Defining Measures of Success in Virtual Care

November 15, 12-1pm

Recording link

Agenda

Time	Topic	Facilitator(s)
10 min	**Welcome and Background**	Amanda Clarke *Safety Net Institute*
40 mins	**Defining Measures of Success** (participant discussion throughout)	Melissa Stratman Amanda Laramie Adrienne Mann *Coleman Associates*
5 min	**Next Steps and Wrap-up**	Amanda Clarke

Housekeeping

Rename yourself to include your name and organization

Feel free to speak up or chat in responses at any time

You're encouraged to turn on video for this peer group

This meeting is being recorded and will be posted online

Materials will be available at SNI Link/Virtual Care

Virtual Care in Public Healthcare Systems

- What does success look like? How will we know?

- How does virtual care align with other strategic priorities and initiatives?

- How do we bake in virtual care workflows and processes?

- What's the right mix of virtual care and in-person?

- Are leaders bought in? What's the ROI?

Proactive long-term virtual care strategy

Reactive Virtual Care driven by COVID-19

Virtual Care Maturity Framework

DIMENSIONS:

Leadership & Governance

Technology Platforms

Virtual Care Operations

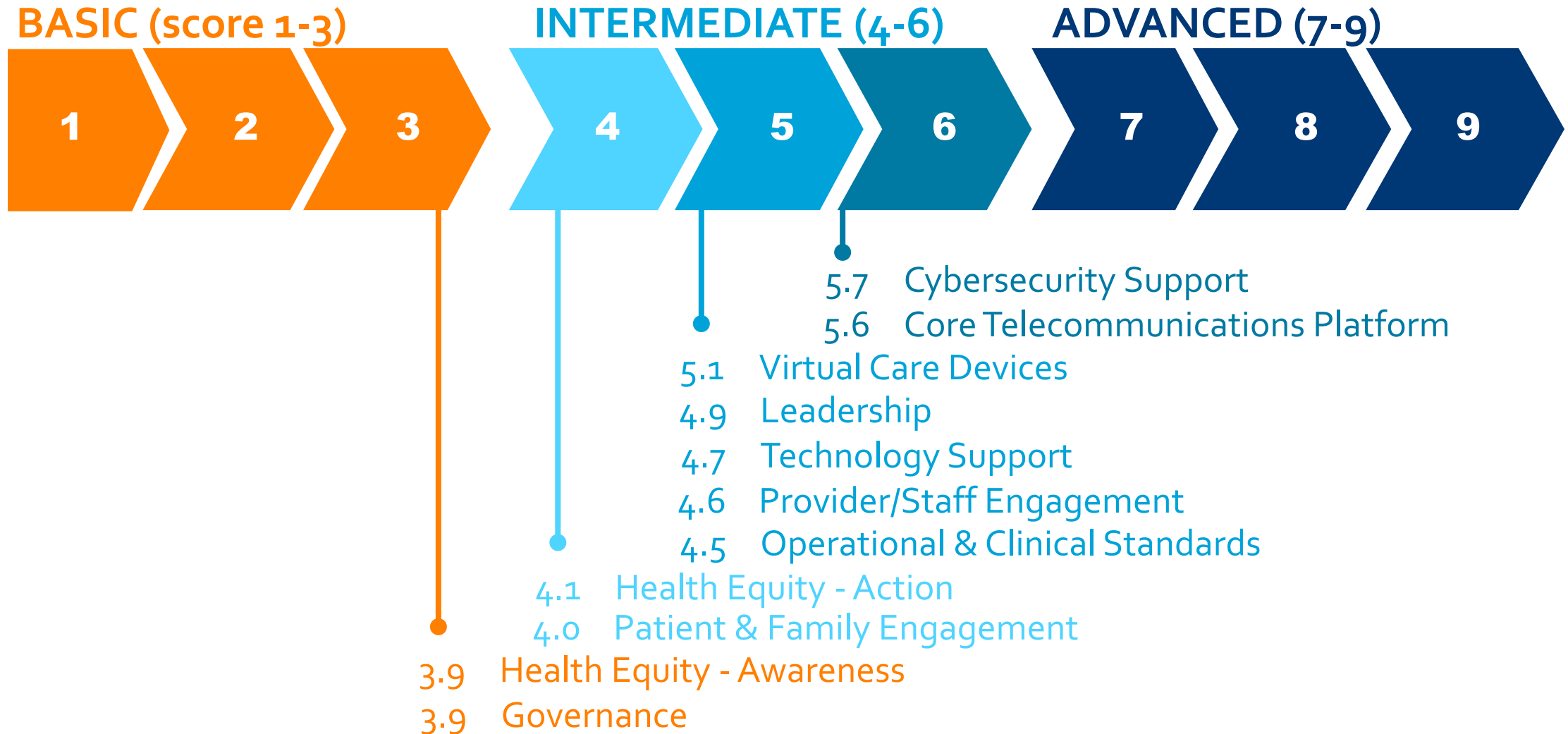**Health Equity**

CATEGORIES:

- Leadership
- Governance
- Core Telecommunications Platform
- Devices
- Technology
- Cybersecurity Support
- Operational and Clinical Standards
- Provider/Staff Engagement
- Patient/Family Engagement
- Awareness
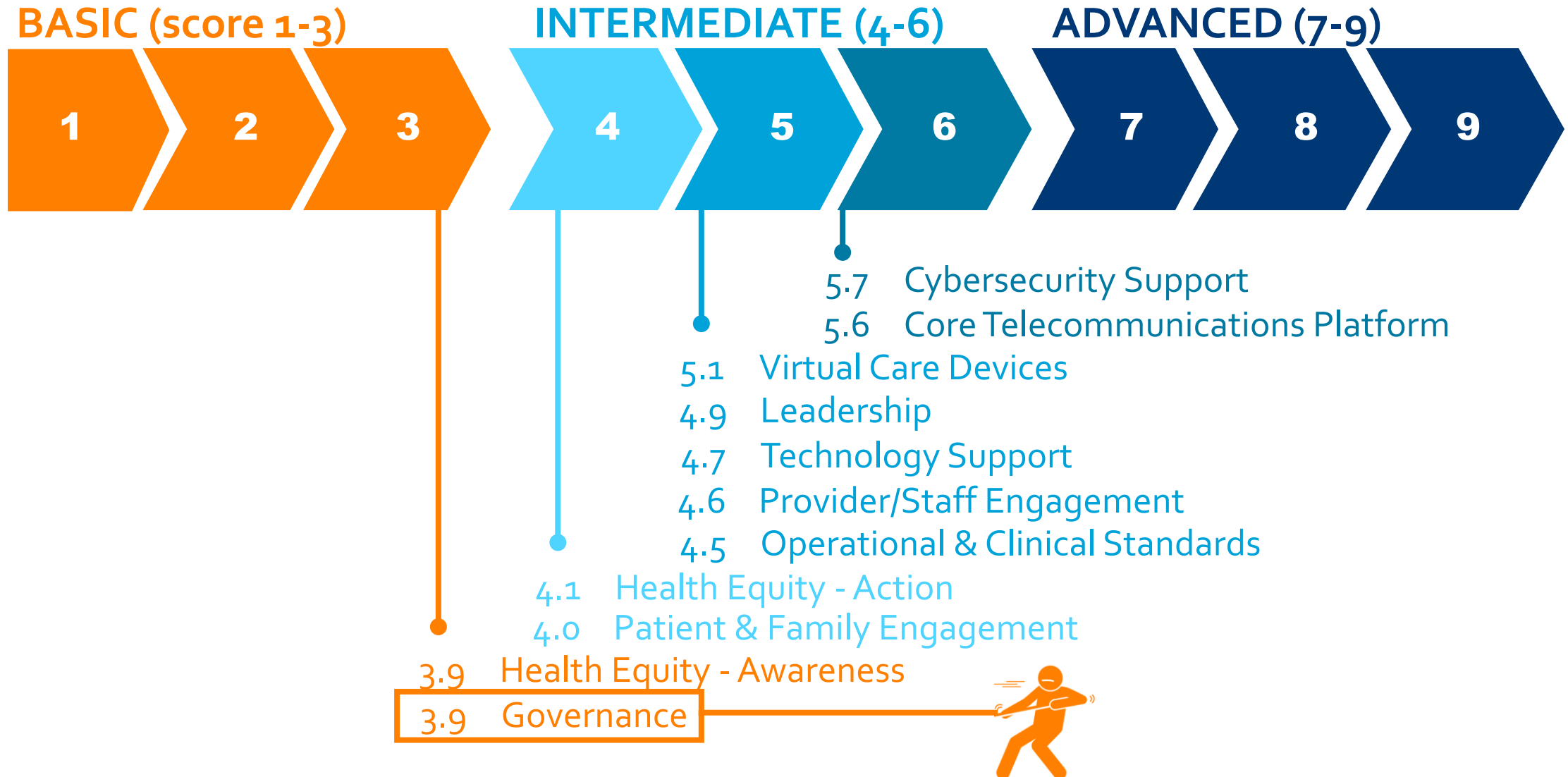- Action

Virtual Care Self-Assessment and Report

- Based on Virtual Care Maturity Framework

- Scoring Across Domains and Categories
  - Basic (1-3) ⟶ Intermediate (4-6) ⟶ Advanced (7-9)

- 14 PHS scored their progress along 10 categories of virtual care capabilities

- Findings compiled in a report
  - Exec Summary
  - Detailed Results

Capability Levels:			Basic
Self-Score Key:			*1-3*
Dimension	**Category**	**Description**	
Leadership and Governance	Leadership	To what degree have organizational leaders committed to immediate and long-term adoption of virtual care operations?	• Leaders leverage virtual care as a short-term, tactical response to the pandemic. • Approaches to virtual care are locally defined and fragmented across departments. • Leaders rely on existing infrastructure and resources to address the shift to virtual care.
	Governance	To what degree has the organization committed to a permanent organization-wide virtual care governance/strategic oversight structure?	• Oversight of virtual care falls to existing in-person care oversight processes. • Existing operational governance structures remain unchanged and there are no new operational or clinical quality oversight processes put in place specifically for virtual care processes.

Average Scores for Each Category

BASIC (score 1-3)   **INTERMEDIATE (4-6)**   **ADVANCED (7-9)**

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

5.7   Cybersecurity Support

5.6   Core Telecommunications Platform

5.1   Virtual Care Devices

4.9   Leadership

4.7   Technology Support

4.6   Provider/Staff Engagement

4.5   Operational & Clinical Standards

4.1   Health Equity - Action

4.0   Patient & Family Engagement

3.9   Health Equity - Awareness

3.9   Governance

Average Scores for Each Category

BASIC (score 1-3)   INTERMEDIATE (4-6)   ADVANCED (7-9)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

5.7 Cybersecurity Support
5.6 Core Telecommunications Platform
5.1 Virtual Care Devices
4.9 Leadership
4.7 Technology Support
4.6 Provider/Staff Engagement
4.5 Operational & Clinical Standards
4.1 Health Equity - Action
4.0 Patient & Family Engagement
3.9 Health Equity - Awareness
3.9 Governance

SNI Support for PHS

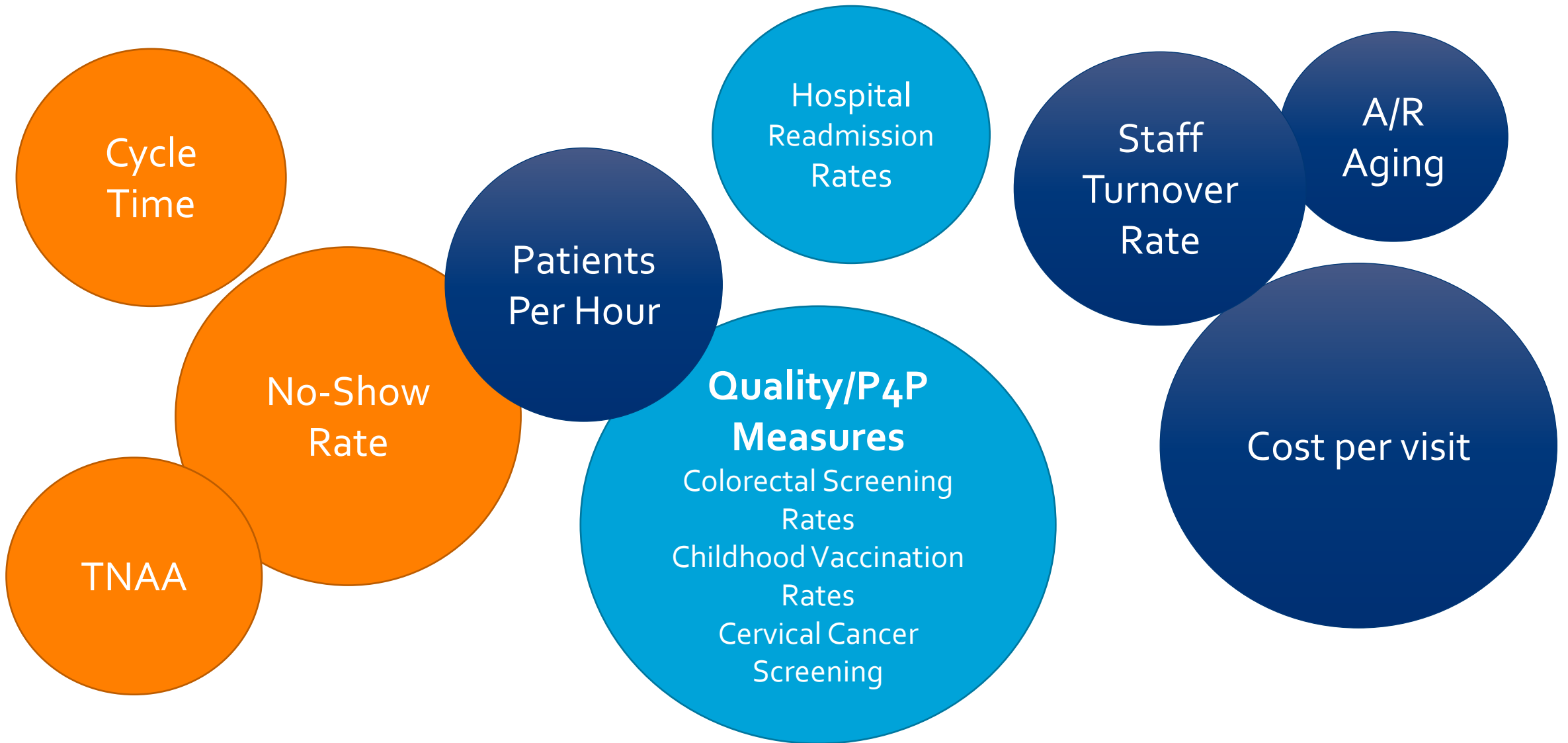## Measuring Success in Virtual Care
3-part webinar series

- Defining Measures of Success in Virtual Care
- Peer Sharing: Virtual Care Measures of Success at Public Health Care Systems
  Dec 7, 1-2pm. REGISTER
- Virtual Care Measures of Success: 3-Month Check-in. February 2022

Defining Measures of Success in Virtual Care

Identifying Key Performance Indicators

Ambulatory KPIs You May Already Have

Cycle Time

Hospital Readmission Rates

Staff Turnover Rate

A/R Aging

Patients Per Hour

No-Show Rate

Quality/P4P Measures
Colorectal Screening Rates
Childhood Vaccination Rates
Cervical Cancer Screening

Cost per visit

TNAA

Virtual Care Measurement Buckets

Access

$$$

Patient Experience

Staff & Provider Experience

Quality

Assume Universal Considerations of Health Equity
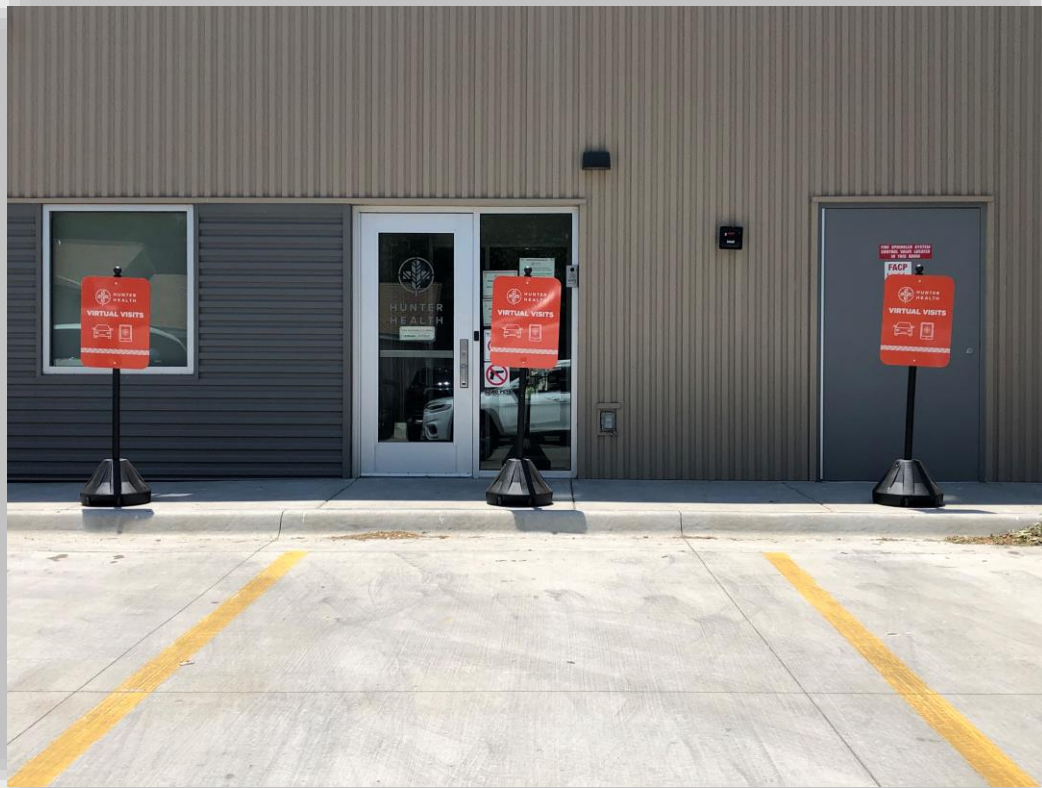
Access Measures

Access

- No-Show Rate*
- Same Day Access*
- TNAA*
- Continuity*
- After Hours Care*

* = KPIs you may already have

Access - TNAA

Access – Equity Gaps

Access

Access – No-Show Rate

Some Ambulatory Care Centers are comparing **No-Show Rates** for Virtual Care Patients and In-Person Visits…

Virtual Care

In-Person Care
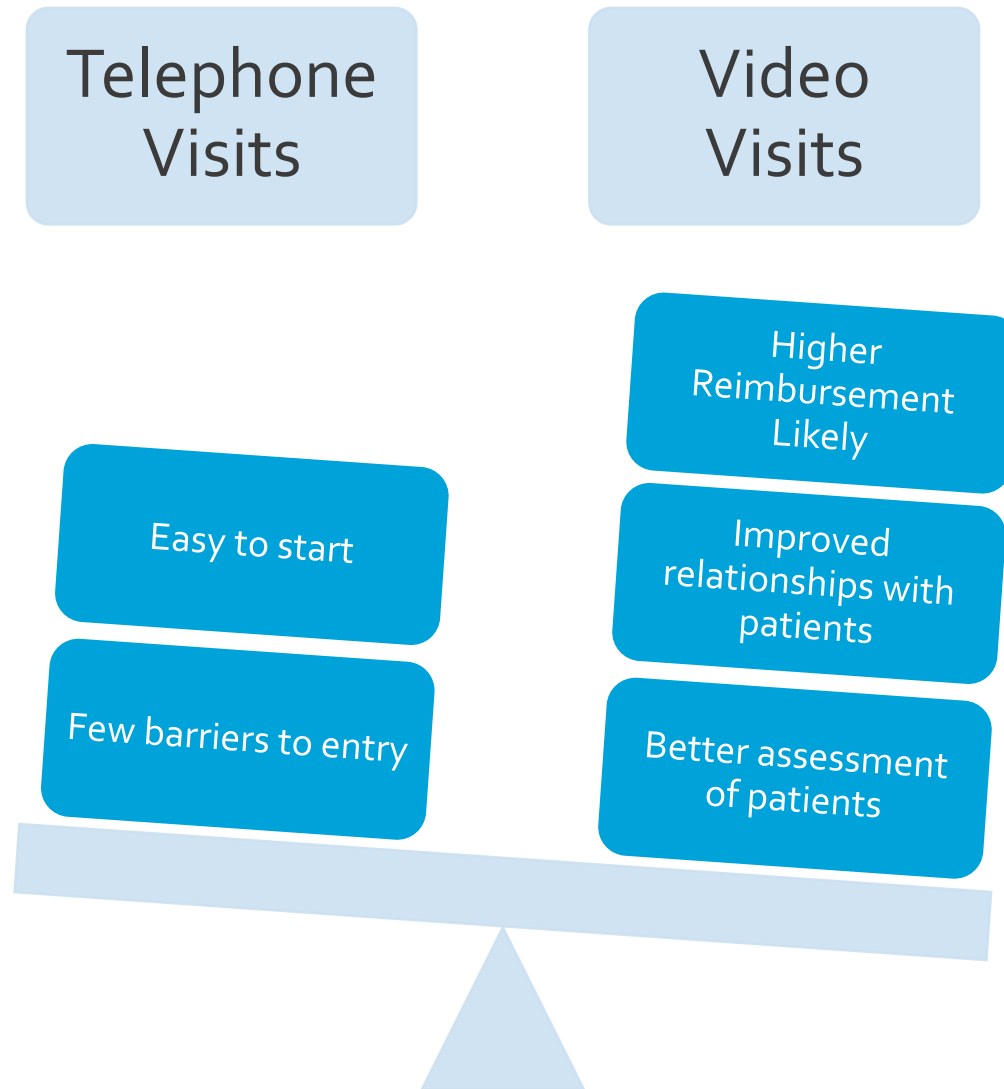
No-Show Rate: 14%

No-Show Rate: 22%

Access

$$$
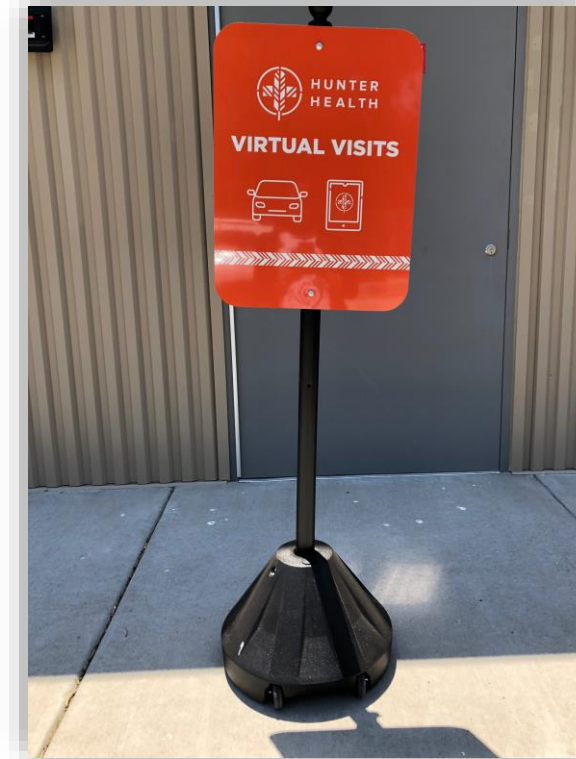
- Cost Per Visit*
- Payer Mix*
- A/R Aging*
- No-Show Rate*
- Patients Per Hour*

$$$

$$$

$$$ – Telephone vs. Video

Many health centers are working to increase the % of virtual visits that are provided via video instead of telephone to prepare for changes to reimbursement rates.

Telephone Visits

Video Visits

Easy to start

Few barriers to entry

Higher Reimbursement Likely

Improved relationships with patients

Better assessment of patients

$$$

$$$- Expanding Virtual Care

The cost of expanding virtual care should be accounted for to compare potential cost saving. Consider the following for possible costs of virtual care:

Time and resources spent to credential and prepare members of the care team	Development of new billing procedures
Equipment Costs	Efforts to expand technology access to underserved communities

What else?

$$$

(Chuo, MD, MS, IA et al., 2020, 2-3); (National Quality Forum, 2017, 7)

$$$- Tools and Resources

[A Framework for Evaluating the Return on Investment in Telehealth](#) Manatt Health

[A Healthy Balance: Hybrid Virtual Care Models for Optimal Patient Experience, Considerations for California Health Care Executives](#) CTRC

Table 2. Considerations and Guiding Questions for Evaluating Telehealth ROI

Considerations	Guiding Questions
Patient acuity mix	• Will the telehealth program impact the average patient acuit • How will revenue and costs change as the patient acuity leve
Cost savings	• Will the telehealth program result in cost savings (e.g., redis system, delivery of care in a lower-cost setting)?
New-patient volume	• Will the telehealth program result in increased patient volum
Patient retention	• Will the program result in higher patient retention rates?

Reimbursement or contract revenue	• Are these telehealth services reimbursable under:
	  – State Medicaid program and Medicaid managed care org
	  – Fee-for-service Medicare and Medicare Advantage?
	  – Private payers?
	• Will the telehealth program bring in other forms of direct rev
	payment from a distant site for a teleconsult)?

Technology	• What are the hardware and software costs to implement the
Program management	• What are the programmatic costs to design, implement and
Staffing	• What are the staffing requirements to provide the program? • Will there be associated training costs? • Can we reduce costs by leveraging mid-level providers to pr • Does this program automate existing tasks, thereby reducin

5. QUALITY METRICS & SUSTAINABILITY

QUALITY IMPROVEMENT FRAMEWORKS FOR SUSTAINABILITY

A vital responsibility of the healthcare executive is to design feedback loops to serve up data for continual learning and improvement. This will help ensure the sustainability of your hybrid model into the future.

ESTABLISH BASELINE VALUES

First, establish baseline values for patient satisfaction, provider satisfaction, and metrics tied to health outcomes such as the percentage of patients with diabetes that have an HbA1c value less than 8% or the percentage of hypertensive patients with blood pressure in the normal range. Continue to track these measures as your hybrid program matures. Annotate when your health center introduces new virtual offerings on a large scale.

SET MEASURABLE GOALS

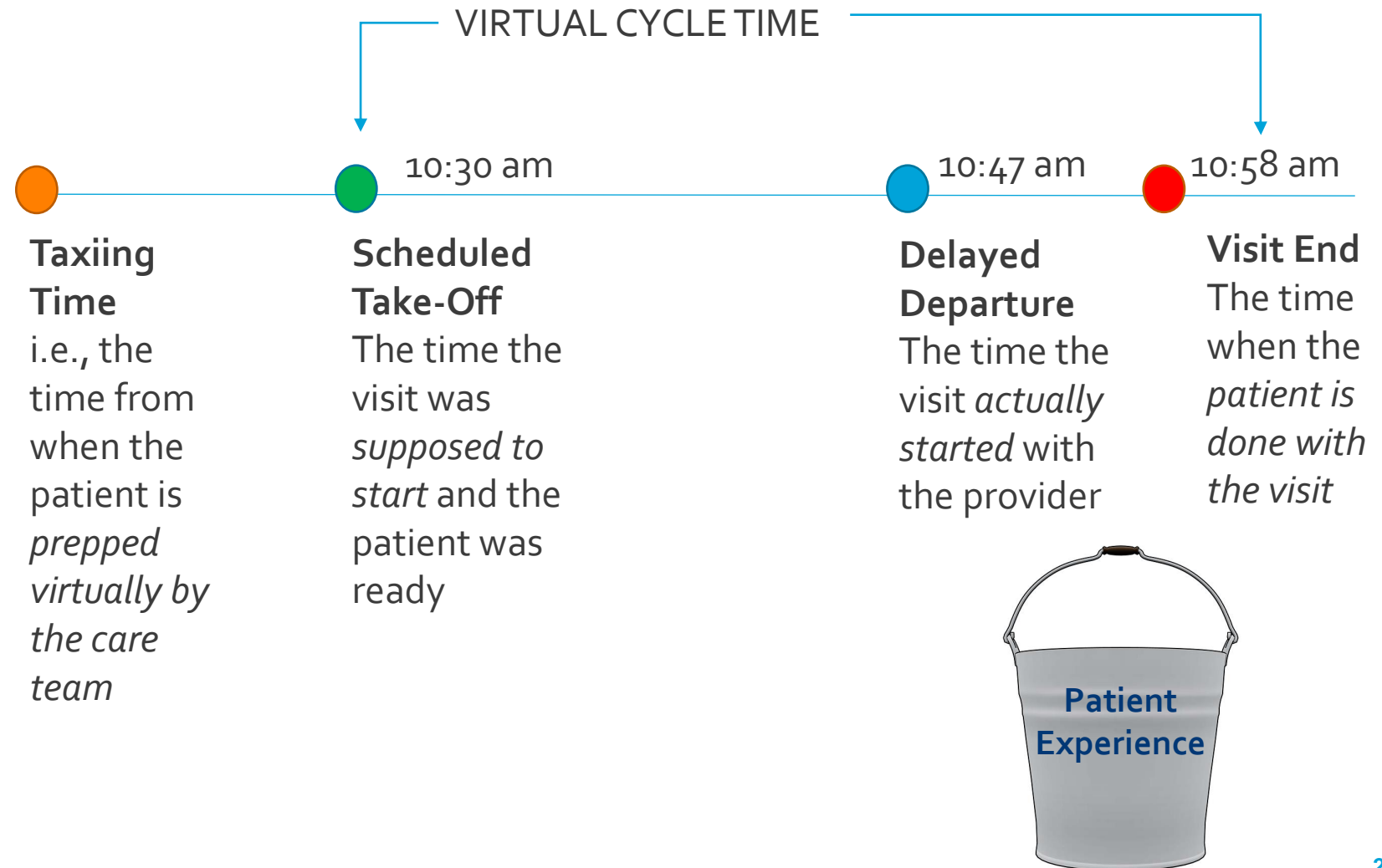Borrow from quality improvement frameworks to set measurable goals for your program to meet within a certain timeframe.

$$$

Patient Experience Measures

Patient Experience

- Cycle Time

- Abandoned Call Rate

- Patient Experience Survey *Technology Use*

Patient Experience – Cycle Time

In other Ambulatory Health Care environments, staff are examining **Cycle Time** as a patient experience measure.

VIRTUAL CYCLE TIME

Taxiing Time
i.e., the time from when the patient is *prepped virtually by the care team*

10:30 am
Scheduled Take-Off
The time the visit was *supposed to start* and the patient was ready

10:47 am
Delayed Departure
The time the visit *actually started* with the provider

10:58 am
Visit End
The time when the *patient is done with the visit*

Patient Experience

Appointment Time: 3:20 pm
Arrival Time: 2:37 pm
Provider: Cole
Payer Type: _____

Date: 10/7/21
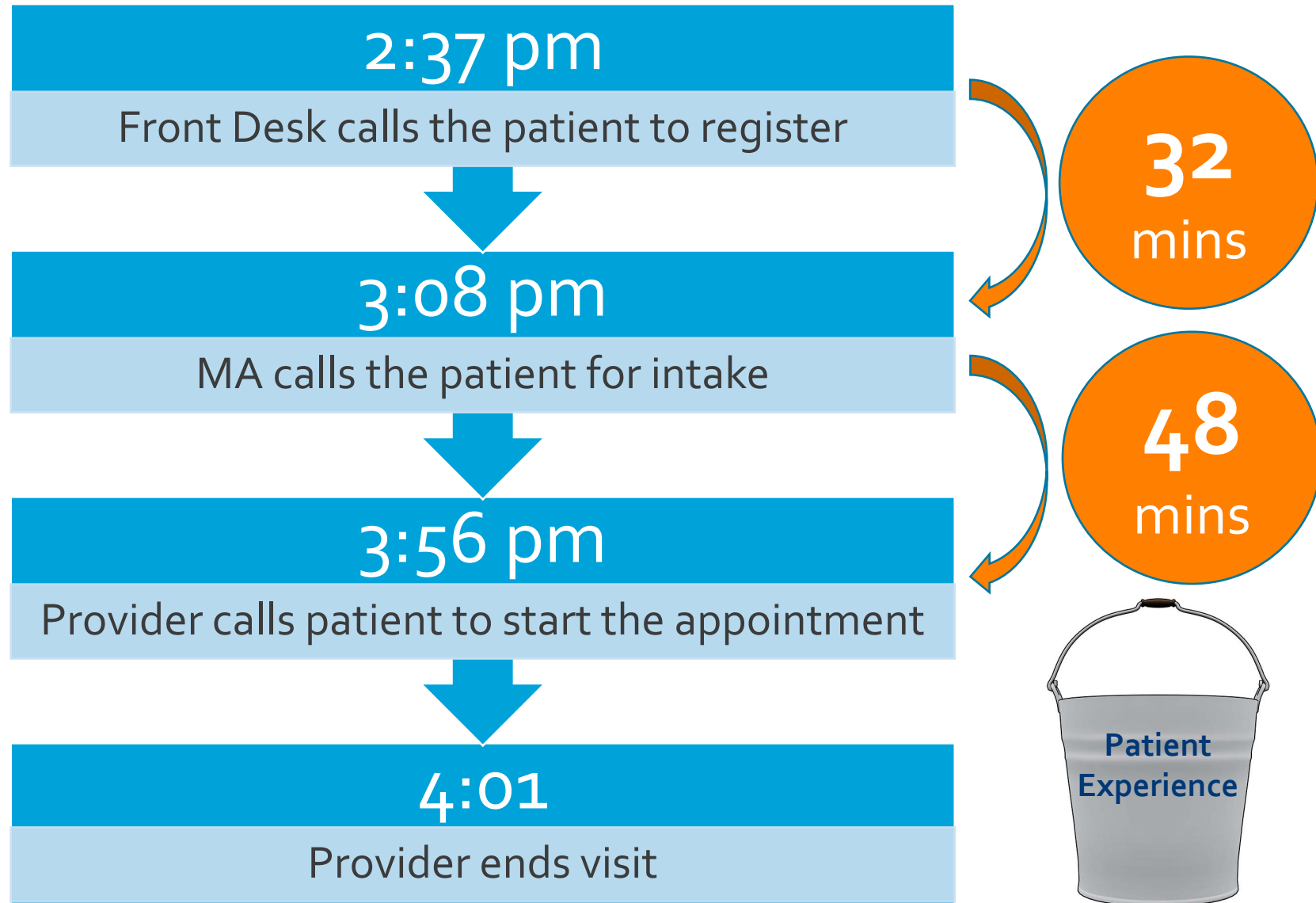Visit Type: Telehealth
Patient's Gender & Age: Female 37yrs

Step	Time	Run Clock	Description of Step	Wait in Min.
1	2:37 PM	1	POD Reception calls pt to check in. Pts registration was all up to date. Pt checked in and informed that the MA would call between 3pm & 3:20 & they hang up.	31
2	3:08 PM	31	MA calls pt to get pts chart/appt ready for the provider	
3	3:11 PM	34	MA finishes getting pt ready for provider & lets her know that provider is a little behind and that she would be calling her when ready and they hang up.	45
4				
5	3:56 PM	79	Provider calls pt to start appt.	

DPI
©Coleman Associates
8

Step	Time	Run Clock	Description of Step	Wait in Min.
6	4:01 PM	84	Provider completes appt- hangs up with pt	
7				
8				
9				
10				

Patient Experience

SNI CALIFORNIA HEALTH CARE SAFETY NET INSTITUTE

Patient Experience – Cycle Time

Breakdown of a typical Virtual Care visit in an FQHC in California...

2:37 pm

Front Desk calls the patient to register

3:08 pm

MA calls the patient for intake

3:56 pm

Provider calls patient to start the appointment

4:01

Provider ends visit

32 mins

48 mins

Patient Experience

Cycle Time Example – Patient Experience

The patient spent **5 minutes** with the provider,

8 minutes with a staff member,

and **76 minutes waiting**.

This Cycle Time was **41 minutes long** from the start of the visit.

But, **84 minutes long** including the **Taxiing Time**.

Patient Experience

Patient Experience

At the University of California-Davis, patients who used virtual care resulted in an average of...

Patient Experience

278 fewer miles traveled

$156 in travel cost savings per individual

(National Quality Forum, 2017, 11); (Casey, 2017)

Patient Experience - Surveys

Validated tools for assessing Patients' Experiences with Virtual Care:

The Virtual Care Usability Question

Telemedicine Satisfaction and Usefulness Questionnaire

Patient Assessment of Communication during Telemedicine

Net Promoter Score

What Else?

(Chuo, MD, MS, IA et al., 2020, 2-3)

Staff & Provider Experience Measures

Staff & Provider Experience

- Retention/Turnover*
- Satisfaction Surveys*
- Flexible Work
- Timely Charting Completion*
- Ease of use of technology

Staff & Provider Experiences

Since COVID-19, virtual care has opened up the opportunity for flexible and virtual work for providers and staff in health centers. The impact of this increased flexibility can be measured using:

Staff Satisfaction Surveys

Turnover

Staff & Provider Experiences

The biggest driver of patient and staff dissatisfaction with virtual care are difficulties with the technologies. These can be measured with the following:

Down Time

Length of Virtual Visits

% of Visits in which patients and providers were not successfully connected

Quality

- HBA1C*
- HTN*
- Childhood Vaccines*
- Timely Prenatal Care*
- Readmission Rates*
- Timely visits after ED or hospitalization*
- Wait for New Patient Appointments*

Quality

Virtual Care

HbA1C <9% ✔
Controlled HTN ✔
Childhood Vaccinations
Timely Pre-natal Care ✔
Readmission Rates ✔

VS

In-Person Care

HbA1C <9%
Controlled HTN
Childhood Vaccinations
Timely Pre-natal Care
Readmission Rates

Quality

Quality

Concerning JDEI:
Dive deeper into quality metrics and look for potential disparities by disaggregating measures by race, ethnicity, gender identity, sexual orientation, age, zip code, etc.

Quality

In one of the NQF environmental scan studies, patients who were evaluated for stroke virtually had....

Faster diagnosis

More complete records

Faster administration of appropriate therapy

(Meyer et al., 2008); (National Quality Forum, 2017, 12)

Quality

Quality

In a Virginia hospital, hip and knee replacement patients that used Virtual Care had…

Decreased readmissions

Shorter stays

Improved Patient Satisfaction

(National Quality Forum, 2017, 15)

Quality

Quality

At the Oregon Health and Sciences University, Skype BH services were given to adolescents in rural areas with poorly controlled Type 1 DM, and...

The participants had increased adherence to diabetes regimens

The relationships between participants and therapists were similar to in-person encounters

Virtual Care Measurement Buckets

Access

$$$

Patient Experience

Staff & Provider Experience

Quality

Assume Universal Considerations of Health Equity

Question:

What other examples have you seen?

Wrap-up

Homework

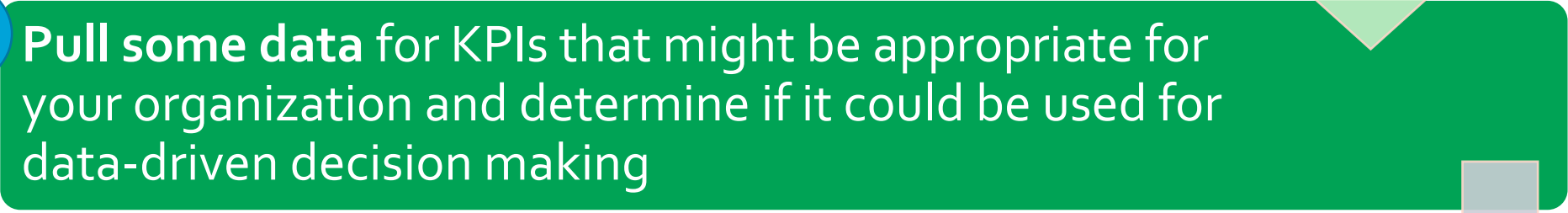**1** **Have internal conversations** about KPI examples that resonated with you

2 Look at what you are currently evaluating for Virtual Care and **identify what** you could change

3 **Pull some data** for KPIs that might be appropriate for your organization and determine if it could be used for data-driven decision making

4 **Prepare to share** briefly on our next call

Homework Worksheet
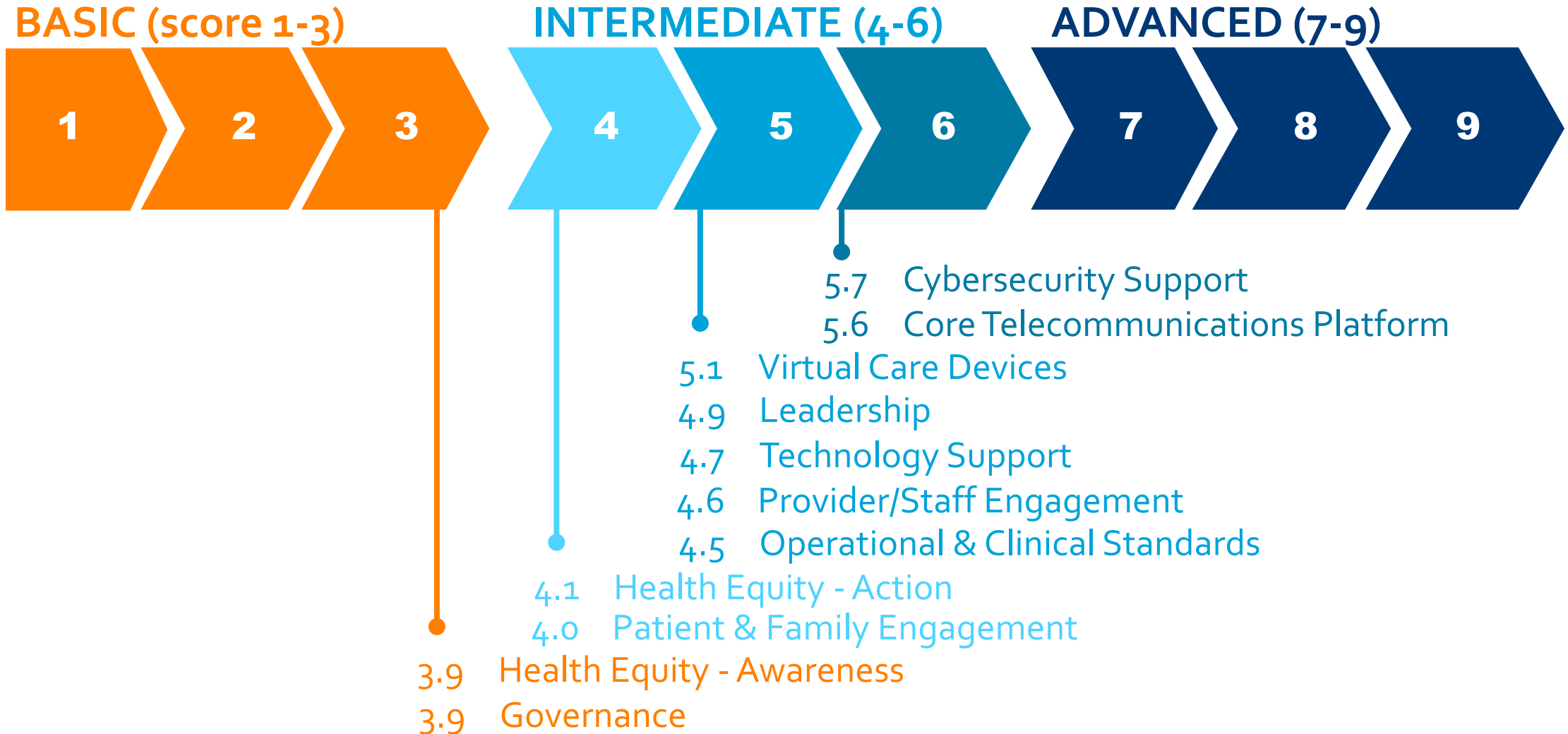

CALIFORNIA HEALTH CARE
SAFETY NET INSTITUTE

Defining Measures of Success in Virtual Care

Convene your virtual care leaders (e.g., CIO/CMIOs, telehealth leads, ambulatory care leads) and respond to the questions below. Reference the webinar slides for examples of virtual care key performance indicators (KPIs), as well as resources to guide the conversation.

1. What measures are you currently evaluating for virtual care?

2. What were the virtual care measures discussed on the webinar that resonated with you? Are there measures that weren't covered on the webinar that you'd also like to consider?

3. If available, what are your organization's KPIs (e.g., True North measures) outside of virtual care (these measures could be systemwide or specific to ambulatory care)? How could you align the measures you select for virtual care with your current KPIs and/or strategic initiatives?

4. What equity measures would you include to monitor your progress to reduce disparities in access to virtual care? Relatedly, what equity measures would help you understand if

Average Scores for Each Category

BASIC (score 1-3)

INTERMEDIATE (4-6)

ADVANCED (7-9)

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |

5.7   Cybersecurity Support

5.6   Core Telecommunications Platform

5.1   Virtual Care Devices

4.9   Leadership

4.7   Technology Support

4.6   Provider/Staff Engagement

4.5   Operational & Clinical Standards

4.1   Health Equity - Action

4.0   Patient & Family Engagement

3.9   Health Equity - Awareness

3.9   Governance

Up Next

Measuring Success in Virtual Care

✓ Defining Measures of Success in Virtual Care
- Peer Sharing: Virtual Care Measures of Success at Public Health Care Systems. Dec 7, 1-2pm. REGISTER
- Virtual Care Measures of Success: 3-Month Check-in. February 2022

Operations & Clinical Standards

- Mixed Models, Revisited
- Virtual Care Intake and Social Needs Screening

Patient & Family Engagement

- Tech Navigators
- Access and Digital Literacy
- Remote Patient Monitoring

Up Next

Measuring Success in Virtual Care

- ✓ Defining Measures of Success in Virtual Care
- **Peer Sharing: Virtual Care Measures of Success at Public Health Care Systems. Dec 7, 1-2pm. REGISTER**
- Virtual Care Measures of Success: 3-Month Check-in. February 2022

Operations & Clinical Standards

- Mixed Models, Revisited
- Virtual Care Intake and Social Needs Screening

Patient & Family Engagement

- Tech Navigators
- Access and Digital Literacy
- Remote Patient Monitoring

Thank you!

don't forget to fill out the survey

References

Casey, C. (2017, 03 21). *Saves patients time, money*. University of California.
https://www.universityofcalifornia.edu/news/telemedicine-saves-patients-time-money

Chuo, MD, MS, IA, J., Macy, MD, MS, M. L., & Lorch, MD, MSCE, S. A. (2020, November).Strategies for
Evaluating Virtual Care. *Pediatrics , 146* (5), 1-7. PMC. 10.1542/peds.2020-1781.

Gagnon, M.-P., Duplantie, J., Fortin, J.-P., & Landry, R. (2006). Implementing Virtual Care to support medical
practice in rural/remote regions: what are the conditions for success? *Implementation science, 1* (18),
1. Pub Med. https://doi.org/10.1186/1748-5908-1-18

National Quality Forum. (2017). *Creating a framework to support measure development for Virtual Care*.
National Quality Forum. https://www.qualityforum.org/Publications
/2017/08/Creating_a_Framework_ to_Support_Measure_Development_for_Virtual Care.aspx

Smith, A. C., Bensink, M., Armfield, N., Stillman, J., & Caffery, L. (2005). *Telemedicine and rural health care
applications* (Vol. 51). The University of Queensland, Centre for Online Health, Australia. 16388171

World Health Organization. (2016). *Monitoring and evaluating digital health interventions: a practical guide to
conducting research and assessment*. World Health Organization.
https://apps.who.int/iris/handle/10665/252183.