

COVID-19 Through a Quality Lens: Challenges and Opportunities for the Rehabilitation Program at Holy Family Hospital

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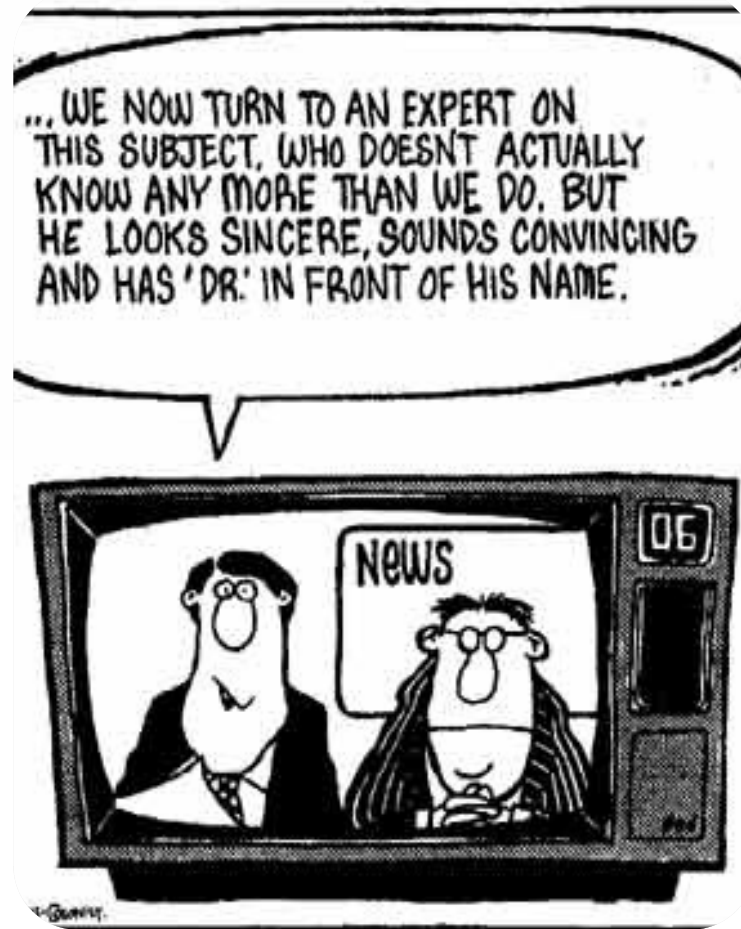


Disclosures

None to declare



Disclaimer



Source: <http://martyfahncke.wordpress.com/>



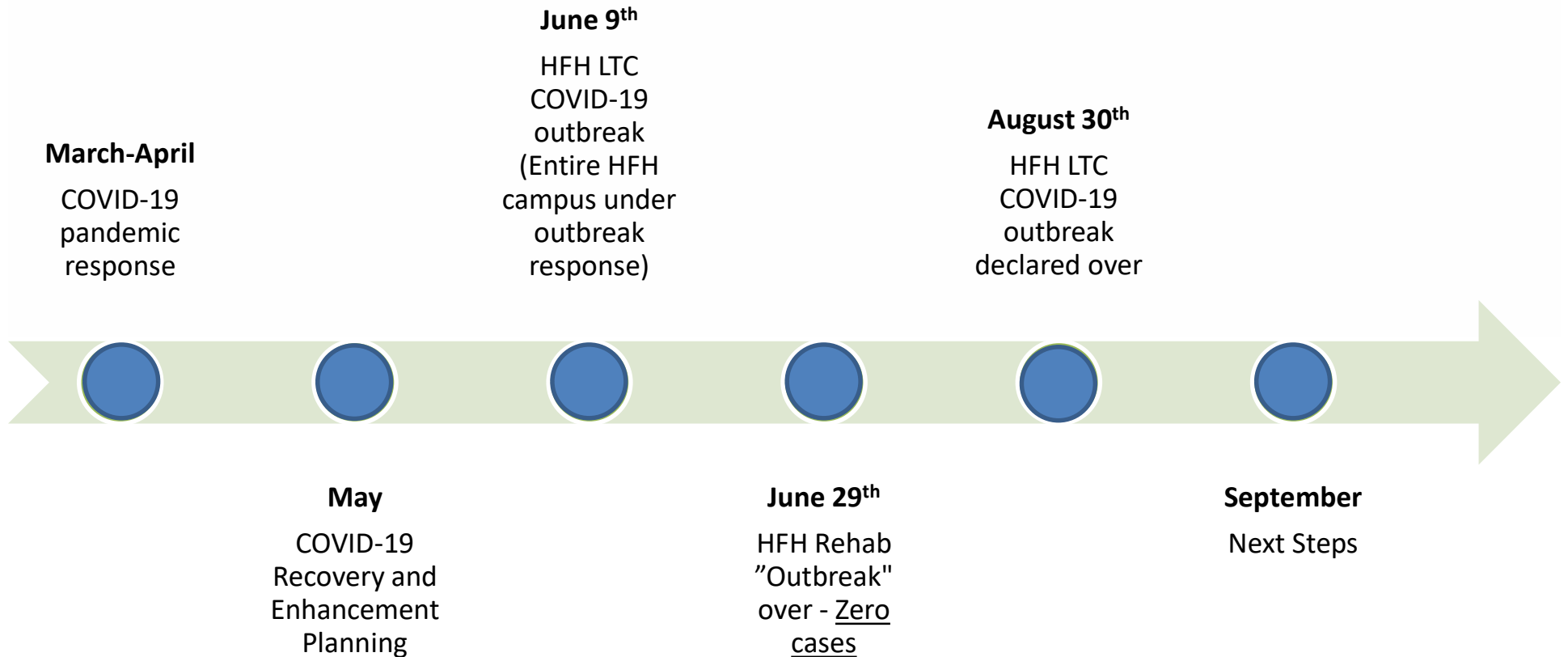
Learning objectives

In this webinar, you will learn how the rehabilitation leadership team:

- Assisted with the pandemic response planning
- Redesigned and tested innovative practices
- Focused on safety and quality during the recovery planning



HFH Rehab Timeline/Agenda

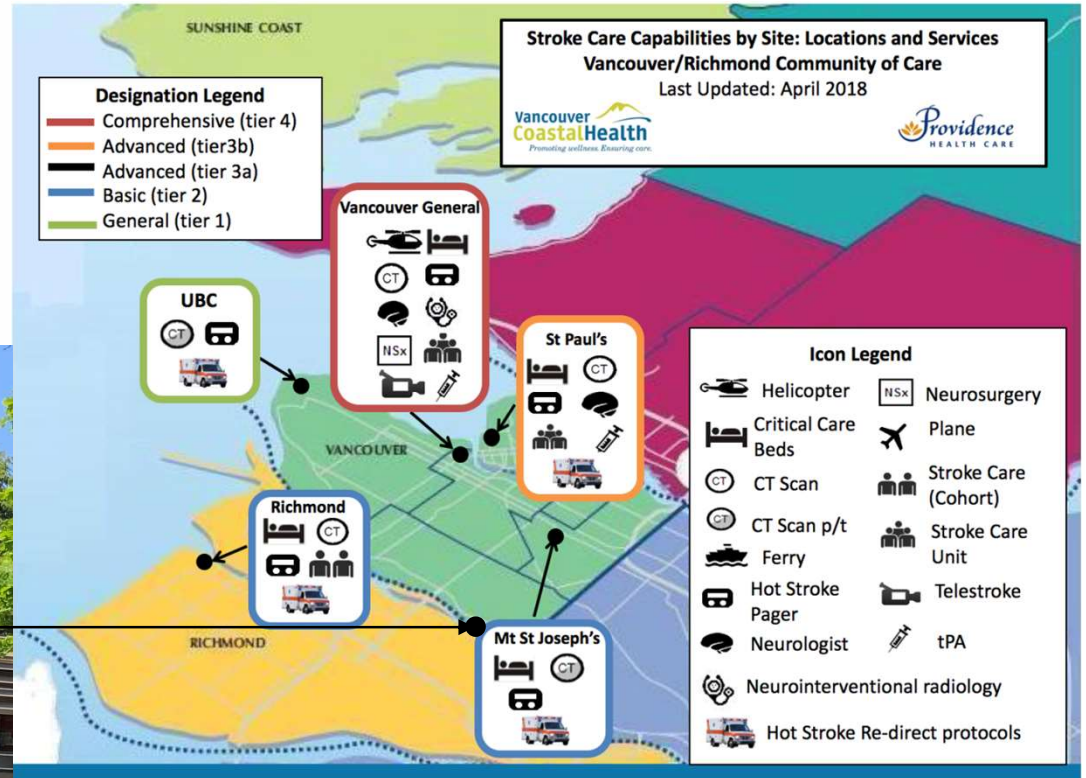




<https://www.providence.ca/our-story/history/missions/vancouver/>

<http://www.providencehealthcare.org/hospitals-residences/holy-family-hospital/overview/history>





Specialized Intensive Rehabilitation

Occupies the Main Floor (2nd floor) of Holy Family Hospital
Rehabilitation of those 55 years of age and older



30

Neuro-rehab

14

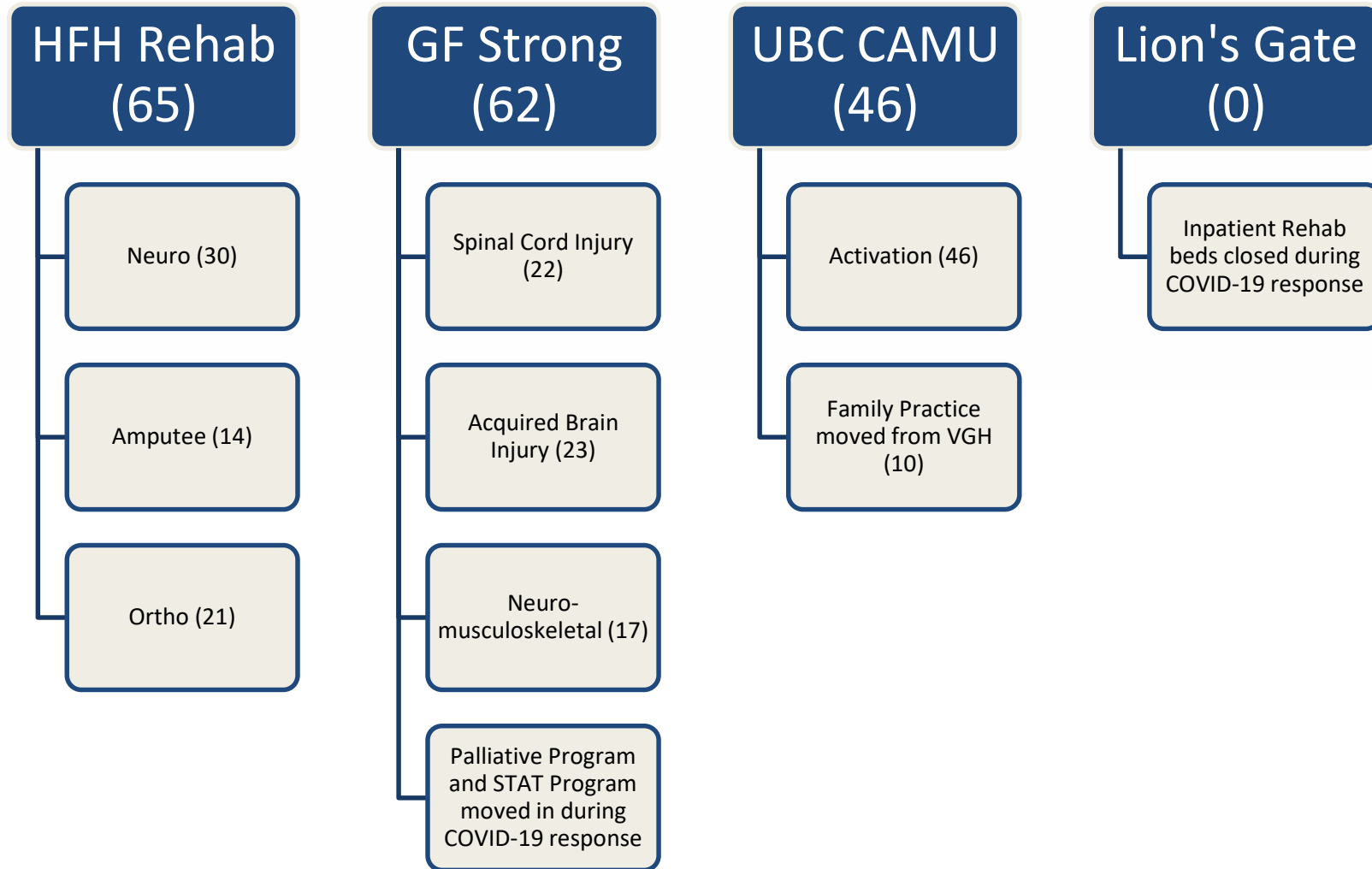
Amputee rehab

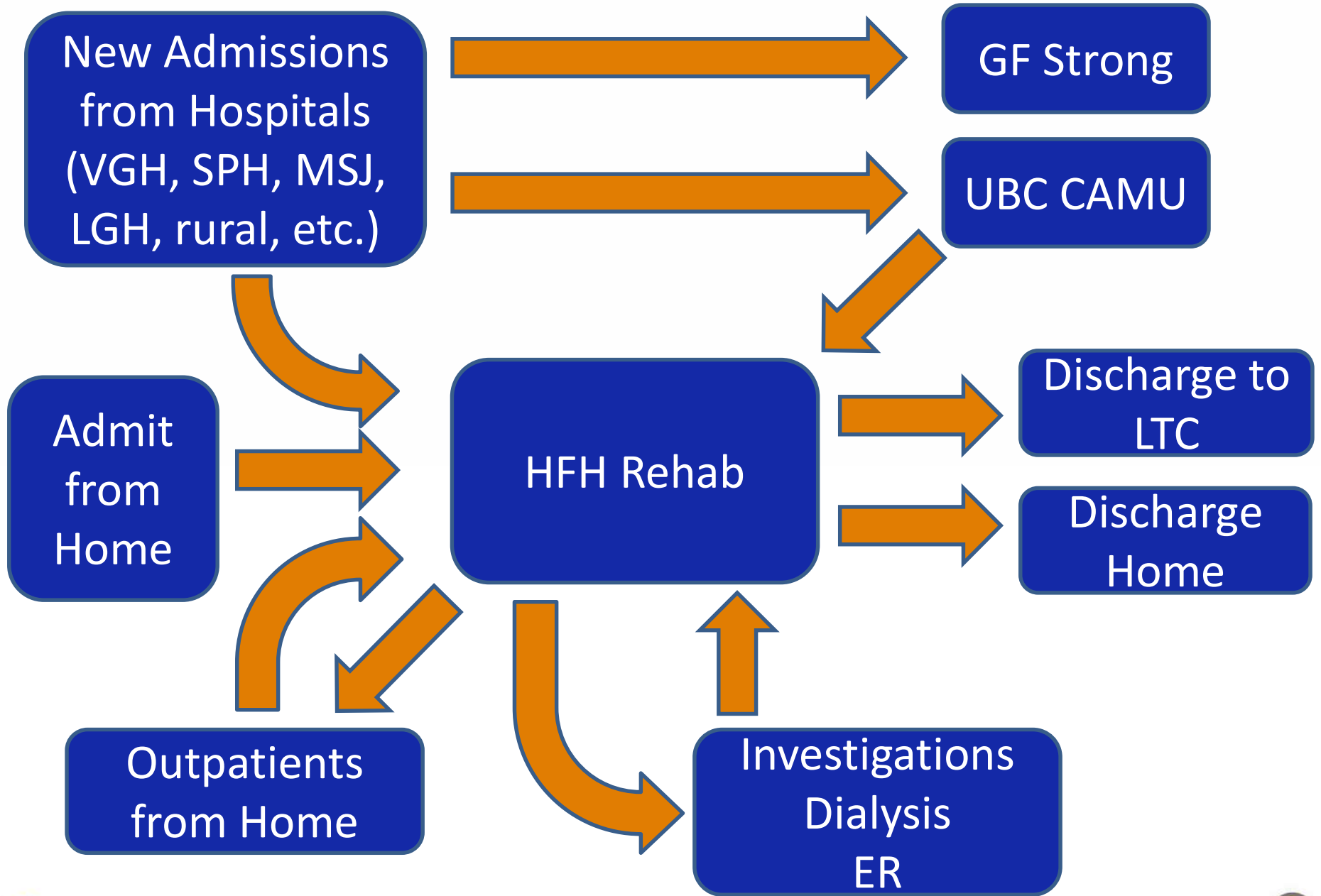
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Orthopedic rehab

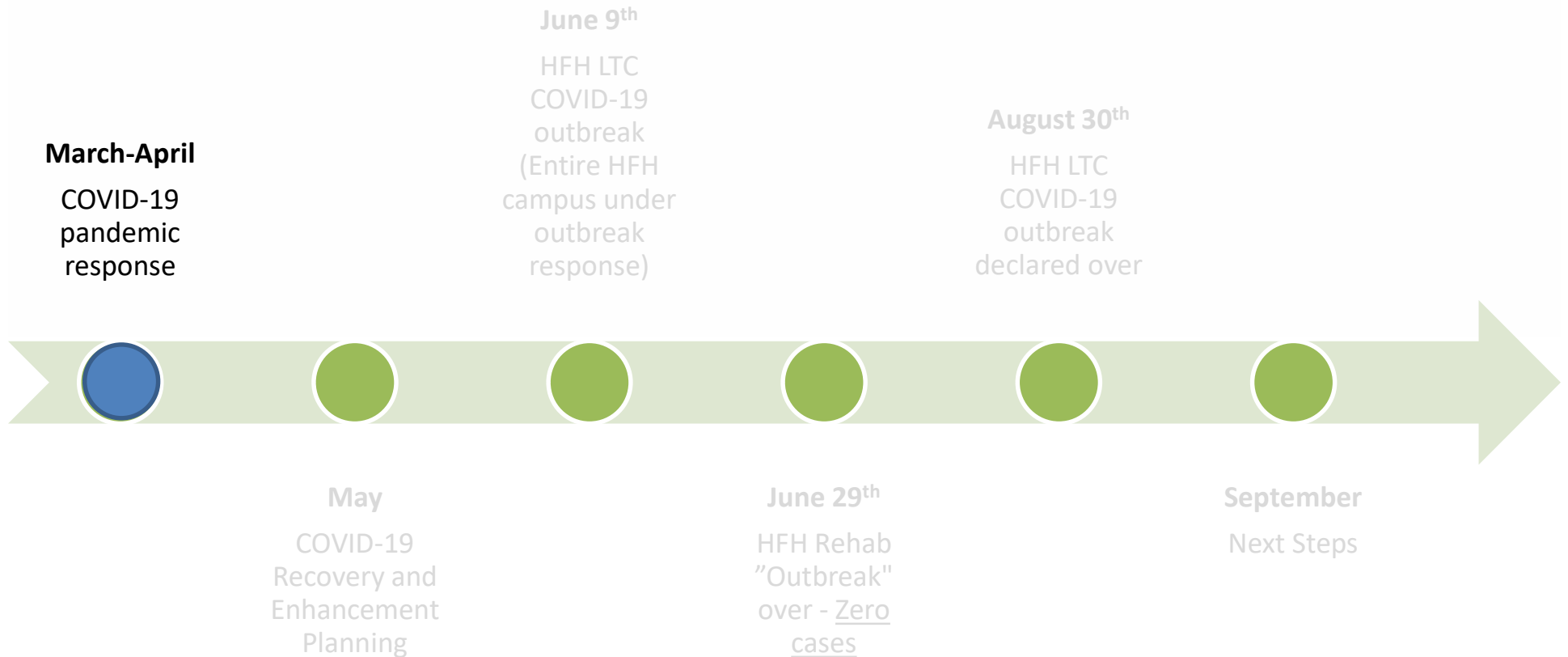


Regional Resources



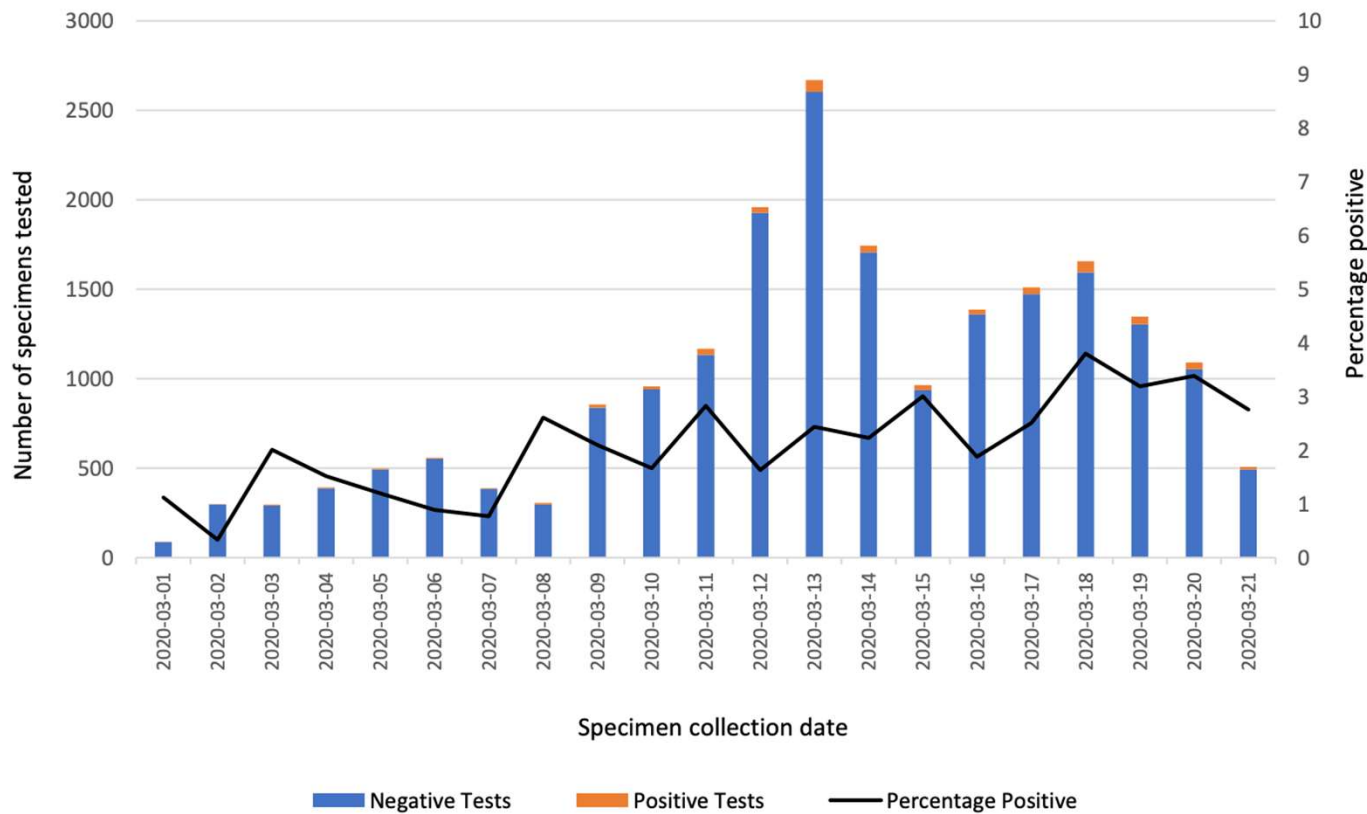


COVID-19 Pandemic Response



COVID-19 in BC – March 23, 2020

Figure 2: Proportion of respiratory specimens testing SARS-CoV-2 positive* in BC, March 1-March 21, 2020 (N=20,649)

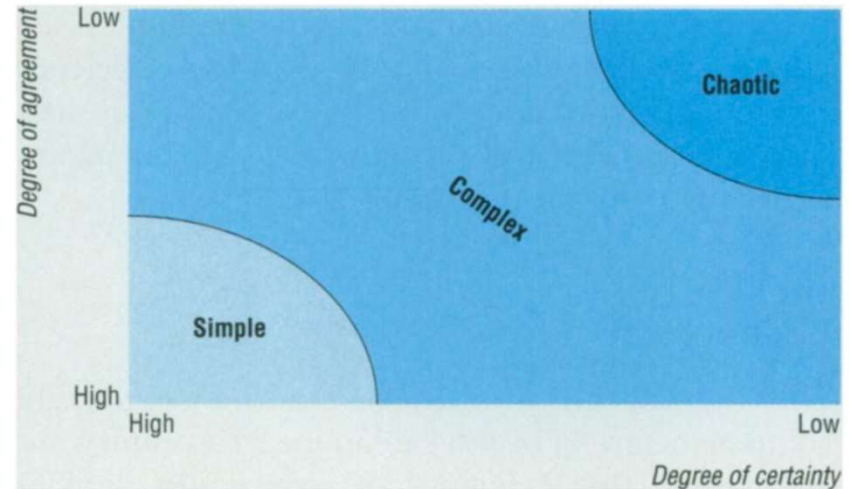


[http://www.bccdc.ca/Health-Info-Site/Documents/BC Surveillance Summary March 23 2020.pdf](http://www.bccdc.ca/Health-Info-Site/Documents/BC_Surveillance_Summary_March_23_2020.pdf)



Zone of Complexity / Edge of Chaos

- Abandon linear models
- Accept unpredictability
- Respect and utilize autonomy and creativity
- Respond flexibly to emerging patterns and opportunities



The certainty-agreement diagram (based on Stacey²³)

(Plsek and Greenhalgh, 2001)



Complexity science

Complexity, leadership, and management in healthcare organisations

Paul E Plsek, Tim Wilson

- Management thinking has viewed the organisation as a machine and **believed that considering parts in isolation, specifying changes in detail, battling resistance to change, and reducing variation** will lead to better performance
- In contrast, complexity thinking suggests that **relationships between parts are more important** than the parts themselves, that **minimum specifications yield more creativity** than detailed plans

(Plsek and Wilson, 2001)



Impact of COVID-19 outbreak on rehabilitation services and Physical and Rehabilitation Medicine (PRM) physicians' activities in Italy

An official document of the Italian PRM Society (SIMFER).

Published March 16th, 2020

Ensure appropriate interventions to the persons in need of rehabilitation

Support all the other areas of healthcare by facilitating the continuity of care

Aims:

Provide adequate care

Protect patients and professionals

Limit the spread of the infection

SET PRIORITIES IN REHABILITATION ACTIVITIES

(Boldrini et al., 2020)



Prevent Spread

Alternative modalities for the delivery of care

Personal protective equipment

Social distancing measures

Preventive identification of symptomatic cases

Therapeutic Needs

Involving family members or other persons in care delivery

Difficulties in communication

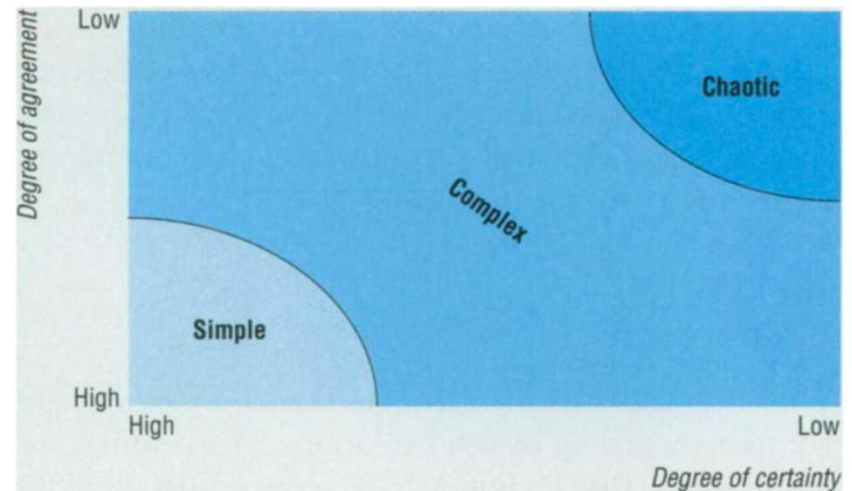
Prolonged and/or close interaction in rehabilitation

Figure drawn based upon article contents from Boldrini et al. (2020)



Communication

- PHC daily EOC meeting
- HFH Rehab
Interdisciplinary Steering
Committee daily meetings
with shared decision
making
- Updates to staff (memos,
townhalls, meetings)



The certainty-agreement diagram (based on Stacey²³)



Initial Meeting Topics

Inpatient

- Defining “non-essential” HFH rehab activities
- Physical distancing in dining, rehabilitation activities
- Inpatient passes from HFH Rehab
- Plan for symptomatic inpatients or staff

Outpatient clinic status

Traffic

- Access to HFH inpatient rehab and visitation guidelines
- Shared spaces with visitors and LTC - public computers, cafeteria

Creating capacity in hospitals



Navigating Coronavirus Disease 2019 (Covid-19) in Psychiatry: A CAN report for Inpatient Rehabilitation Facilities

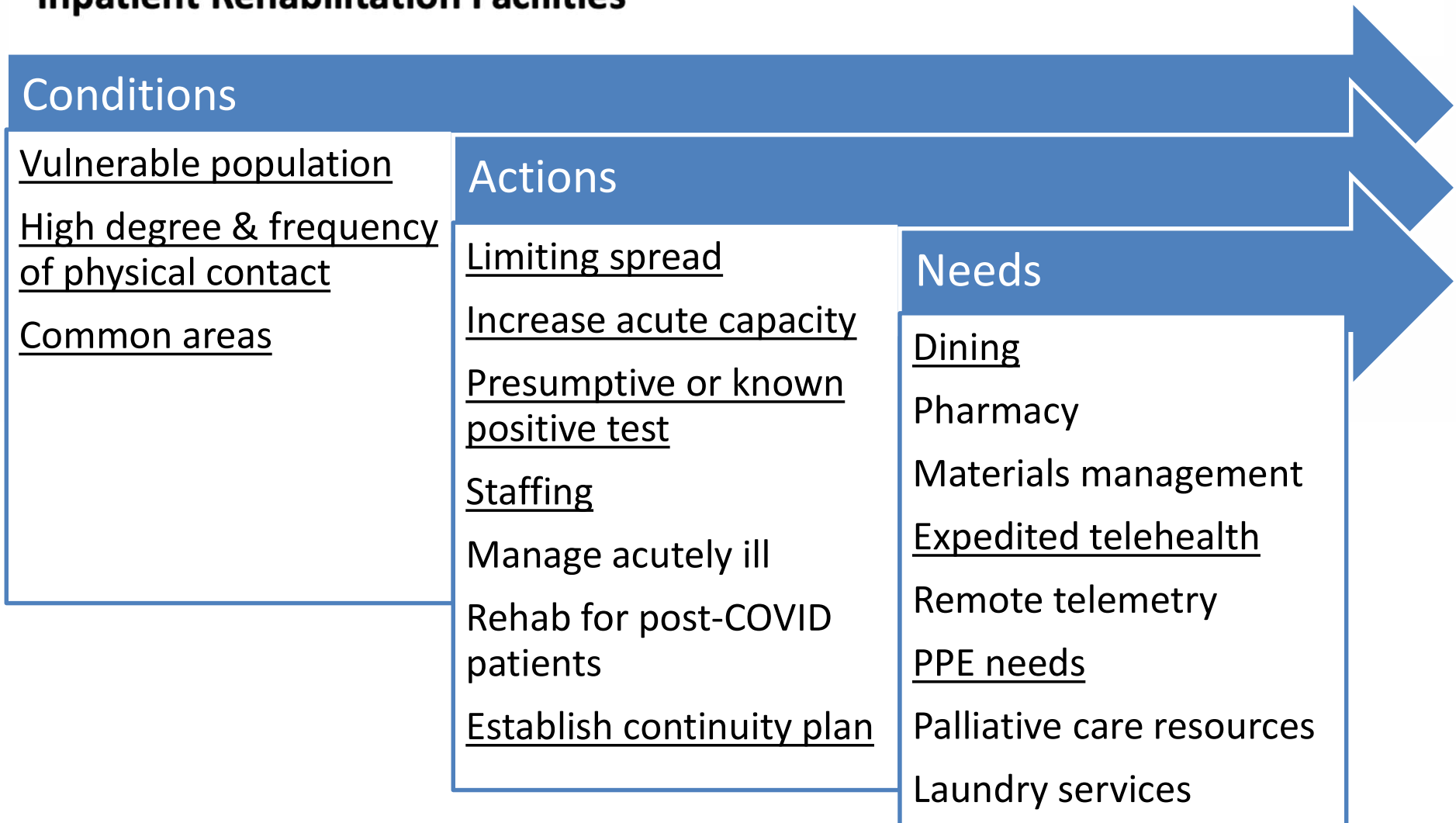


Figure drawn based upon article contents from McNeary et al. (2020)



Visitation Policies

- Greeters
- Evolving, as guided by the VCH/PHC visitation policies



COVID-19 Screening

Pre-admission to HFH Rehab

Inpatient screening

Staff screening

In the last 14 days, have you:

	No	Yes
Returned from travel outside of Canada?		
Been in close contact with anyone diagnosed with lab confirmed COVID-19?		
Lived or worked in a setting that is part of a COVID-19 outbreak?		
Been advised to self-isolate or quarantine at home by public health?		

Do you have new onset of any of the following symptoms:

	No	Yes
Fever		
Cough: new or worse than usual		
Shortness of breath		
Diarrhea		
Nausea and/or vomiting		
Headache		
Runny nose/nasal congestion		
Sore throat or painful swallowing		
Loss of sense of smell		
Muscle aches		
Fatigue		



Rehabilitation Activities

Suspended

- Recreational activities, shared computer lounge, pool

Redeployed

- Recreational coordinators to LTC
- Outpatient allied health staff to inpatients

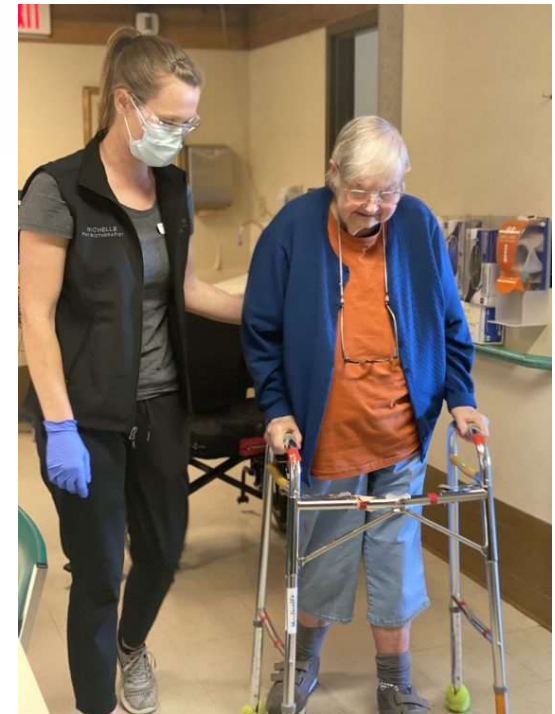
Physically distanced multi-patient exercises

Reconfigured dining area for physical distancing and only select patients in the dining room



Personal Protective Equipment

- Following PPE recommendations for acute care
- PPE education
- Supply chain



Environmental Considerations

IPAC recommendations

- Removing non-essential items from the hallways
- Clearing sink areas

Inventory of spaces for virtual visits



Creating Capacity in Hospitals

COVID-19 pandemic response

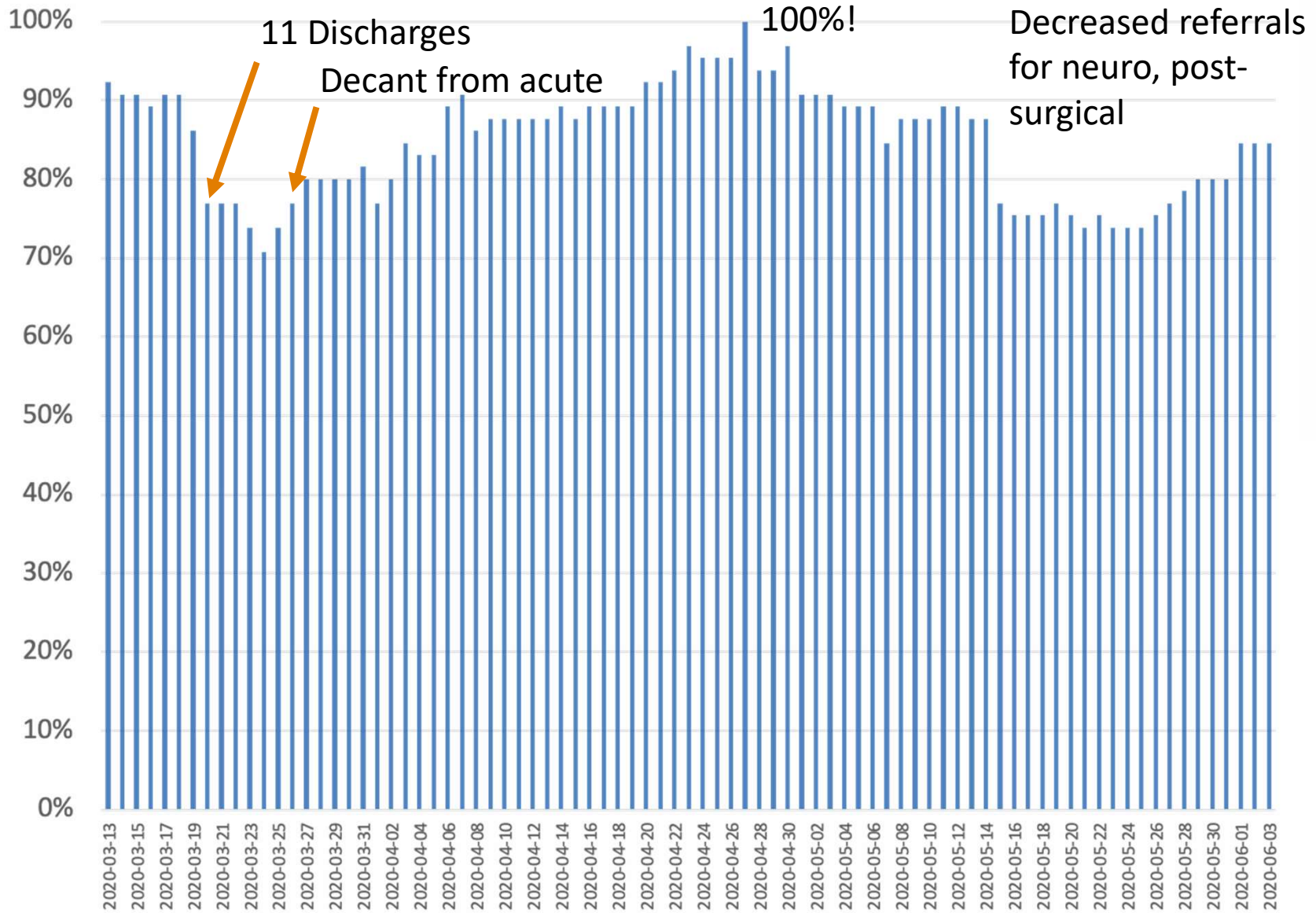
- Acute care needed capacity to prepare for acute COVID-19 admissions
- LGH had no inpatient rehabilitation beds
- Many rehab inpatients discharged in response

Inpatient Census on March 13th, 2020: 94%

- Rehab 1 (Ortho/amp rehab): (35/35 = 100%)
- Rehab 2 (Neuro-rehab): (26/30 = 87%)



HFH Rehab Census March 3 to June 3



Plan if COVID+ Case

Planning if there are:

- Symptomatic inpatients awaiting swab results
- COVID positive cases



RED – Known COVID – LIMITED ACCESS - CONTACT and DROPLET precautions as per routine practices , PPE and *exceptional* hand hygiene



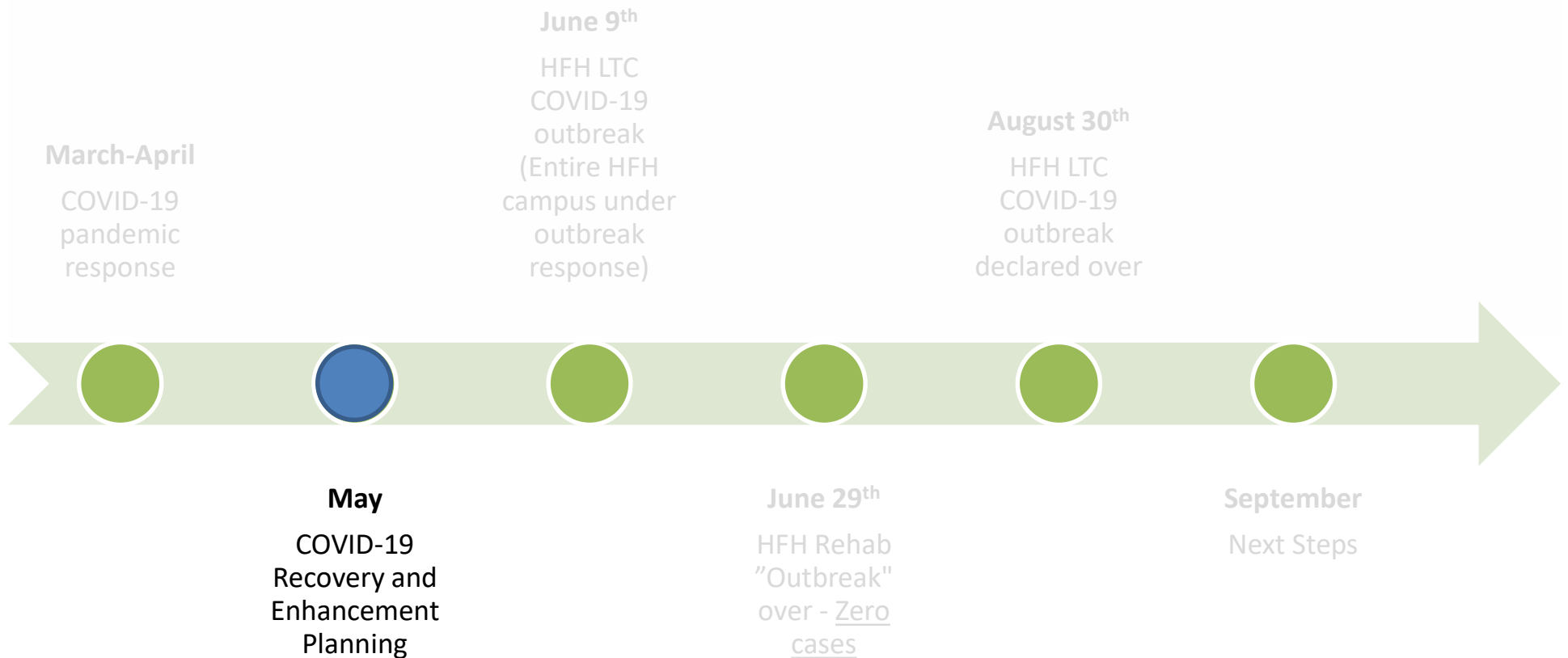
YELLOW- Potential COVID – extraordinary precautions - CONTACT and DROPLET precautions as per routine practices , PPE and *exceptional* hand hygiene



Green – No known COVID – extraordinary precautions (mask/face shield) and *exceptional* hand hygiene



Recovery and Enhancement



Prevent Spread

Alternative modalities for the delivery of care

Personal protective equipment

Social distancing measures

Preventive identification of symptomatic cases

Therapeutic Needs

Involving family members or other persons in care delivery

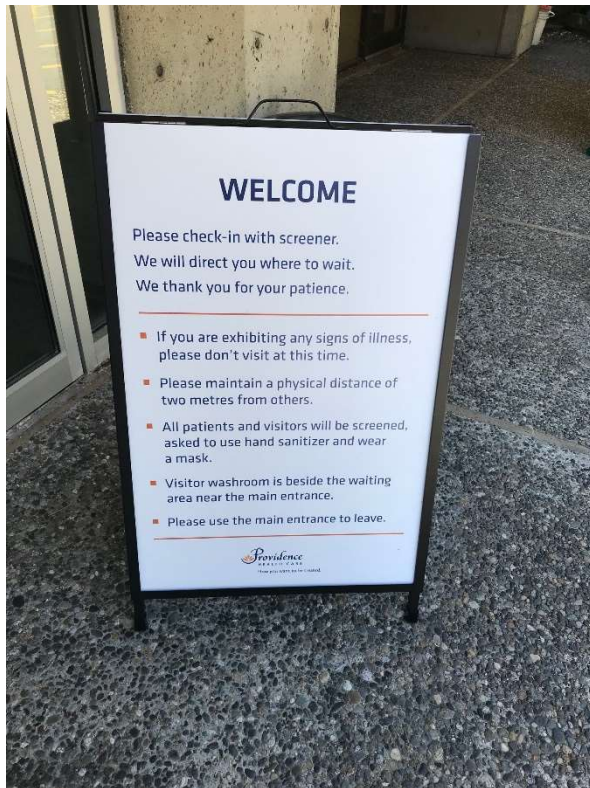
Difficulties in communication

Prolonged and/or close interaction in rehabilitation

Figure drawn based upon article contents from Boldrini et al. (2020)



Physical distancing measures







Virtual Care

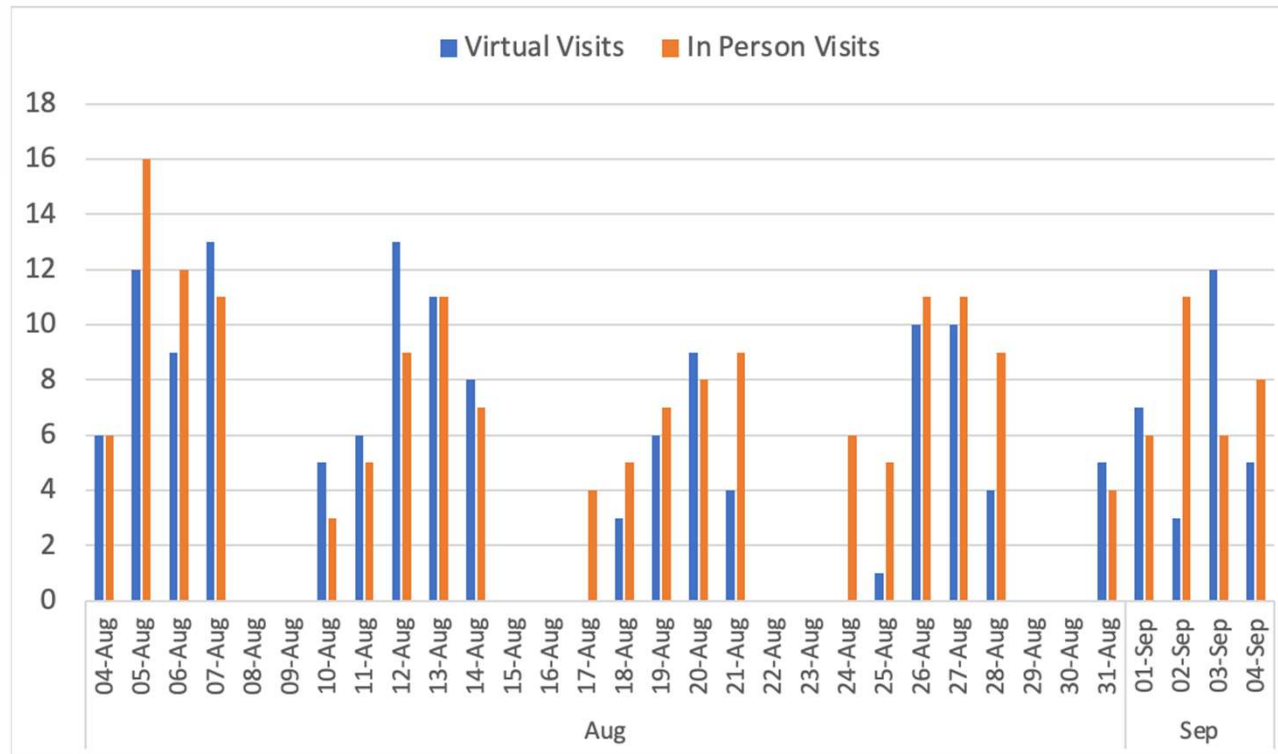


- Outpatient appointments
- Specialist appointments into HFH Rehab
- Connecting patients with family and support network



Outpatient therapy appointments

Month	Virtual Visits	In-person visits
August 2020	135	159
September 1-4	27	31



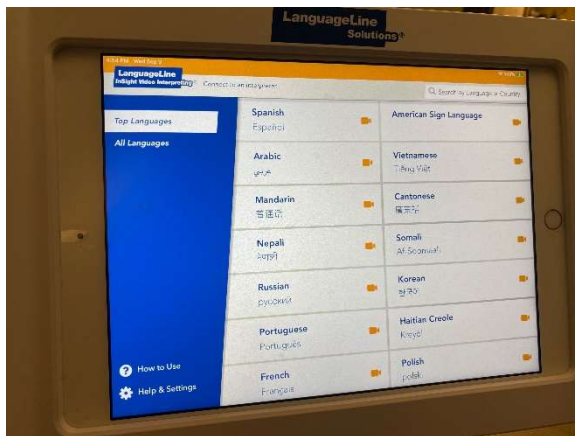
Family Meetings



Video Interpreter Service

Remote video interpreter service in multiple languages

Trial project at HFH Rehab

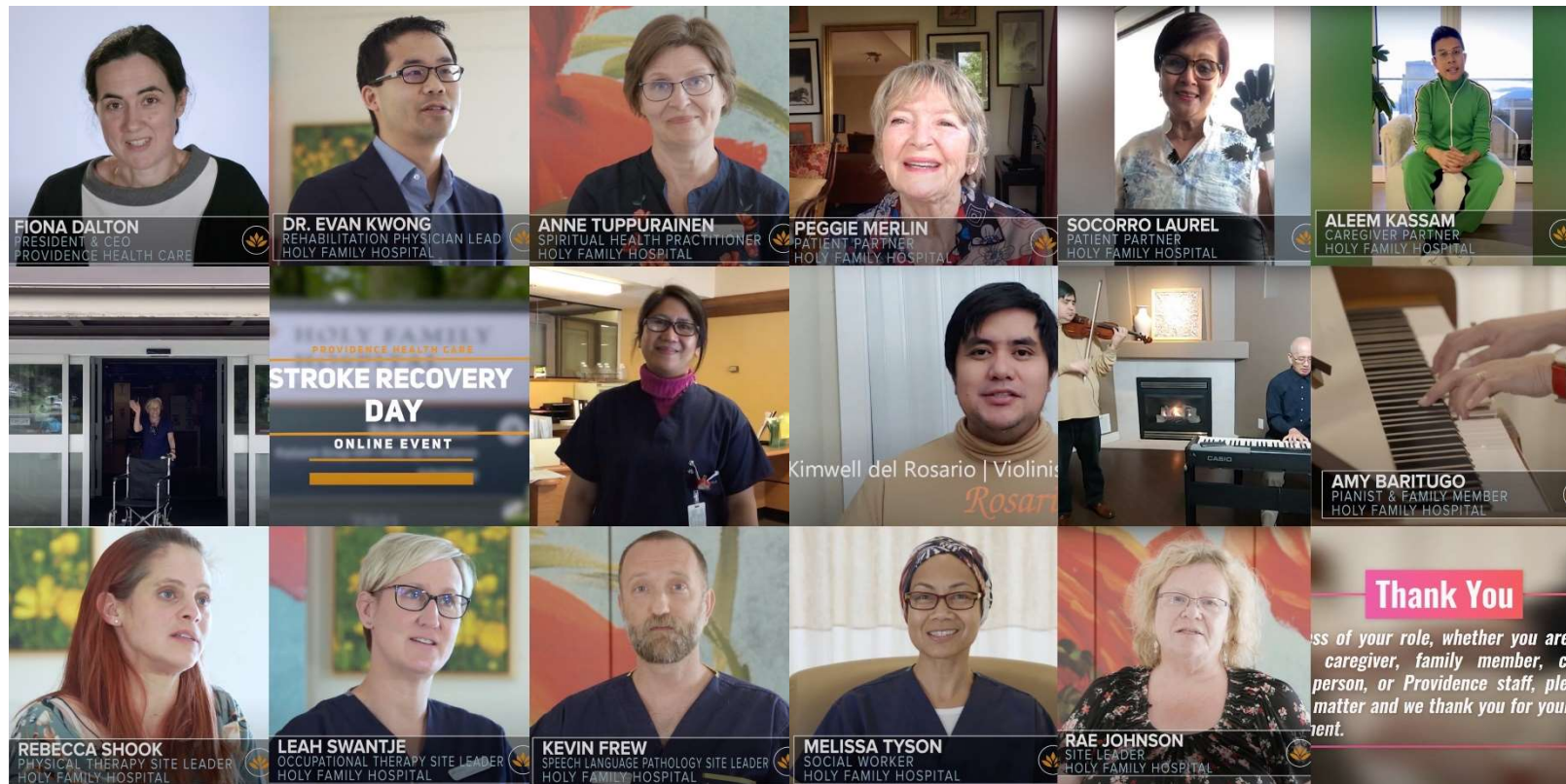


2019 Inaugural Stroke Recovery Day

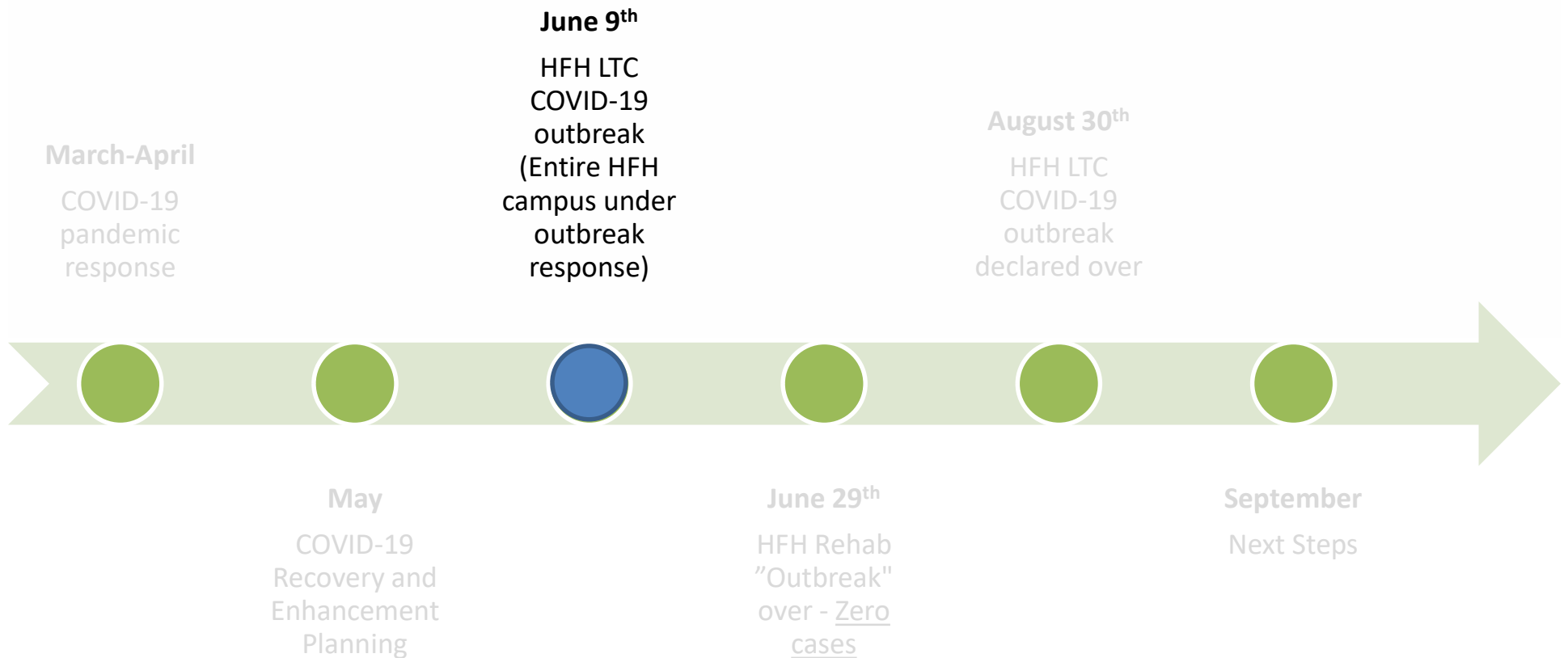


2020 Virtual Stroke Recovery Day

<http://thedailyscan.providencehealthcare.org/2020/06/navigating-and-celebrating-stroke-recovery-in-uncertain-times/>

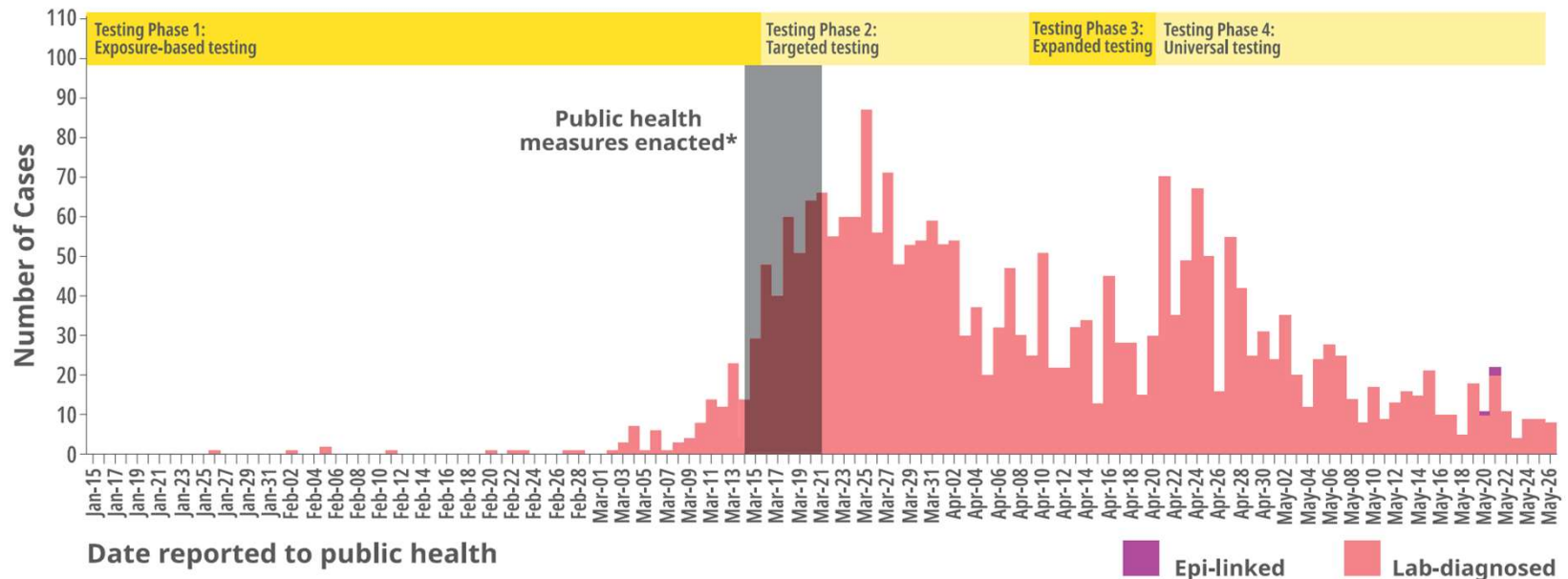


COVID-19 Outbreak Response



BC Modeling June 4th, 2020

Epidemic Curve: Confirmed COVID-19 cases in BC by reported date January 1 and May 27, 2020 (N=2553).



Cases reported on the same day as this report are excluded as only a portion are available at the time the data are extracted. The number of cases reported by day differs from that in Table 1 in previous reports as this figure reflects the date the case was lab-confirmed and reported to the Health Authority.

COVID-19 IN BC

3

https://news.gov.bc.ca/files/June4_Covid19_PPP_V8.pdf



COVID-19 Outbreak Response

June 9th – Outbreak on HFH LTC on 3rd floor

- Out of precaution the entire HFH campus, including HFH rehab on the 2nd floor was included in the outbreak response
- COVID-19 swabbing for all rehabilitation inpatients – Zero cases



COVID-19 Outbreak Response

- Reconfigured services on HFH campus (separated staff, operations, environment)
- PPE spotters
- Decluttering
- Continued with screening inpatients



VITAL SIGNS	
COVID-19 Symptoms Assessment	None (N)
<input type="checkbox"/> Temperature Oral	36.8 (N)
<input type="checkbox"/> Peripheral Pulse Rate	76 (N)
SBP/DBP Cuff	
<input type="checkbox"/> Systolic Blood Pressure	116 (N)
<input type="checkbox"/> Diastolic Blood Pressure	58 (N)
Blood Pressure Method	Automatic (N)
Oxygenation	
<input type="checkbox"/> Respiratory Rate	16 (N)
Oxygen Therapy	
<input type="checkbox"/> SpO2	99 (N)
SpO2 Site	



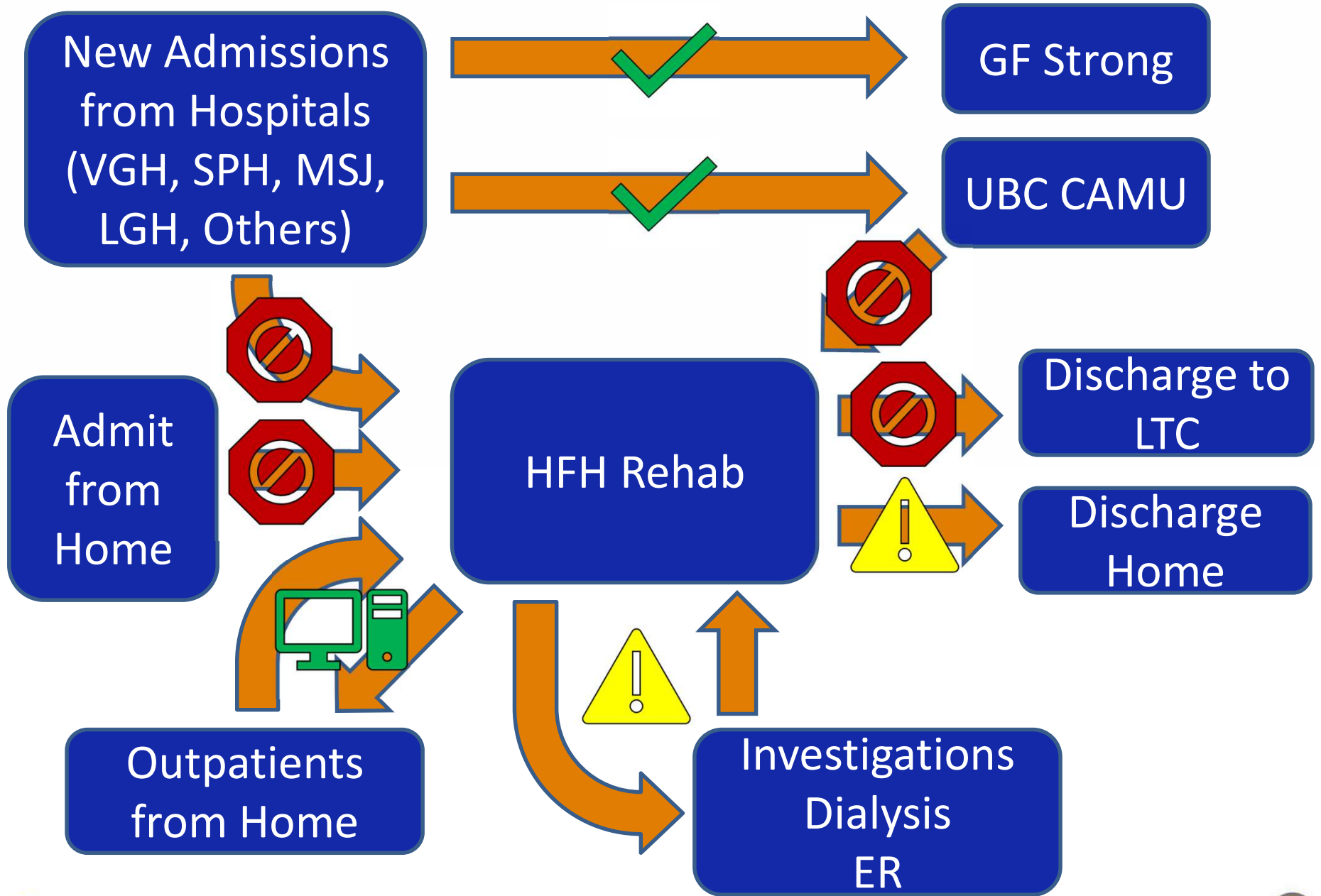
Communication

Ongoing EOC meetings, HFH Rehab huddles
Townhall for rehab patients, families, and staff

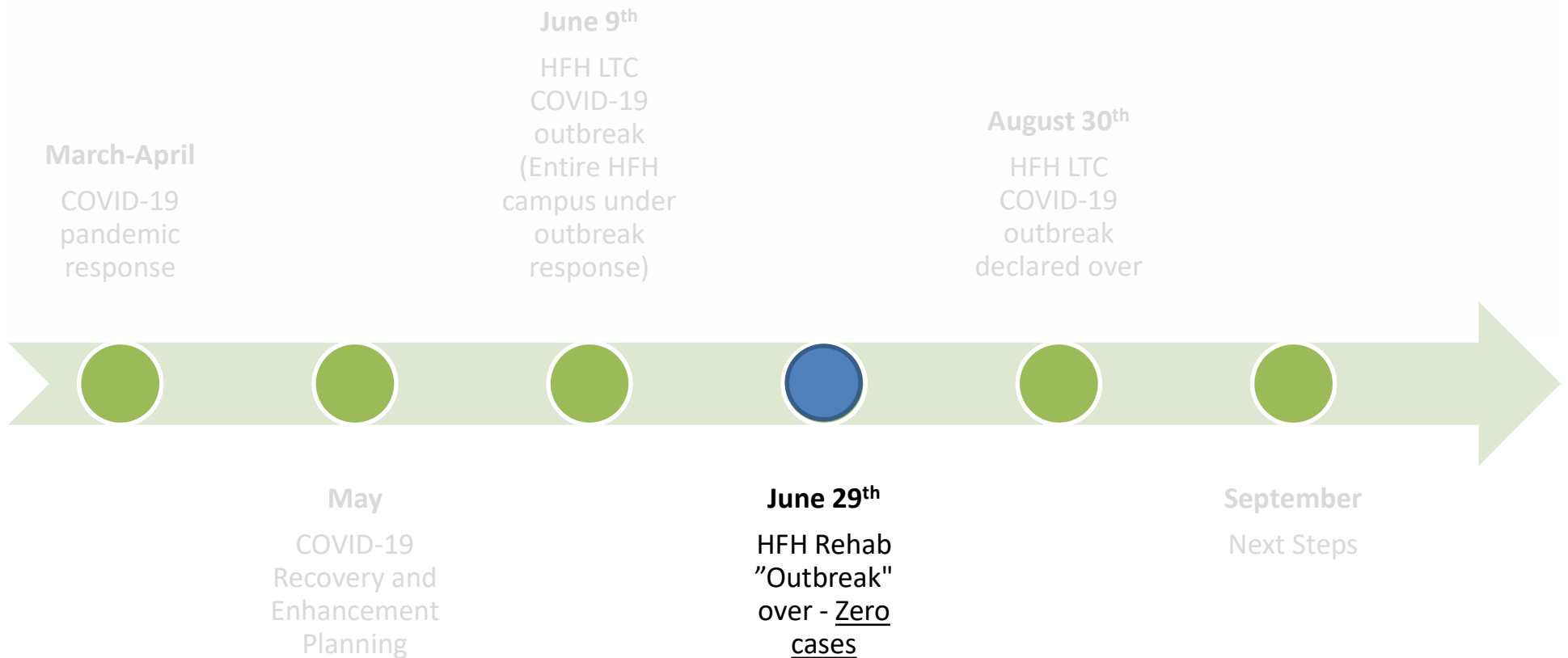
Agenda

1. **Welcome – Fiona Dalton, President & CEO**
2. **Message to Rehab Staff – Jeffrey Chan, Patient Care Manager, Rehabilitation, Holy Family Hospital**
3. **Outbreak Update – Dr. John Harding, Medical Health Officer, Public Health – Vancouver Coastal Health, and Dr. Victor Leung, Medical Director, Infection Prevention & Control, Providence**
4. **Q & A Session**
5. **Closing Comments – Fiona Dalton**





HFH Rehab Timeline

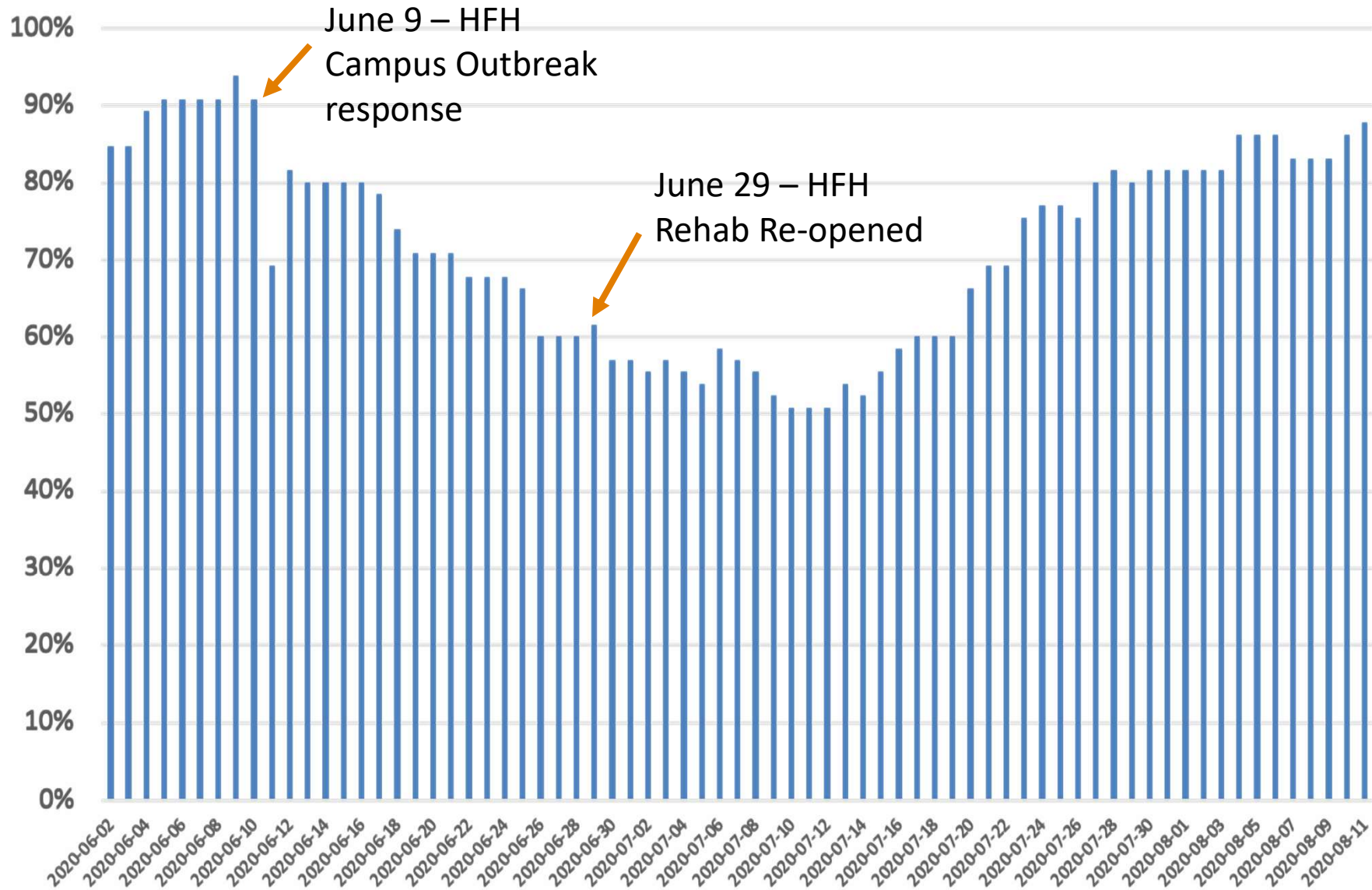


Outbreak Recovery Planning

- Provide clear message about the outbreak status at HFH Rehab and the re-start of rehabilitation services
- Gradual phased reopening since June 29th—limited daily inpatient admissions, quota for outpatient visits

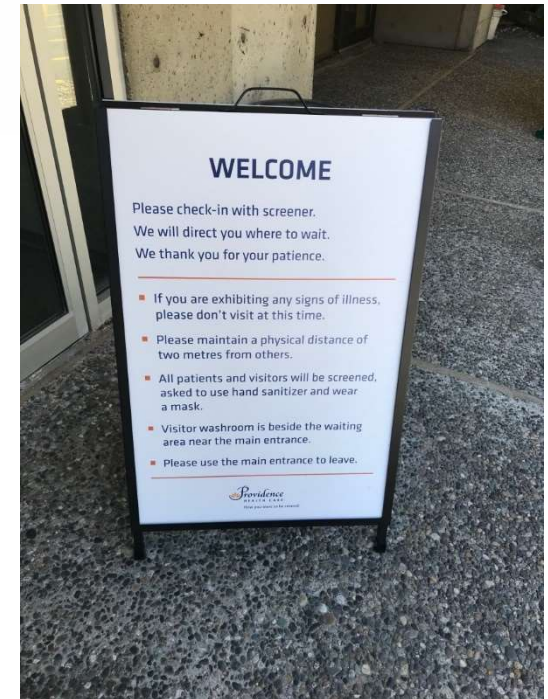
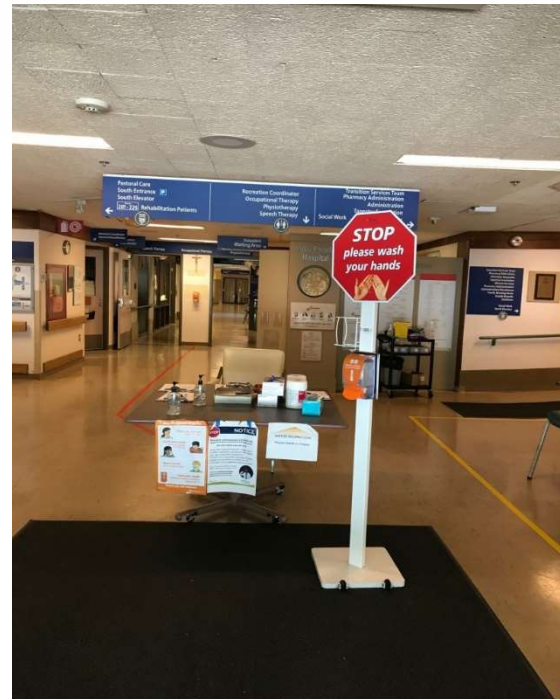


HFH Rehab Census June 2 to August 11

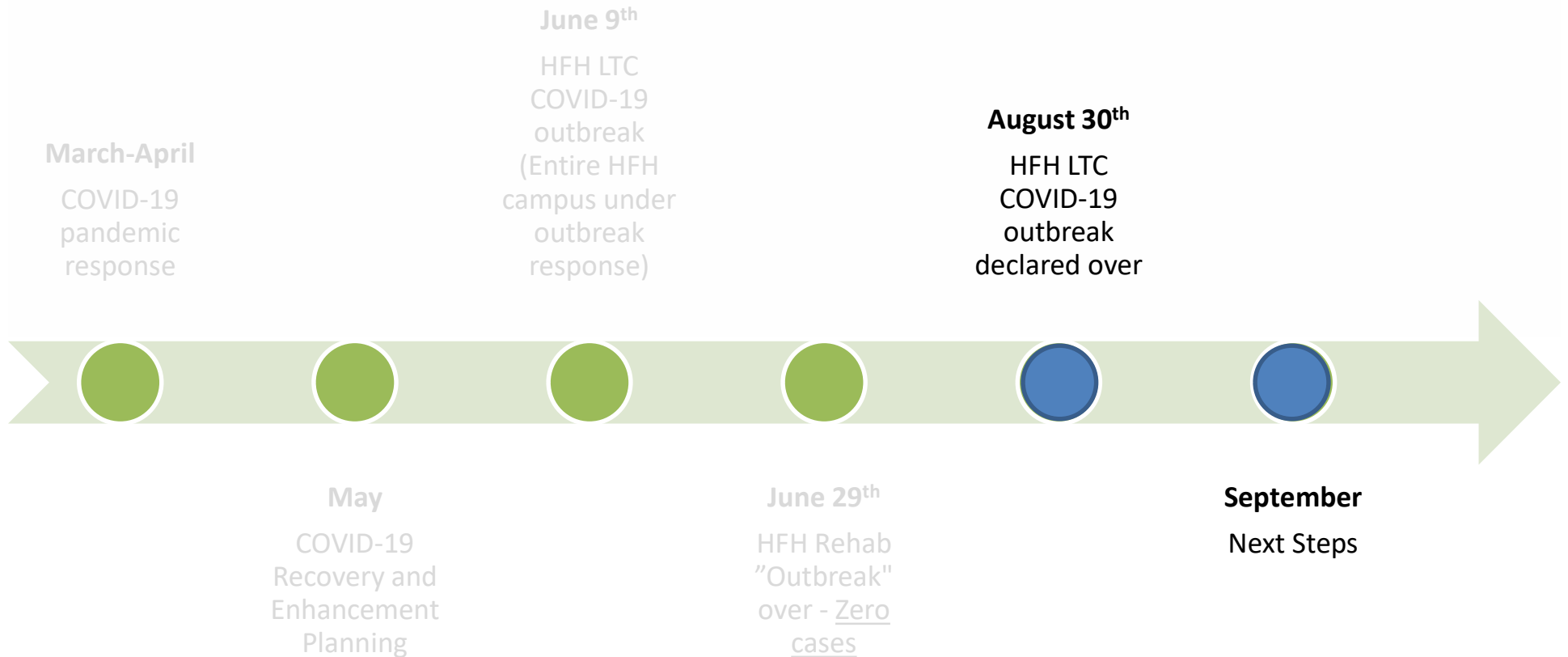


Visitation Guidelines

- Essential visits
- Window visits
- Virtual visits



Next Steps



Complexity science

The challenge of complexity in health care

Paul E Plsek, Trisha Greenhalgh

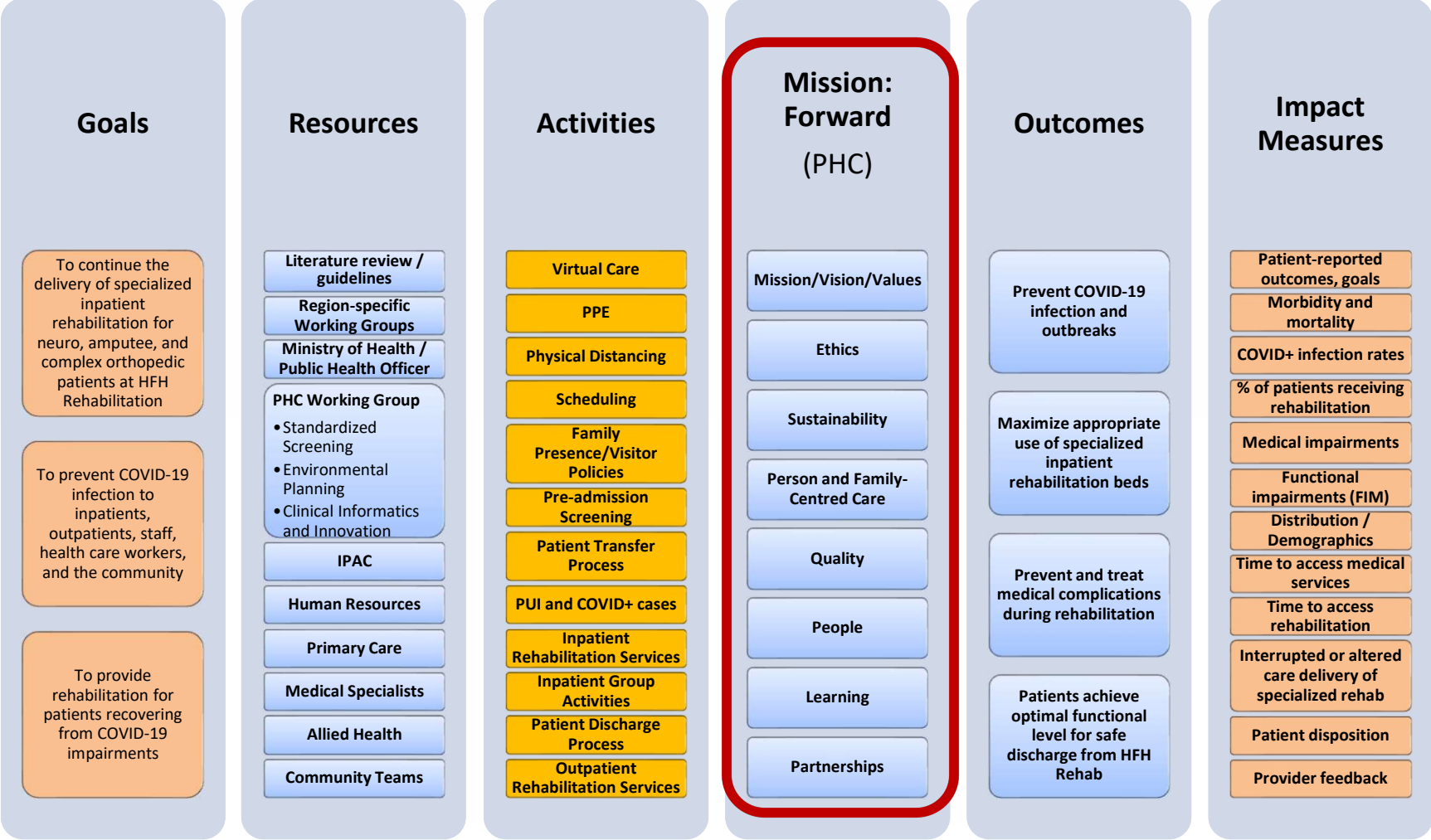
Complex Adaptive System

Collection of individual agents with freedom to act in ways that are not always totally predictable, and whose actions are interconnected so that one agent's actions changes the content for other agents

(Plsek and Greenhalgh, 2001)



Logic Model (Kwong EH, Last updated May 5, 2020)





2019
2026

**MISSION:
FORWARD**

PROVIDENCE HEALTH CARE
STRATEGIC PLAN

Our Strategic Directions



Quality-Forward

Exceptional Quality,
Safety & Value



People-Forward

Inspiring People
& Teams



Learning-Forward

Discover, Learn &
Innovate For Impact



Partnerships-Forward

Partnerships

Our Foundational Principles



Mission/Vision/Values

Everything begins
with Mission



Ethics

Ethics are
fundamental to
all we do



Sustainability

Proactive financial
and environmental
stewardship



**Person and Family-
Centred Care**

Partners in care

<https://www.missionforward.ca/>



Acknowledgements

- HFH Rehab Interdisciplinary Steering Committee
- VCH/PHC Leadership teams
- Public Health / Medical Health Officer
- PHC IPAC team
- VCH/PHC Communication teams
- PHC Virtual Health team
- VCH/PHC Regional Rehab Program
- GF Strong, UBC CAMU





Questions?

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