

# The Growth of Telehealth and the Virtual Experience

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*Center for Virtual Health*

# Agenda

- My Story
- Current state of healthcare
- Virtual Health definitions
- What's trending?
- Deep dive into our program
- Questions?



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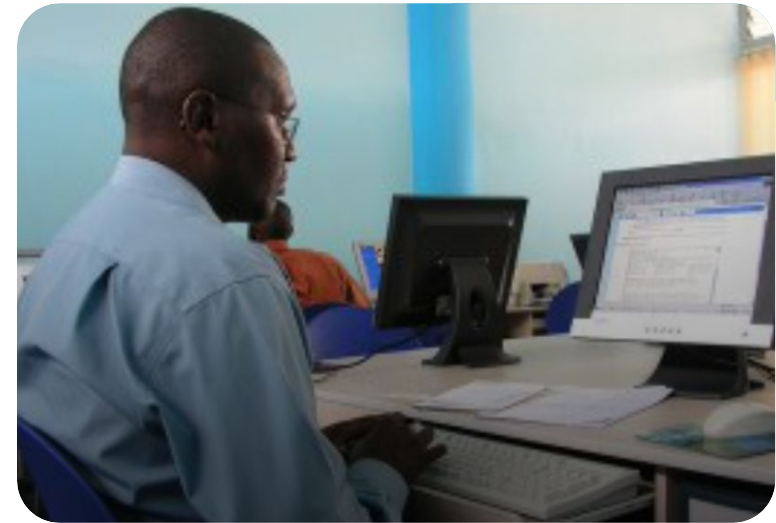


I enjoy taking a collective approach with my patients, creating a plan of care that is unique to every patient's individual needs, wherever they may be during their journey in life. My philosophy of care is simple: help patients exercise, eat healthy, sleep well and make positive changes in their lives.



# Current Care Delivery Model

- Ray is a 51-year-old man who is currently on Medicaid hasn't seen his primary care provider in 3 years.
- He is not on any medications, but he takes a multivitamin when he remembers because he often feels tired and lacks energy.
- He has been meaning to schedule his screening colonoscopy, but he doesn't have time to wait on hold to make the appointment or to leave work for a day to get the procedure done.
- Lately, he has been feeling overwhelmed because of COVID and worried about job security
- He calls for an appointment and is told he is a "new patient" and the wait for a new patient appointment is 2 months - he will have to take time off from work to make the appointment.



# Virtual Health Vision & Strategy

- Drive value-based care and population health initiatives through virtual digital solutions.
- Transform the way care is delivered, including leveraging the home as the new venue.
- Leverage virtual and digitally enabled technology to deliver care, eliminate barriers to access and provide entry into other markets and sectors.

**The future of  
health care  
is virtual**

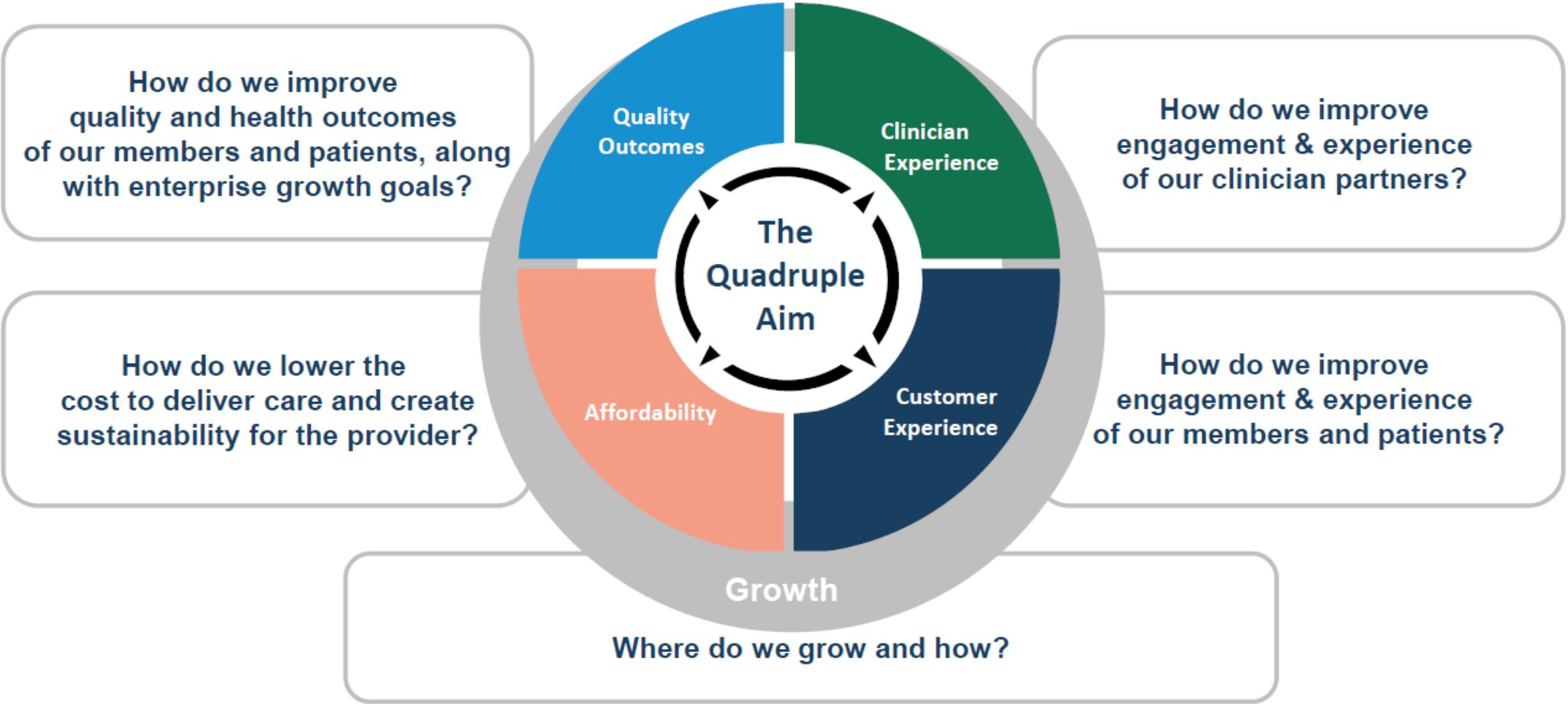
**POPULATION  
HEALTH IS  
TRUE NORTH**

**The “home” will  
be the new  
venue of care**

**Anything that can  
be done virtually  
will be done virtually**



# Framework for change



# Defining Virtual Health

A clear understanding of digital, virtual, and tele within the context of health and care will help narrow focus on the scope of interactions

## Digital (Synchronous and Asynchronous)

Digital interactions in the context of a health system could include digital means of **communication, documentation** and **retrieval** of health information, predictive **analytics**, clinical **decision support** tools, **research and education tools** etc.

## Virtual (Synchronous and Asynchronous)

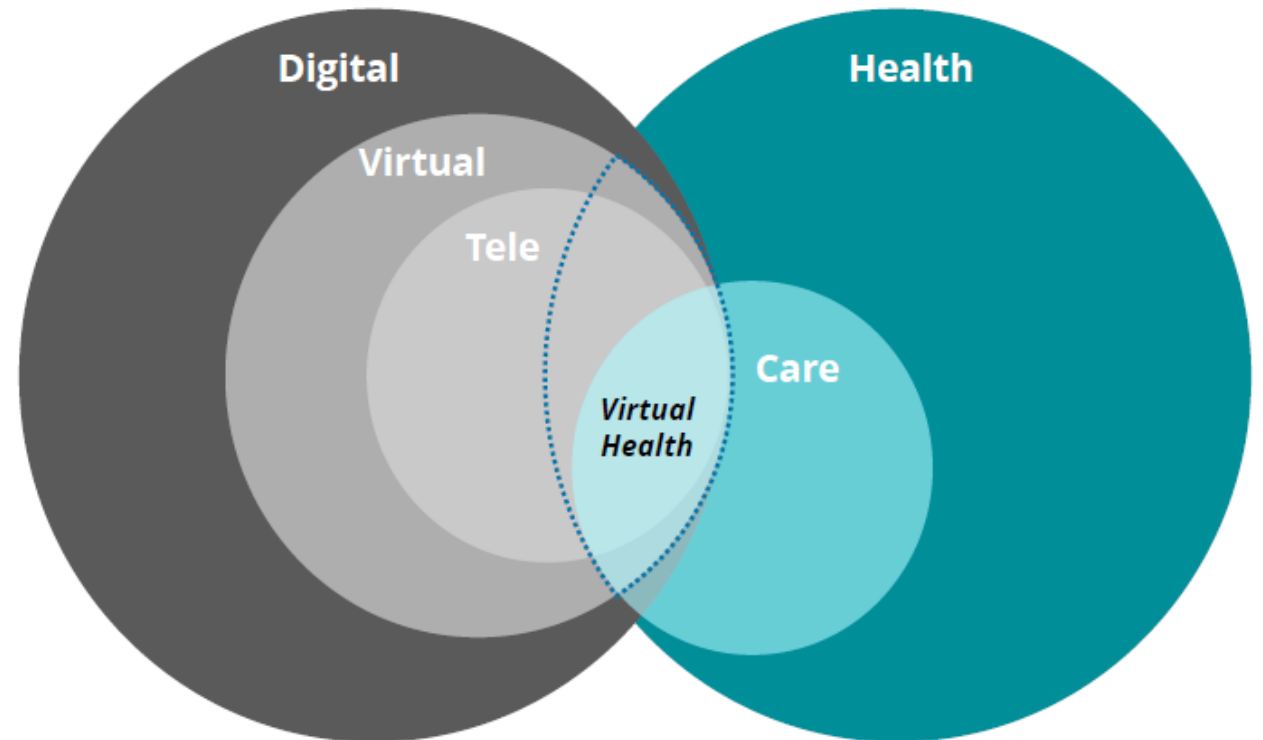
Virtual interactions **involve all communications and/or transfer of information between two or more entities through non-physical means**. In the context of health, it is when a provider is delivering care or other health services to a patient who is not in their physical presence

## Tele (Synchronous)

“Tele” interactions **imply real-time engagement between two or more parties, as opposed to asynchronous messaging or data transfer**. Telehealth could involve speaking with someone (phonic) or having a video visit, with the intention of providing medical care or partaking in broader health activities

## Health vs. Care

“Health” encompasses **engaging the patient across their overall health journey** while “care” is a **subset** of this journey and **limits the scope of interaction** to the act of care delivery



# Market Forces



Shift to Value Based Care



Consumerism



Need to Expand Capacity



Alignment with Home Based Care Strategy

**“As we shift to value...with bundled payments, we want to know what is going on with the patient at all times” - CSO**

**“Our primary goal with RPM is to reduce hospital readmission and penalties. We would rather monitor them and do dispatch than have them readmitted” – CMIO**

**“Patients seeking convenience is one of our biggest challenges, and has changed our strategy...patients want easy to use solutions” – Director of Connected Health**



## Four hurdles health systems must address



### Shift away from managing RPM in clinical silos

- Service line leaders have traditionally identified, selected, piloted, and managed RPM programs
- This has resulted in **redundancies across the system** (in both vendors and patient enrollment) and **expensive implementation**

“We have so many unique programs it’s like we have a field of 1000 flowers” -  
*CMIO*



### Mismatched incentives and limited revenue in FFS arrangements

- The biggest ROI for remote monitoring has been reduction in total cost of care; **FFS systems are not incentivized to reduce TCOC**
- Shifting to value-based care can incentivize the uptake in RPM, but this shift has been slow across the industry
- Reimbursement exists, but it is limited and challenging to navigate

“We need to cross the chasm and invest in RPM, figure out what works, and go all the way to value based care.” -  
*Telehealth Director*



### Scaling monitoring capabilities

- Staffing monitors is extremely expensive for even the largest health systems
- We have heard that **scaling monitoring is the #1 barrier to entry** for many systems seeking to scale their RPM programs

“In our experience RPM fails as soon as we start trying to scale monitoring. It’s too expensive.” – *CEO of Telehealth*



### Establishing and tracking ROI

- **Creating RPM programs and use cases is time consuming and expensive; this is especially true when the ROI is unclear**
- We’ve heard that health systems find it challenging to implement new programs without evidence

“We want to roll out RPM to our at-risk populations, but we haven’t seen any robust research about ROI” – *CMO*

## Broader market will be aggressive in scaling solutions to lower TCOC

**Payors** will continue to expand RPM and home health capabilities, since it aligns with goal to lower the total cost of care



**Retail health / pharmacy companies** with a national footprint will expand reach into the home



**Tech players** threaten to disintermediate health system and attract patients with virtual solutions



### Recipe for a successful RPM solution:

1. Digital engagement
2. Devices
3. Logistics
4. National Call Center
5. Dispatching
6. Analytics

### New entrants are already equipped with key capabilities to scale their RPM solutions:

- ✓ Nation-wide consumer reach
- ✓ Shipping / logistics capabilities
- ✓ Digital platforms with advanced technology
- ✓ Monitoring capabilities
- ✓ Dispatch capabilities
- ✓ Hired healthcare providers

# #1 The rise of on-demand healthcare (why patients want care on their own time)



## Mobility

- >75% web browsing occurs on mobile devices
- >80% own a smart phone



## Gig economy

- Rise of freelance professionals
- More freedom



## Trust in internet/Apps

- Mindfulness
- Exercise
- Nutrition
- Sleep

## #2 Importance of big data and how to effectively use it

- Big data aggregates information from multiple sources and identifies patterns and trends
  - Examples: lower rate of medication errors, facilitating primary care for frequent fliers, more accurate staffing
- Need for data architecture / analytics and tie insights into marketing; measure what matters!
- Identifying and cultivating relationship with your ideal consumers (customer relationship management tools)

## #3 Treating patients with virtual reality

- >60 mil Americans have chronic pain and due to opioid pandemic (\$80 bil burden/yr)
  - VR > Percocet
- Medical student/resident training in procedures
- Motivate patients to eat healthier/exercise
- Teach children with autism learn how to navigate world
  
- Powerful tool----understand consumers' needs and virtual engagement

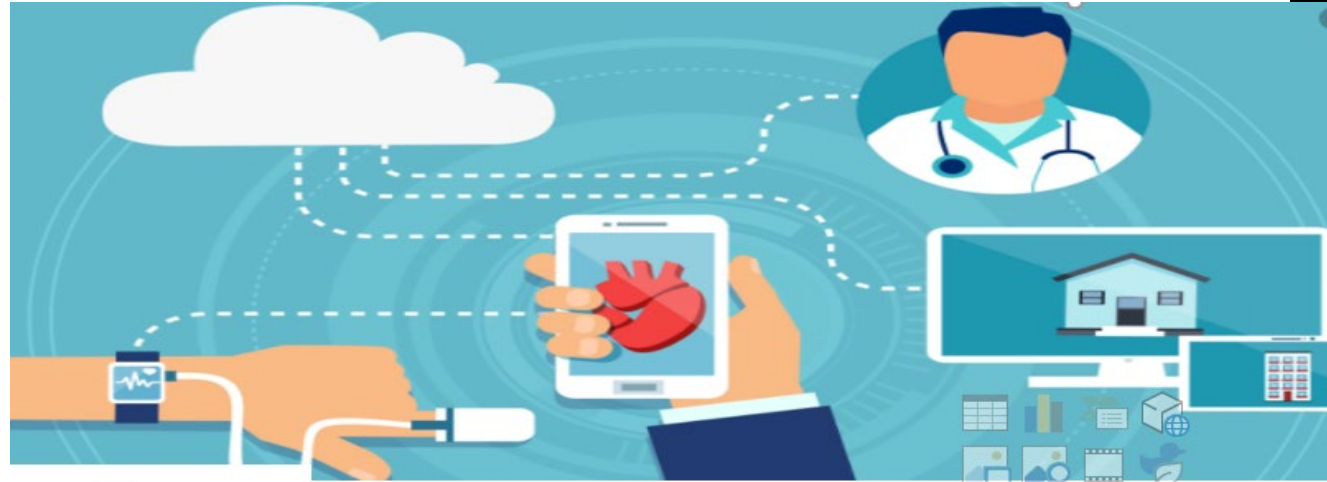




## #4 Wearable devices

- Personalizes the healthcare experience – medical devices give patients a sense of ownership in the process of improving their health.
- Targets insurance pricing – information obtained from wearable devices can help insurers more accurately rate a patient's risk for illness.
- Provides insurance incentives – patients who take preventive measures to improve their health can obtain lower insurance premiums.
- Provides gamification opportunities – some medical devices such as fitness watches can create competitive goals for users to achieve through exercise, diet and nutrition.

# Remote Patient Monitoring



## Past Year

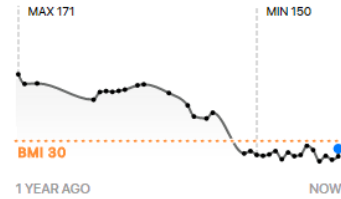
### Notifications

No Apple Health Notifications were captured, shared, or enabled over the past year.

### Weight

**155** LBS  
MAR 08, 2022

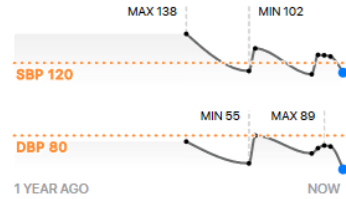
**29.7** BMI  
MAR 08, 2022



[AHA Adult BMI Guidelines](#)

### Blood Pressure

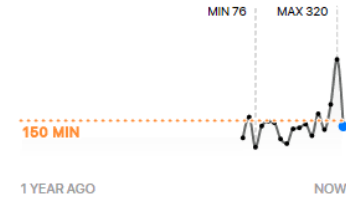
**114/63**  
MAR 17, 2022



[AHA BP Guidelines](#)

### Exercise Minutes

**134** MIN  
MAR 06 - 12, 2022



[AHA Activity Guidelines](#)

### Menstrual Cycle

No menstrual cycle data is available for the past year.

## Latest Labs [i](#)

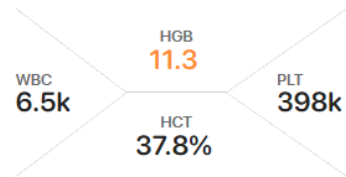
[Add to Scratchpad](#)

### Metabolic

No complete Metabolic panel available

### CBC

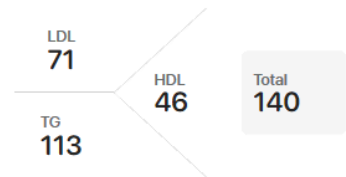
JAN 12, 2018



Out of Ranges

### Lipid Profile

OCT 18, 2021





# #5 Predictive healthcare

Big Data + insights + wearable data + consumer/biometric information

- Can predict when you get an illness like COVID
- Can predict when you may develop a chronic disease
- Over time, it can then provide personalized treatment



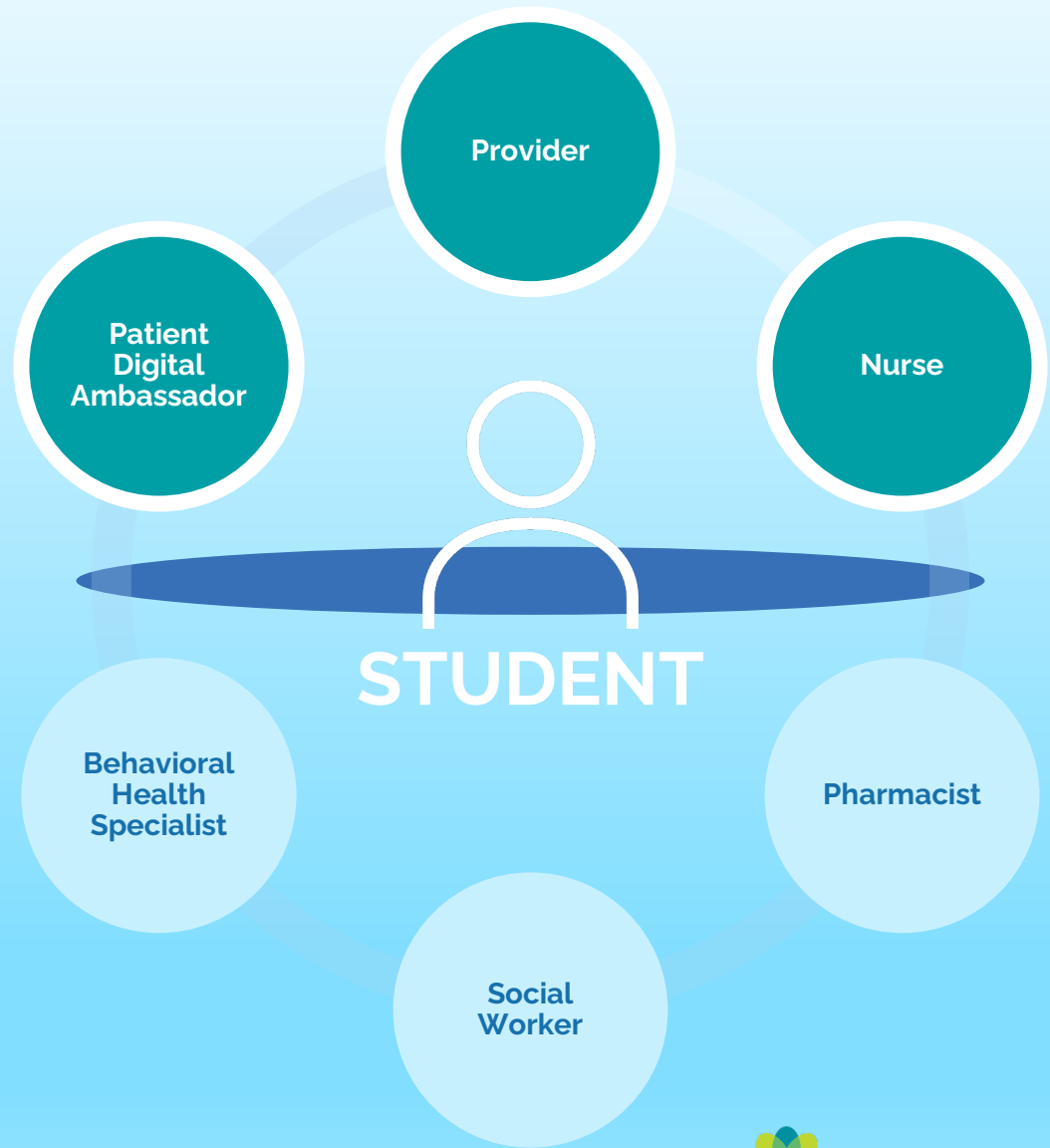
[ChristianaCare Caregiver Virtual Health – ChristianaCare](#)

*We are a care team focused  
on YOU*





# Virtual Primary Care Team



# Working on Wellness



## Prevention

- Vaccines
- Cancer screening
- Chronic disease screening



## Chronic Disease

- Diabetes
- HTN
- Obesity
- Asthma



## Wellness

- Mindfulness
- Exercise
- Nutrition
- Sleep

# Easy Ways to Stay Healthy



- Keep a heart healthy **diet**.
  - Reduce your salt to (1 tsp or less)
  - Reduce saturated fats
  - Choose lean meats
  - Increase fruits and vegetables
  - Increase your fiber (20-30g/day)



- Get moving. **Exercise!**
  - Play/Engage in fun activities
  - Exercise for 30 min/day
  - Pump some iron
  - Aim for healthy weight loss (BMI 18.5-24.9)



- Maintain a healthy **lifestyle**.
  - Limit alcohol intake
  - Quit smoking!
  - Actively manage stress
    - Meditation, deep breathing...

# Amazing Access to Care

- **Convenient**
  - Self-scheduling in Patient Portal
  - Scheduling with your PDA
- **Accessibility**
  - Monday – Friday 7 a.m. – 8 p.m.
  - Saturday and Sunday 9 a.m. – 1 p.m.
  - 24/7 call coverage
  - Open during lunch hours
  - Open in inclement weather
- **Text Messaging**
  - Secure and available 24/7



# Virtual primary care can be a great choice for community members

- Greater connection to the provider, health records, test results, and relevant educational information.
- Stress reduction
  - Virtual appointments allow patients to remain in their comfortable home/work environments
  - No waiting in a general waiting area
  - Less white coat high blood pressure
- Allows for greater independence, health education, and involvement in one's treatment – members can become more actively involved in taking their own blood pressure, tracking heart rate, etc.



A woman with long brown hair, wearing glasses and a bright yellow t-shirt, is seated at a table. She is focused on a white blood pressure monitor with a grey cuff around her left arm. The background is a softly blurred indoor setting, possibly a home or a care facility, with a white tablecloth and some greenery. The right side of the image has a semi-transparent blue overlay containing white text.

# Care at home

Remote patient monitoring

- Apple Health

- Blood pressure monitoring

- Blood sugar monitoring

- Other wearable devices

Nutrition/Meal Planning

- Healthy meals

Home Lab testing

- Blood sugars

- STDs



“What if the patient needs to be seen in person?”

>9/10 scenarios can be handled virtually

Right Place, Right Time (Is it urgent or emergent?)

Community Access Points/Nurse-Assisted Exams

Mobile Access Points

Home Technology

Home Visits



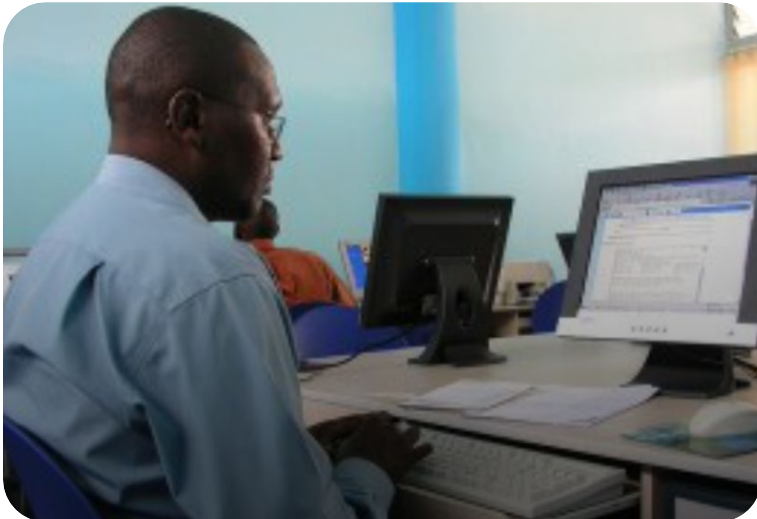
# *Care in the community*

- **Community centers and other non-traditional sites of care**
- **Cultural community centers**
- **Barber Shops**
- **Mobile Vans**
- **Libraries**
- **So much more...**



# Center for Virtual Health Care Delivery Model

- Patient self-schedules a same-day virtual appointment and meets with provider for a full evaluation via an audio/video visit.
- Obtains an order for bloodwork to evaluate fatigue issues and kit for blood work gets sent to the home
- Provider text/call to review lab work results and discuss follow-up care for a newly-identified diagnosis of anemia.
- Nurse reaches out to discuss nutrition guidance
- Patient Digital Ambassador schedules endoscopy for the patient to eliminate being on hold
- The team's behavioral health specialist engages the patient to address his mental health and provides 2 apps for patient to use



**Digital Technology**

**+**

**Relationship-based care**

-----  
**better outcomes, lower costs,  
happier patients/caregivers**



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