## Calling all beginners and **experts**

Start Here! Go Big! How to Set Up a Remote **Patient Monitoring program and Drive RPM** to the Future - Care Anywhere

accenture



## **Start Here! Go Big!**

## How to Set Up a Remote Patient Monitoring program

and

## Drive RPM to the Future - Care Anywhere

## Let's begin:

- Setting up a remote patient monitoring system
- Managing disruption
- Steps to success

### RPM drives a future care model

- Care Anywhere.
- Align with the expectations described by NCQA
- Extending RPM to Care Anywhere –
   Value-based care driven by supply-side consideration

## RPM and CARE ANYWHERE CAPABILITIES ACROSS THE

Extends the delivery of care beyond traditional physical settings to locations and approaches that suit people. Productization of services or a product mindset encourages consideration of settings such as homes, offices, hotels, dormitories, and flexible care settings. Care Anywhere provides convenient, cost-efficient care in a competitive health ecosystem.

MARKET FORCES

## Growth of consumer liquid expectations

Consumer expectations have become truly liquid across industries – comparisons evolve between brand experience (e.g., receiving primary care vs best-in-class tech support)<sup>1</sup>

## Innovative care models anchored on flexibility

COVID-19 has driven differentiated & flexible care models, anchoring on true patient centricity and strong digital foundation (e.g., virtual visit expansion, RPM, novel partnerships)<sup>2</sup>

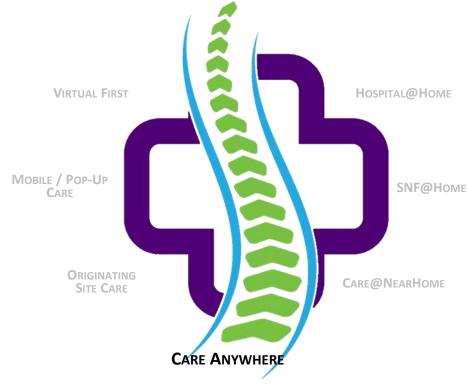
## Productization of healthcare via unbundling of care services

Traditional care services are seeing an unbundling into disparate product offerings (e.g., primary care), reframing operating models with a product mindset<sup>3</sup>

A blended care system relies on CARE ANYWHERE – componentized delivery of care anchored to optimizing cost & choice – to link care delivery services across its core enablers.

# CARE ANYWHERE – ORCHESTRATING TOMORROW'S CARE

Redefining how and where care is provided driving improved cost effectiveness and use of tomorrow's health professional workforce and facilities.



#### It is...

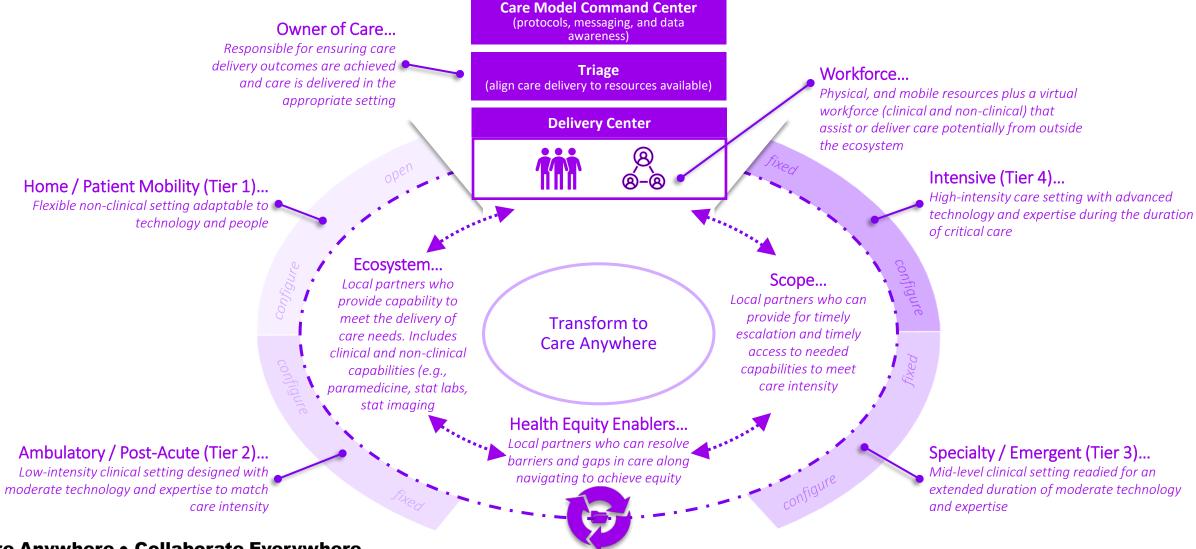
- Intentional Delivering productized delivery of a service
- Location agnostic Driving care to the optimal setting, ensuring appropriate site of care and reflecting preference
- Tiered Reimagining care delivered to the home (i.e., wherever the patient is), to spaces (i.e., both fixed and pliable) that are proximal to the patient; rethinking the professional workforce, facilities (e.g., specialty/emergent care), and intensive care capabilities
- Focused on care "delivery" rather than care "routing"

### It isn't...

- Monitoring focused Rather, it is care delivery-centric, enabling the delivery of care
  in the most effective location
- One-sided Care Anywhere is about matching provider capabilities expressed as a product to patient preferences
- **Fixed** Care Anywhere is about creating and leveraging flexibility for providers & patients and in the spaces where care is delivered to provide the most appropriate location for care
- Cost neutral Economically, the goal is to reduce overall cost, increase revenue, and more effectively use the clinical workforce

### **CARE ANYWHERE CARE MODEL**

Care Anywhere is uniquely designed to orchestrate the delivery of care in the most effective setting leveraging the capabilities across the care model.



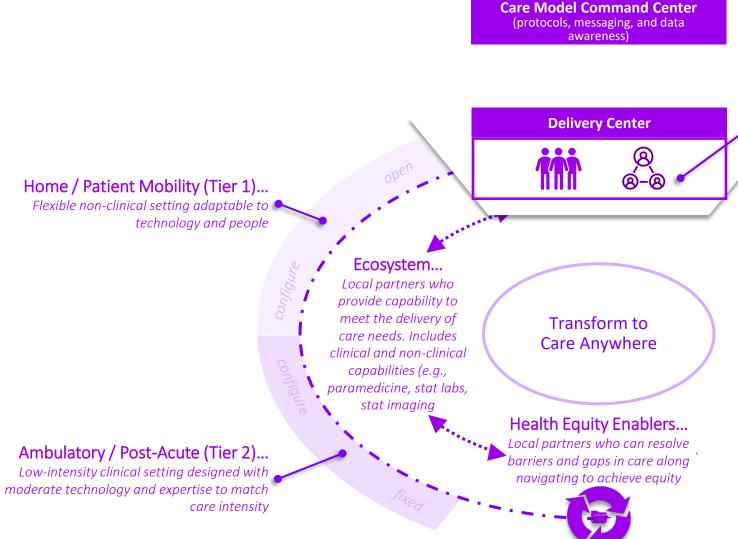
Care Anywhere • Collaborate Everywhere

Data Sharing

### RPM CARE MODEL

Proactively manage a post-surgical or chronic condition or post-procedure to ensure patient compliance and ongoing health status. Supported with appropriate condition specific devices. The duration of the engagement will depend on the condition but may range

from days to years.



#### Workforce...

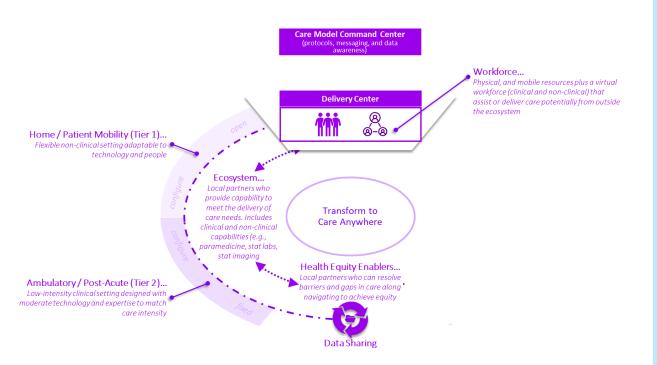
Physical, and mobile resources plus a virtual workforce (clinical and non-clinical) that assist or deliver care potentially from outside the ecosystem

# RPM@SCALE

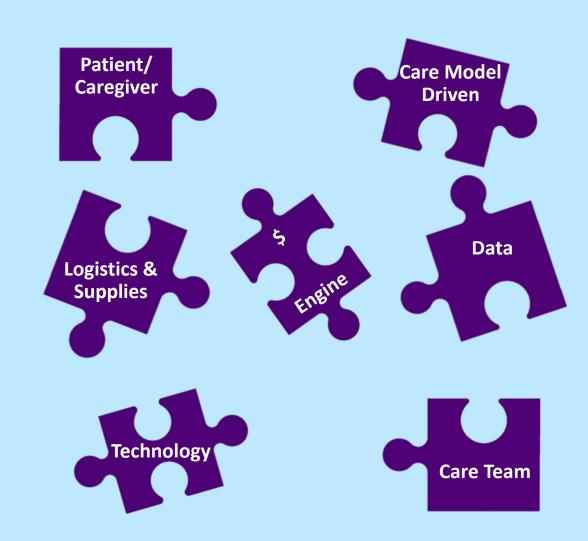
**Workshop Activity** 

## The Opportunity

Remote Patient Monitoring may provide alternative, economically favorable locations to keep services open, maintain access, increase compliance, resolve inequity, and address supply shortages



## What we learned from 2 days on RPM?...





### **The Opportunity - Foundation**

8:10am

RPM: A Rural Health System's Journey Shari K. Rajoo M.D., M.S.

8:50am

Ways Payers Can Use Remote Care to Improve Population Health Tamara Perry, MA-IOC

10:00am

Remote Patient Monitoring: Bridging Outpatient and Inpatient Care to Reduce Healthcare Utilization Mayumi Oda, CRNP

10:40am

Reimbursement for Remote Patient Monitoring: Building a Cost Effective RPM Program that Dramatically Improves Patient Outcomes Meryl Holt

11:20am

Use of Remote Patient Monitoring to Advance Health Equity and Improve Maternal Health Outcomes

Florence Kariuki, RN, MHA, FHELA

12:00pm

How Remote Patient Monitoring of Chronic Conditions Can Help Your Organization Carla Beckerle, DNP, APRN-BC

1:30pm

Interoperability: Leveraging Technology to Advance Coordinated Care Hallie Bleau 3:45pm - 4:30pm

Panel: AI in Remote Patient Monitoring

Khang Nguyen, MD. Jay Pandit, MD Shekar Ramanathan

3:45pm

How Remote Patient Monitoring Can Help Advance Health Equity

Michael B. Marchant

4:30pm

Member Centric Outreach to Improve Outcomes for Blood Pressure Monitoring Jamie Galbreath, PhD, MPH, CHES

8:15am

RPM+: Elevating Care Beyond Boundaries Lauren Majors, IBCLC

9:00am

Digital Health Tools and Value Based Care Anthony Roggio, MD

10:15am

Improving Patient Engagement through Digital Health

Brenda Garza, M.S.

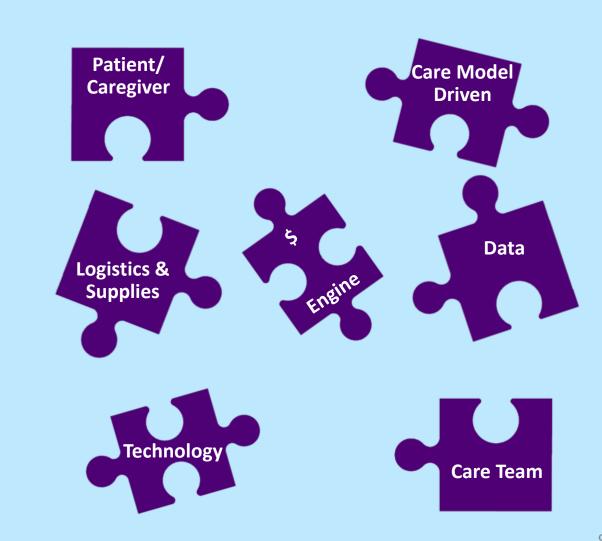
11:00am

Virtual Monitoring for the Inpatient Setting Brian Wayling

11:45am

Optimizing Clinical Operations Post-Acute Utilizing Remote Patient Monitoring Michelle Elsener MBA, BSN, RN-BC, CPHQ

## What we learned from 2 days on RPM?...



# RPM@SCALE

**Getting Started** 

## REMOTE PATIENT MONITORING REIMBURSEMENT SUMMARY

Prof / Tech	Process	Resource	CMS Reimb.	CMS CPT code / description	
One-time Technical	Follow up home care technical and home care services set up	<ul><li>Technical resource</li><li>QHP*</li></ul>	\$19	CPT 99453: Initial set-up of technology and patient education	
Technical	Specific condition remote monitoring devices	Technical resource	\$64/46	CPT 99454: Device supply with daily recordings, programmed alerts transmission, monthly	
	Medication reminders	(i.e. device			
	Health care reminders	malfunction)		, ,	
Professional	Escalation support	Physician	\$52 (20 min)	CPT 99457: Collection, interpretation of physiologic data, <b>20 minutes</b> or more per month requiring interactive	
	Collect and Interpret health status tracking (blood pressure, blood glucose, pulse rate)	<ul><li>QHP*</li><li>Other Clinical Staff</li></ul>	\$58 (30 min)	communication with patient by physician, QHP, and other clinical staff	
			, 433 (33 1.1111)	CPT 99091: Same as 99457 but for <b>30 minutes</b>	

\*QHP definition: an individual who by education, training, licensure/regulation and facility privileging (when applicable) performs a professional service within his / her scope of practice and independently reports a professional service

#### Potential Adjunct Billing:

Chronic Care Management: \$47 / patient / month

Transition Care Management: Local Physician Fee Schedule

ILLUSTRATIVE REVENUE CALCULATIONS						
	Annual / 20,000 patients					
Prof / Tech Reimbursements						
One-time technical	\$19					
Monthly technical	\$64	\$64				
Monthly professional	\$58	\$52				
Patient Total	\$141	\$116	\$715	\$1417	\$28.2M	

## REMOTE PATIENT MONITORING OVERVIEW

#### **CONDITIONS INCLUDE:**

heart failure, COPD, diabetes, pain management, hypertension, atrial fibrillation, diabetes-associated foot disease, weight loss/gain, sleep apnea, asthma, high blood pressure, stroke, men's and women's health, medication management, post-procedure monitoring, etc.

PEOPLE	PROCESS	TECHNOLOGY
<ul> <li>Care Manager</li> <li>RN</li> <li>Physician</li> <li>Home Health Aides</li> <li>PT / OT / SP Therapists</li> <li>Technology Support and Installation</li> </ul>	<ul> <li>Follow up home care technical and home care services set up</li> <li>Nudging and messaging</li> <li>Healthcare reminders</li> <li>Escalation support</li> <li>Collect and Interpret health status tracking</li> <li>Specific condition remote monitoring devices</li> <li>Medication reminders</li> </ul>	<ul> <li>Care Management / Remote Monitoring Platform</li> <li>Video Capabilities</li> <li>Audio capabilities</li> <li>Knowledge system</li> <li>Telecommunication bandwidth</li> <li>Peripheral devices</li> </ul>

## REMOTE PATIENT MONITORING

### **HIGH-LEVEL TECHNOLOGY VIEW**

#### **PATIENT**

#### REMOTE MONITORING SERVICE

#### **HEALTHCARE PROVIDER**

**Data Collection/Care Management** 





for heart and lung

sounds









Interaction



for examining the

guided exams with your



adaptor for the









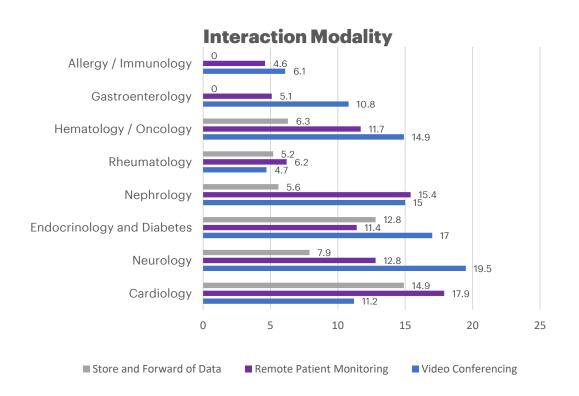




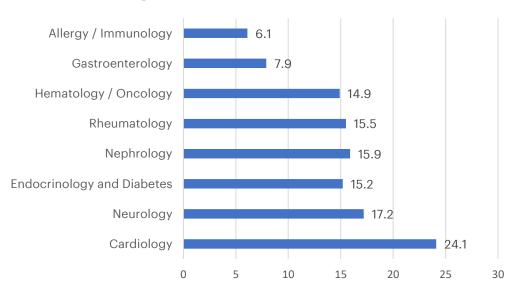




## REMOTE PATIENT MONITORING INTERNAL MEDICINE PHYSICIAN ADOPTION RATES



#### **Physician to Patient Interaction**



#### Summary:

- 15.4% of physicians worked in practices that used telemedicine for physician to patient interactions
- Adoption significantly higher in large (> 25 physicians), multi-specialty, and hospital-owned practices
- Video conferencing has the widest overall adoption
- Remote patient monitoring used most often by internal medicine specialties practices

All information from 'The Use of Telemedicine by Physicians: Still the Exception Rather Than The Rule', by Carol K. Kane and Kurt Gillis

### **REMOTE PATIENT MONITORING**

## CARE ROLES AND RESPONSIBILITIES IN AND OUT OF SCOPE

CPT 99453 (Setup & Pre-Care)

Equipment
Delivered
and Installed.
Technical
Orientation
Provided

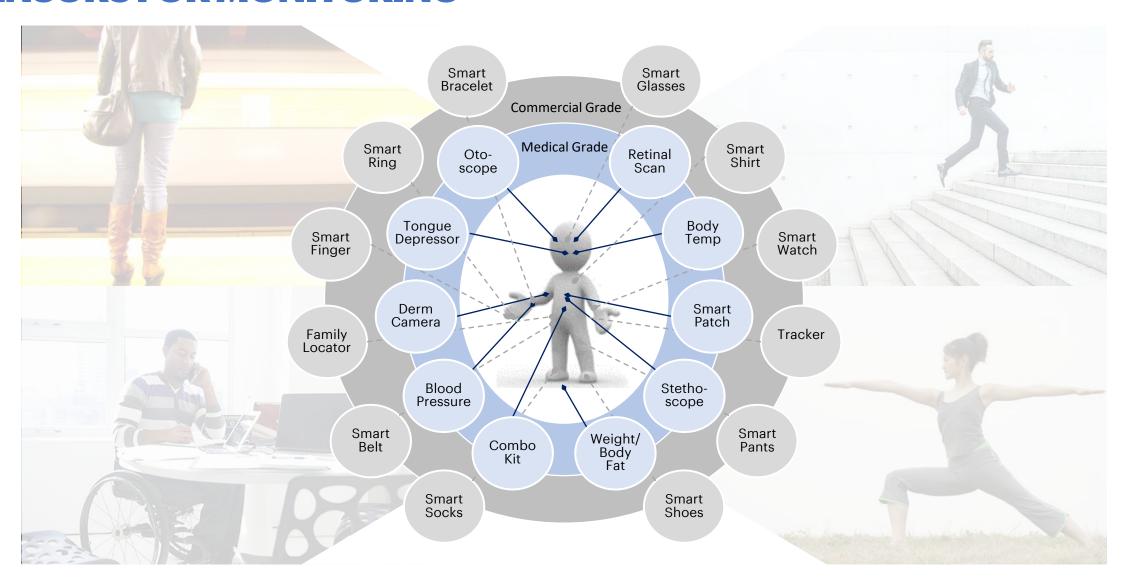
CPT 99454, CPT 99457, CPT 99091

Program Orientation		Routine Care Process		Escalated Care Process		Discharge Process	
Activity	Resp	Activity	Resp	Activity	Resp	Activity	Resp
Support for the initial connection and setup	Т	Support for ongoing connection	Т	Support for ongoing connection	Т	Support for the disconnection	Т
First time connection to the patient. Test communication approach (video, audio). Resolve before continuing	T, NC		C, NC, PHRN	<ul> <li>Difficulty with understanding</li> <li>if urgent: i.e. not taking meds as prescribed resulting in chest pain, dizziness or shortness of</li> </ul>	C, NC, PHRN		C, NC, PHRN
Reinforce education on using the technology.	T, NC	If notified or observed that patient not following protocol (e.g., not entering medication, not using	C, NC, PHRN	breath (SOB) – a call or fax letter to HCP/HP • If non-urgent – then routine			
If issues with understanding orientation then escalate to HCP in Escalated Care Process	C, NC	peripheral) then place notification to HCP/HP and go to Escalated Care Process		<ul><li>escalation to HCP/HP</li><li>HCP determines whether patient should continue</li></ul>		Report to the HCP/HP on close out of program	C, NC, PHRN
Patient demonstrates they can use any devices and peripheral equipment. Ensure receipt of data.	NC	<ul> <li>Call to the patient (up to CPT code limit) to review progress;</li> <li>Review data (medication, tracking data);</li> </ul>	mit) to review progress; v data (medication, ng data); e-defined assessment atient about their ion  PHRN reinforcement not working  • if urgent (not meds, compl about pain) – a call or fax lot to HCP/HP  • not urgent – then routine escalation to HCP/HP	reinforcement not working • if urgent (not meds, complaining	C, NC, PHRN	Letter to the member with contact information if the member decides to reengage.	C, NC, PHRN
Reinforce the program and timing Provide phone number for questions or contact person	T, NC	<ul> <li>Use pre-defined assessment with patient about their condition</li> <li>Follow script defined for</li> </ul>		to HCP/HP • not urgent – then routine			
Wrap up the orientation	NC	assessment • Reinforce education		Review with HS or HP to determine continue participation in program	C, NC, PHRN	<ul><li>Legend:</li><li>T – Technician</li><li>NC – Non-Clinical</li></ul>	
Notify HCP/HP on completion of orientation and confirmation that patient is participating		<ul> <li>Close out call with confirming schedule for next call</li> <li>Confirm text reminders selected and receipt</li> </ul>	C, NC, PHRN	Member is hospitalized, stop the intervention, on discharge from hospital reinitiate the program with the member	C, NC, PHRN	<ul> <li>C – Clinical</li> <li>PHRN – Physician/Registered Nurse</li> <li>HCP/HP – Clinical Sponsor</li> </ul>	
		During call, If any anomalies place notification to HCP/HP and to Escalated Care Process	C, NC, PHRN	from Health System or Health Plan			
		<ul> <li>System will prepare reporting and/or dashboard for HCP/HP</li> <li>Review and confirm submission</li> </ul>	C, NC, PHRN				

No Code (Post-Care & Disconnect)

Equipment Removed from Care Setting

## REMOTE PATIENT MONITORING SENSORS FOR MONITORING



## REMOTE PATIENT MONITORING ACCENTURE PROCESS CAPABILITIES

		PEOPLE	TECHNOLOGY			
PROCESS	Resource	Provider Resource	Vendor Resource	Tool / Platform	Vendor Capabilities	
Follow up home care technical and home care	Technical Resource	Low	High	Access to client     Care Management     Platform	Cross Condition	
services set up	QHP*	Medium	Medium			
Specific condition remote monitoring devices	Technical Resource	Low	High	Video and Audio     Capabilities	Care Model Determined	
Medication Reminders				Reminder App	Care Model Determined	
Health care reminders				GenAl Chat bot	New	
Escalation support	Physician	Low	Low	Care Management     Platform	Cross Condition	
Collect and Interpret health status tracking	QHP*	Medium	Medium	<ul><li>Audio Capabilities</li><li>Chat Bot</li></ul>	<ul><li>High</li><li>New</li></ul>	
(blood pressure, blood glucose, pulse rate)	Other Clinical Staff	Low	High			

<sup>\*</sup>QHP definition: an individual who by education, training, licensure/regulation and facility privileging (when applicable) performs a professional service within his / her scope of practice and independently reports a professional service

## REMOTE PATIENT MONITORING ROUGH ORDER OF MAGNITUDE COSTS

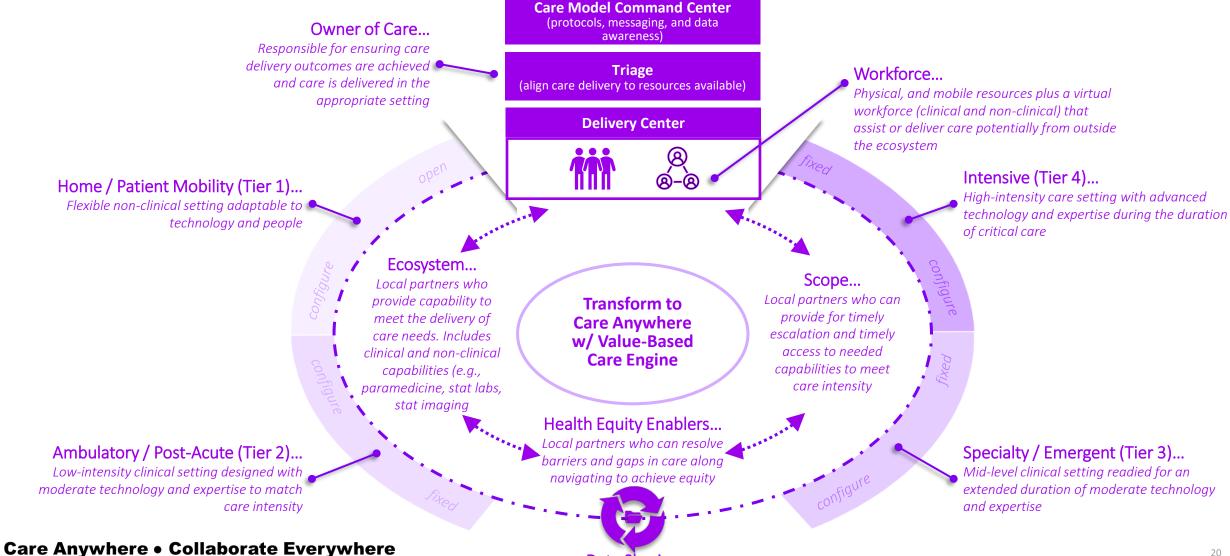
#	Capability	ROM	Explanation
1	Care management and Remote patient monitoring core technology platform. Tracks all patients, assigns patients to care manager for monitoring, presents patient demographics, care details, remote monitored data, and alerts based on provider configured rules. Can support a variety of interactions with the patient and/or family to support communication, monitoring, and management.	\$500,000 to \$1,000,000	Varies greatly based on the types of conditions to be monitored, types of interaction with patient/family, and the sophistication of the rules engine for escalation. Several vendor options with new vendors entering the market place. Cloud deployments are typical.
2	HCP and care management seat charges for core platform (assumes 100 care managers and HCP)	\$2,000 to \$4,000 / month (based on a range \$20-40 per seat/month charge)	Establishes a recurring fee for use of the platform.
3	Integration with existing systems, especially EMRs such as Epic and Cerner	\$100,000 - \$250,000	Typically these platforms have established integration with Epic and Cerner. There may unique systems requiring additional integration or new integrations to EMRs not previously developed. The costs for integration are typical and present no unique challenges over other integrations for other platforms
4	Integration with remote devices to be used by a patient at home	\$100,000-\$250,000	Many new devices on the market present unique opportunities to perform medical grade quality monitoring of patients. Maintaining integration with selected devices will depend on the breadth of conditions monitored and the creation of displays to reflect that data in the core platform
5	Remote devices	\$100 per month for supplies or \$300 for unit purchase	Vary significantly on type and functionality of the device. Companies like Medtronic support delivery of a device to a home, pickup, and refurbishing for next patient. Other instances include throw away devices, such as heart/body temperature patches, or patient owned like Tyto for full family use.

# CARE ANYWHERE

The Value Case

## **CARE ANYWHERE CARE MODEL – Leveraging Value-Based Care**

Care Anywhere is uniquely designed to orchestrate the delivery of care in the most effective setting leveraging the capabilities across the care model.



Data Sharing

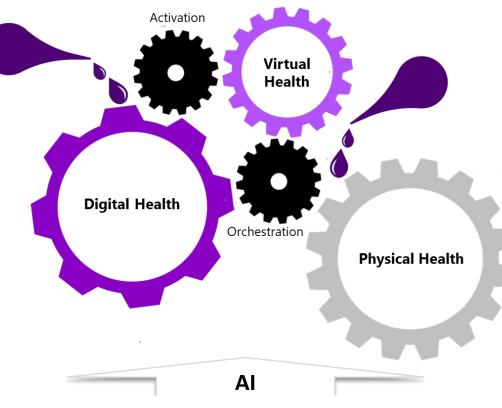
Copyright © 2023 Accenture. All rights reserved.

## **Answer VBC Foundational Questions on Journey to Future**

For example - "In 2030, every interaction ... – physical and virtual – will be seamless and markedly different than any other health care experience."

Realize success in Value-Based Care requires both demand and supply-side optimization through Care Anywhere.

- How to identify patients with the highest risk
- Addressing patients who need care
- Encouraging annual wellness visits
- Keeping open communication with provider-relation reps
- Being open-minded to succeed at VBC



- Member Enrollment
- Intelligent Benefits
- Mailroom
- Risk Score Accuracy
- HEDIS Clinical Review
- UM Intake
- UM Clinical Review

- Fraud, Waste, and Abuse
- Provider Data Management, Credentialing, Appeals Intake
- Member Appeals

#### "Personalization can...

- · Inform and educate
- Connect to appropriate care
- Guide to relevant resources
- Build trusted relationships
- Encourage action
- Onboard to an experience
- Improve quality of life and holistic wellness
- Support better health outcomes"

#### Orchestration will ...

- · Guide to the right place, right time
- Lead to liquid expectations
- Create a distinct foundation
- Leverage AI (Gen AI)
- Hide complexity

#### Activation will ...

- · Communicate to be understood
- Match channel to preference
- Create proactive engagement
- Transpose information to action
- Reduce barriers

#### Content/Knowledge can...

- Trigger action
- Enrich interactions
- · Inform and educate
- Refine clinical workflow
- Reflect and transcribe

## **CARE DELIVERY ANYWHERE**

## **Quality Framework**

Areas of Focus



Data Sharing & Interoperability

Aligning around standards for data sharing and interoperability



Health Equity

Ensuring health equity in the delivery of care



Referrals

Processes for verifying that patients can access necessary follow-up care



Communication

Guidelines for effective communication for innovative modalities of care delivery



Appropriateness of Setting for Care

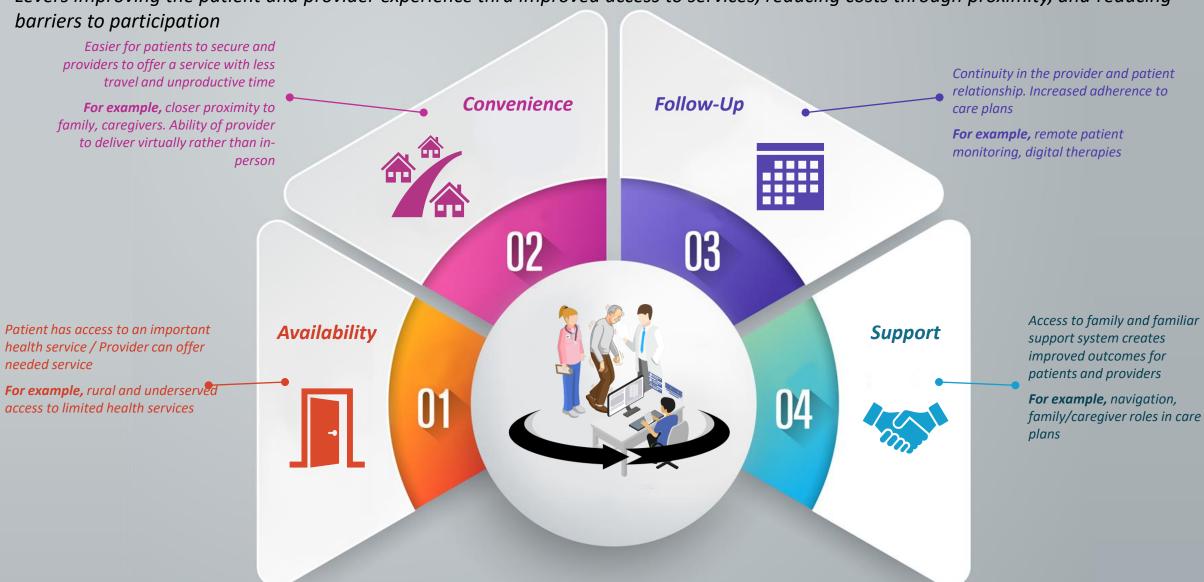
Processes for ensuring that patients receive the right care, in the right way

11 | (NCQA

NCQA, January 12, 2023, Care Delivery Anywhere

## Improve Access and Experience

Levers improving the patient and provider experience thru improved access to services, reducing costs through proximity, and reducing



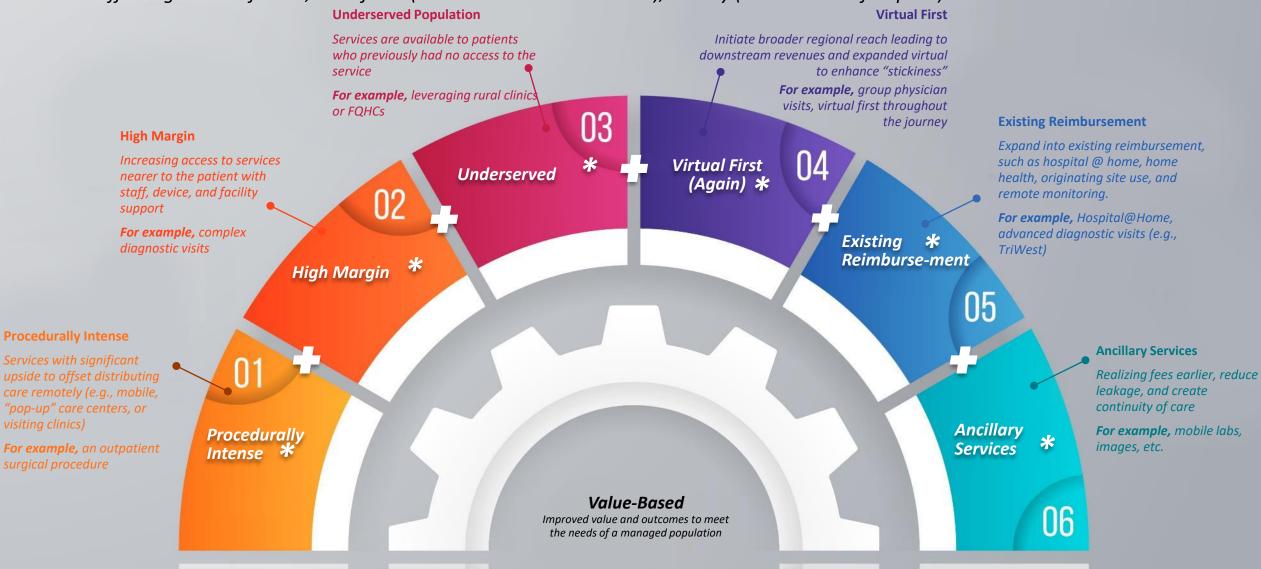
Copyright © 2023 Accenture. All rights reserved.

**Care Anywhere • Collaborate Everywhere** 

23

## Improve Economic Opportunities

Levers effecting costs: Inflation, Workforce (enabled thru Virtual Health), Facility (reduced hard footprint)



**Care Anywhere • Collaborate Everywhere** 

24

## CARE ANYWHERE IS FOCUSED ON HEALTH EQUITY

#### **PRIMARY HEALTH EQUITY FOCUS**

- Get healthcare to people that need it most
- Urban care
- Rural care
- People of color
- People that can't afford care
- The elderly
- People who need mental health and behavioral resources
- Digital divide

#### Previous research indicates...

Forming unlikely partnerships to design innovative solutions for undeserved and vulnerable people



Health equity is an inclusive, just distribution of resources and opportunities needed to achieve peace of mind and improved health outcomes

Investing in initiatives that proactively address the needs of vulnerable populations and support community wellness

Ensuring marginalized individuals have the agency and support needed to lead healthful lives

#### Which means...

Equal access to care/all have access to care regardless of race, gender, etc.

41%

Health equity is being able to ensure equal access to and delivery of healthcare in a manner that treats everyone as equals.

Quality health care for all/equal quality of care

Providing the same level of health care services to any individual devoid of socioeconomic status.

All have opportunity to be healthy/fair and just opportunity to be healthy

The opportunity for all persons to be healthy through access to care and resources by addressing the social determinants of health.

Equal health outcomes/providing resources to achieve equal health outcomes

Healthcare needs of all patients are appropriately addressed in order to achieve the desired health outcomes for all

Reduce causes of health disparities/remove barriers

14%

Understanding disparities within healthcare and working with experts to make sure decisions & processes are put in place to mitigate these disparities as much as possibly to ensure equity for everyone who is in need of health care.

Recognize impact of race, gender, age, etc. on heath outcomes

9%

Addressing SDOH matters for the patient population.



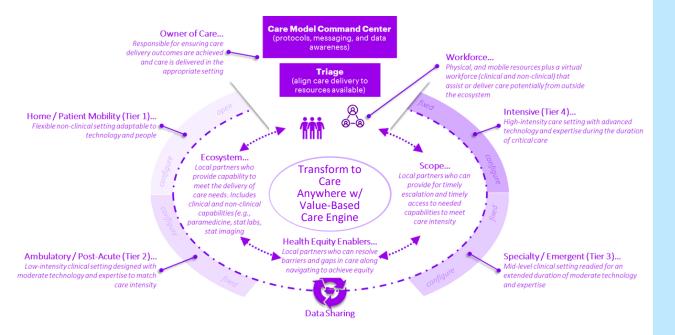
- Accenture, Ankor Shah, 2022
- 2. HIMSS, Accenture, Ankor Shah, 2022

# CARE ANYWHERE

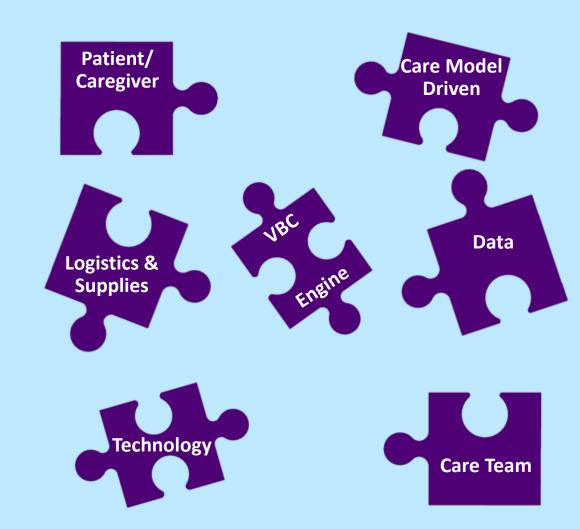
**Workshop Activity** 



The Care Anywhere model may provide alternative, economically favorable locations to keep services open, maintain access, increase compliance, resolve inequity, and address supply shortages



## What we learned from 2 days on Value-Based Care?...





### **The Opportunity - Foundation**

8:10am

RPM: A Rural Health System's Journey Shari K. Rajoo M.D., M.S.

8:50am

Ways Payers Can Use Remote Care to Improve Population Health Tamara Perry, MA-IOC

10:00am

Remote Patient Monitoring: Bridging Outpatient and Inpatient Care to Reduce Healthcare Utilization Mayumi Oda, CRNP

10:40am

Reimbursement for Remote Patient Monitoring: Building a Cost Effective RPM Program that Dramatically Improves Patient Outcomes Meryl Holt

11:20am

Use of Remote Patient Monitoring to Advance Health Equity and Improve Maternal Health Outcomes

Florence Kariuki, RN, MHA, FHELA

12:00pm

How Remote Patient Monitoring of Chronic Conditions Can Help Your Organization Carla Beckerle, DNP, APRN-BC

1:30pm

Interoperability: Leveraging Technology to Advance Coordinated Care Hallie Bleau 3:45pm - 4:30pm

Panel: AI in Remote Patient Monitoring

Khang Nguyen, MD. Jay Pandit, MD Shekar Ramanathan

3:45pm

How Remote Patient Monitoring Can Help Advance Health Equity

Michael B. Marchant

4:30pm

Member Centric Outreach to Improve Outcomes for Blood Pressure Monitoring

Jamie Galbreath, PhD, MPH, CHES

8:15am

RPM+: Elevating Care Beyond Boundaries Lauren Majors, IBCLC

9:00am

Digital Health Tools and Value Based Care Anthony Roggio, MD

10:15am

Improving Patient Engagement through Digital Health

Brenda Garza, M.S.

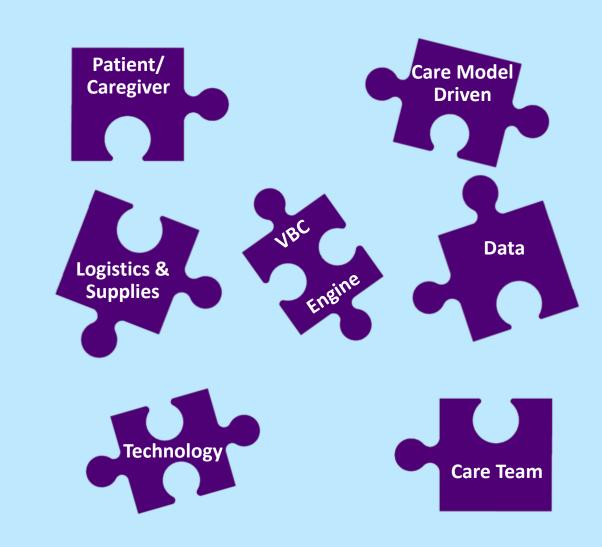
11:00am

Virtual Monitoring for the Inpatient Setting Brian Wayling

11:45am

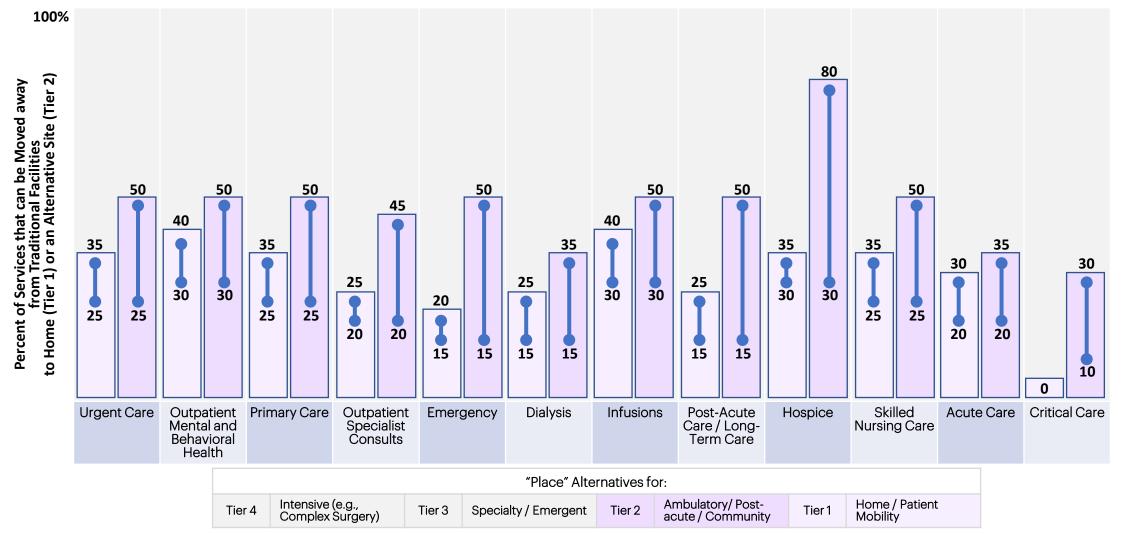
Optimizing Clinical Operations Post-Acute Utilizing Remote Patient Monitoring Michelle Elsener MBA, BSN, RN-BC, CPHQ

## What we learned from 2 days on RPM?...



## Care Anywhere: Orchestrating the Reinvention of Care Delivery

Shifting "place" is a key aspect of Care Anywhere. Increasing opportunities exist to shift to more convenient places.



#### Sources.

- "From facility to home: How healthcare could shift by 2025, February 1, 2022, Bestsennyy, Chmielewski, Koffel, and Shah, McKinsey & Company
- Accenture study.

# CONSUMER JOURNEY

**Use Case: Rheumatology** 

### **STEP 1 - APPROPRIATENESS**

**MEET MARIA** 

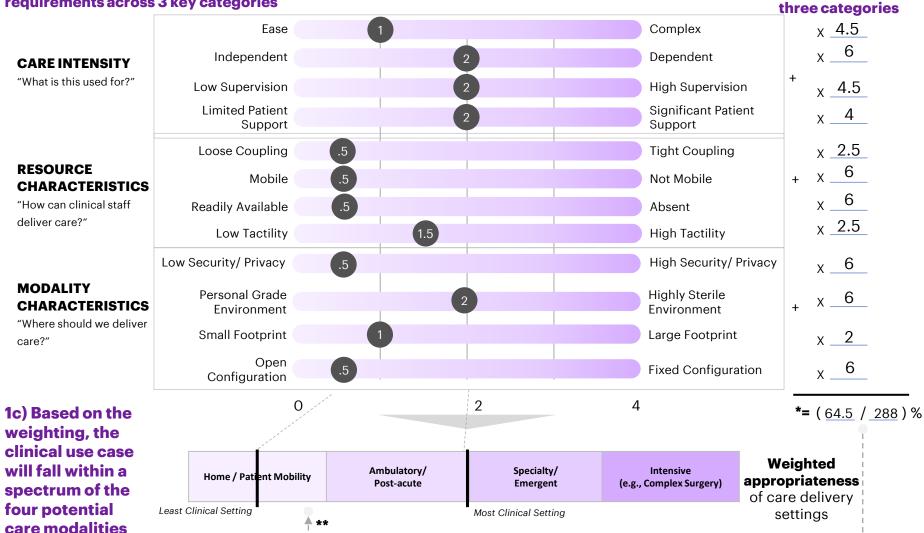


Maria is a 67-year-old retired teacher who lives with her partner in a Dallas suburb. She has moderate to severe **rheumatoid arthritis causing pain in her lower extremities**. She is experiencing an acute flare up and requires a treatment that will relieve her joint pain and inflammation.

#### **Step 1 Discussion:**

- a) Care Intensity: Maria's acute flare up is causing her severe pain and stiffness in her joints, inhibiting her ability to walk. Her doctor recommends a corticoid steroid injection. Treatment delivery is ranges from low to moderate complexity and requires moderate supervision. A review of an image is required to ensure proper placement of the injection.
- **b) Resource Characteristics**: Corticoid steroid injections have moderate to high mobility and moderate tactility.
- c) Modality Characteristics: Corticoid steroid injections for arthritis pain and inflammation relief require low privacy and can be delivered in a clinical setting or personal environment.

1a) To find the range of appropriate delivery locations, identify degree of clinical requirements across 3 key categories



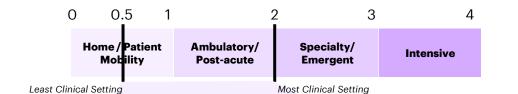
1b) To find the most

likely appropriate location, add weight

across each of the

<sup>\*(</sup> Total / Max ) % Total is the sum of the selected value for a category x the weight Max is highest weight x 4 x number of non-zero weighted categories \*\*Likely Appropriate = Least Clinical Setting + ((Most Clinical Setting-Least Clinical Setting) \* ( Total / Max ) %)

#### STEP 2 – PREFERENCE



## 2a) Identify various preference considerations for each of the key players based on the findings in Step 1

Preference ...

Maria

... to Match Cost Share

... to Match Hours of

... for Geographical Access

Expectations

to Care

0

Availability

#### **Step 2 Discussion:**

- a) Identify various players: The relevant players for Maria's case include herself, her rheumatologist provider's practice, and her Medicare insurance.
- b) Identify categories: Identifying Maria's optimal treatment requires consideration of her cost share, her historical treatment adherence, her personal support network, and her geographical and technological access to care. Necessary considerations also include her insurance benefit, reimbursement, and incentives. Additional categories include her provider's care delivery capabilities, costs, professional network, and community resources.
- c) Importance: As a 67-year-old retiree, Maria values options with low-cost share. Her insurance, Medicare, values low cost, low complexity interventions, unless medically necessary; and her provider values options that optimize resource time and costs



2

#### **Care Anywhere • Collaborate Everywhere**

0.5 + (50% \* 1.5) = 1.25

12

2b) Calculate each key player's considerations indicating their

overall preference and will

### **STEP 3 - CHOICE**

#### **Step 3 Discussion:**

#### a) Patient Considerations:

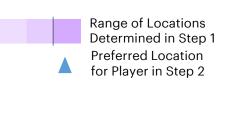
- i. Maria's home is distant from her rheumatologist provider's practice, and given her acute pain and join stiffness, she prefers not to drive long distances
- ii. Maria's provider's practice is owned by a hospital, and she is consequently charged a high facility fee for her in-person visits. Her cost share is lower for home visits.
- iii. Maria has access to a tablet and laptop for virtual care visits.

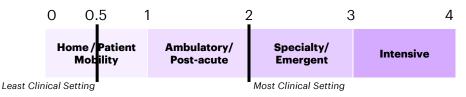
#### b) Care Delivery Considerations:

- i. Maria's rheumatologist's practice has robust virtual health capabilities.
- ii. Maria's rheumatologist's practice has a network of mobile nurses and EMTs for home visits, as well as a brick-and-mortar practice for in person visits.
- iii. It is less costly and resource intensive for the practice to have their nurses deliver corticoid steroids, rather than their providers.

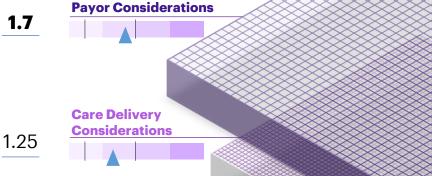
#### **Payor Considerations:**

- i. Maria's covered benefits include corticoid steroid injections, nurse home visits, and virtual health visits.
- ii. It is less costly for the payor to reimburse virtual health compared to in-person visits.





3a) Based on the individual preferences of key players in Step 2, Step 3 aligns the preferences among those key players. The result is a choice that reflects appropriateness and preference. Step 3b) Final preference from 2b





#### **Ambulatory Location Confirmed as Optimal**

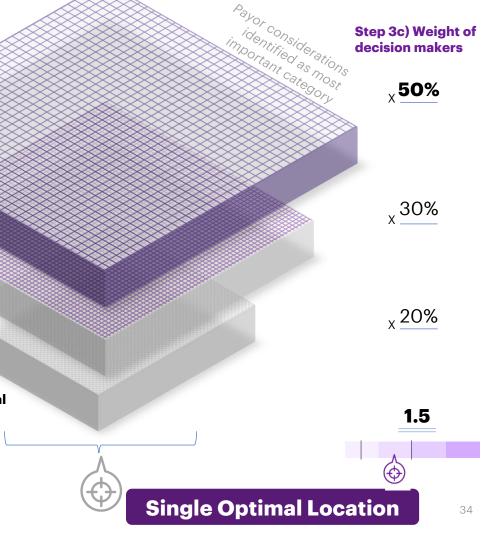
- Corticoid steroid injections delivered by nurse in an ambulatory setting
- Provider is available if concerns arise

**Patient** 

1.25

**Considerations** 

Virtual follow-up visits with the provider to evaluate treatment efficacy and next steps.



# CONSUMER JOURNEY

**General Approach** 

#### **Care anywhere- Overview**

#### CARE ANYWHERE IS...

The curation of care model building blocks to "fit" the preferences and constraints of care delivery, in order to improve access, experience, outcomes, and optimize cost

#### & ORCHESTRATES ACROSS...



proximity, capabilities to

ensure the

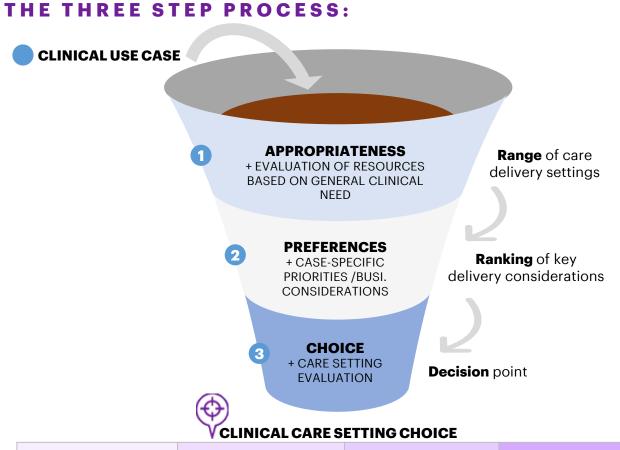
outcome



**TECHNOLOGY** as equipment, facilities, and devices available to people



**PROCESS** to appropriately couple and direct people and technology



Home / Patient Mobility	Ambulatory/	Specialty/	Intensive
	Post-acute	Emergent	(e.g., Complex Surgery)
Flexible non-clinical setting adaptable to technology and people	Low-intensity clinical setting designed with moderate tech and expertise to match care intensity	Mid-level clinical setting readied for an extended duration of moderate tech and expertise	High-intensity care setting with advanced tech and expertise the duration of critical care

### **STEP 1 - APPROPRIATENESS**

#### STEP 1:

The first step to identify which modalities to deliver care across requires analyzing clinical need across three categories:

- Care intensity: What is the clinical intensity of the service required?
- b) Resource **Characteristics:** Does the clinical team need to be altogether in a room (e.g., surgery) vs symptom monitoring?
- Modality **Characteristics:** How much security & privacy is needed for care (e.g., gynecology appt vs triage)?

1a) ILLUSTRATIVE: To find the range of appropriate delivery locations, identify degree of clinical requirements across 3 key categories

#### categories (example) Ease Complex **CARE INTENSITY** Independent Dependent "What care is to be **High Supervision** provided?" Low Supervision 6 Significant Patient **Limited Patient** Support Support 3 **Loose Coupling Tight Coupling RESOURCE** Not Mobile Mobile **CHARACTERISTICS** "How can clinical 3 Readily Available Absent resources deliver care?" 3 Low Tactility **High Tactility** x 6 Low Security/ Privacy High Security/ Privacy **MODALITY** Personal Grade **Highly Sterile** x 6 **CHARACTERISTICS** Environment Environment "Where should we deliver 6 **Small Footprint** Large Footprint care?" Open 6 **Fixed Configuration** Χ \_\_ Configuration = ( Total/Max ) %

Ambulatory/

Post-acute

Home / Patient Mobility

Least Clinical Setting

1c) Based on the weighting, the clinical use case will fall within a spectrum of the four potential care modalities

\*( Total / Max ) % Total is the sum of the selected value for a category x the weight Max is highest weight x 4 x number of non-zero weighted categories \*\*Likely Appropriate = Least Clinical Setting + ((Most Clinical Setting-Least Clinical Setting) \* ( Total / Max ) %)

Specialty/

Emergent

Intensive

(e.g., Complex Surgery)

Most Clinical Setting

1b) To find the most

**\*=** (162/288)%

Weighted

appropriateness

of care delivery

settinas

likely appropriate location, add weight across each of the three

### "CARE ANYWHERE" PARADIGM

## **STEP 2 - PREFERENCE**



Most Clinical Setting

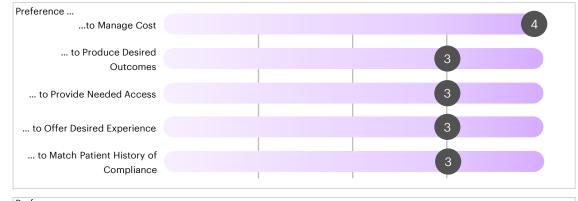
## STEP 2:

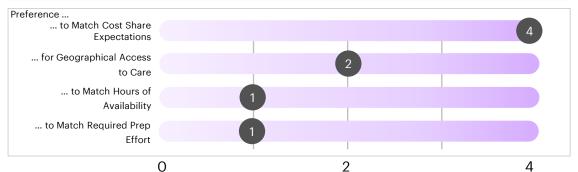
The second step will identify various players to consider when deciding on modalities of care

- a) Identify various players (e.g., providers, employer-sponsored health plans, Medicare)
- b) Identify categories within each player to consider within each player
- c) Select the level of importance across each slider to then tally up at the category level to determine the most important group

#### 2a) ILLUSTRATIVE: Identify various preference considerations for each of the key players based on the findings in Step 1







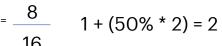
2b) Calculate each key player's considerations indicating their overall preference and will inform the choice in Step 3.

#### Where:

Starting Location + Preference within the identified range

$$=\frac{8}{16}$$
 1 + (50% \* 2) = 2

$$\frac{6}{1}$$
 1 + (80% \* 2) = 2.6



#### **PATIENT**

**PAYER** 

#### **Care Anywhere • Collaborate Everywhere**

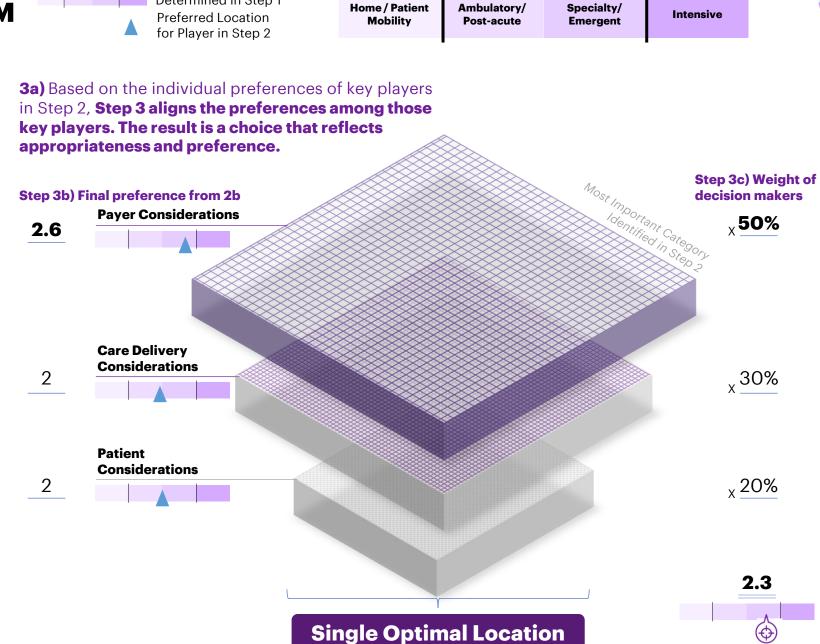
## "CAREANYWHERE" PARADIGM STEP 3 - CHOICE

#### STEP 3:

Using the established hierarchy of players (step 2), a series of filters will be applied to the range of locations accordingly.

#### Pictured example:

- a) Since the payer was determined to have the greatest sum in step 2, its considerations will be used as the first filter to **narrow the location options**.
- b) The following filter will use the provider considerations to narrow down the number of locations a **level further**.
- c) Patient considerations will be applied to make the final clinical care setting decision.
- d) A **single optimal location** for clinical care is determined.



0

Range of Locations
Determined in Step 1

# CARE ANYWHERE

**Case Studies** 

## **High-Level Analysis: Example - Closures**

Cost pressures, staffing shortages, and inconsistent volumes are driving service closures and limiting access



## **The Problem**

Hospitals are closing services & locations at an unprecedented clip due to financial pressures

136

Rural hospital **closures** between 2010 and 2021 \$7B

Medicare & Medicaid underpayments to rural hospitals in 2020 70%

...of HPSAs\* are located in rural or partially rural areas

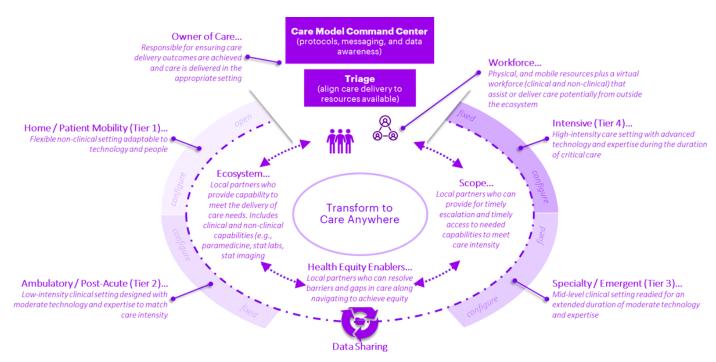
Health services with low margins are often the first to be cut. Low margins can be attributed to several factors, including:

- **High capital expenditures**, which limit the ceiling of cost reduction efforts
- Poor staff availability, which caps volume potential
- Non-optimal staff usage, where a mismatch exists between labor compensation and productivity
- Irregular patient volumes and spare capacity, which limit revenue and prevent facility cost coverage
- Unfavorable payor mix, which can limit reimbursement potential



## **The Opportunity**

The Care Anywhere model may provide alternative, economically favorable locations to keep services open and maintain access



Note (\*): Health Professional Shortage Area

Source: American Hospital Association – Rural Hospital Closures Threaten Access

## **Lower Margin Services | First Movers**

Several lower margin services have already shifted into Tier 1 and Tier 2 settings



**Primary Care** 



**Emergency Services** 



**Dialysis** 



**Sleep Studies** 

#### Traditionally delivered in...

 Outpatient or ambulatory brick-andmortar settings

#### Now being delivered in...

- Retail locations (e.g., CVS, Walmart)<sup>1</sup>
- Virtual and online settings<sup>2</sup>



one medical



#### Traditionally delivered in...

· Both inpatient and outpatient settings

#### Now being delivered in...

- Urgent care and retail settings<sup>3</sup>
- Virtual settings (e.g., triage)<sup>4</sup>
- Free standing ER facilities<sup>5</sup>





**¬NewYork-Presbyterian** 

#### Traditionally delivered in...

Inpatient settings or a dialysis outpatient unit

#### Now being delivered in...

- Homes<sup>6</sup>
- Retail locations (e.g., DaVita)<sup>6</sup>
- Skilled Nursing Facilities<sup>7</sup>







#### Traditionally delivered in...

Outpatient settings

#### Now being delivered in...

- Homes<sup>8</sup>
- Hotels<sup>9</sup>
- Virtual and online settings<sup>10</sup>



VANDERBILT VALEALTH





Sources: ¹RAND ²CVS Health ³Concentra ⁴NYP ER Telemedicine ⁵HCA Healthcare 6DaVita Treatments
7DaVita SNF 8Stanford Sleep Study 9Vanderbilt Sleep Study ¹0Project Baseline Study

## **SKILLED NURSING FACILITY**

For example, SNF can be targeted at several appropriate locations of care.

#### **Patient Criteria:**

- Ability to pay for Home Health
- In a safe and appropriate house **Hospital to SNF:**
- Lower acuity
- Discharged to home from SNF within 7 days
- Low ADL score on admission to SNF
- Fits target diagnosis:
- CHF Exacerbation
- o COPD Exacerbation
- Cerebral infarction
- o Fracture
- Surgical aftercare
- Cellulitis
- Pneumonia
- Pvelonephritis
- Gastroenteritis & **Ability to Perform:**

- Colitis
- Dehydration
- Rhabdomyolysis
- o COVID-19
- Multiple Sclerosis Flare
- o Clostridium Difficile
- Acute Gout Flare

• Meets intermediate (observation/inpatient) level of care or higher

- No weapons
- Family and/or caregiver support

#### Rapid Discharge:

- Higher acuity but stable
- Stayed in SNF for more than 30 days
- Low ADL score after 20 days
- Congestive heart failure
- Cerebral infarction
- Wound Fracture

aftercare

Upper limb

fracture

- Surgical aftercare
   Diabetes
- Cellulitis
- Orthopedic

#### Patient Criteria: (like Tier 1 except)

- Unsafe or inappropriate house
- No consistent family member or caregiver support
- Weapons in the home
- Moderate acuity including addition diagnosis:
  - New strokes

- o High rehabilitation potential
- New joint replacements

#### **Ability to Perform:**

- Meets Level I or II intermediate (observation/inpatient) or Level III extensive
- Synchronous telemetry or no telemetry
- Manage complex medications and wound management
- Typical SNF level care and interactions with roles supported by virtual clinicians

#### **Resource Requirements:**

- Audio and video through broadband along with telemetry
- Other infrastructure set up
- Virtual clinical support plus trained staff mobile to the home
- · Mobile lab, imaging, ancillaries

#### **Patient Criteria:**

 Patient condition is critical and may be complex from comorbidities

#### **Ability to Perform:**

- Level IV intensive care which might include ventilator management
- Adhoc or planned lab, imaging, and other ancillary services are onsite

#### **Resources Required:**

In-person access to staff and ancillary services





**Resource Requirements:** 

- · Audio and video through broadband
- Other infrastructure set up
- Virtual clinical support plus trained staff mobile to the home



Tier 2: Ambulatory/Post-Acute Site (space, staff, technology)

## TIER 2 Examples for Alternatives to SNF@Home or Traditional

## Skilled Nursing Facility

A care delivery model aimed at delivering a SNF-level of care near a patient's home, without sacrificing the quality of care delivered in a facility setting. Skilled care is supplemented with wraparound services catering to holistic patient needs



#### **Location Criteria**

- Adaptable Infrastructure
  Facility can be outfitted\* for care
- 2 Commonplace
  Facility should be common to most communities
- Mission-Aligned
  Ownership should be aligned to the healthcare mission
- 4 Strategically Beneficial
  Represents an attractive business opportunity for all parties
- Accessible Facility / location is easily accessed by community members
- 6 Secure & Safe Facility is secure and in a safe location
- 7 Excess Capacity
  Facility has excess capacity that is available for extended periods

#### **Relevant Examples**



CAHs, Nursing Homes & Assisted Living Facilities

Critical Access Hospitals and residential nursing facilities fit all location criteria and are the 'status quo' option



Hotels

Hotels operating below capacity allow for private care to be delivered comfortably and conveniently



Schools & Universities

Schools & universities have extra capacity – in both classrooms and residence halls – during off periods



**Unused Retail Space** 

Shopping malls and seasonal retailers have been left with excess space with the shift to digital retail



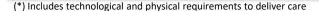
**Unused Homes** 

Airbnbs, rental properties, and second homes are comfortable environments to outfit for care



Places of Worship

Churches, synagogues, mosques, and the like are all mission-oriented and operate below capacity



## **SPECIALTY DIAGNOSTIC/FOLLOW-UP**

A recent review by clinicians supporting care to the veteran population identified the following expectations across typical specialties. Each will be impacted by a specific patient.

#### **Diagnostic Opportunities:**

- Audiology\*
- Behavioral Health Prescribing
- Behavioral Health Psychotherapy
- Cardiology\*
- Dialysis
- Dermatology\*
- Endocrinology
- Gastroenterology
- **General Surgery**
- Hematology and Oncology
- Infectious Diseases
- Nephrology
- Neurological Surgery
- Neurology
- Neuropsychology
- Nutrition/Dietetics
- Orthopedic Surgery
- Otolaryngology\*
- · Pain Management

Informational Pre-/Post-Care **Opportunities:** 

All specialties

- Physical Medicine and
- Physical Therapy/ Occupational Therapy

Rehabilitation

- Plastic Surgery
- Podiatry
- Primary Care\*
- Rheumatology
- Sleep Medicine
- Speech Therapy
- Urology

#### **Diagnostic Opportunities:**

- Allergy and Immunology
- Audiology
- Cardiology
- Dentistry\* Dermatology
- Obstetrics and Gynecology
- Ophthalmology\*
- Optometry\*
- Otolaryngology
- **Primary Care**
- **Pulmonary Diseases**
- Radiology\*
- Thoracic and Cardiovascular Surgery

\*Capability may require movement of resources, such as mobile ancillaries, labs, images as well as people. Relies workforce strategies

#### **Diagnostic Opportunities:**

- Acupuncture
- Chiropractic
- Dentistry
- Ophthalmology
- Optometry
- Radiation Oncology (see Hematology and Oncology)
- Radiology

#### **Emergent Care:**

· Patient condition is emergent and complex from comorbidities



on the ecosystem of partners as well as

Tier 2: Alternative Site of Care (space, staff, technology)

Tier 3 or 4: Specialty, Consult In-Person

Tier 1: Home / Patient Mobility

Tier 2: In-Person Ambulatory

## **NEUROPSYCHOLOGY DIAGNOSTIC/FOLLOW-UP**

For example, in Neuropsychology care can be targeted based on patient capability and desired level of care.

#### **Patient Criteria:**

- Patient condition, mental state, and living situation are appropriate
- Patient is complying with medications and requires periodic support
- Patient can consent to care at home

#### **Ability to Perform:**

- Treatment is self-administered but watched by remote clinician
- Store, forward, documentation of diaries
- Verbal reinforcement of treatment and compliance
- Planned lab, imaging, ancillary services
- Patient, caregiver, or trained staff support the following:
  - o Ready assessments including WAIS-IV Digit Span, WAIS-IV Similarities, HVLT-R, Semantic Fluency, Letter Fluency
- Stimulus materials including MoCA, TOPF, Streep Test, Ors SDMT, WAIS-IV Vocabulary, BNT-2, Trial Making Test

#### **Resource Requirements:**

· Audio and video through broadband

 Trained staff mobile to the home Mobile lab, imaging, ancillaries Mobile Ancillaries Mobile Trained Staff

#### Patient Criteria:

- Patient would benefit from additional education. reinforcement, or review of medications
- Patient's living condition or mental state are not appropriate for staff to provide care at home

#### **Ability to Perform:**

- Staff administer treatment and a remote clinician
- Staff support document or image review
- Staff training on treatment and compliance
- Planned lab, imaging, ancillary services
- Trained staff support the following:
  - Use of examination methods requiring assistance required including WAIS-IV Block Design, WMS-IV Visual Reproduction, WAIS-IV Matrix Reasoning, Rey Complex Figure Test and Recognition Trial (RCFT)

#### **Resource Requirements:**

- · Audio and video through broadband
- Trained staff mobile to the home
- · Mobile lab, imaging, ancillaries



#### **Patient Criteria:**

 Patient condition or progress has changed and would benefit from detailed review

#### **Ability to Perform:**

- Provider and ancillary staff can perform a full range of neuropsychology tests, diagnosis and treatment
- Adhoc or planned lab, imaging, and other ancillary services are onsite or near

#### **Technology Required:**

 In-person access to staff and ancillary services

#### **Patient Criteria:**

 Patient condition is emergent and complex from comorbidities

#### **Ability to Perform:**

- Provider and ancillary staff can perform a full range of neuropsychology tests, diagnosis and treatment
- · Adhoc or planned lab, imaging, and other ancillary services are onsite

#### **Technology Required:**

• In-person access to staff and ancillary services







Tier 2: Alternative Site of Care (space, staff, technology)

Workforce

## **DEVICE ORIENTED DIAGNOSTIC/FOLLOW-UP**

Vendors, such as Sensoria Health, focus on technologies that enhance Tier 1 and 2 flexibility, but tie to Tier 2 in-person approaches

#### Patient Criteria:

- Patient condition requires near continuous monitoring post procedure or as part of ongoing management
- Patient or care giver demonstrate ability to manipulate and manage sensor technology
- · Patient can consent to care at home

#### Ability to Perform:

- · Monitor movement and or health status based on device capability
- Perform diagnostic or follow up examination. May require trained staff or care giver support for examination
- Examination or treatment watched by remote clinician
- Store, forward, documentation of diaries
- · Verbal reinforcement of treatment and compliance
- · Planned lab, imaging, ancillary services
- Patient, caregiver, or trained staff support the following:



- · Audio and video through broadband
  - · Trained staff mobile to the home
    - Mobile lab, imaging, ancillaries



Tier 2: Alternative Site of Care

#### Patient Criteria:

- Patient would benefit from additional education. reinforcement, or review of medications
- Patient or caregiver living situation or home capability not conducive to the examination requirements

#### Ability to Perform:

- Staff administer treatment and a remote clinician
- · Staff support document or image review
- · Staff training on treatment and compliance
- Planned lab, imaging, ancillary services
- Trained staff support the following:
  - o Patient sensor with trained staff manipulation
  - o Clinician sensor system with trained staff

#### Resource Requirements:

- · Audio and video through broadband
- · Trained staff mobile to the home
- · Mobile lab, imaging, ancillaries

Patient

#### Patient Criteria:

 Patient condition or progress has changed and would benefit from detailed review

#### Ability to Perform:

- Provider and ancillary staff can perform a full range of tests, diagnosis and treatment with patient or clinician system
- · Adhoc or planned lab, imaging, and other ancillary services are onsite or near

#### **Technology Required:**

- Full range of technology support
- · In-person access to staff and ancillary services

#### Patient Criteria:

· Patient condition is emergent and complex from comorbidities

#### Ability to Perform:

- Provider and ancillary staff can perform a full range of tests, diagnosis and treatment with clinician system
- · Adhoc or planned lab, imaging, and other ancillary services are onsite

#### Technology Required:

- Full range of specialized technology support
- In-person access to staff and ancillary services





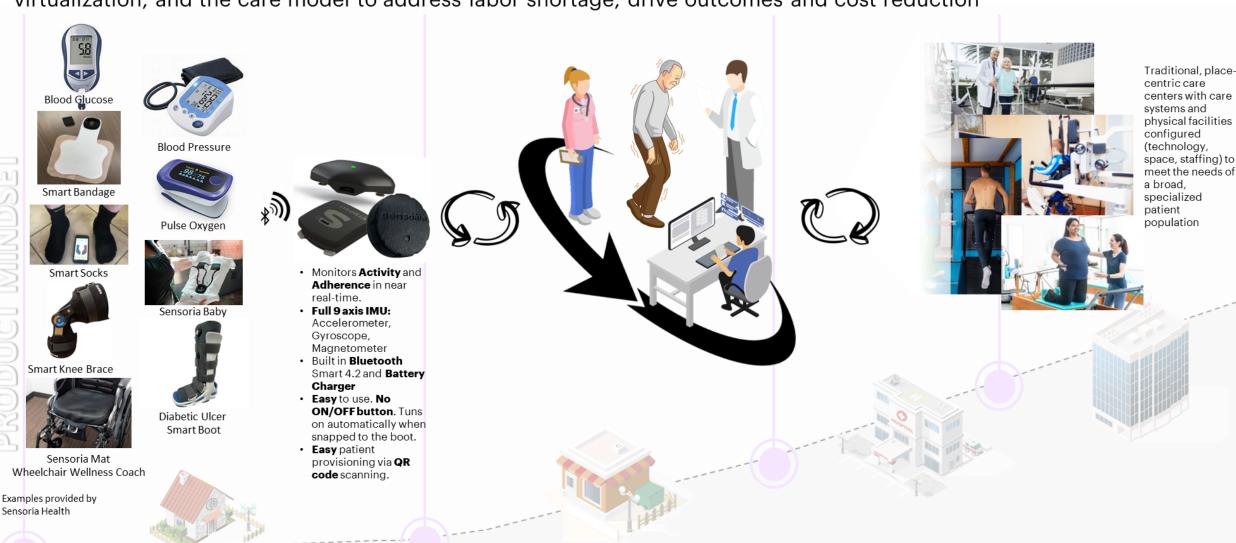


(space, staff, technology)

Tier 2: In-Person Ambulatory

## PERSONALIZED CARE & CARE PLATFORMS

Care Anywhere orchestrates the personalization and supply of care delivery focusing on mobility, virtualization, and the care model to address labor shortage, drive outcomes and cost reduction



Tier 1: Home / Patient Mobility

Tier 2: In-Person An

Fier 3 or 4: Specialty Consult

In-Person



Greg Smith
Virtual Health Lead
Accenture
g.l.smith@accenture.com

# Thank You