

Finding Your People

Issues in Patient Identification, Recruitment and Referral

Colleen Hole, MHA, RN | Atrium Health

Michelle Grinman, MD | Alberta Health Services



aahcm.org



Advancing Health in America

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Webinar
May 18, 2021



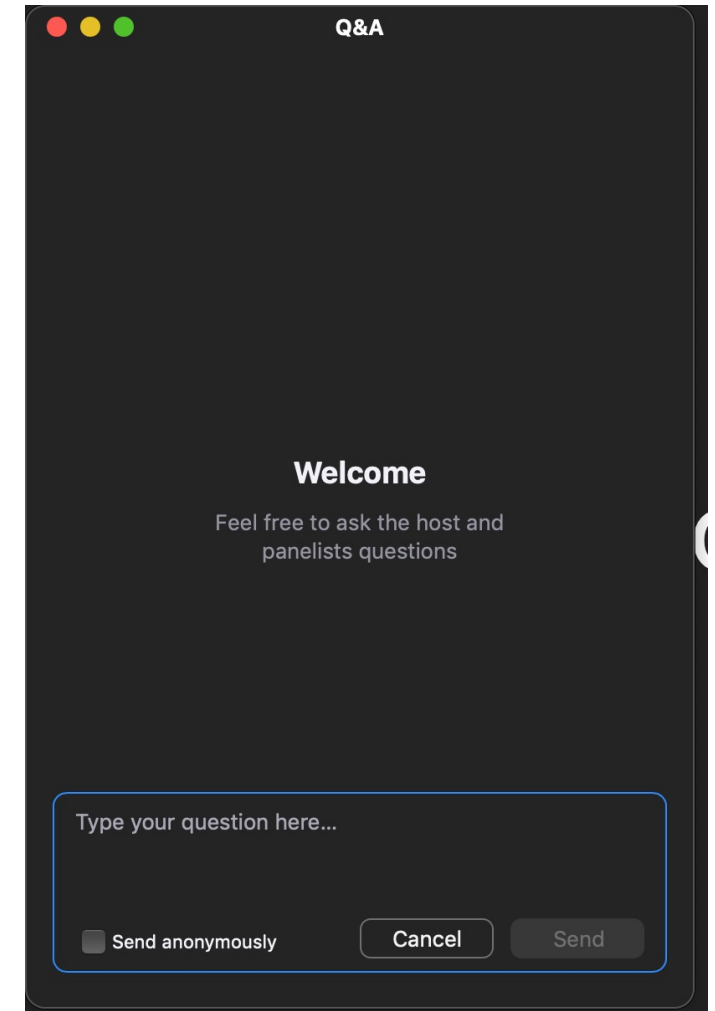
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ZOOM Webinar Housekeeping

- Please submit your questions via the Q&A option.
- Due to the large audience for today's webinar, everyone has been placed on mute.
- If you have any technical issues, please contact Gabrielle Schiller (gabrielle.schiller@mssm.edu) or send her a message via the Zoom chat feature.





Al Siu, MD, MSPH
Professor and Chair Emeritus,
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The HaH Users Group Webinar Series

- The Hospital At Home Model and the CMS Acute Hospital Care At Home Waiver
- Building Support for Your Hospital at Home Program: Issues in Strategic Engagement
- Who's In, Who's Out? Deciding Which Patients Are Right for Your Hospital at Home Program
- Tech Matters: Building the Right Digital Platform for Your Hospital at Home Program
- Efficient, Effective, Excellent: Issues in Hospital at Home Logistics and Operations
- On Time, Every Time: Delivering Hospital at Home Ancillary Services
- How Are We Doing? Evaluating Hospital at Home Quality and Safety
- Mastering Meds: Exploring Issues of Pharmacy in Hospital at Home

See [Events](#) or the Technical Assistance Center at HaHUsersGroup.org

[Learn more at HaHUsersGroup.org](https://HaHUsersGroup.org)

More Soon

- Monthly webinars
- Please chat to us or put in the Q and A, topics you would like to see covered



Building Support for Your Hospital at Home Program: Issues in Strategic Engagement

Ryan Thompson, MD | Massachusetts General Hospital

Karen Titchener, MS | Huntsman



Webinar
January 19, 2021



Today's Webinar

Finding Your People

**Issues in Patient Identification,
Recruitment and Referral**



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Atrium Health



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Disclosures

Colleen Hole: None

Michelle Grinman: None



Atrium Health

Atrium Health

\$11.1B Net Operating Revenue

69,800+ Teammates | **50** Hospitals*

53 Urgent Care Locations | **45** EDs | **25** Cancer Care Locations

4,650+ Physicians | **17,000+** Nurses

*Note: Includes Joint Venture and Affiliated Enterprises

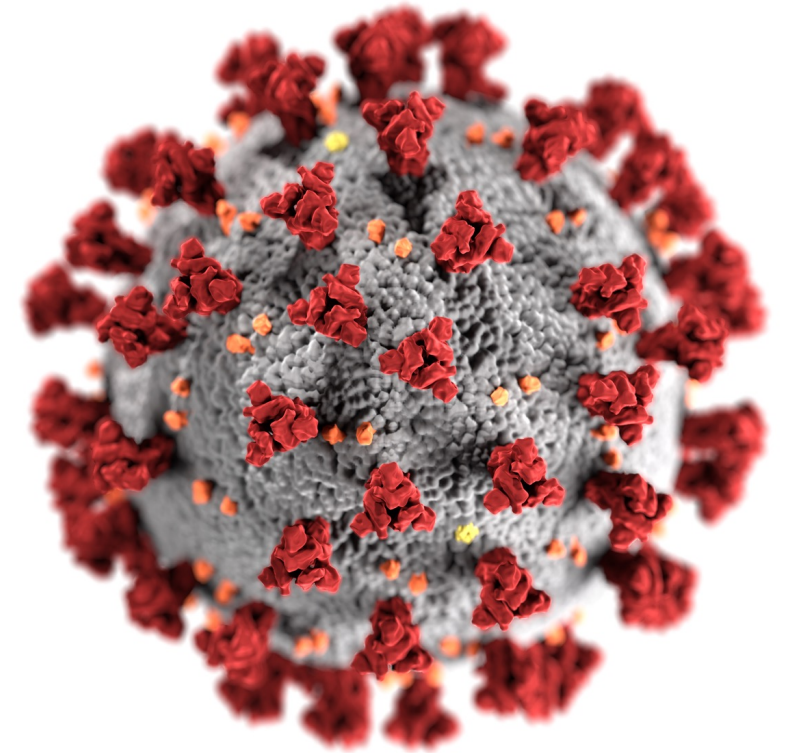
COVID-19 Virtual Hospital... *launched March 2020*

Rationale:

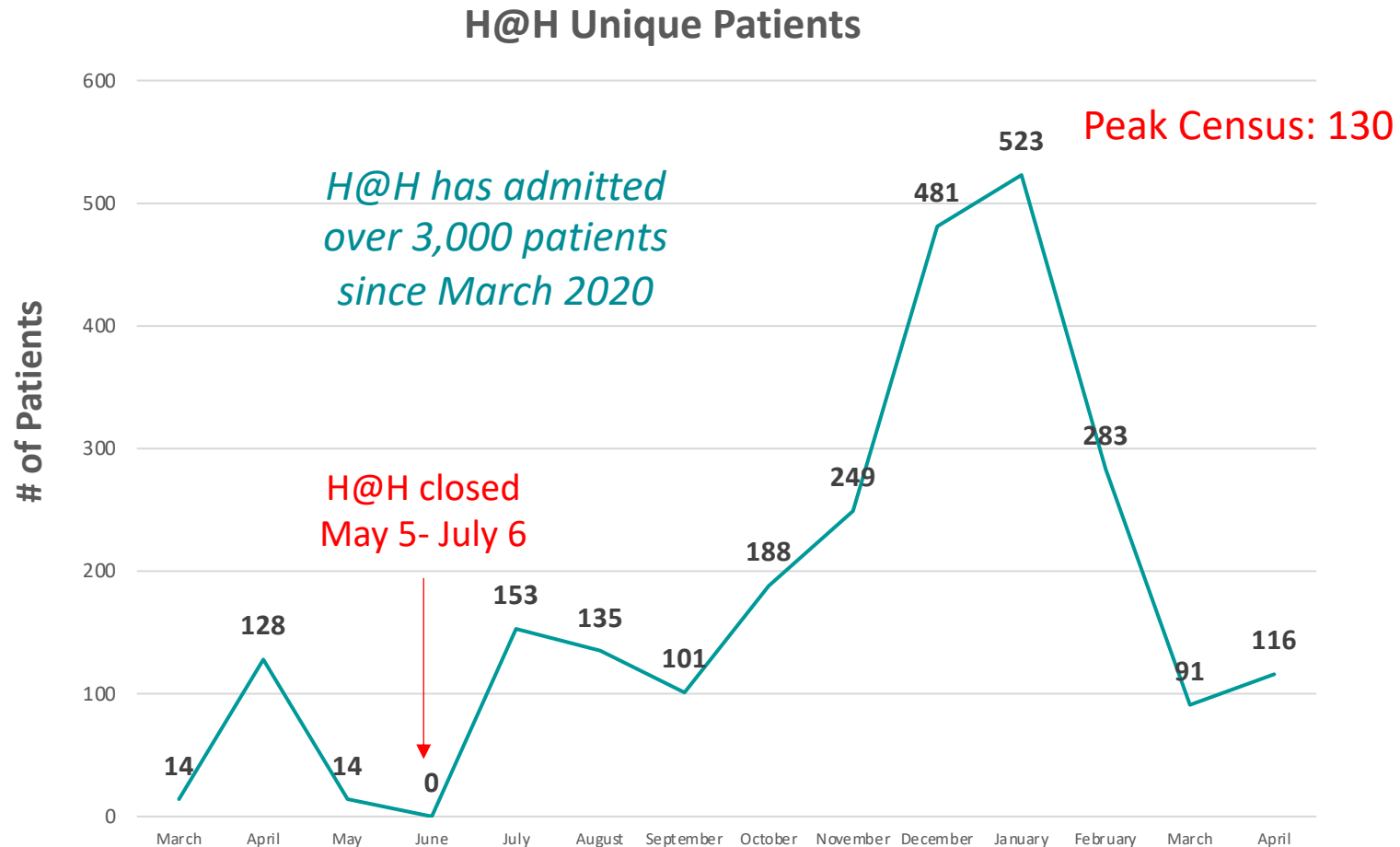
- At pandemic peak, Atrium Health projected to need up to 100% additional hospital bed capacity

Objectives:

- Increase inpatient bed capacity by caring for patients with mild/ moderate symptoms at home
- Actively monitor COVID-19 patients to assure prompt intervention for symptom escalation
- “Wrap patients with care” to mitigate fear and anxiety
- Decrease community spread



H@H Census Trend



CVH- Acute Scope of Services



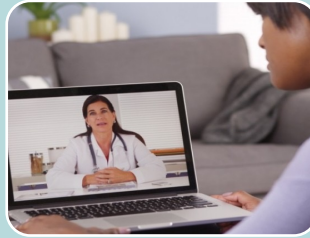
**Remote
Patient
Monitoring**
*O2 Sat and
Vital Signs*



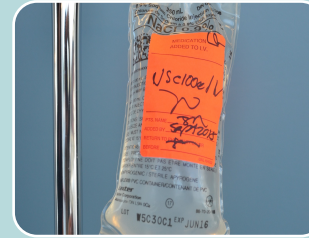
**24/7 RN
Telephonic
Assessment
&
Monitoring**



**Daily In-
home
Community
Paramedic
or RN Visit**



**Daily
Virtual Visit
with
Provider**



**IV Fluids
and meds;
O2; Resp
treatments
and other
therapies**



**EKG
Imaging**



Labs

COVID-19: Patient Placement

Per clinical severity stratification (DSCRB65) and in alignment with Atrium Health ID

Severe
Symptoms

Moderate
Symptoms

Mild
Symptoms

**“Brick and Mortar”
Hospital**

COVID-19 Virtual Hospital



CVH- Acute Care
(2nd floor)

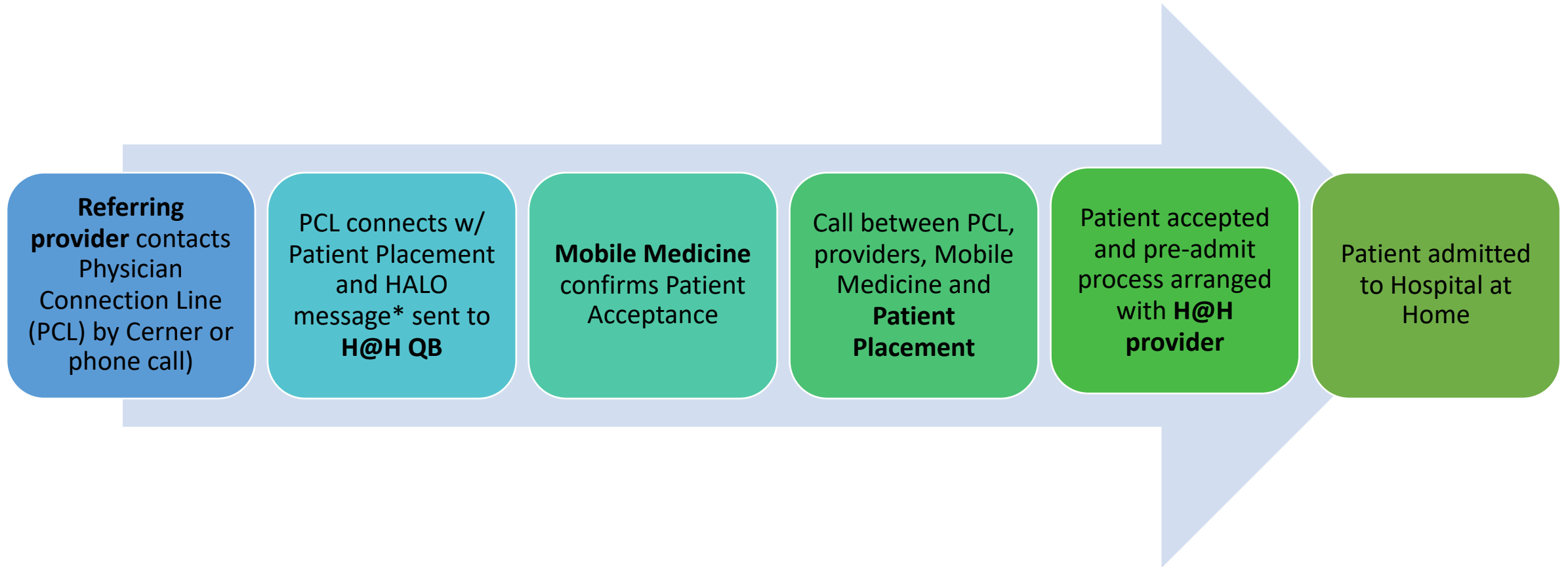


CVH- Observation Care
(1st floor)



Atrium Health

Hospital at Home Placement Process (via PCL)



CVH- Acute Patient Eligibility Criteria

Clinical Factors

- Requires no more than 4L O2 per nasal cannula
- Resp <24, Systolic BP >90, O2 sat >92 on no more than 4L O2 or decreasing O2 requirement
- VS no more frequently than q6 hrs
- Not expected to need major diagnostics or procedure in next 72 hrs
- Patient condition stable enough for RN telephonic monitoring, in-home paramedic visit and virtual physician visit only

SDOH Factors

- Patient has a working phone number with emergency contact
- Patient's living situation is stable and safe
- There is support in the home to assist the patient with ADLs, groceries, medications, etc.

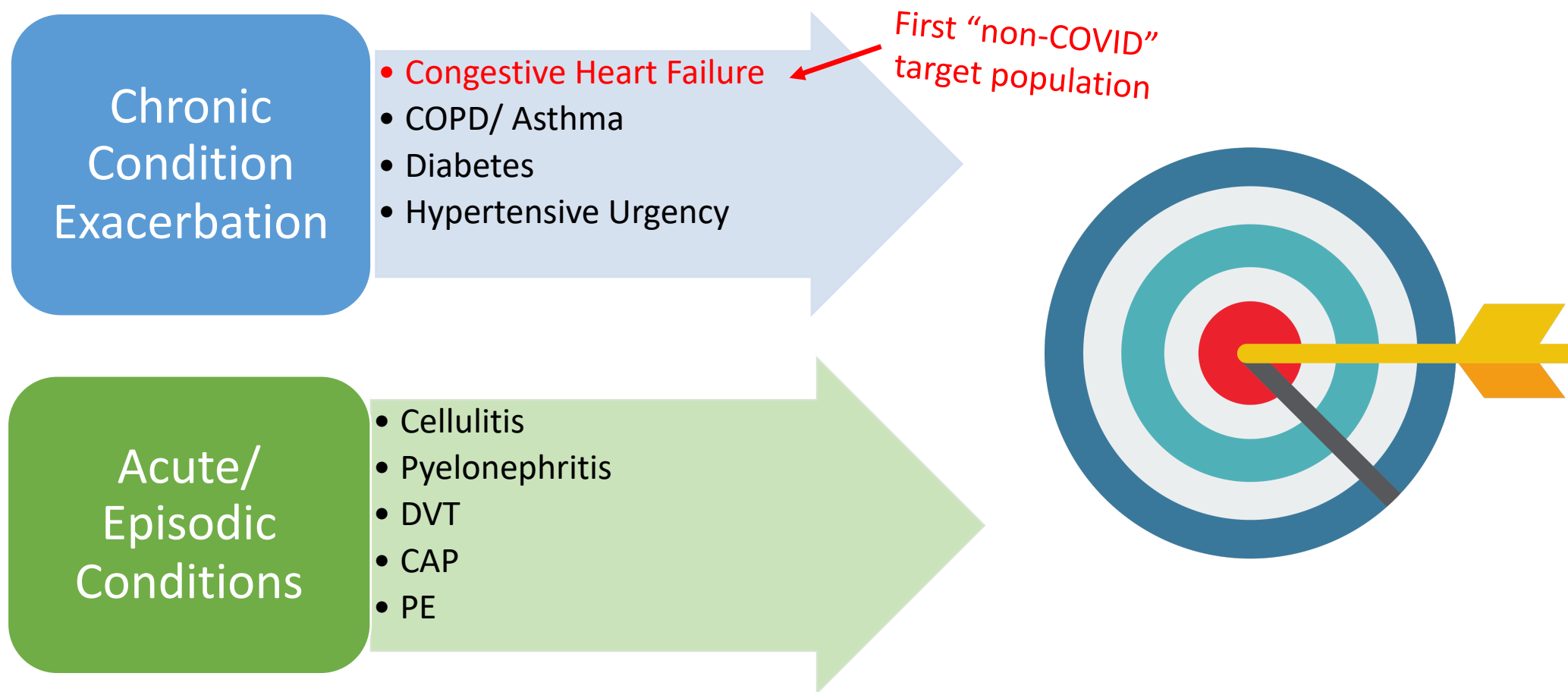
Patient Factors

- Ability to comply with monitoring devices and care team interactions or has support in home to do so
- Able to transfer from bed to BR
- Not confused beyond baseline
- Understands the plan of care

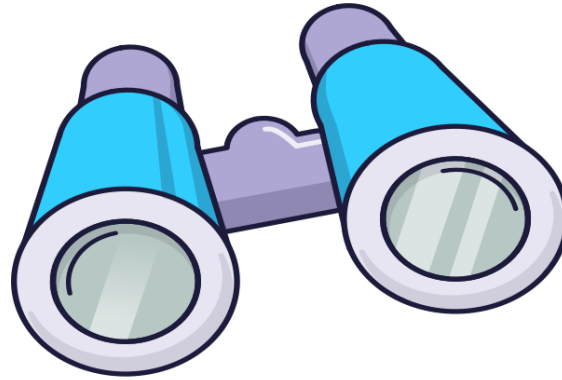
Patient Exclusion Criteria

- Acute medical or social conditions requiring bricks and mortar stabilization and support
- Acute Delirium/Psychosis or acute flare of chronic Psychiatric Diagnosis
- Positive Domestic Violence Screen
- Leaves Against Medical Advice
- Requires multiple or routine administrations of controlled substances for pain control
- Lives in a Skilled facility (Group Home, SNF, ALF)
- Under Hospice Care
- Dialysis
- Less than 18 years of age
- Pregnancy

Beyond COVID... Target Populations and Conditions



People and Processes to Help “Find Our People”



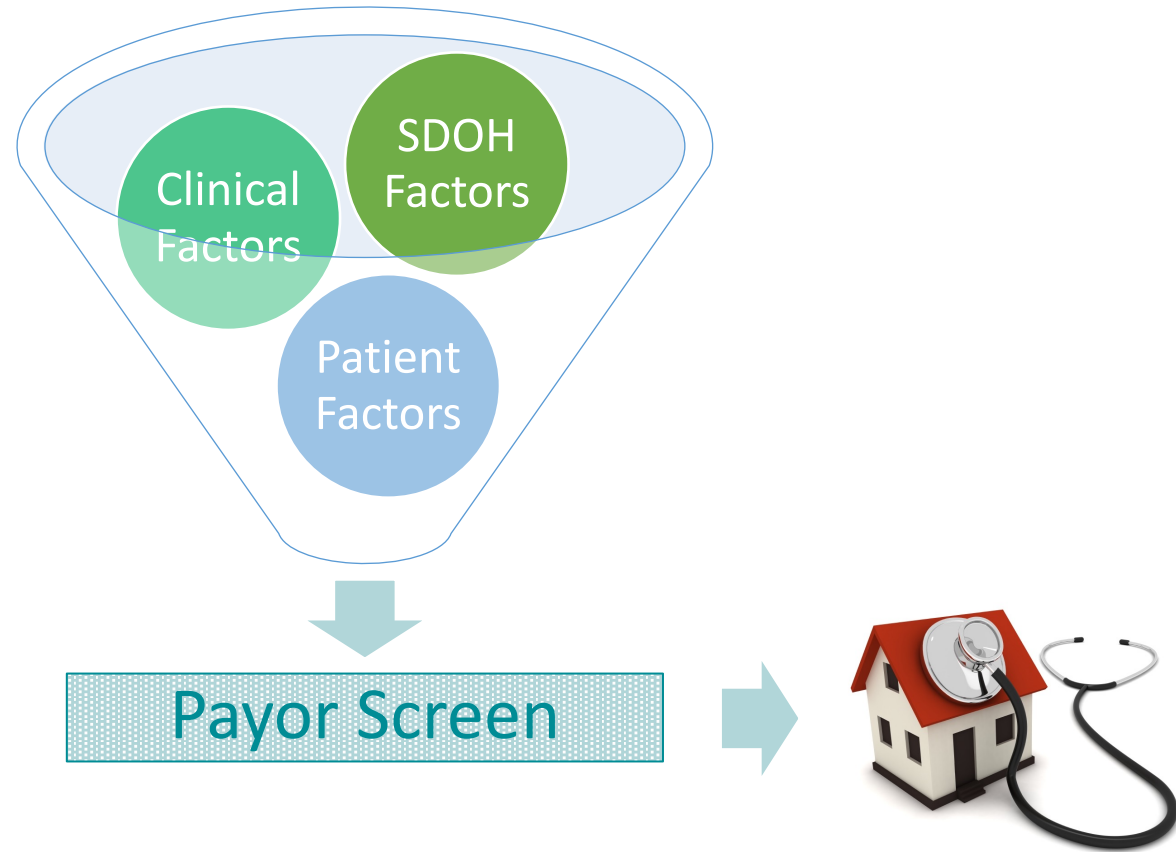
- Nurse Navigators: Hospitalist Group and Cardiology
- Case Management/ Discharge Planners: Working the “list”
- ED Liaisons: Champions and Educators
- Progression of Care Rounds: Physician/RN Rounds
- Provider and Nursing Education & Engagement: Video, “Job Aids”, Meetings

CMS Waiver

- Annals paper drew attention of Harvard and Hopkins
- Waives Condition of Participation for 24/7 bedside RNs
- Full IP DRG payment- must meet IP criteria (2 MN rule)
- PHE period only (currently extended through July)
- Submitted and approved for 3 Atrium facilities December 2020; 3 additional facilities approved April 2021
- State Licensure and CON have waived usual process for adding licensed beds
- Requires two in-home visits daily
- Built infrastructure (CofP Policy revisions, Documentation, Coding/Billing, Quality Committee, etc.)
- Participation gives us a “seat at the table” as CMS evaluates the data and learnings to inform future policy

The Eligibility Funnel...

- CMS Waiver incentivizes focus on Medicare FFS patients
- No clinician wants to think about payors when making clinical or disposition decisions



Annals of Internal Medicine- pub. 5/10/21

Factors Associated With Risk for Care Escalation Among Patients With COVID-19 Receiving Home-Based Hospital Care

“...this study provides practical initial evidence to help inform patient selection guidelines as health systems and payers increasingly leverage hospital-at-home as a standard care delivery option.”

Table. Characteristics of Patients With COVID-19 Who Received AH-HaH Care*

| Characteristic | Overall | Transfer to Hospital Within 14 d | Immediate Care Escalation (≤48 h) | Care Escalation >48 h to Discharge |
|--|--------------------|----------------------------------|-----------------------------------|------------------------------------|
| Patients, n | 391 | 84 | 41 | 43 |
| Event rate (95% CI)† | — | 0.21 (0.18–0.25) | 0.10 (0.08–0.13) | 0.11 (0.08–0.14) |
| Sociodemographic characteristics | | | | |
| Median age at admission (IQR), y | 56.0 (46.0–67.5) | 57.0 (48.0–71.0) | 55.0 (46.0–72.0) | 58.0 (49.0–71.0) |
| Gender, n (%) | | | | |
| Female | 205 (52.7) | 40 (19.5) | 20 (9.8) | 20 (9.8) |
| Male | 186 (47.6) | 44 (23.7) | 21 (11.3) | 23 (12.4) |
| Race/ethnicity, n (%) | | | | |
| Non-Hispanic White | 181 (46.3) | 34 (18.8) | 18 (9.9) | 16 (8.8) |
| Non-Hispanic Black | 144 (36.8) | 34 (23.6) | 15 (10.4) | 19 (13.2) |
| Hispanic/Latino | 51 (13.0) | 12 (23.5) | 5 (9.8) | 7 (13.7) |
| Other | 12 (3.1) | 3 (25.0) | 2 (16.7) | 1 (8.3) |
| Not specified | 3 (0.8) | 1 (33.3) | 1 (33.3) | 0 (0.0) |
| Median ADI (IQR) | 100.6 (88.3–113.8) | 102.9 (93.5–119.0) | 105.8 (95.1–121.7) | 101.1 (87.8–114.4) |
| Coexisting conditions | | | | |
| Median CCI score (IQR) | 1.0 (0.0–2.0) | 1.0 (0.0–3.0) | 1.0 (0.0–2.0) | 2.0 (0.0–4.0) |
| CCI score, n (%) | | | | |
| 0 | 153 (39.1) | 26 (17.0) | 14 (9.2) | 12 (7.8) |
| 1–2 | 146 (37.3) | 30 (20.5) | 17 (11.6) | 13 (8.9) |
| 3–4 | 52 (13.3) | 15 (28.8) | 5 (9.6) | 10 (19.2) |
| ≥5 | 40 (10.2) | 13 (32.5) | 5 (12.5) | 8 (20.0) |
| Cerebrovascular disease, n (%) | | | | |
| Yes | 26 (6.6) | 9 (34.6) | 4 (15.4) | 5 (19.2) |
| No | 365 (93.4) | 75 (20.5) | 37 (10.1) | 38 (10.4) |
| Congestive heart failure, n (%) | | | | |
| Yes | 40 (10.2) | 8 (20.0) | 2 (5.0) | 6 (15.0) |
| No | 351 (89.8) | 76 (21.7) | 39 (11.1) | 37 (10.5) |
| Peripheral vascular disease, n (%) | | | | |
| Yes | 21 (5.4) | 3 (14.3) | 2 (9.5) | 1 (4.8) |
| No | 370 (94.6) | 81 (21.9) | 39 (10.5) | 42 (11.4) |
| Renal disease, n (%) | | | | |
| Yes | 36 (9.2) | 12 (33.3) | 4 (11.1) | 8 (22.2) |
| No | 355 (90.8) | 72 (20.3) | 37 (10.4) | 35 (9.9) |
| Diabetes, n (%) | | | | |
| Yes | 126 (32.2) | 38 (30.2) | 14 (11.1) | 24 (19.0) |
| No | 265 (67.8) | 46 (17.4) | 27 (10.2) | 19 (7.2) |
| Chronic obstructive pulmonary disease, n (%) | | | | |
| Yes | 116 (29.7) | 28 (24.1) | 14 (12.1) | 14 (12.1) |
| No | 275 (70.3) | 56 (20.4) | 27 (9.8) | 29 (10.5) |
| Cancer, n (%) | | | | |
| Yes | 32 (8.2) | 8 (25.0) | 5 (15.6) | 3 (9.3) |

Challenges



Virtual Workforce



“Cross-Silo” Work



Disparate Information Systems



Competing Priorities



Payment

A glowing lightbulb sits on a rustic wooden surface. The lightbulb is illuminated from within, casting a warm, orange glow. The wood grain is visible, and the overall scene is dimly lit, emphasizing the light from the bulb.

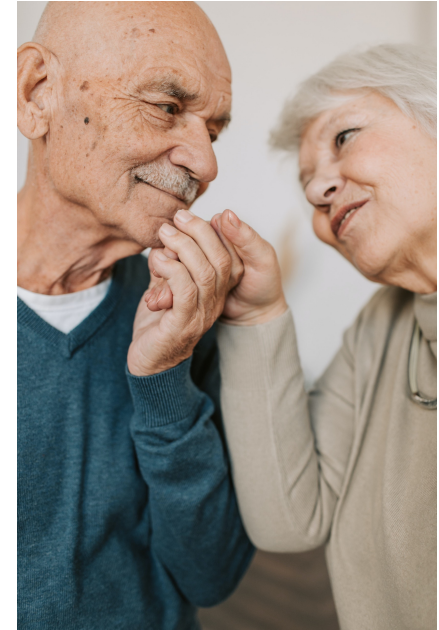
What Have We Learned?

- Virtual care is care... and can still be very personal
- Technology can enable care and increase patients' sense of safety and connectedness... *and we can't assume older patients can't/won't embrace it.*
- We can be fast and nimble when we need to be.
- Getting things done is easier and more effective when nobody cares who gets the credit....*Silo busting is fun!*

And if for no other reason we do this because...

If Bill, my Daddy, had he been in an unfamiliar isolated environment, the outcome may have been different. *He did not do well in previous hospitalizations. However, while in Virtual Hospital care, he thrived at home with noontime Paramedic visits, virtual Dr communications, and many phone calls each day with nurses.* All were carried out by amazingly caring, genuine, and personable professionals. I'm happy to confirm Daddy is no longer on oxygen, has developed better fluid-intake habits, and for the most part is back on track.

Sue, Momma, had already been in decline with dementia difficulties. The combination of those health-related issues, other ailments, and the virus, were too great a battle. *She passed away on August 11. However, because of you, my Dad and I were able to be with her every step of the way, even to that tender last breath.*





Alberta Health Services

Objectives



1. Briefly describe the Complex Care Hub (CCH) program in Calgary, Canada
2. Discuss some of the patient, caregiver and provider-related considerations when developing a Hospital at Home program
3. Discuss CCH patient, caregiver and provider experience data

Tenets of Care



Hospital at Home Care

- Home based acute assessments and interventions provided by Community Paramedics (from 6 AM to 10 PM)
- Consultation with hospital physicians (on call 24 hours/day, 7 days/week)

Intensive Case Management

- Complex care plan development
- Provider linkages
- Connection with primary care and community services.

Self Management Support

- Education provided to clients and families
- Action plans for chronic diseases

Medication Management

- Medication reconciliation and deprescribing
- Patient education

Pandemic Response



- ▶ Collaboration with another home-based acute care program in same province to develop provincial Virtual Hospital strategy
- ▶ Addition of digital remote patient monitoring cloud-based platform
 - ▶ Patient kits (tablet, blood pressure monitor, oximeter, thermometer, weight scale)
 - ▶ Provider web-based portal
- ▶ Increased patient census by 31% and saved Community Paramedic time

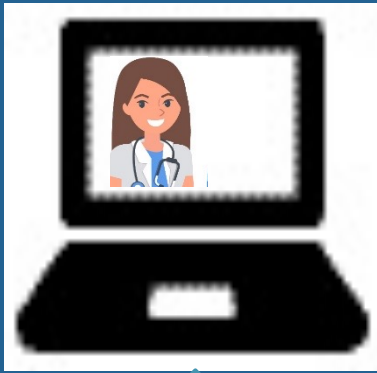
Hospital-based team



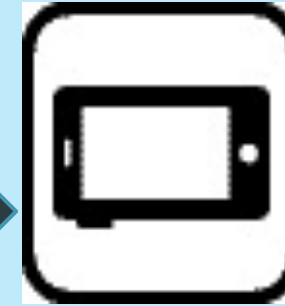
- **Day Medicine Clinic**
 - Expedited work-ups
 - Interventions
- **Hospital Physician**
 - Assessments
 - Directs care plan
- **Nurse Navigator**
 - Intensive case management

Hospital EMR Virtual Hospital Module

- Documentation
- Order entry
- Results viewing



- Cloud-based data transfer
- Direct video conferencing



Patient performs vitals:

- BP
- O2 Sat
- HR
- Temp
- Weight
- Glucose

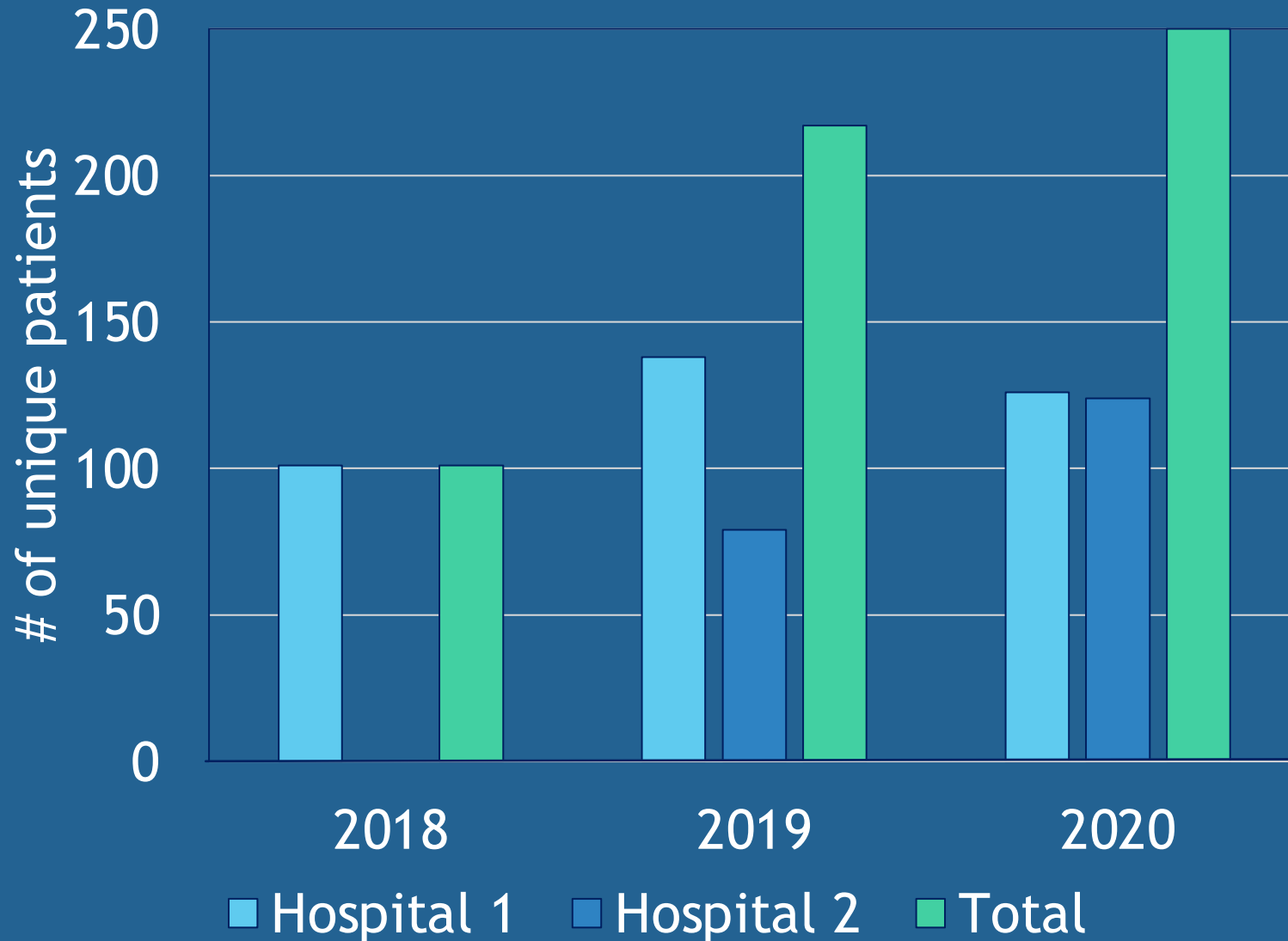


Home-visiting team

- Hands-on assessment
- Labs
- IV medications



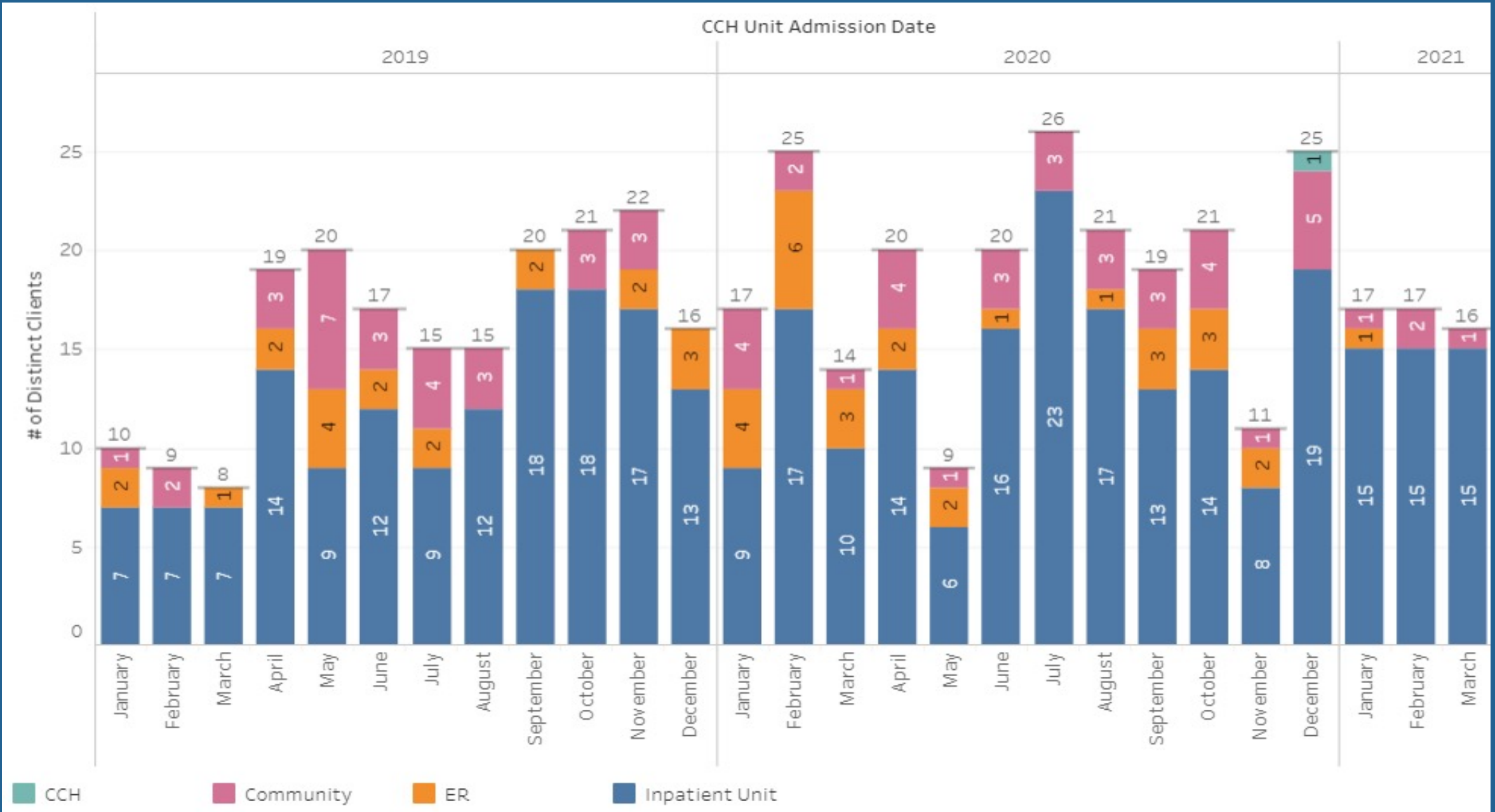
Distinct Patients Admitted to CCH



Total 568
Patients since
program inception

- Median age ~71
- ~2/3 CCI > 2

Sources of CCH Admissions





Patient Selection Considerations

Costs to patients? (Eg: Meds, travel, parking, ambulance)

Barriers to care (Eg: Travel, language, safe home, caregiver presence, internet connection)

Need for caregiver/family at home?

- ▶ Consider caregiver burden / burnout when selecting patients
- ▶ Consider whether patients can follow their own care plans (inclusion criteria)

Help to define
inclusion &
exclusion criteria

Inclusion Criteria

Non-frail

- Independent with ADLs and IADLs prior to presentation and at time of discharge

Frail

- On homecare, or...
- Competent adult available 24/7
- Safe with respect to falls
- Deemed safe for home for at least 48 h w/out homecare by OT and CCH team
- Responsible adult to help

Home
environment

Working telephone
Safe



Exclusions:

What CCH will not Admit



➤ Acute conditions:

- MI/CVA/fractures/acute surgical condition*
- Severe delirium or of unknown etiology^
- Injurious and/or recurrent falls (2 in last month)^

➤ Unsafe clinically

- Unstable / trajectory worsening
- Unmanageable behaviours / risk of harm to self/others

➤ Living situation

- Facility living - for initial pilot; may change in future
- Homeless
- Unsafe living situation (physical environment, caregiver distress)

How will patients and providers feel SAFE with the care provided?



- Skill set of providers for patient population and level of acuity (24/7 accessibility?)
- Communication & processes
 - Shared electronic health record
 - Access to hospital services and reduced wait-times
 - Leverage existing processes where possible
- Shared responsibility between providers and patients/caregivers (consent to care, roles and responsibilities in care)

2180064103 / 100071807668 78y (1942-Mar-14) Female
Unreviewed Allergies Grinman, Michelle

Patient Info Timeline Documents Flowsheets Clinical Summary

Display Group Reset Add Approve Copy Discontinue Discontinue Modify Reinstatement Release/Manage Sign Suspend Unsuspend Other
Format /Sort By Specimen /Verify /Reorder /Cancel /Reorder Hold Orders Actions

☒ Some orders may not be shown for this chart for order dates from 2018-Jan-15; (0 of 36 selected)
Display Format: Department and Order Name; Filtered by: Status/Priority; Grouped/Sorted by: Department and Order Name [Clear All Selections](#)

| Order Summary | Order Date | Status | Stop Date | Entry Date |
|---|-------------|---------|-----------|-------------------|
| Advance Care Planning 0/1 | | | | |
| <input type="checkbox"/> Goals of Care Designation - M1, Designation Definition: All clinically appropriate medical and surgical interventions directed at cure and control of condition(s) are considered, excluding the option attempted life-saving resuscitation followed by ICU care. This GCD has been ordered after relevant conversation with the patient. | 2021-Mar-01 | Active | | 2021-Mar-01 09:37 |
| Medications and IV's 0/19 | | | | |
| <input checked="" type="checkbox"/> acetylsalicylic acid EC tab - (Ordered as: ASA EC tab) 81 mg PO daily, Use Patient's Own Supply CCH HOME MEDS | | Routine | Hold | 2019-Mar-14 10:14 |
| <input type="checkbox"/> atorvastatin tab - 10 mg PO qhs, Use Patient's Own Supply CCH HOME MED | | Routine | Hold | 2019-Mar-13 08:42 |
| <input type="checkbox"/> BIO-K PLUS cap - (Each cap contains 50 billion CFU of Lactobacillus acidophilus CL1285, Lactobacillus casei LBC80R and Lactobacillus rhamnosus CLR2) 2 cap PO / NG daily at 1800h, --Discontinue 5 days after ALL systemic (IV/PO/NG) antibacterials have been stopped, Use Patient's Own Supply, Patient/Parent/Other May Administer Requested for: 2019-Mar-26 > CCH HOME MEDS | | | Hold | 2019-Mar-26 11:16 |
| <input type="checkbox"/> ceftriaxone inj - 1 g IVPB q24h To Be Released Later | | Routine | Hold | 2019-Mar-14 09:43 |
| <input type="checkbox"/> DULoxetine DR cap - 60 mg PO daily, Use Patient's Own Supply CCH HOME MEDS | | Routine | Hold | 2019-Mar-14 10:14 |
| <input type="checkbox"/> formoterol 12 mcg turbuhaler - (Each puff delivers 12 microgram formoterol) 1 puff(s) INHALED q12h, Use Patient's Own Supply CCH HOME MEDS | | Routine | Hold | 2019-Mar-14 10:14 |
| <input type="checkbox"/> furosemide tab - (Ordered as: LASIX tab) 40 mg PO daily, Use Patient's Own Supply | | Routine | Hold | 2019-Mar-14 10:14 |



Patient Experience - COVID

93% (n=15) of patients
who used telehealth
“strongly agreed” or
“agreed”
that it **improved their
access to
healthcare services**

91% (n=21) of patients
“strongly agreed” or
“agreed”
that CCH **helped them
avoid exposure to
communicable
diseases**

*“Having the equipment at your disposal...it got me out of the
hospital earlier.” - CCH patient (2020)*

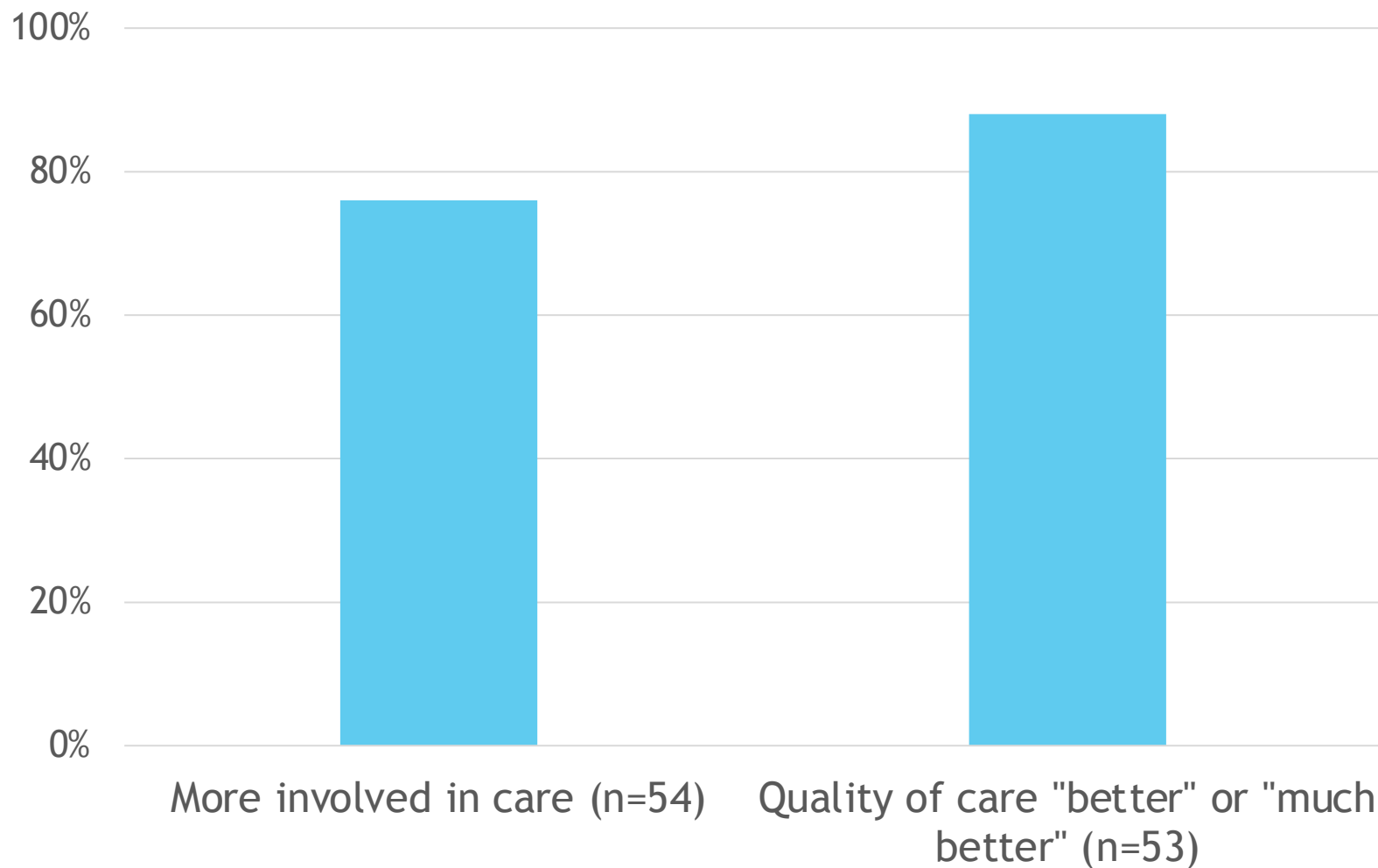
What's working well?

| Theme | Patients | Caregivers |
|----------------|--|--|
| Program model | <ul style="list-style-type: none">• MD & CPs visits frequent and in-depth• Coordinated care (hospital treatments, expedited diagnostics * community services• CPs: <i>“fantastic... caring... professional”</i>• MDs & nurses: <i>“explained things” & “always there to help”</i>• Preferred CCH vs traditional hospital | <ul style="list-style-type: none">• Access to physicians, nurses and CP• Enough resources/support• Felt CCH improved loved one's care |
| Communication | <ul style="list-style-type: none">• Prepared to receive HAH services:<ul style="list-style-type: none">• Involved in their care• Understood Complex Care Plans | <ul style="list-style-type: none">• Involved in care enough |
| Other benefits | <ul style="list-style-type: none">• Patients happy to “save” hospital beds and lower cost of care | <ul style="list-style-type: none">• Ability to see rest of family• ↓ travel to hospital - time-saving• ↓ Reduced cost of parking• ↓ stress → (+) emotional health |

Opportunities for Improvement

| Theme | For Some Patients | For Some Caregivers |
|---|---|---|
| Program model | <ul style="list-style-type: none">• Automated phone line difficult to navigate• MD rotations can impact care continuity and coordination• Travel to hospital burdensome | <ul style="list-style-type: none">• Travel to hospital visits can be burdensome• Knowing when visits are scheduled and transitions of care |
| Communication with patients and/or caregivers | <ul style="list-style-type: none">• Between providers at care transitions• Info in non-medical language• More involvement in their medical decision-making | <ul style="list-style-type: none">• Could improve communication with caregivers further (more regular updates) |
| Care Plan | <ul style="list-style-type: none">• Weaning oxygen - clearer instructions | <ul style="list-style-type: none">• Challenges managing medication changes and diet restrictions• Stress around decision-making re: goals of care and advanced care planning |

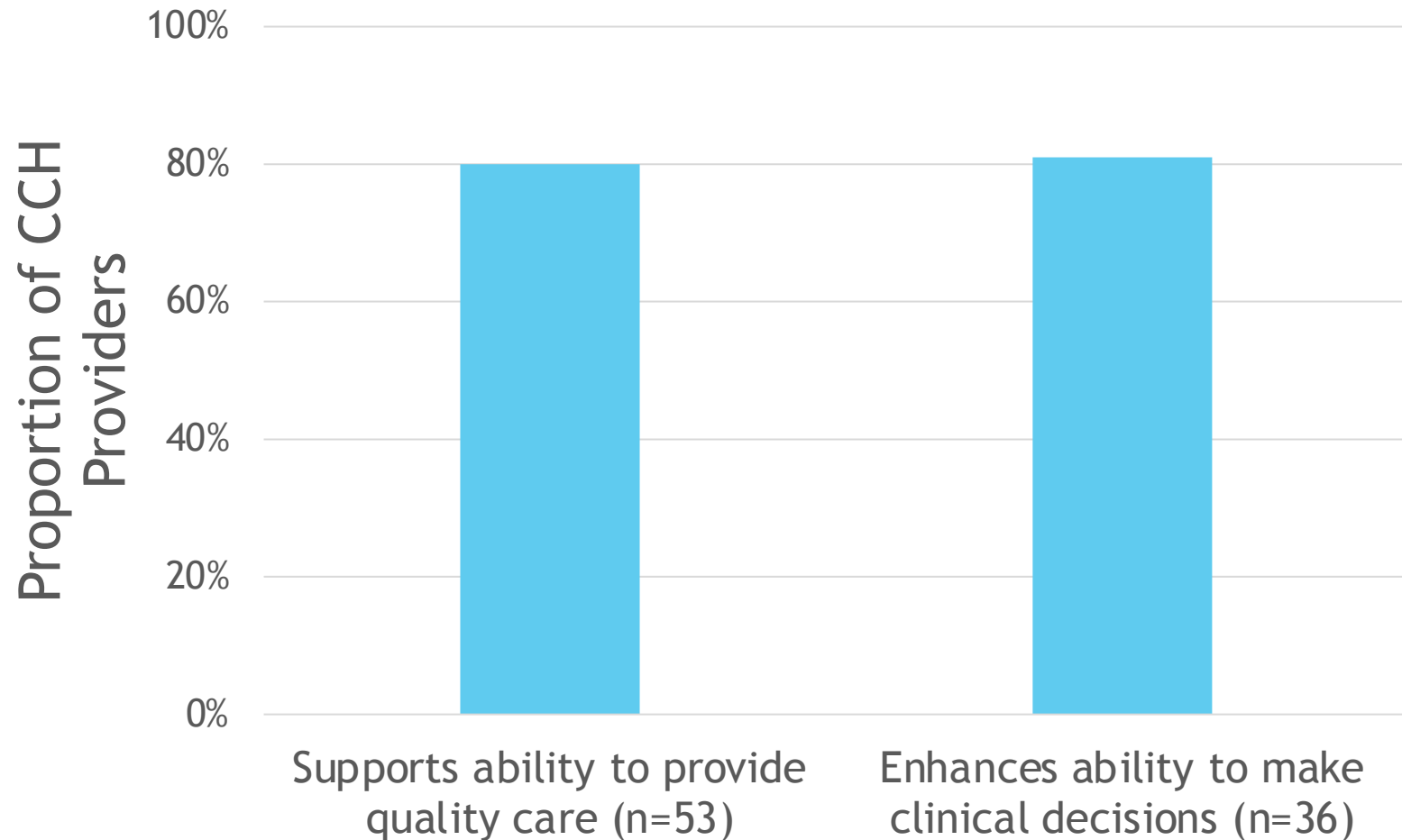
During the Pandemic: Addition of Digital Remote Patient Monitoring



Other benefits noted by patients:

- Overall experience was as good as in person
- Access to care improved
- Healthcare needs met using telehealth

Provider Experience: Digital Remote Patient Monitoring



- ▶ Enabled them to conduct virtual assessments
- ▶ Created opportunity for Community Paramedics to use time more effectively
- ▶ Some providers expressed dissatisfaction with time needed to support patients with using the technology.

Take Home Messages



- ▶ When designing a HAH program place the patient, caregiver and providers at the centre of the experience and map their journey
- ▶ Consider impact on patients and caregivers in terms of:
 - ▶ stress (managing care recommendations, travel, care planning)
 - ▶ cost to patients and caregivers
- ▶ Design use of technology to reduce cognitive and logistical load for providers
- ▶ Continually improve processes and communication (patient-provider, provider-provider)

Thank you!



Acknowledgements

- Complex Care Hub clinical and leadership team
- Mobile Integrated Health Services, Alberta Health Services
- Information Technology, Alberta Health Services
- Rockyview General Hospital & South Health Campus leadership
- Health Services Evaluation and Evidence team, Alberta Health Services
- Calgary Zone Leadership, Alberta Health Services

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2. Canadian Hospital Consumer Assessment of Healthcare Providers and Systems (CHCAHPS). June 2017. Available at: <http://insite.albertahealthservices.ca/assets/ses/tms-ses-hcahps.pdf>
3. Bédard M, Molloy DW, Squire L, Dubois S, Lever JA, & O'Donnell M. The Zarit Burden Interview: A new short version and screening version. *The Gerontologist*. 2001; 41(5):652-657.
4. Corbin, J. & Strauss, A. (2015). *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory* (4th ed.). Thousand Oaks, CA: SAGE Publications Inc.



QUESTIONS

Learn More

- Hospital at Home Users Group
<https://hahusersgroup.org/>
- Hospital at Home Users Group Technical Assistance Center
(Powered by CAPC)
<https://www.hahusersgroup.org/technical-assistance-center/>
 - **Featured Resource – Annotated CMS Waiver**
<https://www.hahusersgroup.org/technical-assistance-center/cms-waiver-requirements/options-for-addressing-the-2020-cms-waiver-requirements/>

Watch Them Again...

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THANK YOU



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