

# PATIENT CENTRED DIGITAL HEALTH: HOW CLINICIANS CAN MAKE A DIFFERENCE

NeLL Digital Health & Care Symposium  
November 27<sup>th</sup>, 2020

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UBC FACULTY OF MEDICINE  
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# BC, Canada Healthcare Context

944,735 km<sup>2</sup>  
(11% Brazil)

5.1M Population  
(2.4% Brazil)

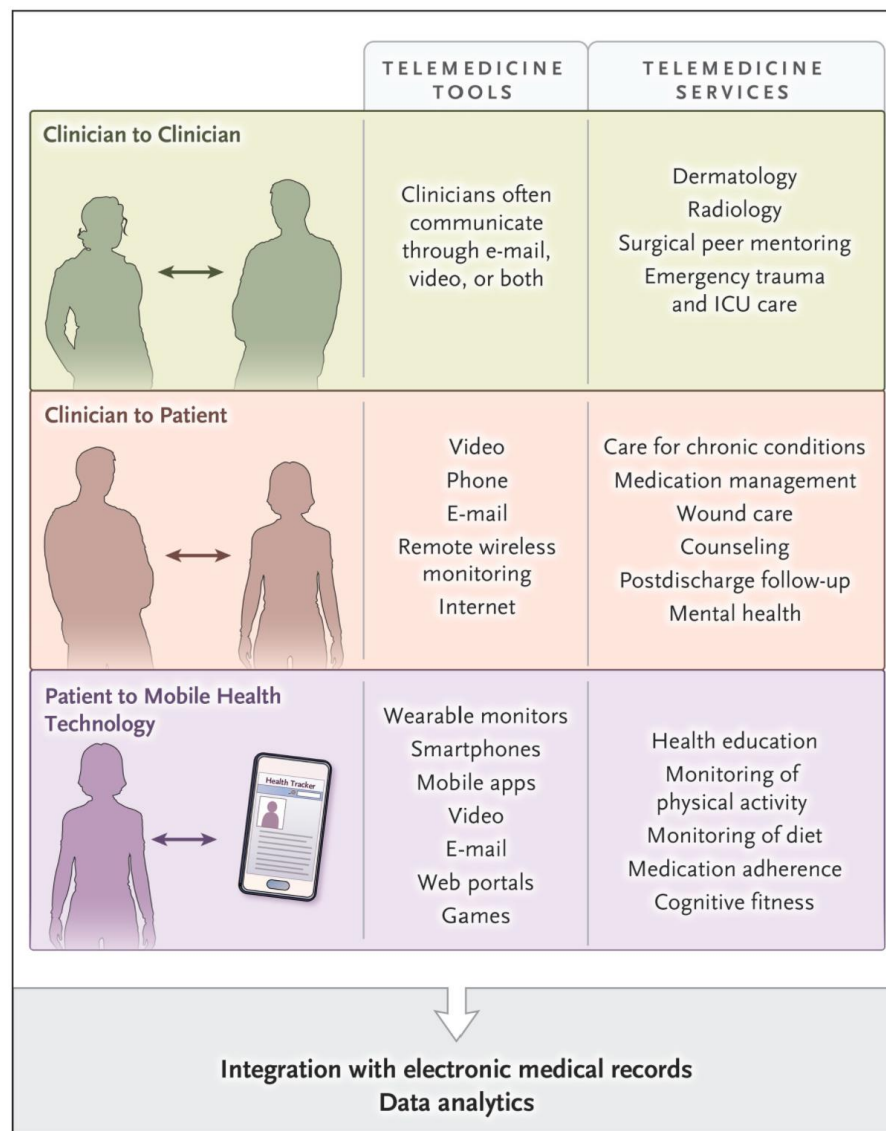


- Urban/regional/rural
- ED/urgent care capacity
- Equity of quality care access
- Cost effectiveness





Reed V. Tuckson, M.D., Margo Edmunds, Ph.D., and Michael L. Hodgkins, M.D., M.P.H.





# COVID CHANGES EVERYTHING

## How has COVID-19 changed the outlook for telehealth?

### 1 Consumer

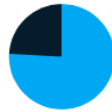
Shift from:



**11%**

use of telehealth in 2019

To:



**76%**

now interested in using telehealth going forward

While the surge in telehealth has been driven by the immediate goal to avoid exposure to COVID-19, with more than 70 percent of in-person visits cancelled,<sup>1</sup> 76 percent of survey respondents indicated they were highly or moderately likely to use telehealth going forward,<sup>2</sup> and 74 percent of telehealth users reported high satisfaction.<sup>3</sup>

### 2 Provider

Health systems, independent practices, behavioral health providers, and others rapidly scaled telehealth offerings to fill the gap between need and cancelled in-person care, and are reporting

**50–175x**

the number of telehealth visits pre-COVID.<sup>4</sup>



In addition, **57%**

of providers view telehealth more favorably than they did before COVID-19 and

**64%**

are more comfortable using it.<sup>5</sup>

McKinsey  
& Company

May 29,  
2020

- Nearly half of all Canadians have accessed a physician using virtual care
- Those connected virtually with doctor during COVID - 91% satisfaction rate

~ Canadian Medical Association, June 8, 2020

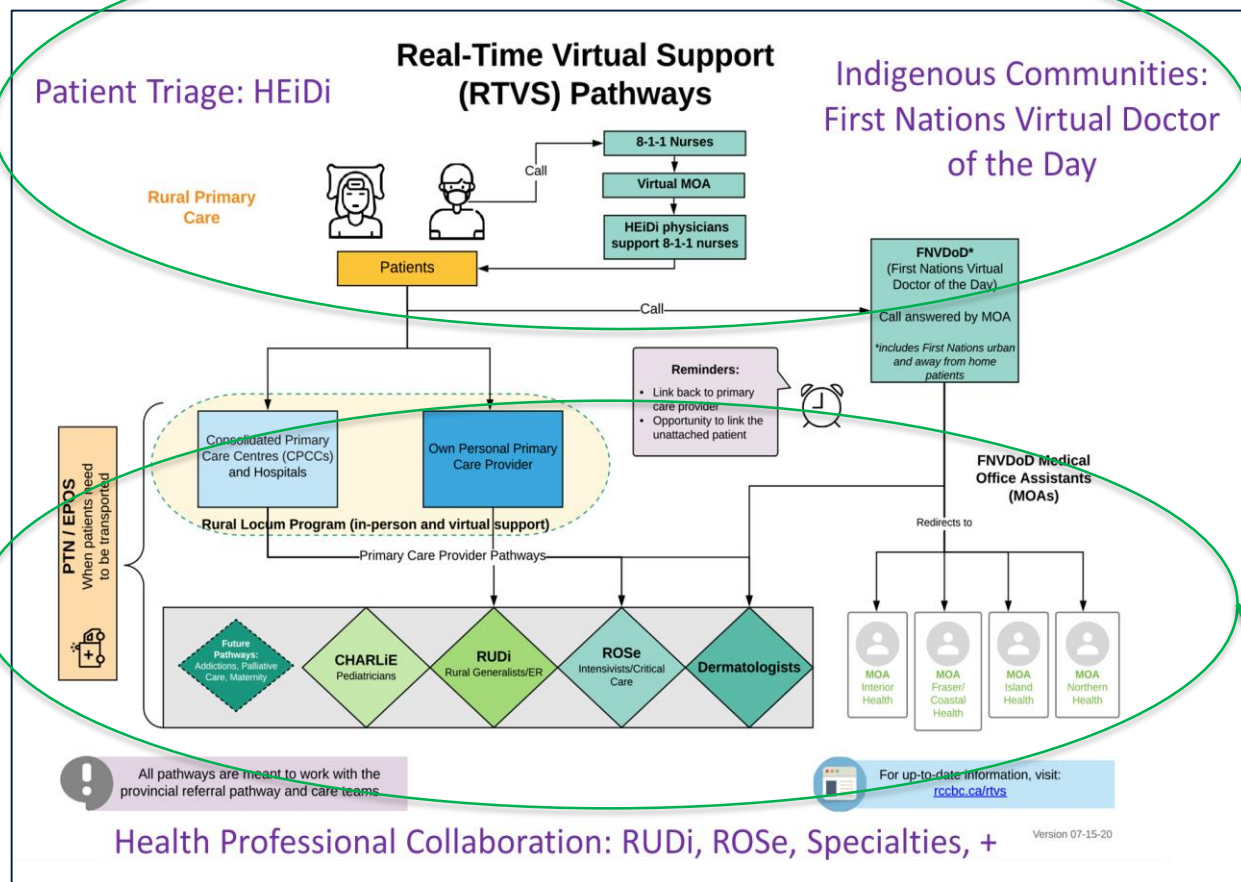


# REAL TIME VIRTUAL SUPPORT BC (RTVS)

**COVID-19 pandemic: “positive disruptor” for virtual care**

- Forced changes in team based healthcare delivery
- Accelerate RTVS development & deployment

**PATIENTS-HP**



**HP-HP**



Joint Standing Committee on Rural Issues (JSCI)



First Nations Health Authority  
Health through wellness



Province-wide solutions.  
Better health.



How you want to be treated.



BC EMERGENCY  
MEDICINE NETWORK



THE UNIVERSITY OF BRITISH COLUMBIA  
Department of Emergency Medicine  
Faculty of Medicine



BC AHSN  
British Columbia  
Academic Health Science Network



# 811 Healthlink BC Emergency iDoctors in-Assistance (HEiDi): Pathway Highlights



- 6-7x Increase call volumes
- More complex call content
- Rapidly evolving knowledge about COVID
- Emotional anxiety of callers

**AIMS:** Virtual physicians (off site) to partner with 811 nurses

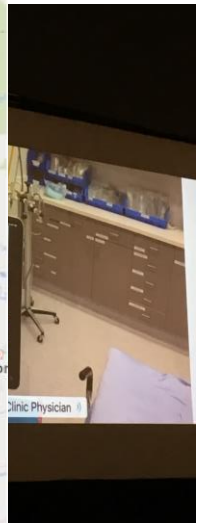
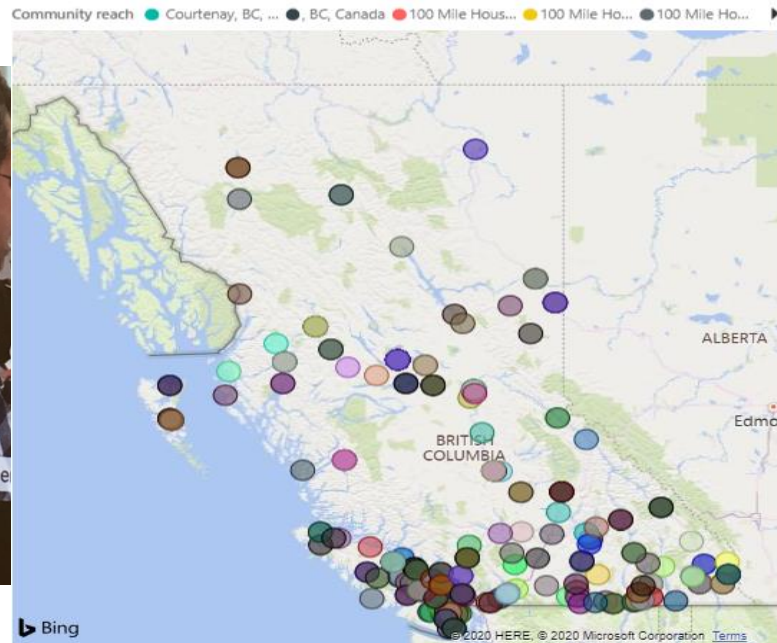
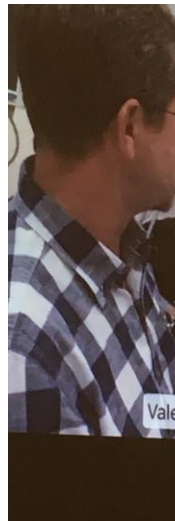
- Increase capacity to take calls
- Improve patient triage, reduce ED/Urgent MD visits
- Address mental wellness
- Support continuity with primary care





## PEER-TO-PEER SUPPORT ON DEMAND IN BC: AS OF 10/2020

- Emergency care (RUDi)
- Intensive care (ROSe)
- Pediatrics (CHARLiE)
- Maternal health (MaBAL)
- Mental Health (COMPASS)
- Dermatology
- Rheumatology
- Hematology
- ...





# WEARABLES & SENSORS

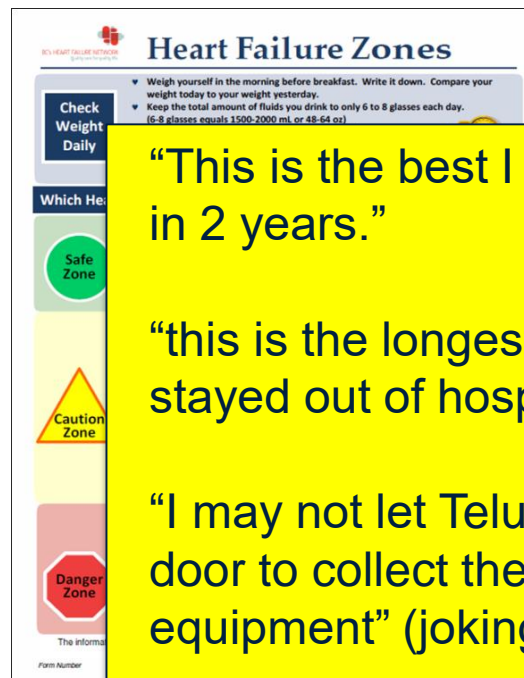






## Phase 1 (3 hospitals, 70 pt):

- 59% decr. Readmissions
- 44% decr. ED revisits
- 44% decr. Per patient cost
- Improved Quality of Life



"This is the best I have felt in 2 years."

"this is the longest I have stayed out of hospital"

"I may not let Telus in the door to collect the equipment" (joking)

"people who have not seen me for a while tell me 'What a difference'" and "even your voice is stronger"





## What Do I Need To Know



- Know My Number
- What Is High Blood Pressure?
- How To Measure My Blood Pressure
- What Are The Causes?
- Health Risks Associated With High Blood Pressure
- What Medications Can Lower Blood Pressure?
- How Do I Prevent High Blood Pressure?
- I've Just Been Diagnosed With High Blood Pressure, Now What?

## Hypertension Canada's Blood Pressure Measurement Device Recommendation



Hypertension Canada recommends you in your practice use the following devices used in your care equipment.

Devices used in your care equipment.

Here are some of the devices used in your care equipment.

- Ask the size and type of the device.
- Blood pressure measurement device.
- Ask your patient if they have an irregular heart rate.
- Automated blood pressure measurement device.
- Make sure the device is calibrated.
- Blood pressure measurement device.



## Omron unveils a real blood-pressure smartwatch

The company has also unveiled the Omron Blood Pressure Monitor + EKG, the first single at-home device in the U.S. that measures blood pressure and EKG.

Posted on January 9, 2018 by [Dusan Belic](#) in [Heart Disease](#), [Omron Healthcare](#), [Wearables](#)





# HEALTH APPS



## Blood Pressure Companion 4.4

BP Tracker & Heart Rate Logger  
Maxwell Software

#63 in Medical

★★★★☆ 137 Ratings  
Free

### HOME PAGE OVERVIEW



### COMPREHENSIVE REPORTS



### ADD READINGS VERY EASILY

**Add Entry**

Form fields for Systolic, Diastolic, HR, and Weight.

Buttons: Cancel, Add Entry, Save, Cancel, Add Entry, Save

### SHARE TO EMAIL & HEALTHKIT

**Share**

Options: Email, HealthKit

Buttons: Cancel, Preview, Share

LIVESTRONG.COM
Eat Better
Get Fit
Manage Weight
Live Well
MyPlate
More

Health > Blood Pressure > Blood Pressure Information

## 5 Apps to Monitor Your Blood Pressure When You Can't See Your Doc Regularly

By Amanda MacMillan | May 7, 2020

Medically Reviewed by Jennifer Logan, MD, MPH



# HEALTH APPS



ABOUT

You can help when help is most needed. Give to the R

Training & Certification

First Aid Tips & Resources

## First Aid App

- > Course Schedules & Registration
- > Course Descriptions
- > Become a Training Partner or Instructor

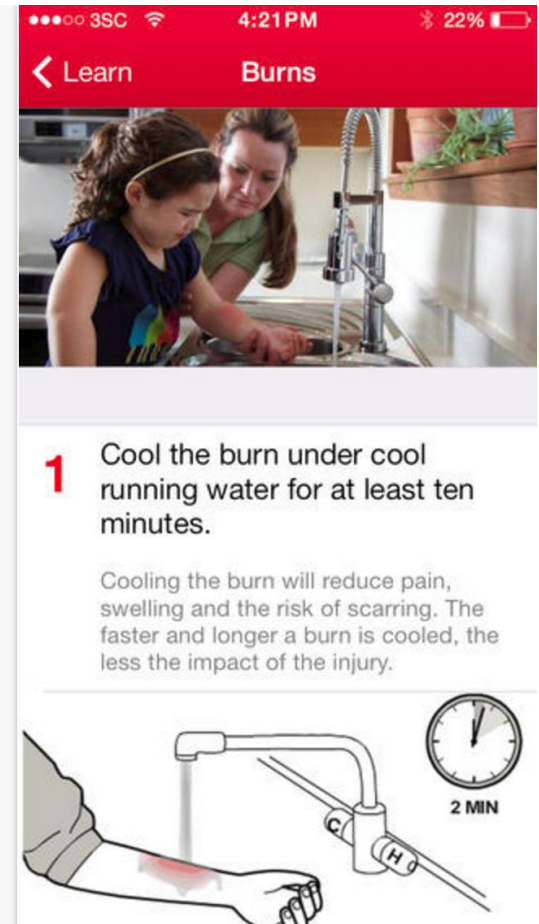
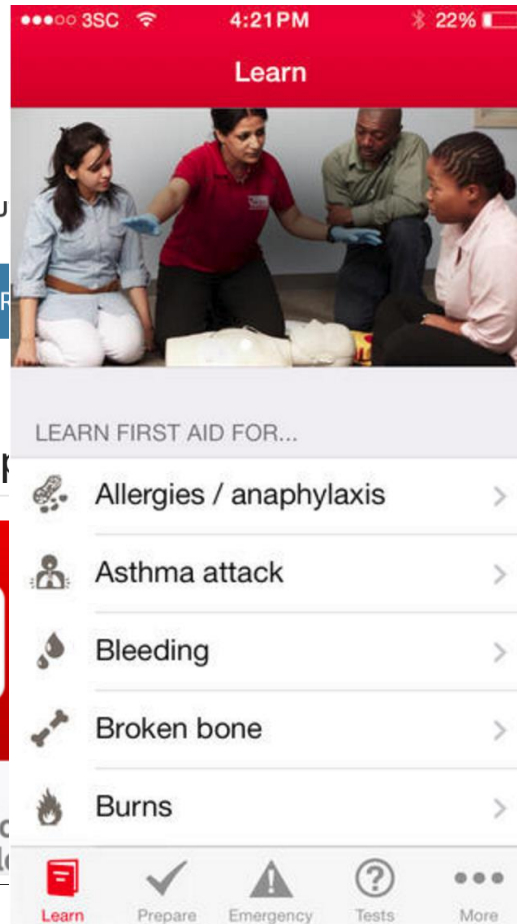
✓ First Aid Tips & Resources

First Aid Tips

First Aid App



Free to download





# PATIENT PORTAL



## myehealth

*Providing patients with secure access to their lab results*

Through *myehealth*, patients in British Columbia and Ontario will have secure Internet access to their lab results.

*Myehealth* offers a fast and secure method for patients to receive their results electronically. Once results are released from the performing lab, they're available online in *myehealth*. Excelsior uses secure technologies and procedures to help protect your information from unauthorized disclosure. *Myehealth* is a free service and is available in 4 languages.

British Columbia

Ontario

### Interested in *myehealth*?

- ▶ [BC Users Login](#)
- ▶ [BC User Registration](#)
- ▶ [FAQs](#)
- ▶ [View Demo](#)
- ▶ [User Questionnaire](#)


### Am I eligible to use *myehealth*?


To register you must:

- Be age 16 or older, or have received a Welcome Letter from Excelsior
- Have a BC Care Card number
- Have had lab work within the last 12 months
  - Lifelabs, Valley Medical Lab, BC Biomedical Laboratories
  - As an outpatient only at Vancouver Coastal Health, Providence Health, or Fraser Health


[About Us](#) | [Contact Us](#) | [Privacy Policy](#) | [Terms of Use](#)

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POWERED BY: 




Schedule




Message Doctor




Profile




Medications




Health Summary




Test Results



Account Balance &

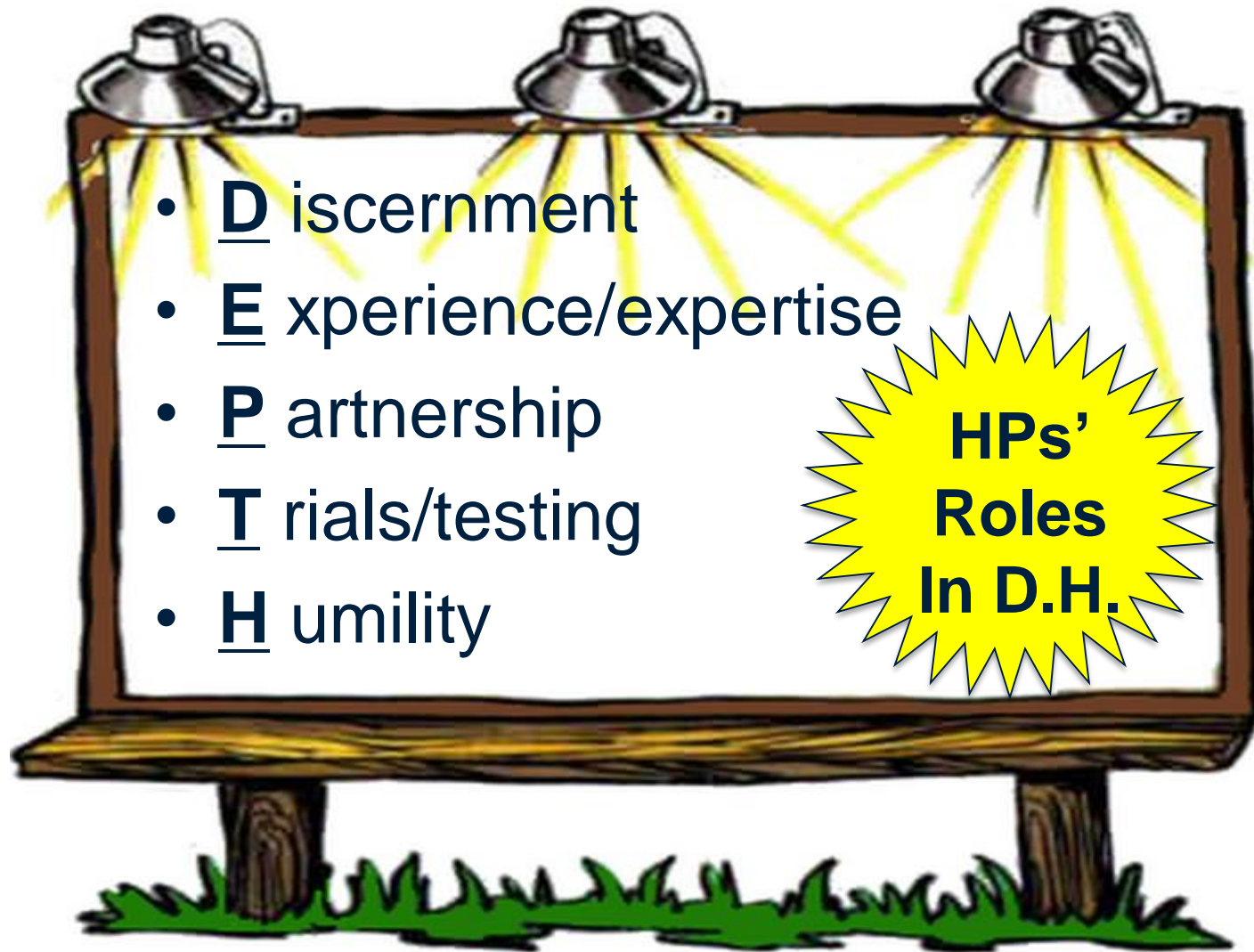


Devices & Vitals



Telemedicine





- Discernment
- Experience/expertise
- Partnership
- Trials/testing
- Humility

**HPs'  
Roles  
In D.H.**



#### OUR VISION

*Exceptional Emergency Care.  
Everywhere.*

#### OUR MISSION

*Sharing, supporting, and innovating to improve patient care.*

#### NETWORK MEMBERSHIP

As a member, you can join members-only discussions, comment on and curate clinical resources, and contact other members directly.

Membership is currently open to all physicians practicing emergency care in BC.

[Learn More](#)

[Register Now](#)

#### CLINICAL SUMMARY

### 1st Trimester Bleeding: Ectopic Pregnancy – Diagnosis



Dr. Genevieve Leduc-Robert  
October 16, 2020

#### DISCOVER OUR LINEUP OF PODCASTS





# APPS FOR PATIENTS

Recommended Apps to prescribe for your patients.

Check out [this handout](#) for patients on how to use Apps safely

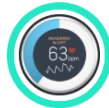


## First Aid by Canadian Red Cross

Lists common emergencies, how to initiate first aid, and when to go to ED for definitive management. Examples include: burns, asthma, myocardial infarction.

[Link to the app](#)

FREE



## Heart Rate by Azumio

Counts heart rate & shows short heart rhythm. For patients complaining of palpitations, but feelings don't occur in clinic/ED. Arrange for Holter monitor. Ask patient to capture a rhythm strip while feeling palpitations.

[Link to the app](#)

FREE



## Medical Dictionary by Farlex

Allows individuals to look up medications, how they work, general indications and common dosages, as a reference - not encouraged to use without consulting a health professional first.

[Link to the app](#)

FREE



## Medisafe

Helps track list of medications. Individuals can enter the pills they take using names, shapes and colours, and time of day to take them. Includes an alarm reminder.

[Link to the app](#)

FREE



## Mindshift by Anxiety BC

Provides info about anxiety & depression and tools to help relax. Helps track anxiety to start to associate and educate about situations that may trigger anxiety.

[Link to the app](#)

FREE



## MyFitnessPal

Tracks total calories and % of carb, fat, or protein. Useful for patients presenting with allergic reactions with a suspicion of food allergy; track food intake, and see if symptoms correlate with certain foods eaten.

[Link to the app](#)

FREE



## P.A.C.E Concussion

Provides an interactive, evidence-based tool to help parents/kids with concussion recognition and recovery. (iPhone, Android Coming Soon!)

[Link to the app](#)

FREE



## Sleep Time by Azumio

Measures movements while sleeping; detecting whether patient is awake, in light sleep, or in deep sleep. Has alarm clock to stimulate you out of deep sleep into light sleep before wake time.

[Link to the app](#)

FREE

# BCEmergencyNetwork.ca





### Anxiety BC

Online, self-help, and evidence-based resources on anxiety and anxiety disorders.

[Link to site](#)



### Canadian Diabetes Association

Information and resources for people with diabetes (recipes, exercise plans, etc.).

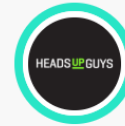
[Link to site](#)



### Canadian Liver Foundation

Provides information and resources on liver disease.

[Link to site](#)



### Heads Up Guys

Health strategies for managing and preventing depression for men. A UBC initiative.

[Link to site](#)



### HealthLinkBC

Provides access to non-emergency health information and advice in British Columbia. Includes some EM-relevant patient handouts.



### Heart & Stroke Foundation

Resources on heart disease, stroke and healthy living.

[Link to site](#)



### MedlinePlus

Synthesizes information on various topics (diseases, conditions, and wellness issues) into evidence-based lay language.

[Link to site](#)



### Pain BC

Provides resources for patients dealing with chronic pain: self management tools and contact information for support groups. Also has education and tools for health care providers.

[Link to site](#)

# BCEmergencyNetwork.ca



## CALL TO ACTION: WHAT CAN HEALTH PROFESSIONALS DO?

- Individual: e.g. digital health skills?
- Practice/clinic: e.g. prescribe app/web?
- Organization: e.g. virtual care?
- Community: e.g. Digital Health literacy?







THE UNIVERSITY OF BRITISH COLUMBIA

## Faculty of Medicine

Rural Coordination  
Centre of BC



doctors  
of bc

Joint Standing Committee on Rural Issues (JSCI)



First Nations Health Authority  
Health through wellness



Providence  
HEALTH CARE

How you want to be treated.



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MEDICINE NETWORK



THE UNIVERSITY OF BRITISH COLUMBIA

Department of Emergency Medicine  
Faculty of Medicine



BC AHSN  
British Columbia  
Academic Health Science Network