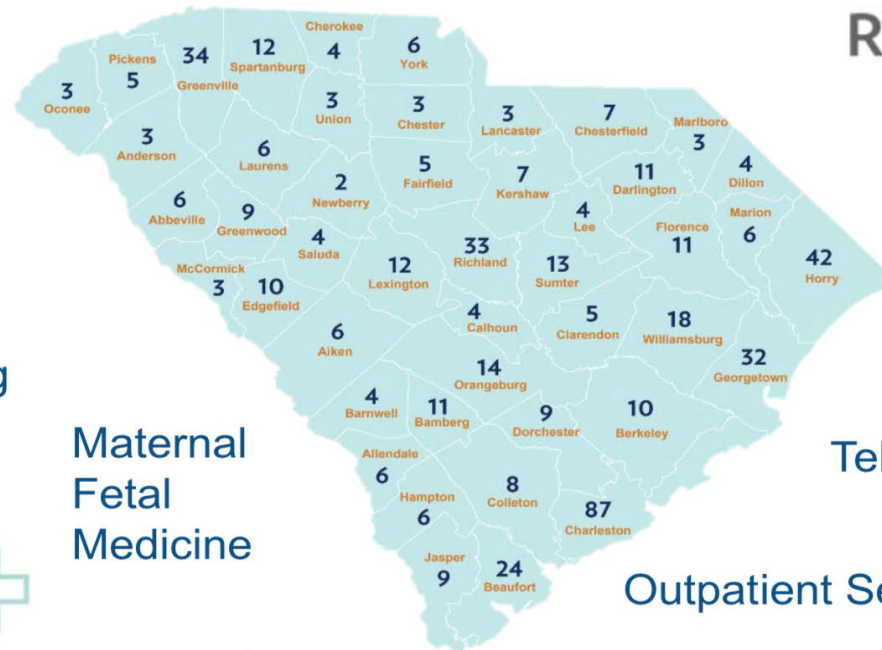
CHF Home Monitoring

Telehealth patient interactions in 2018

Tele-
EEG

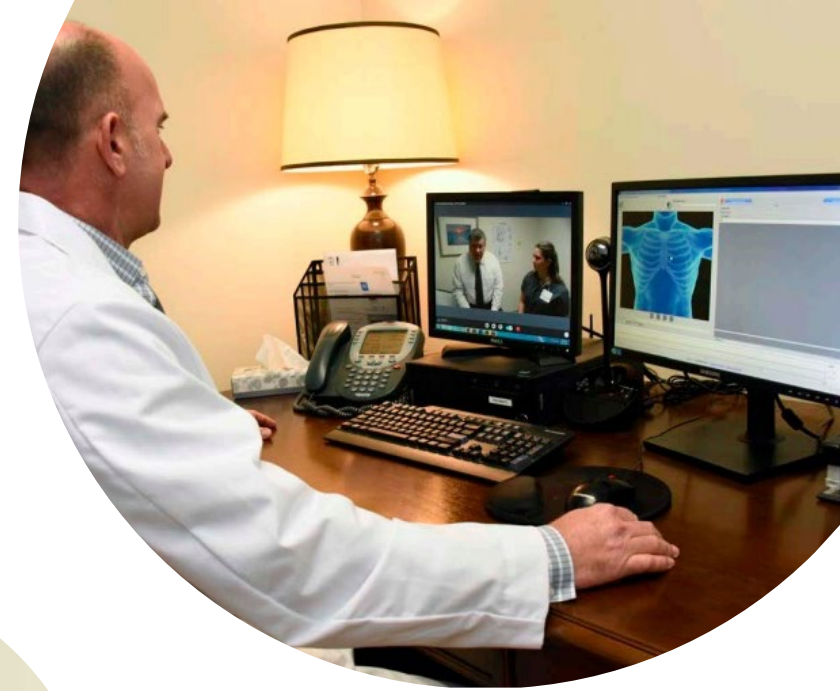
SOUTH CAROLINA
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Leveraging Telehealth

- Extend Service
- Support Hospitals
- Provide Convenient Care
- Support Primary Care
- Achieve Health Equity
- Support Institutions
- Avoid Cost



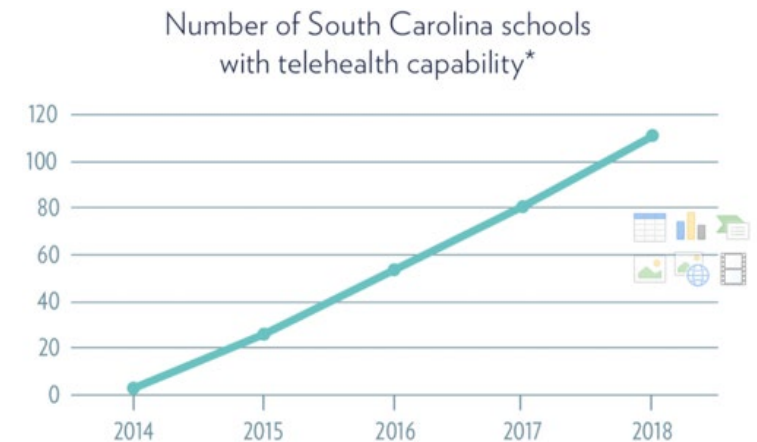
Health Equity

The gap in access to health services will be closed for high priority health disparities



Types of Care Provided Via School Telehealth

- Acute Care
 - Sick visits for most low-acuity conditions
 - Over 85% of visits are able to be completed with telemedicine alone
- Chronic disease management
 - Asthma
 - ADHD
 - Specialty Mental Health Services (TFCBT)



*Services vary by county to include acute care and chronic disease management, mental health, group health education, and individual education plan consultation.



School-Based Telehealth

School-based telehealth program demonstrated a **35% reduction in ED visits among asthmatic children**

Association of a School-Based, Asthma-Focused Telehealth Program With Emergency Department Visits Among Children Enrolled in South Carolina Medicaid

John Bian¹, Kathryn K Cristaldi², Andrea P Summer², Zemin Su¹, Justin Marsden², Patrick D Mauldin¹, James T McElligott²



Current



Programs in Development

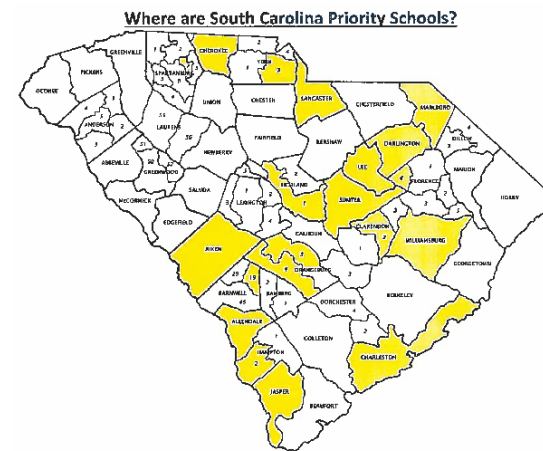
The odds of a telehealth visit for medically complex children is increased by a factor of **23**

Implementing school based telehealth for children with medical complexity

Carrie L Cormack¹, Kelli Garber¹, Kathryn Cristaldi¹, Barbara Edlund¹, Cindy Dodds¹, Liah McElligott²



- Strategically targeting populations identified by key stakeholders

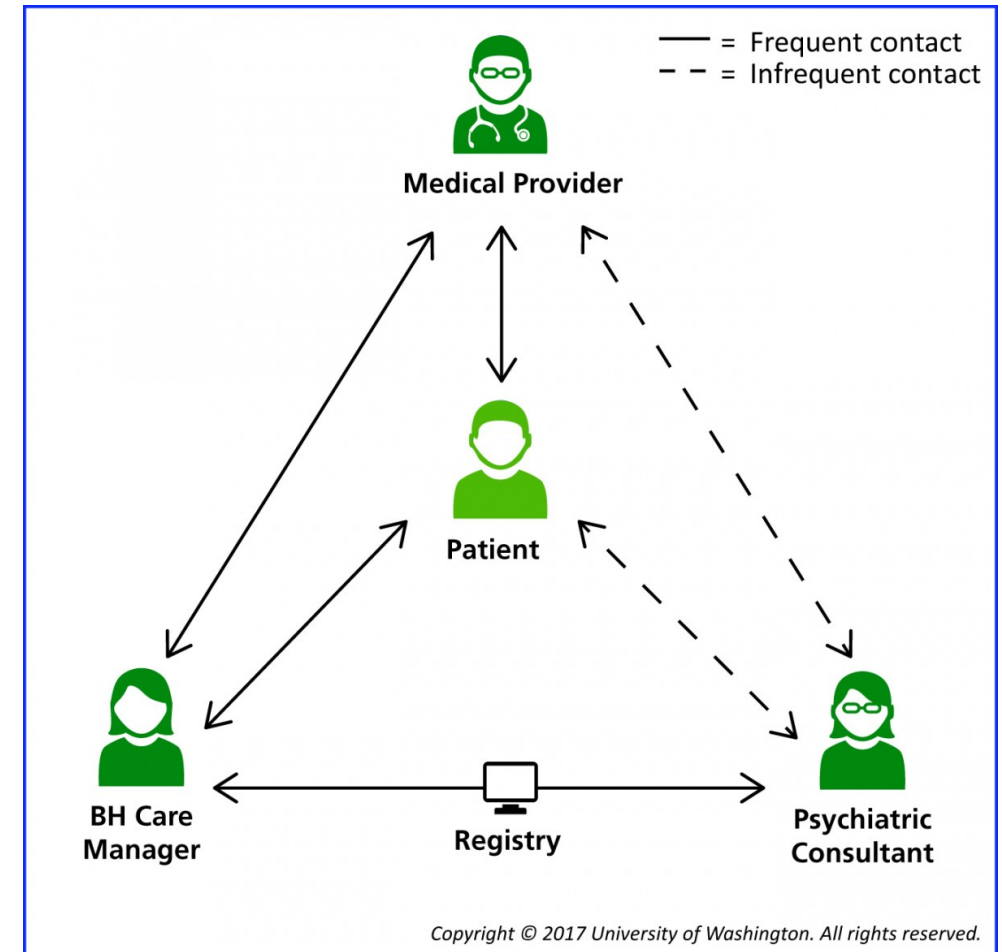
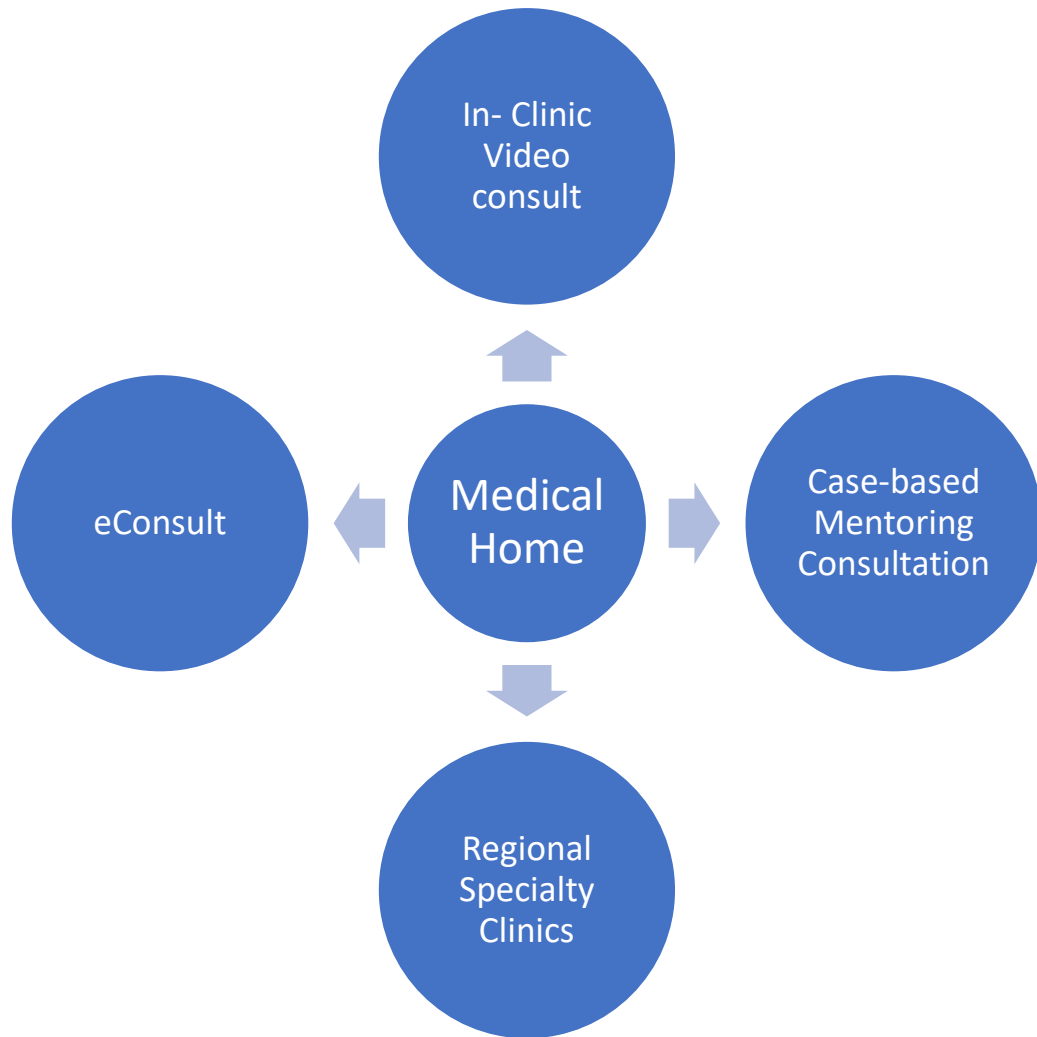


Primary Care Support

All primary care clinics in the state, with **emphasis on Health Professional Shortage Areas (HPSAs)**, will have *access to integrated services* through telehealth partnerships

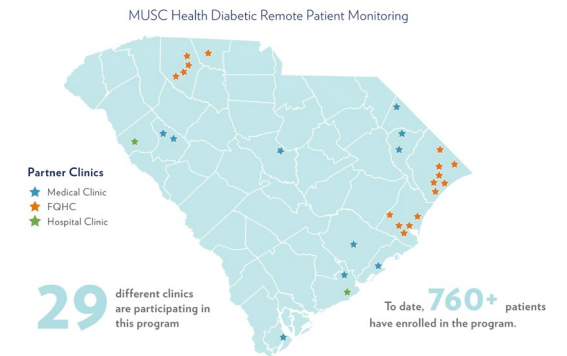
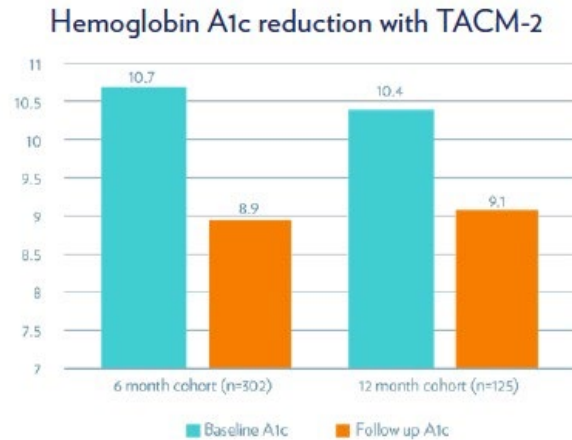


Integrated Telehealth in the Medical Home



Diabetes Remote Patient Monitoring

In 2019, TACM-2 monitored **895 patients** at 19 participating sites with well over **10,000 data transmissions per month**. Outcomes data show a 1.8 drop in A1C readings at 6 months and 1.3 drop at 12 months.



Virtual Screening to Remote Patient Monitoring

What is the reason for this visit?



Virtual Screening

- High risk patients identified
- Referral for additional testing

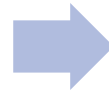


Activate ZipTicket

COVID Test

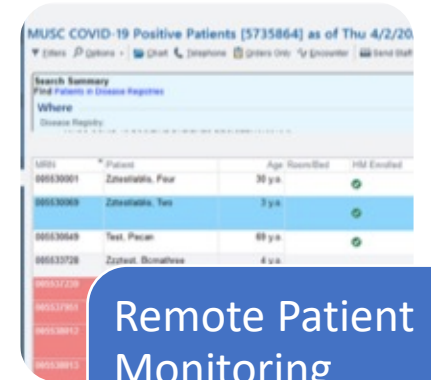
E-ticket

- Activates order creation in EHR
- Self schedule for Drive Through testing



Drive Through

- Orders and schedule driven by Virtual Care screening
- Respiratory specimen collected



MUSC COVID-19 Positive Patients (5735864) as of Thu 4/2/20

Search Summary
Find Patients in Disease Registries

Where
Disease Registry

MRN	Patient	Age	Room/Bed	HM Enrolled
00030001	Zinostatin, Four	30 y.o.		✓
00030005	Zinostatin, Ten	3 y.o.		✓
00030049	Test, Pacen	69 y.o.		✓
00033728	Zinostatin, Bonafide	4 y.o.		✓

Remote Patient Monitoring

- Non-hospitalized COVID + patients
- MUSC-built, population management tool



Remote Patient Monitoring for COVID + Patients

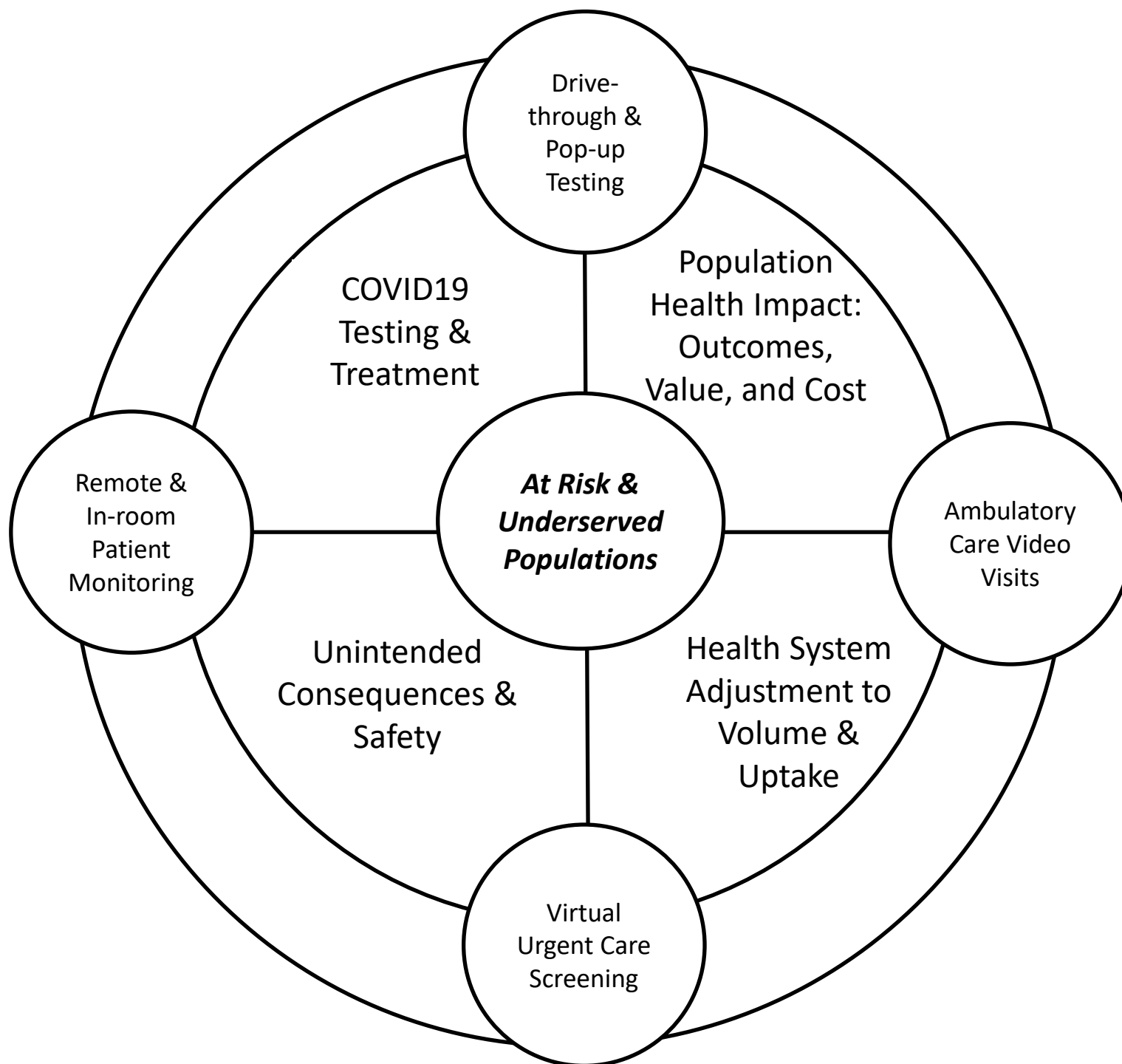
*“Cheryl made me realize that there was **someone who really cared about me.**”*

*“Son, let me tell you something, I don't mind telling you I was very scared and when I talked to Perette she assured me that I was taken care of and that someone was there to help me. Son, this calmed me down; **she was, everything to me.** I can't tell you how that sense of assurance saved me. I was all alone and then I had people looking out for me. I do not know what I would've done without them.”*

*“**I know she, [SH], saved my life.** That is it. I would not have made it without her. Cheryl could be sweet but by golly she could be tough. When do she told me to eat I knew I had better eat; and a lot, before she called me back. That's it. She saved my life.”*

*“Cheryl was **like an angel** watching over me.”*

*“I was so glad that Eric was there he was very nice and made me feel like I had a friend, he was the whole 9 yards. I tell you son, that Eric is 10 times better than my regular doctor that's for sure. I think **we should use this thing and that Eric for my COPD.**”*



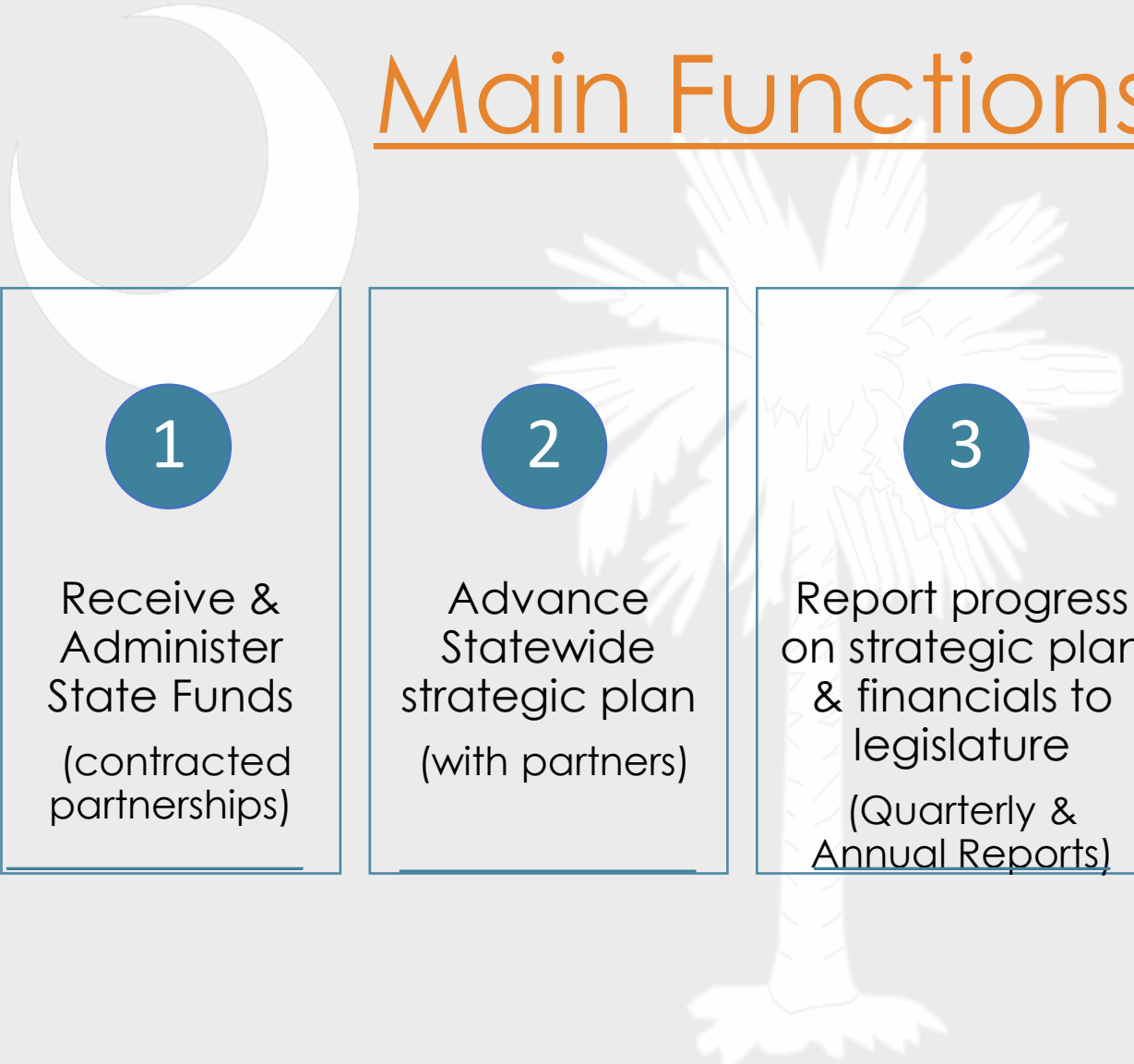
What is the SCTA?

Mission:

Improve the health of all South Carolinians through Telehealth.

A statewide collaboration of many organizations that have joined forces to expand telehealth services across SC.





Main Functions:

1

Receive &
Administer
State Funds
(contracted
partnerships)

2

Advance
Statewide
strategic plan
(with partners)

3

Report progress
on strategic plan
& financials to
legislature
(Quarterly &
Annual Reports)

4

Administer/
Manage
SCTA-
supported
technology &
equipment

Policy Implications

- “Inequitable access to telemedicine is driven by three main barriers:
 1. disparities in access to broadband internet and related technology
 2. Financial barriers to the reimbursement of telemedicine
 3. Lack of institutional commitment to equity in telemedicine”



Broadband Access

The mapping assessment showed that **434,725 SC residents**—about 12% of the SC population—**lack access to FCC-recommended broadband service levels**, with the majority of these residents living in our rural communities.

- 18 million Americans without broadband access in the home
- 1/5th of rural residents
- 15% of households with children

