

Virtual Health Grand Rounds:
**PEDIATRIC REAL TIME VIRTUAL
SUPPORT (RTVS)
OR
CHILD HEALTH ADVICE IN REAL-
TIME ELECTRONICALLY
(CHARLiE)**

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23rd April 2021 | 0800–0900



THE UNIVERSITY OF BRITISH COLUMBIA

Continuing Professional Development

Faculty of Medicine

Rural Coordination
Centre of BC



LAND ACKNOWLEDGMENT

We acknowledge that we work on the traditional, ancestral and unceded territory of the Skwxwú7mesh (Squamish), x^wməθkwəyəm (Musqueam), and Səlílwətaʔ/Selilwitulh (Tsleil-Waututh) Nations and on the traditional, unceded territory of the Lheidli T'enneh First Nation



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PRESENTER DISCLOSURES

Names: David Wensley and Kirsten Miller

Relationships with commercial interests: none



MITIGATION OF BIAS

No industry bias

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LEARNING OBJECTIVES

- Introduction to Pediatric Real Time Virtual Support (RTVS)
- Outline of support provided to rural and remote practitioners
- Peer to Peer support for isolated Specialists



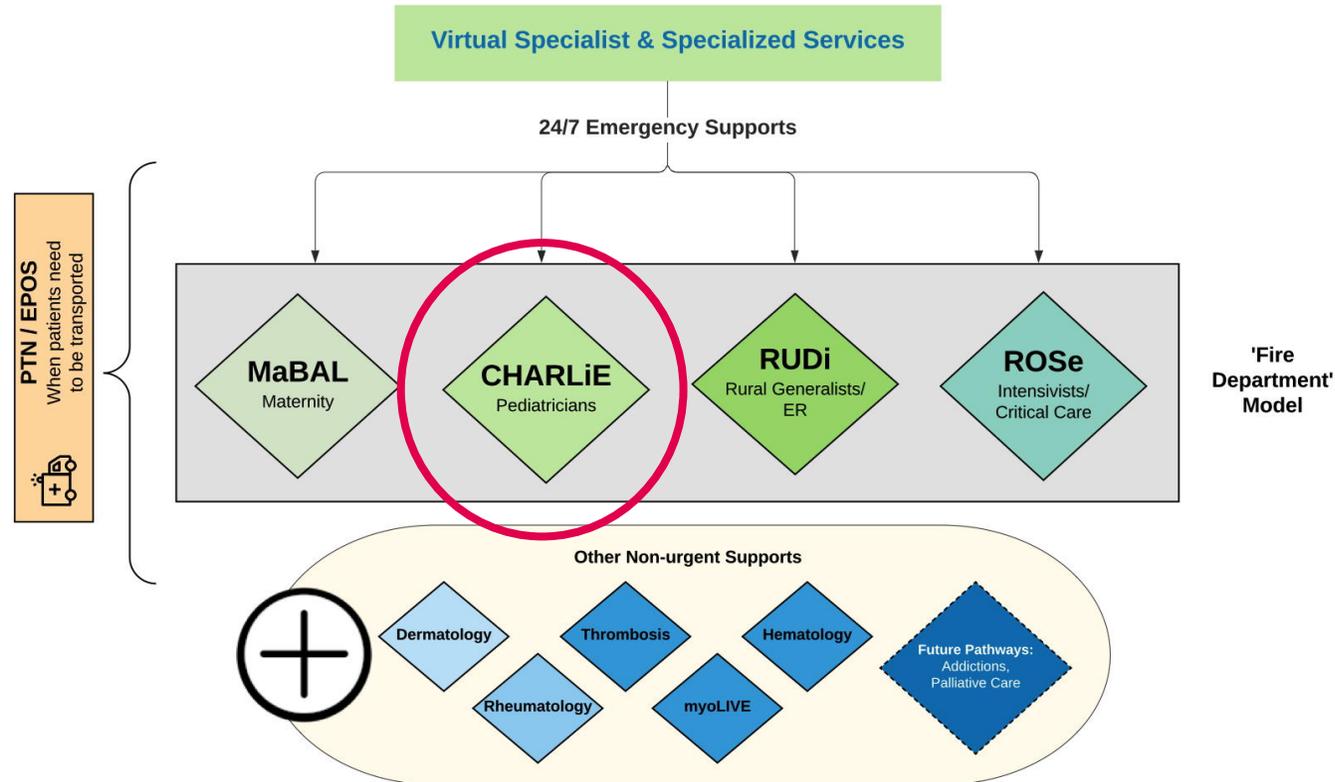
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Real Time Virtual Support (RTVS) pathways for providers

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First Nations and Rural Real-Time Virtual Support (RTVS) - **Providers**



! All pathways are meant to work with the provincial referral pathway and care teams

Version 10-06-20

For up-to-date information, visit:
rccb.ca/rtvs

Introducing CHARLiE

- Child Health Advice in Real-time Electronically
- Launched July 1, 2020, 9 months ago
- Providing 24/7 on-demand peer-to-peer support to rural/remote BC healthcare providers dealing with urgent pediatric cases
 - Support also includes providing a second opinion, reviewing a case, helping to navigate the healthcare system, and providing collaborative support.
- 19 Virtual Physicians working 12 or 24-hour shifts
- Utilizing Zoom videoconferencing and shared MOIS EMR

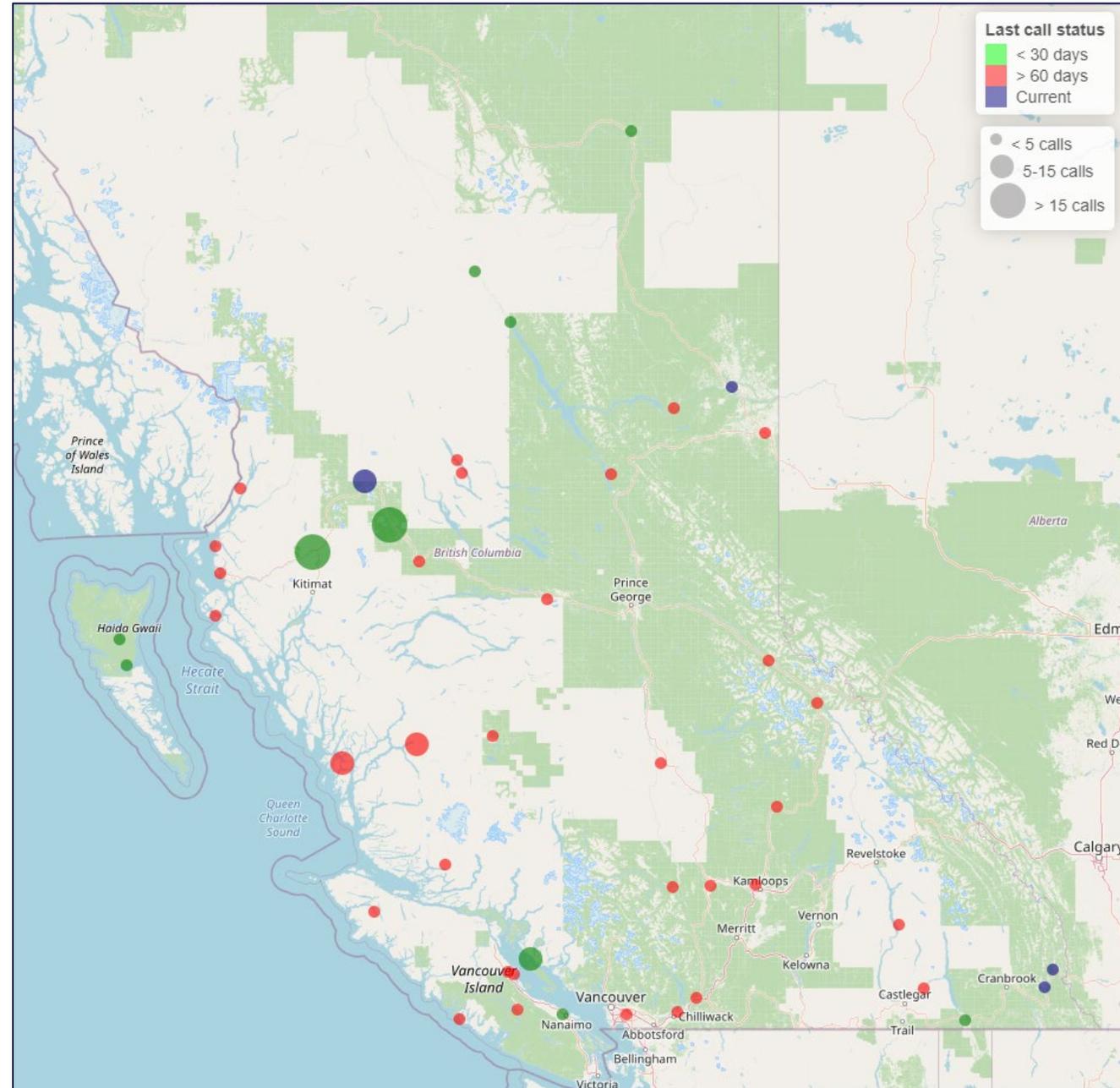
Call Volumes

- 39% increase over past 4 months
- 75% of calls are for clinical support (vs. education or test calls)
- 78% of calls use Zoom video (vs. audio only)
- Average call length = 23 minutes
 - *Some consultations can be 1-2 hours long*



BC Communities Accessing CHARLiE

- 47 different communities utilizing CHARLiE
- Most frequent:
 - Smithers, 35 calls
 - Terrace, 32 calls
 - Hazelton, 15 calls
 - Powell River, 13 calls



Medical Problems Supported

- Head injury in a 3 year old, --- determining whether to monitor in community or transport for CT scan
- Advising treatment for hemarthrosis in a child with hemophilia
- Poor weight gain in an infant
- Seizure management in infants
- ? Epiglottitis
- Neonate w/ fever and complex history: *“Great use of CHARLiE. The ER doc who called is part of RUDi and a strong advocate of the CHARLiE line.”*

Case Breakdown	%
• Neonates	26
• Trauma	15
• Mental Health	11
• Rash (including cellulitis)	10
• Seizures / neurological	9
• Abdominal	9
• Urinary Tract	6
• Other	14

Collaboration

- HEiDi, RUDi, and MaBAL VPs connect with CHARLiE for pediatric advice
 - e.g., Tylenol overdose in 2 children; query erythema multiforme
- And vice-versa, CHARLiE VPs connect to RUDi, MaBAL, ROSe, and other services for support/planning: e.g.
 - planning community home birth with midwife
 - BCCH Endocrinology to support in-community treatment of DKA
 - COMPASS BC to support Child and Youth Mental Health (i.e. assess safety of stimulant medication)
- Education to rural and remote providers
 - Simulation: 2 Pediatric simulations, 2 more planned in next 2 months.
 - Resuscitation courses: NRP course taught – more to follow.
 - Rural Family Practice Residency program: Pediatric teaching.
- Integration with Neonatal and Pediatric transport services and BCEHS Patient Transport Network.

CHARLiE – Peer to Peer Specialist support

- Rural/Isolated Pediatrician support
 - Support for Terrace Pediatricians
- New practitioner support
 - Peer to peer support for isolated Pediatricians – working with SPRUCe

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Terrace-specific Findings

- Terrace providers are one of the highest frequency users of CHARLiE
 - *“I think CHARLiE is critical at supporting not only rural primary care providers but also at offloading some work from rural pediatricians, many of whom are burnt out and overworked.”*
- Example cases:
 - COMPASS call for mental health patient
 - Supporting infant with head injury
 - Leg trauma from fall
 - 1-hour mental health consultation
 - >1-hour consultation for status seizures

Perspectives: CHARLiE VP's

- *“I was again reminded of how much video images add to my ability to provide support. Being able to see the team, the monitor and the patient made supporting clinical decisions about medications and interventions much easier.”*
- Long, extensive work required on many consultations: e.g., infant with bloody stool involved multiple calls from community ER, to neonatologist and PTN
- *“Doing a 'teaching' RTVS call was great!”*
- *“It has provided an opportunity to develop a community to support practitioners in rural and remote communities, but as an urban specialist practitioner it has helped me to understand challenges faced by patients and practitioners in rural areas and I hope to respond these more effectively.”*
- VPs note some ongoing problems with technology: e.g., handling simultaneous calls, charting in MOIS.

Perspectives: End-User Providers

- *“I can't express enough how grateful I am as a relatively new practice physician in rural BC to have CHARLiE and all the lines and tools that have been rolled out.... Very quickly these supports have been very integrated to how I practice in the clinic and Emerg. Access to these services in the nick of time has changed outcomes.”
--- Rural GP*
- *“Thank you for providing this service to our vulnerable communities!”*
- *“Great to have a second set of eyes managing unstable patients.”*
- *“RTVS is a fantastic service that has been a long time coming and really needs to stay. RTVS will improve recruitment and retention of rural doctors, which will benefit many patients; good to have peace of mind to be able to call a non-judgmental colleague for support” ---
Rural GP*

Thank You!

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First Nations Health Authority
Health through wellness



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Joint Standing Committee on Rural Issues (JSC)



We gratefully acknowledge financial support from the Rural Coordination Centre of BC, the Joint Standing Committee on Rural Issues, BC Academic Health Sciences Network, and UBC Department of Emergency Medicine through the Emergency Medicine Network, and the Ministry of Health