

Building Equitable Parkinson's Care Across BC: Lessons from the Interior

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THE UNIVERSITY OF BRITISH COLUMBIA

Centre for Chronic Disease Prevention and Management
Faculty of Medicine



Interior Health

Territorial Acknowledgment





Speaker honorarium: Abbvie
**Consulting: Canadian Agency for Drugs
& Technologies in Health (CADTH)**

Images:

- unsplash.com
- personal photos
- source noted on slide

Presenter Disclosure

Purpose



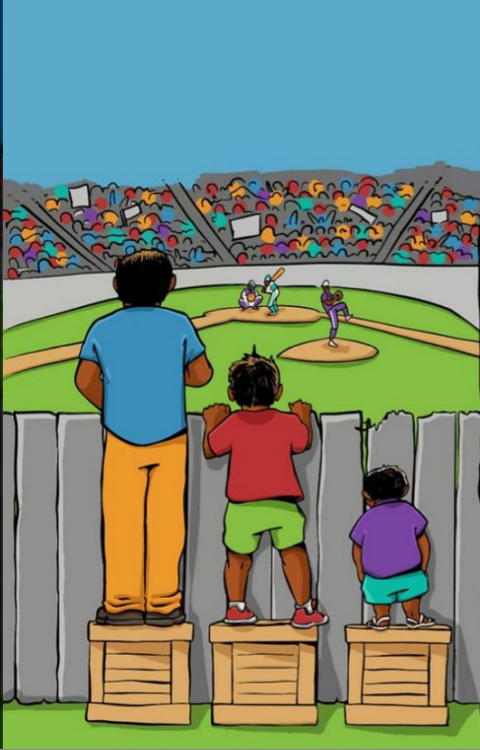
Reflection

Acceptance

REALITY



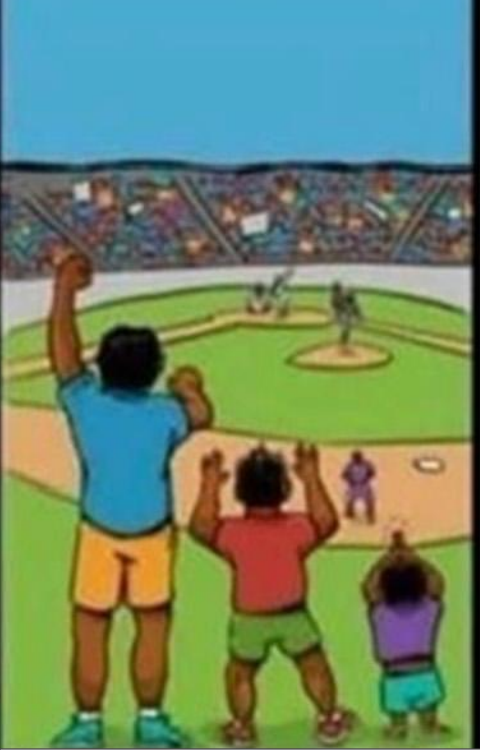
EQUALITY



EQUITY



JUSTICE



SOME GET MUCH MORE OR LESS THAN NEEDED

SAME SUPPORTS FOR ALL

EVERYONE GETS THE SUPPORT THEY NEED

CAUSE OF INEQUITY / SYSTEMIC BARRIER REMOVED

The game: Access to care, services, support

NUMBERS GAME

POCKET-SIZED

SCOREBOOK

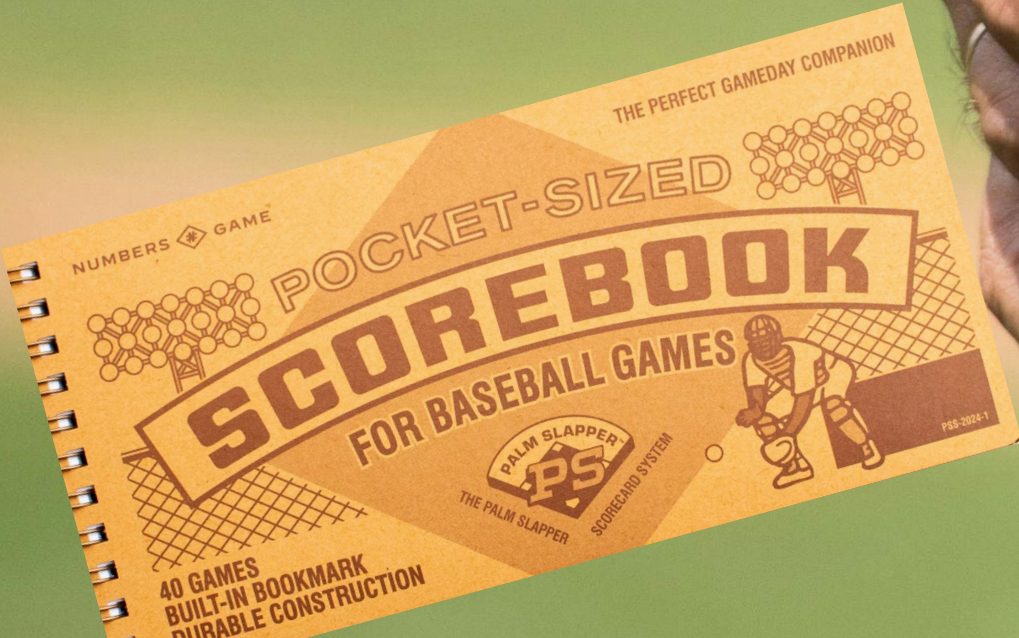
FOR BASEBALL GAMES

THE PERFECT GAMEDAY COMPANION

40 GAMES
BUILT-IN BOOKMARK
DURABLE CONSTRUCTION

THE PALM SLAPPER
PS
SCORECARD SYSTEM

PSS-2024-1



People with PD

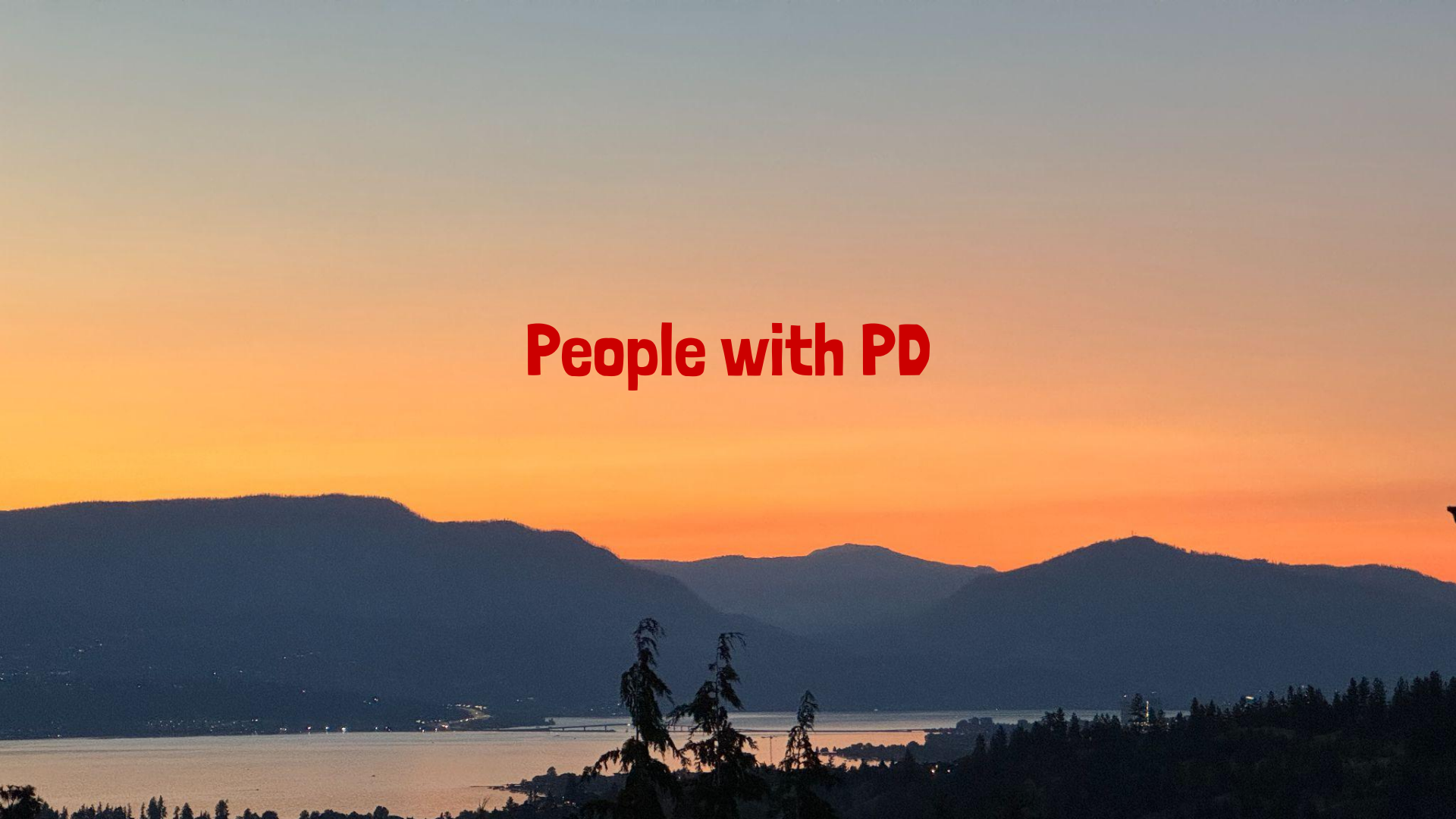
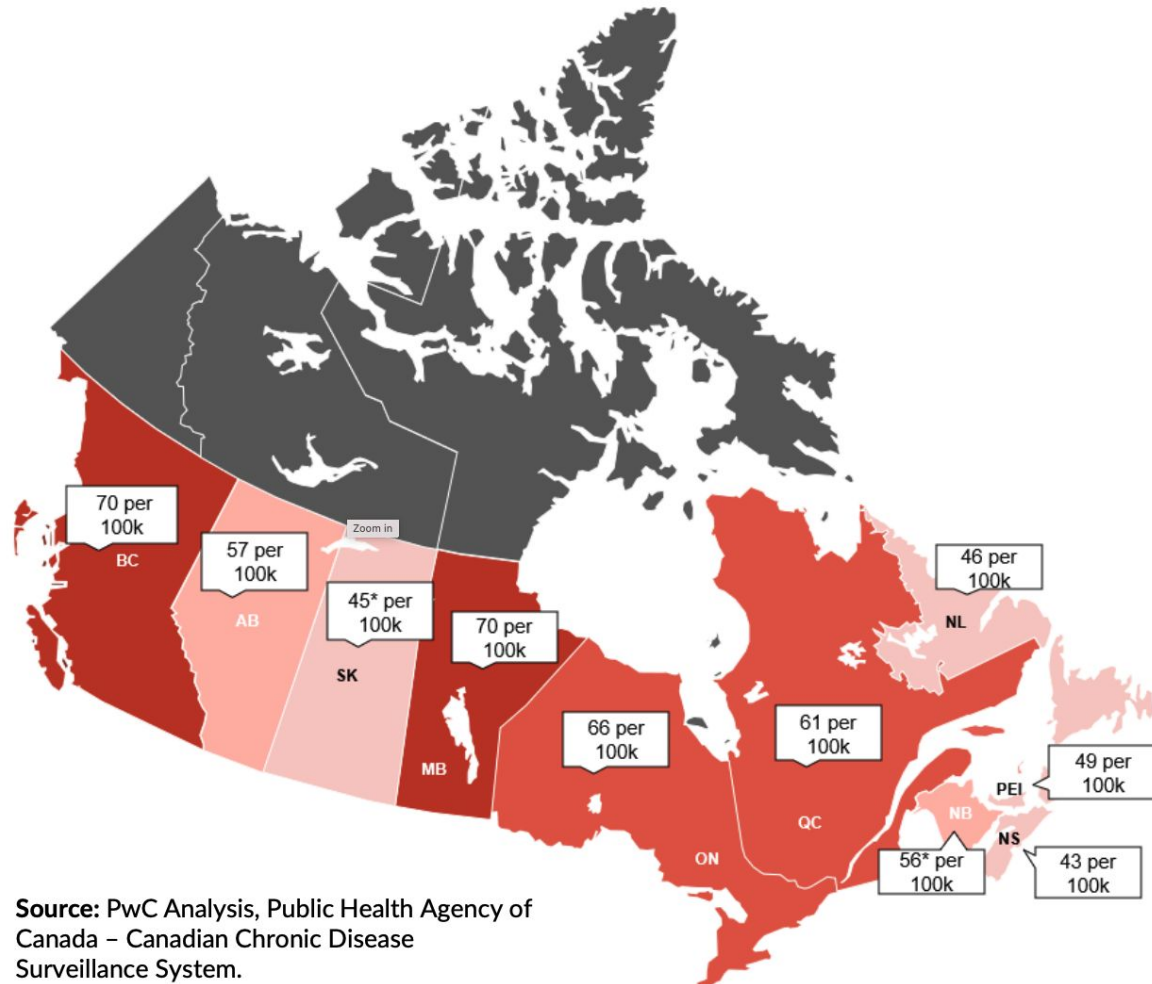


Figure 4: Parkinson's **incidence** by province, 2021



Incidence

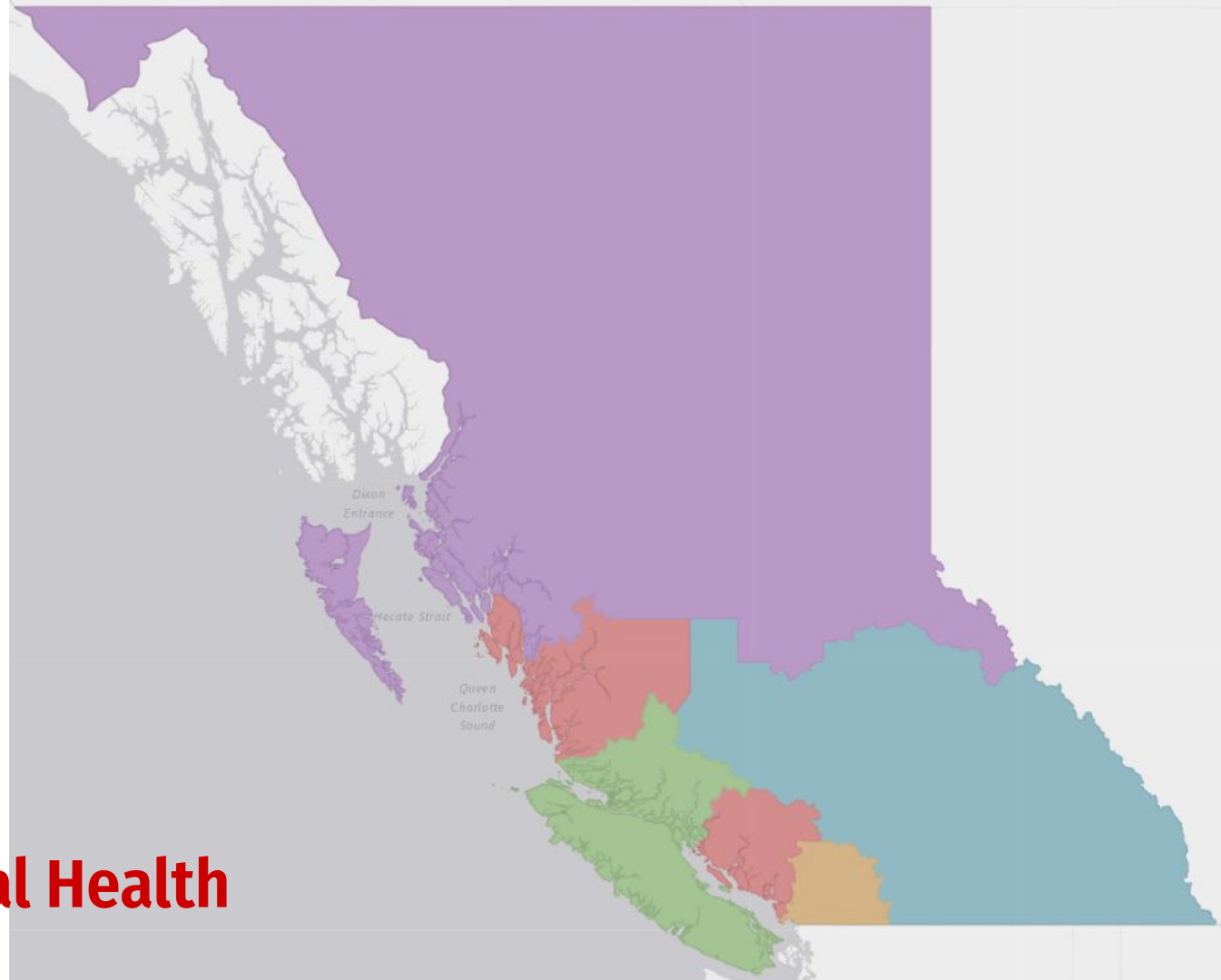
number of new cases in a population / time

Prevalence

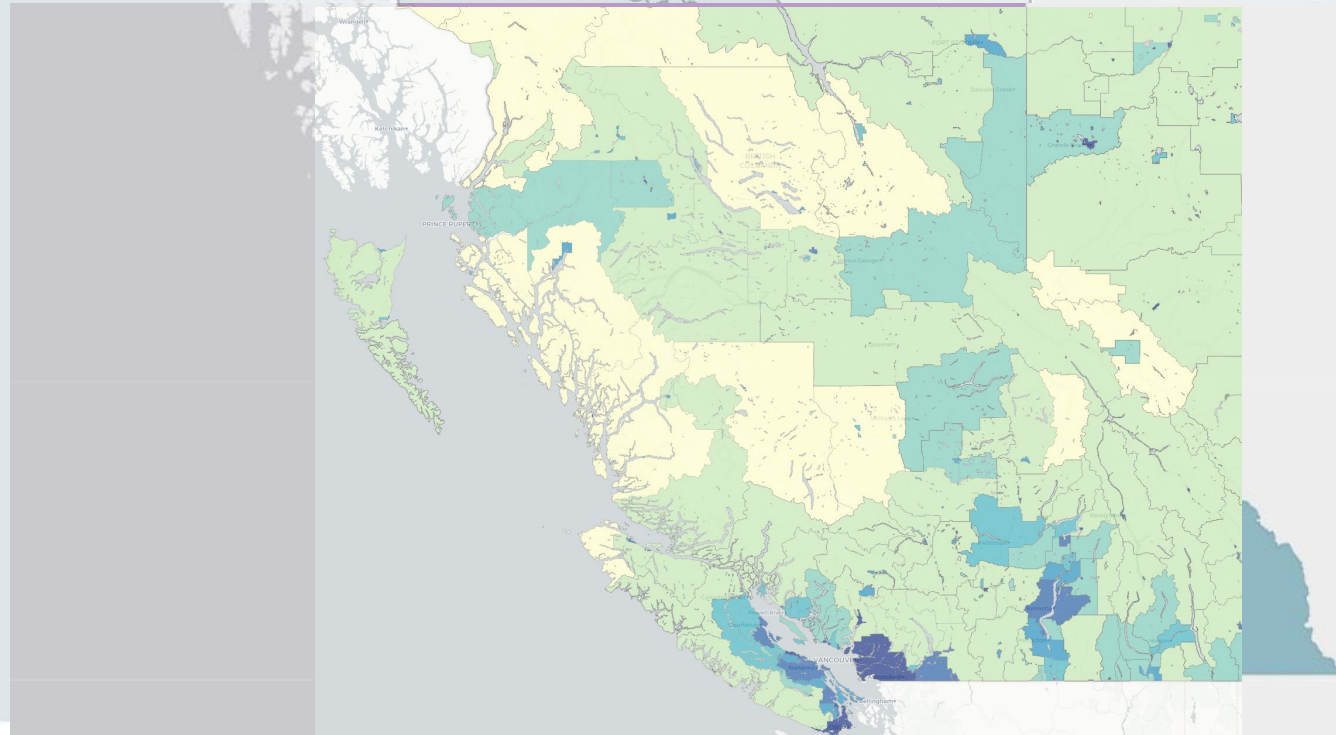
total number of cases in a population

Source: PwC Analysis, Public Health Agency of Canada – Canadian Chronic Disease Surveillance System.

Northern Health
Island Health
Interior Health
Fraser Health
Vancouver Coastal Health



2021 Census: Median Age



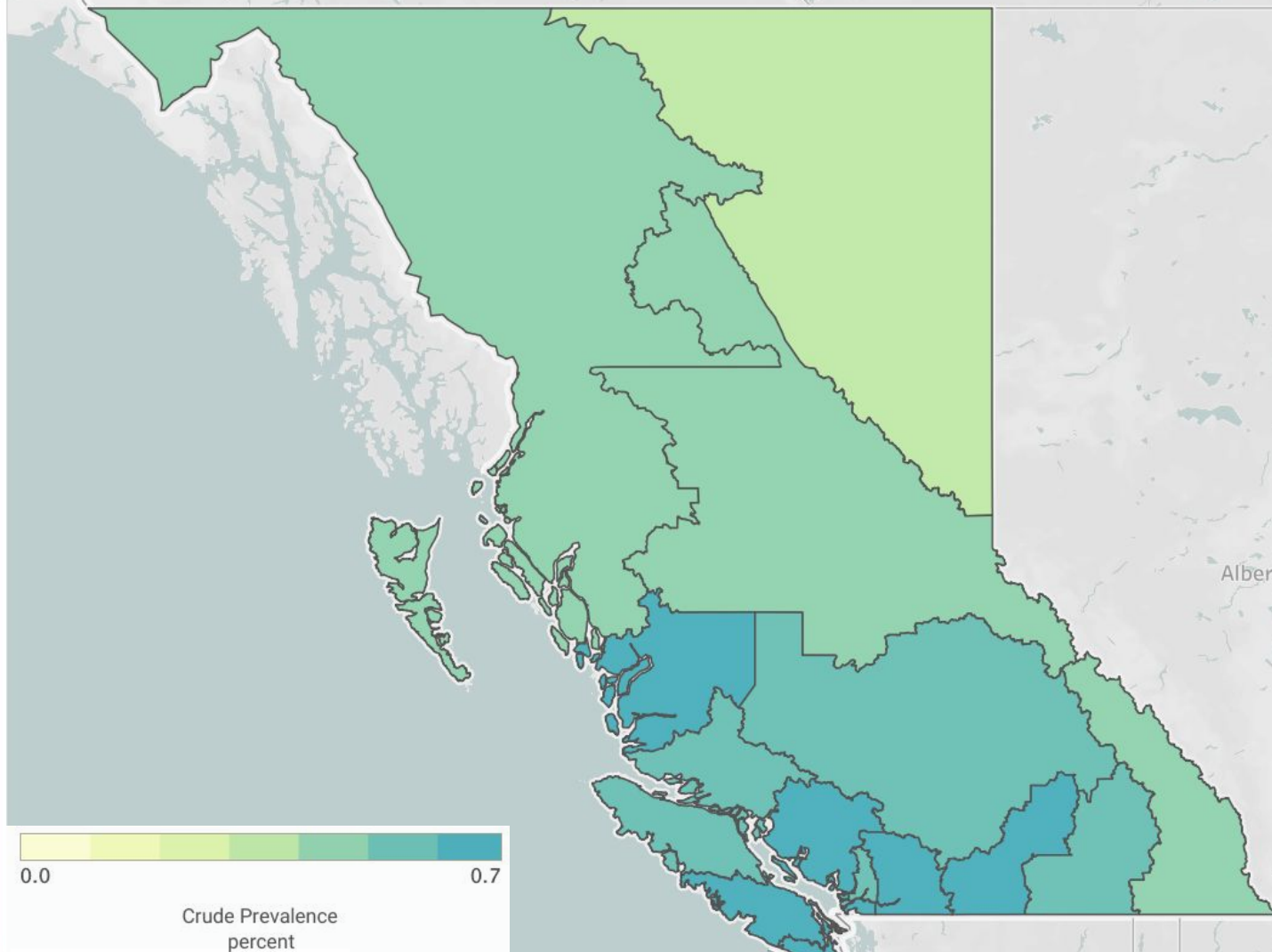
Prevalence of Parkinsonism 2022/2023

Incidence

number of new cases
in a population / time

Prevalence

total number of
cases in a population



Prevalence of Parkinsonism 2022/2023

Northern
Island
Interior
Fraser
Coastal
BC

627

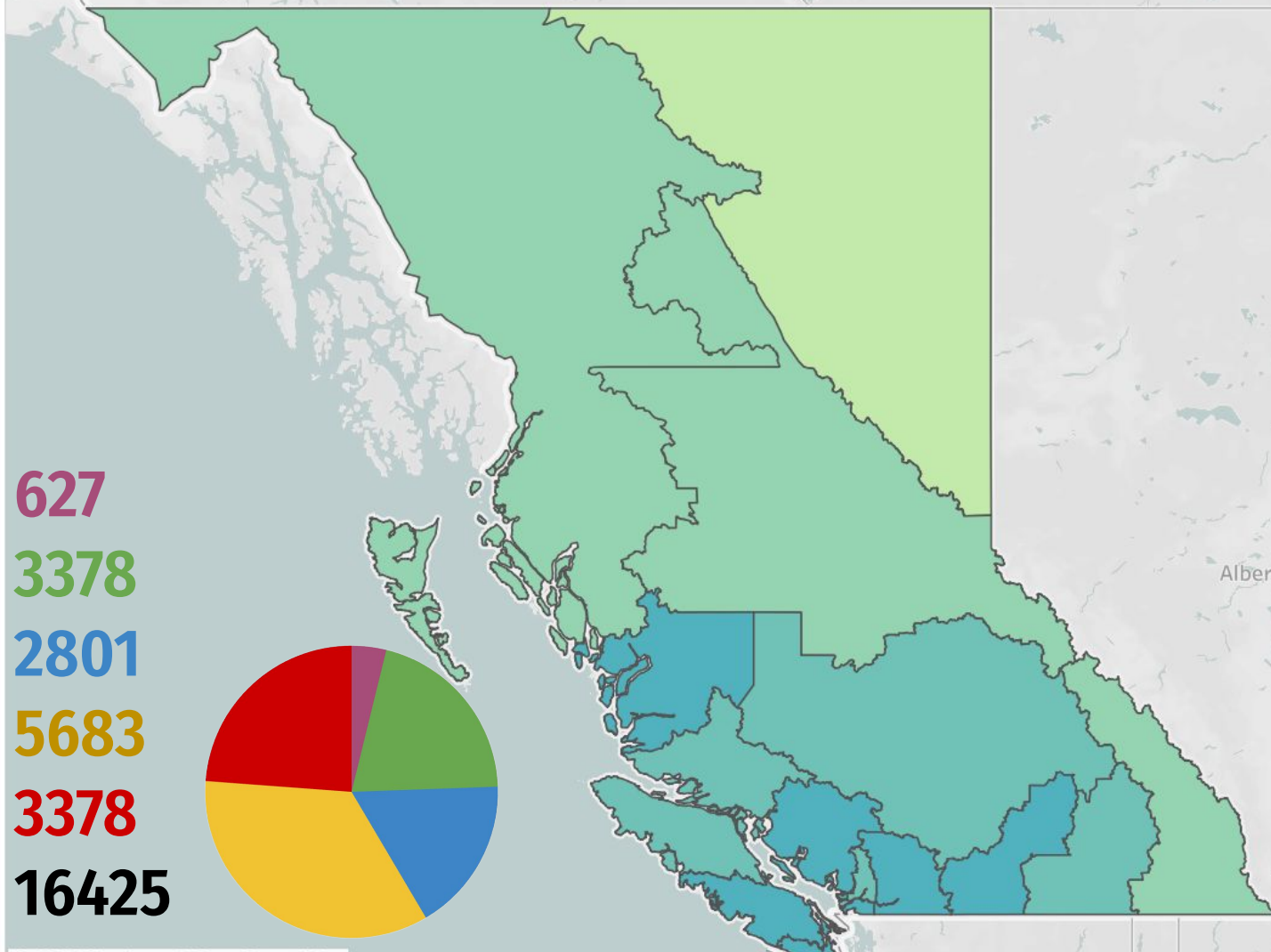
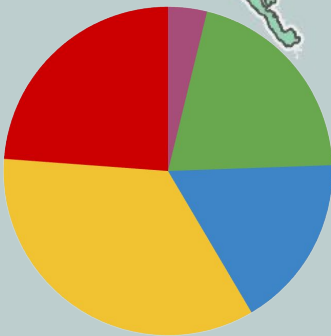
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2801

5683

3378

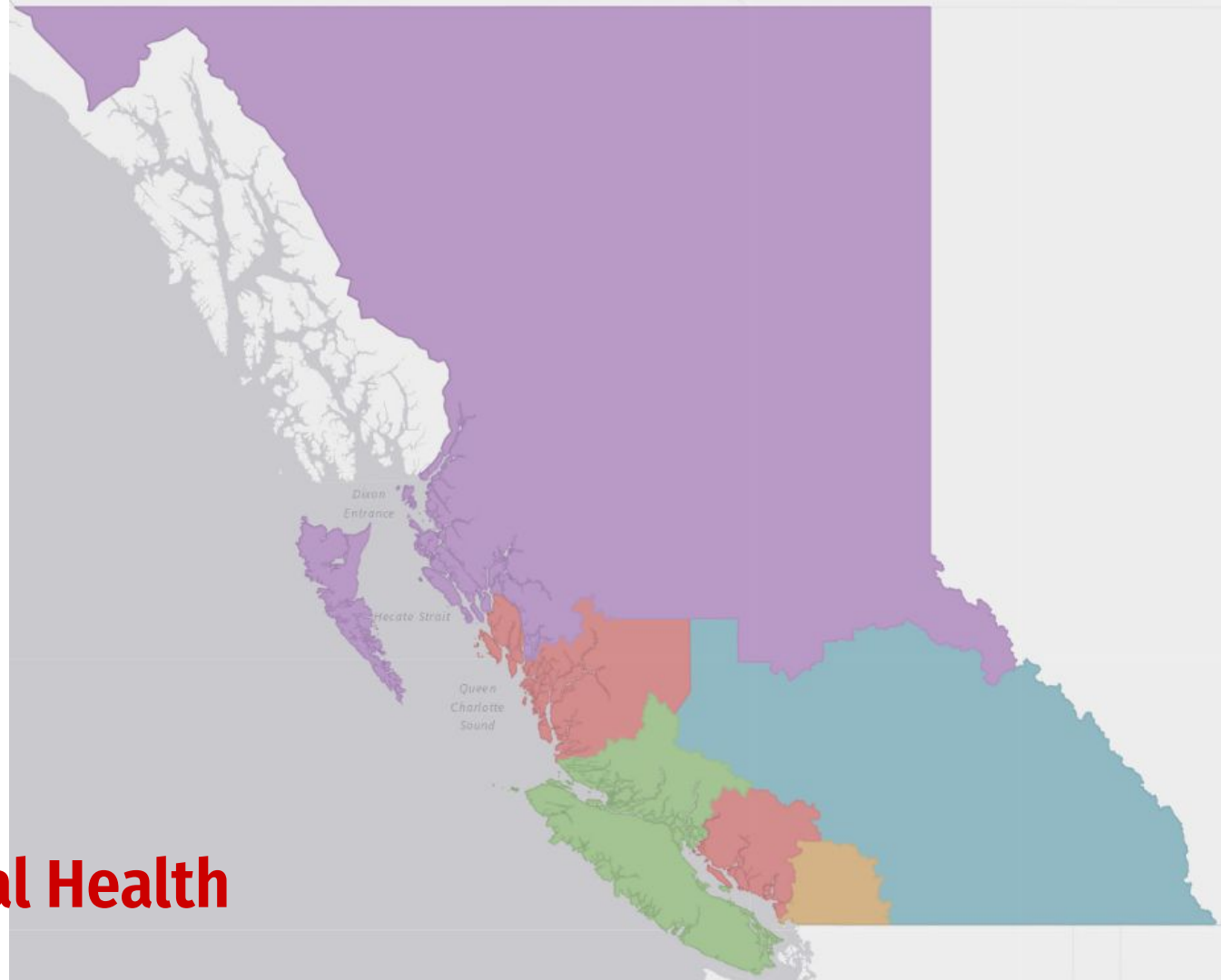
16425



Specialist practices



Northern Health
Island Health
Interior Health
Fraser Health
Vancouver Coastal Health

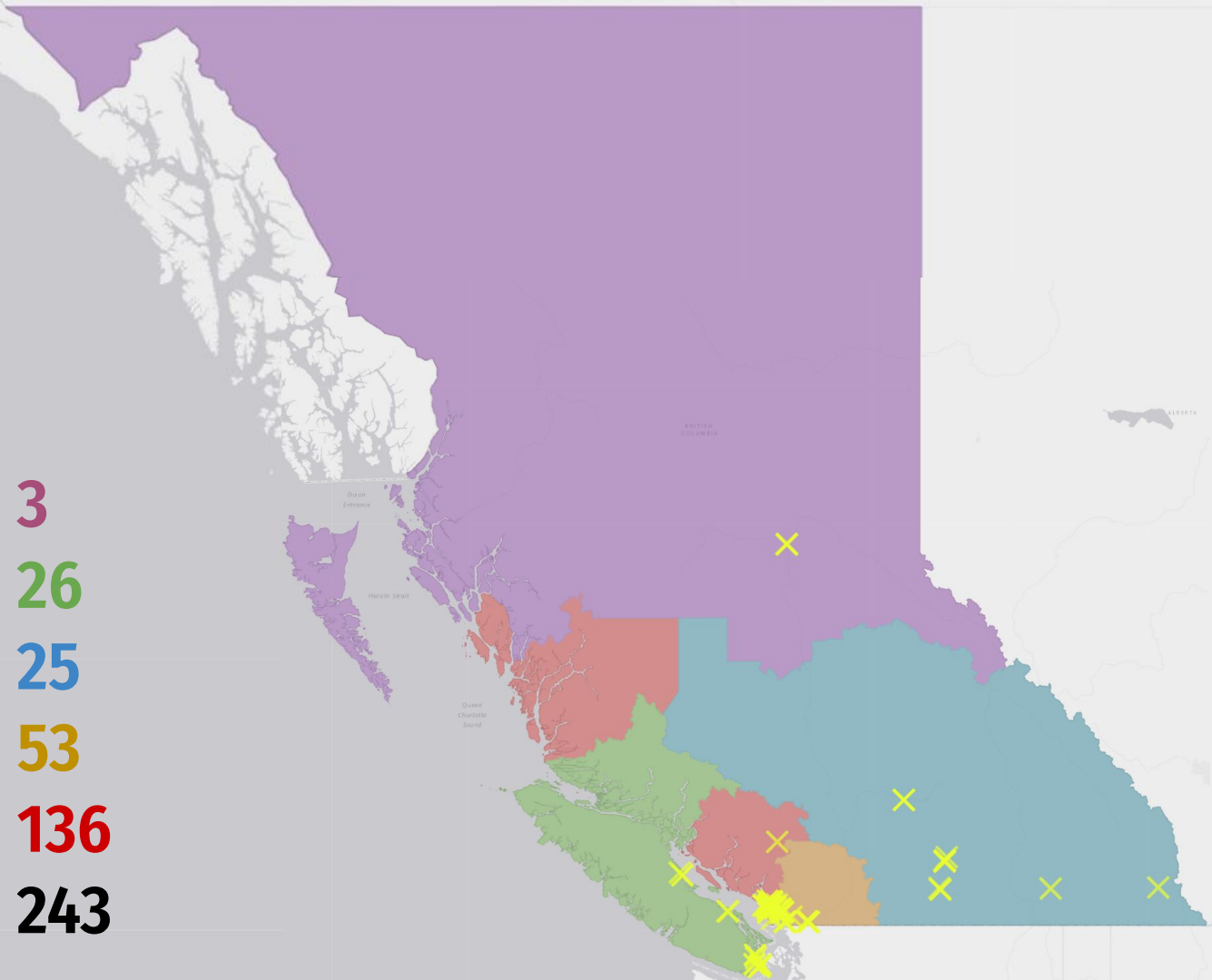


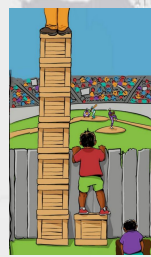
Neurologist Practice Registrants CPSBC

Geocoded September 2024 (DW)
iMapBC

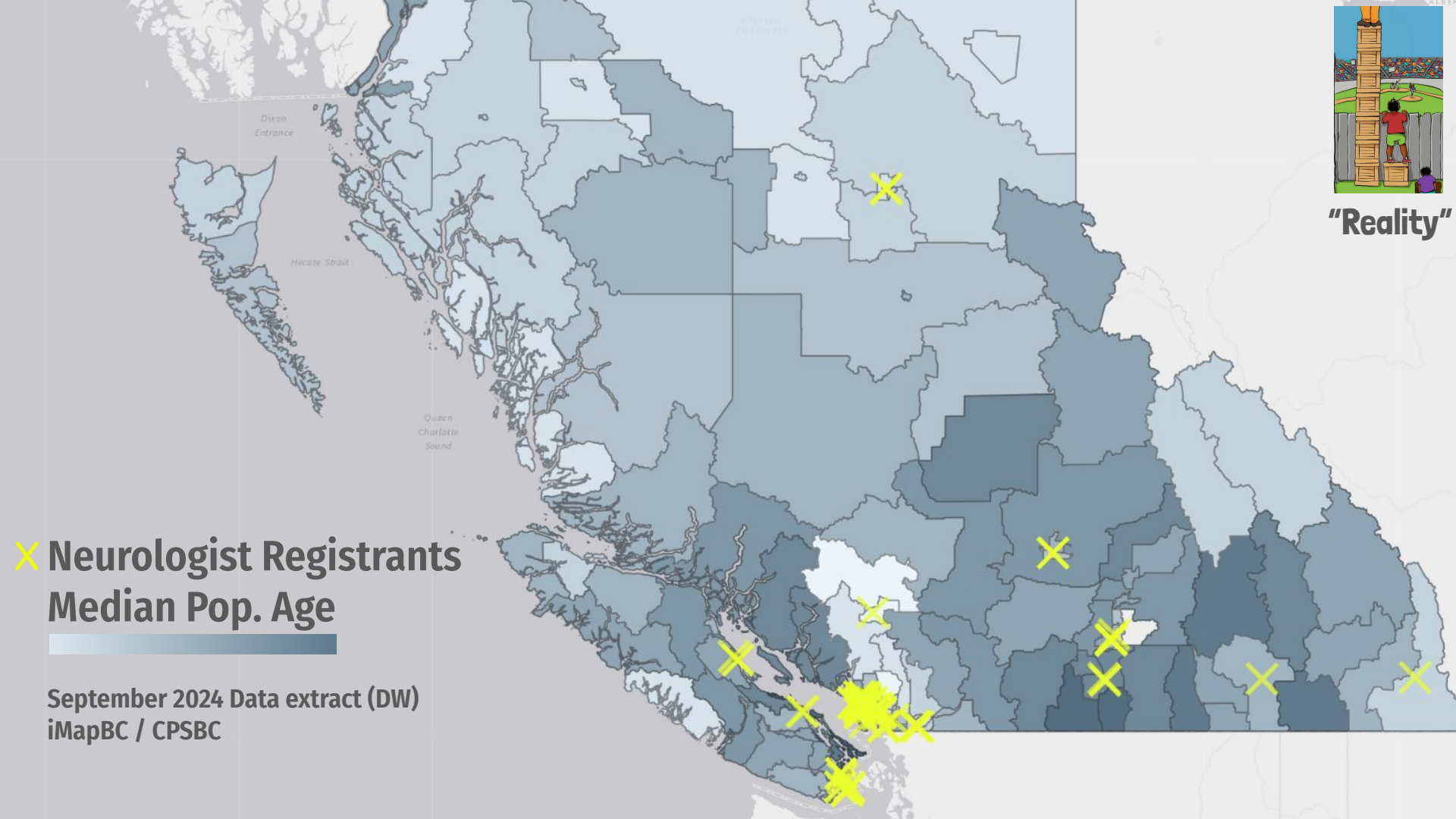
Northern
Island
Interior
Fraser
Coastal
BC

3
26
25
53
136
243





"Reality"



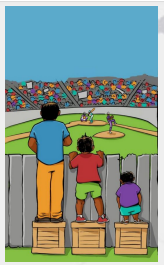
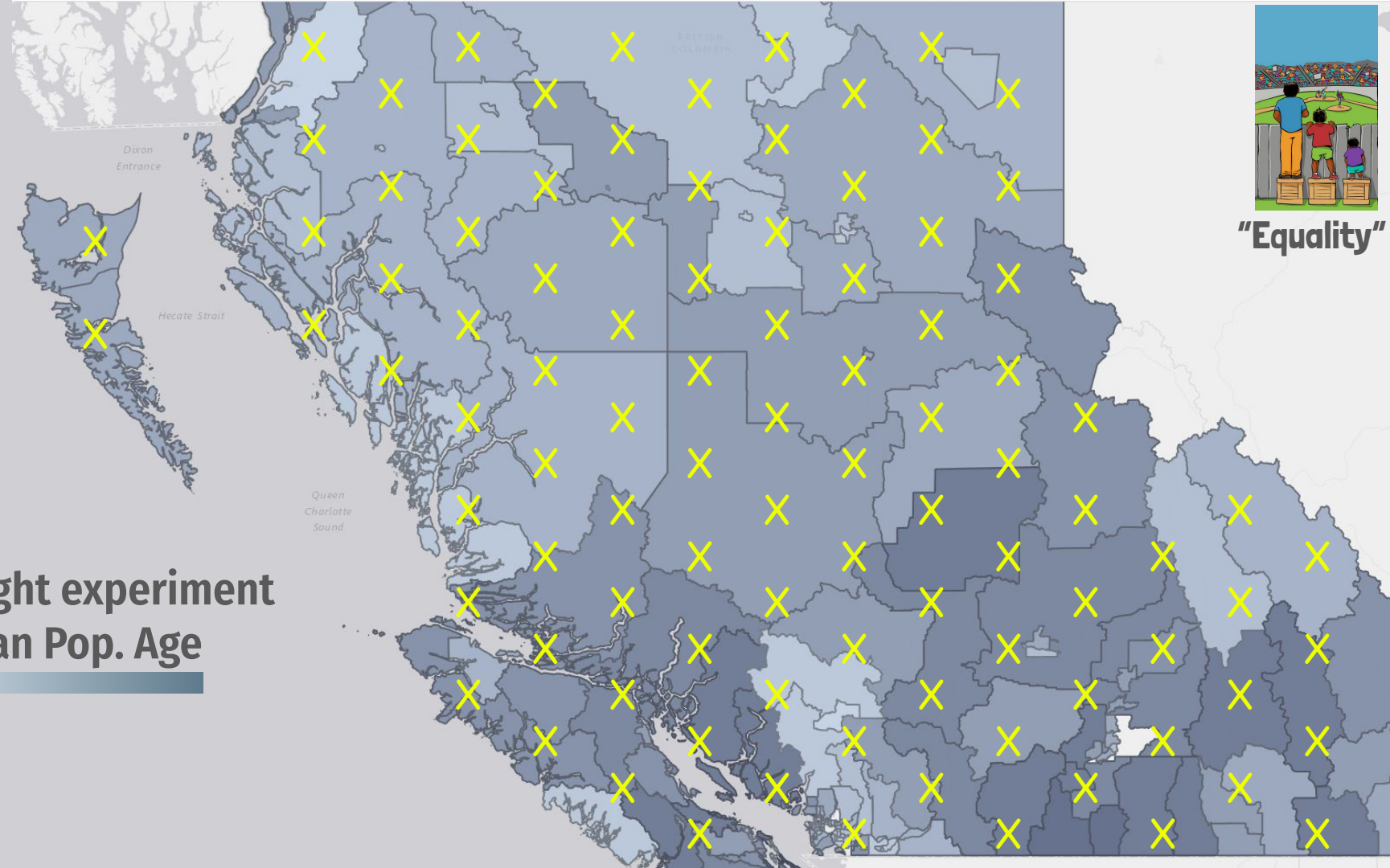
X Neurologist Registrants
Median Pop. Age

September 2024 Data extract (DW)
iMapBC / CPSBC

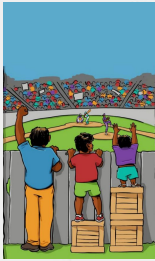
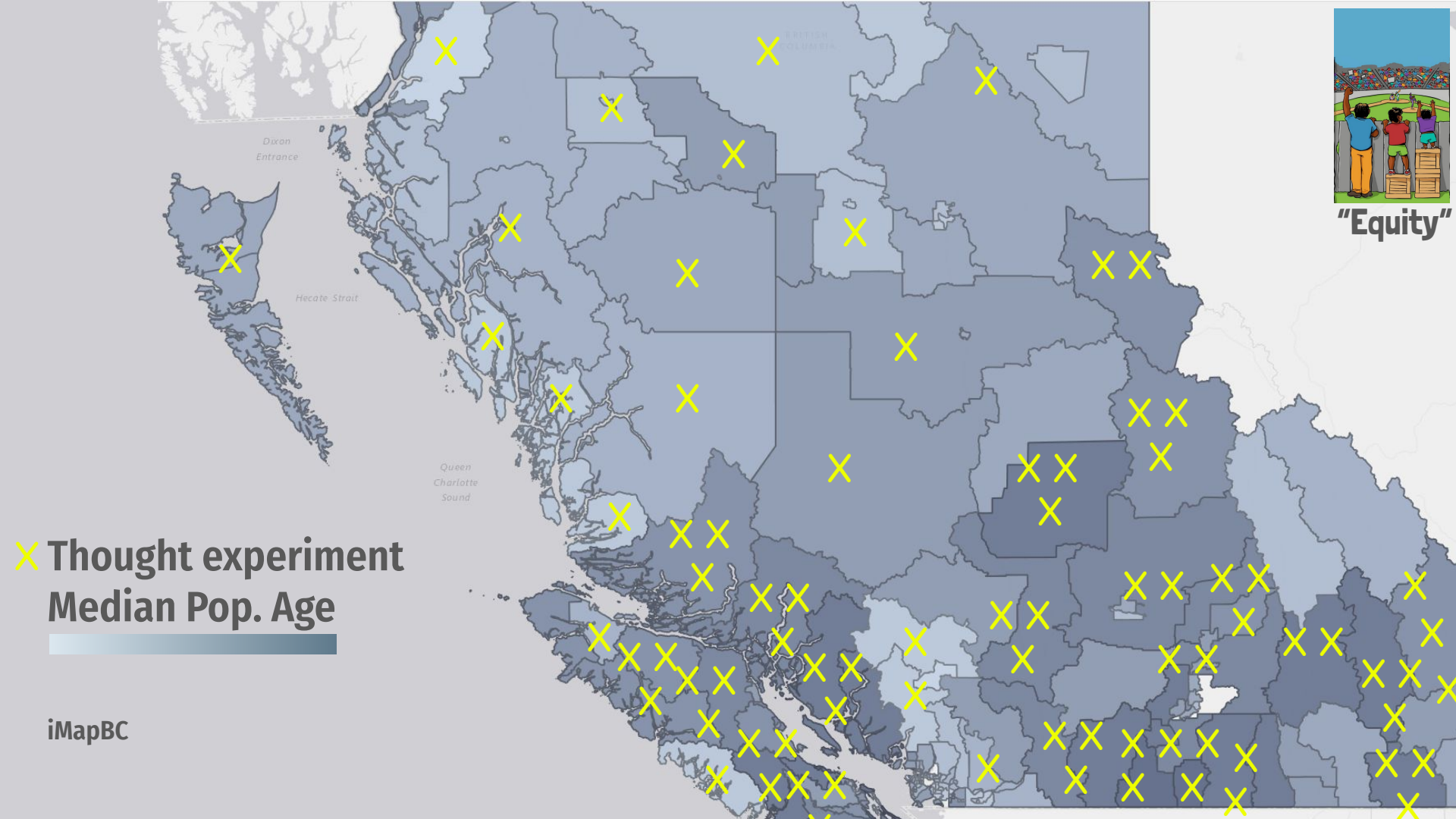
**X Thought experiment
Median Pop. Age**



iMapBC



"Equality"



"Equity"

X Thought experiment
Median Pop. Age



iMapBC

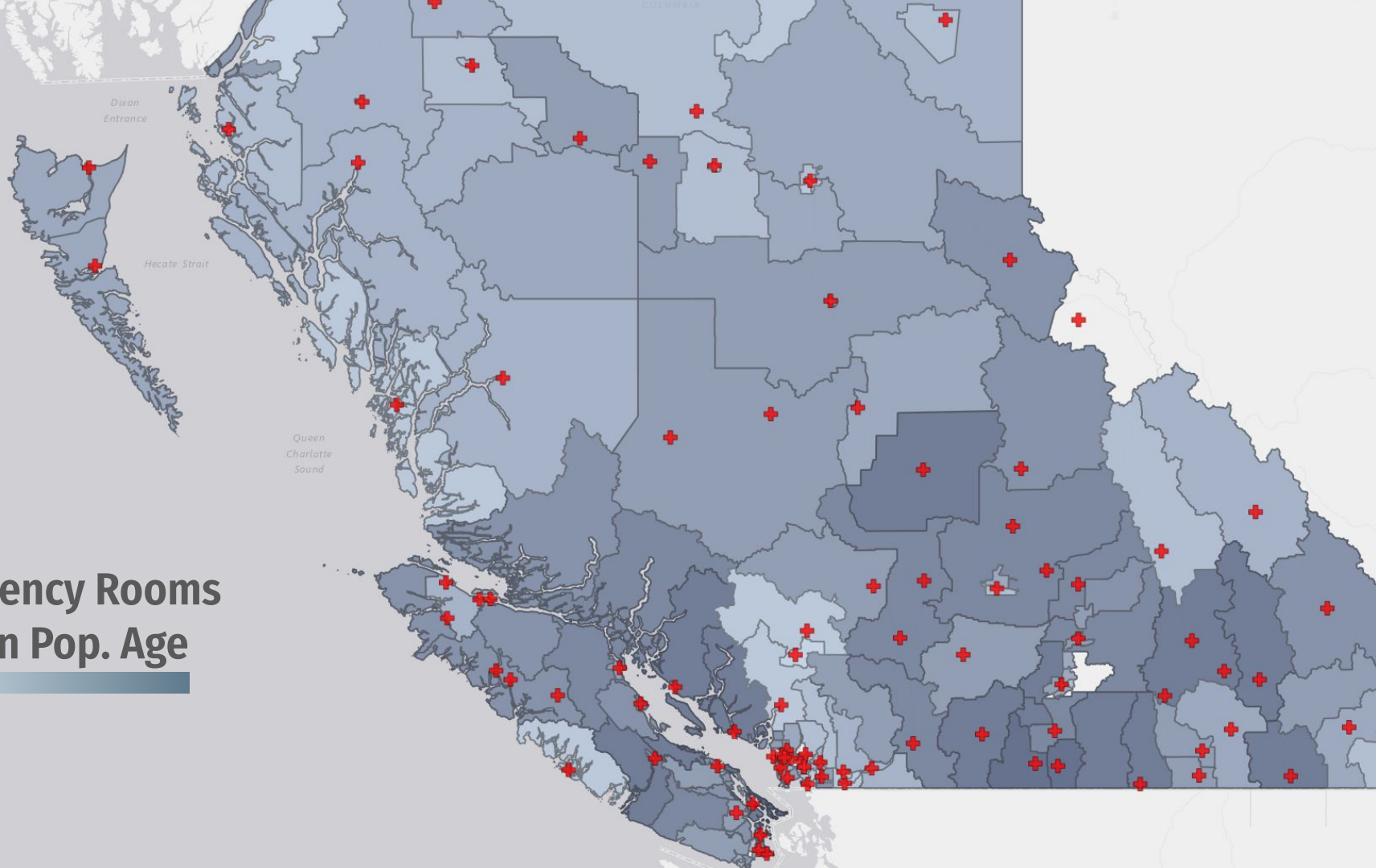
Clinical Services

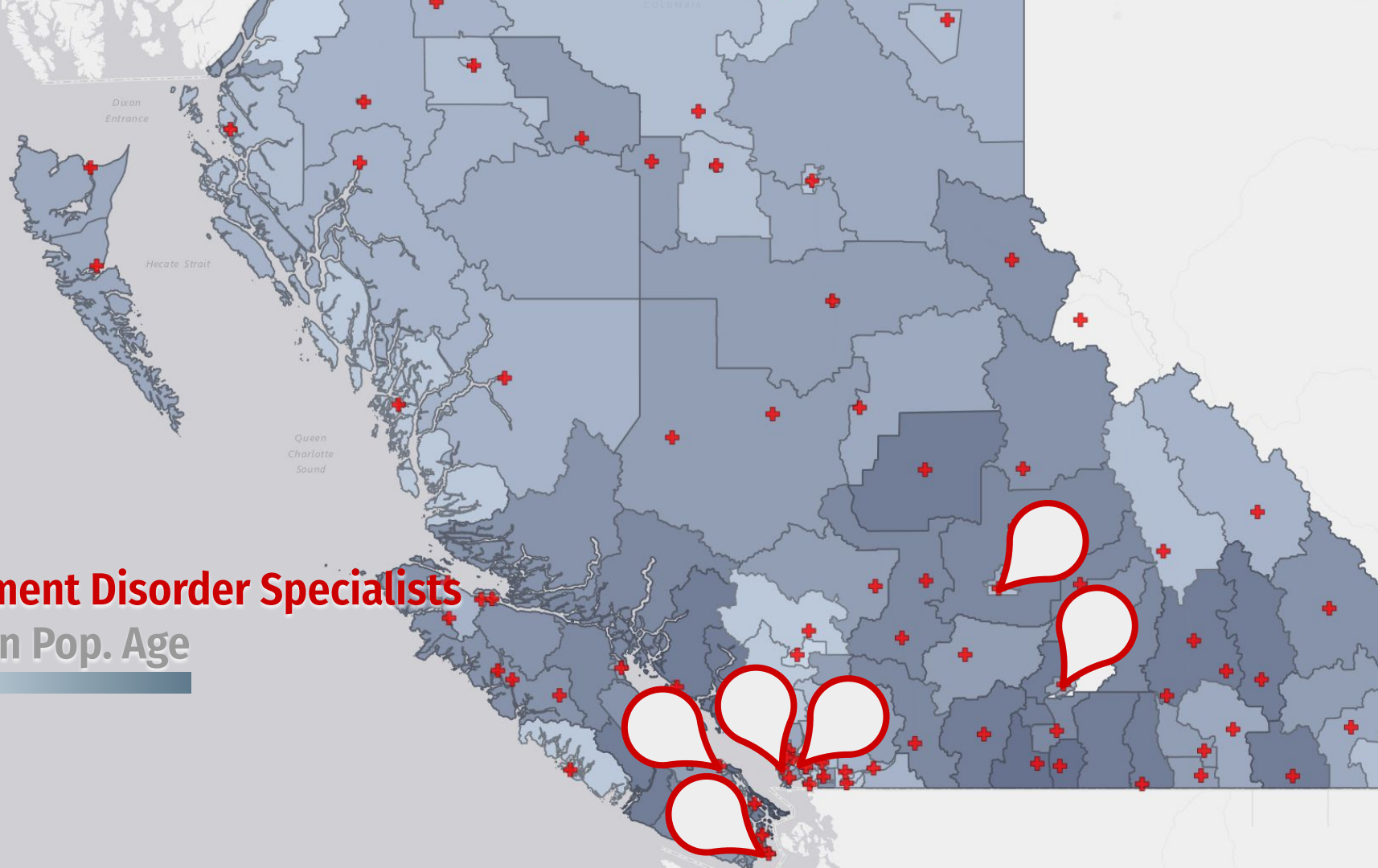


Emergency Rooms Median Pop. Age



iMapBC





Movement Disorder Specialists

Median Pop. Age



Implementation

Canadian guideline for Parkinson disease

David Grimes MD, Megan Fitzpatrick MSc, Joyce Gordon BSc, Janis Miyasaki MD, Edward A. Fon MD, Michael Schlossmacher MD, Oksana Suchowersky MD, Alexander Rajput MD, Anne Louise Lafontaine MD, Tiago Mestre MD, Silke Appel-Cresswell MD, Suneil K. Kalia PhD, Kerrie Schoffer MD, Mateusz Zurowski MD, Ronald B. Postuma MD MSc, Sean Udow MD, Susan Fox PhD, Pauline Barbeau MSc, Brian Hutton PhD

■ Cite as: CMAJ 2019 September 9;191:E989-1004. doi: 10.1503/cmaj.181504



Clinical **monitoring** and **medication** adjustment (e.g. medical care)



Physical therapy for those with **balance or motor function** problems



Speech and language therapy for **communication/swallowing** problems

Consideration of occupational therapy, dietitian referral

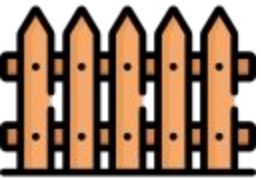


Table 3: Share of people living with Parkinson's that use various health services
As reported in the survey for 2023

The Economic Burden of
 Parkinson's in Canada

	Canada n = 1,397	BC n = 220
Medical doctor (e.g., general neurologist, geriatrician, general practitioner)	77%	82%
Movement disorder specialist (neurologist specializing in Parkinson's)	54%	65%
Physiotherapist	39%	43%
Massage therapist	21%	27%
Occupational therapist	17%	13%
Speech and language therapist	17%	20%
Mental health professional (counselor or therapist)	14%	21%
Dietician	8%	6%
None of the above	5%	4%

Source: PwC-Léger Survey, PwC Analysis



Barrier: Staffing

Upcoming events



- Physicians
- Nurses
- Nurse practitioners
- Allied health professionals

Register now: Informational webinar series for U.S. health-care professionals

U.S. health-care professionals interested in working in British Columbia, Canada are invited to participate in profession-specific webinars hosted by Team BC and health system partners as follows:

Sign up today to get access to webinar registration →

Informational webinar series

Profession	Date/Time (PST)
Nurses	May 13, 10:00 – 11:30 AM
	May 14, 12:00 – 1:30 PM
Physicians	May 20, 10:00 – 11:30 AM
	May 21, 12:00 – 1:30 PM
Nurse practitioners	May 29, 11:00 AM – 12:30 PM
Allied health professionals	Depending on interest. Sign up to receive updates.

up to a year's wait for speech and language pathologist, mom told

B.C. falling behind in early intervention, organization says more training needed

Maryse Zeidler - CBC News

dated: June 27, 2024



Barrier: Cost

Physiotherapists
 Last updated on January 1, 2020

Only those MSP beneficiaries with supplementary benefits status qualify for MSP covered physiotherapy services. To verify a patient's eligibility for these benefits, use the Telep...



Table 7: Use, out-of-pocket spending and share covered by insurance or third party for different rehabilitation services
 Average, as reported in the survey for 2023

Rehabilitation services	Share of respondents using these services (n=1,397)	Number of visits	Out-of-pocket spending	Share covered by insurance or third party
Speech and language therapist	17%	7 (n=210)	\$80 (n=185)	60% (n=178)
Physiotherapist	39%	12 (n=502)	\$435 (n=423)	60% (n=457)
Massage therapist	22%	9 (n=295)	\$630 (n=260)	50% (n=270)
Occupational therapist	18%	4 (n=215)	\$50 (n=198)	70% (n=195)
Mental health professional	15%	6 (n=191)	\$360 (n=166)	70% (n=166)
Dietician	8%	3 (n=106)	\$30 (n=97)	60% (n=91)



Barrier: Cost

Figure 7: Out-of-pocket spending for medical equipment and home modifications

For those reporting a need for equipment and home modifications. Average, as reported in the survey for 2023

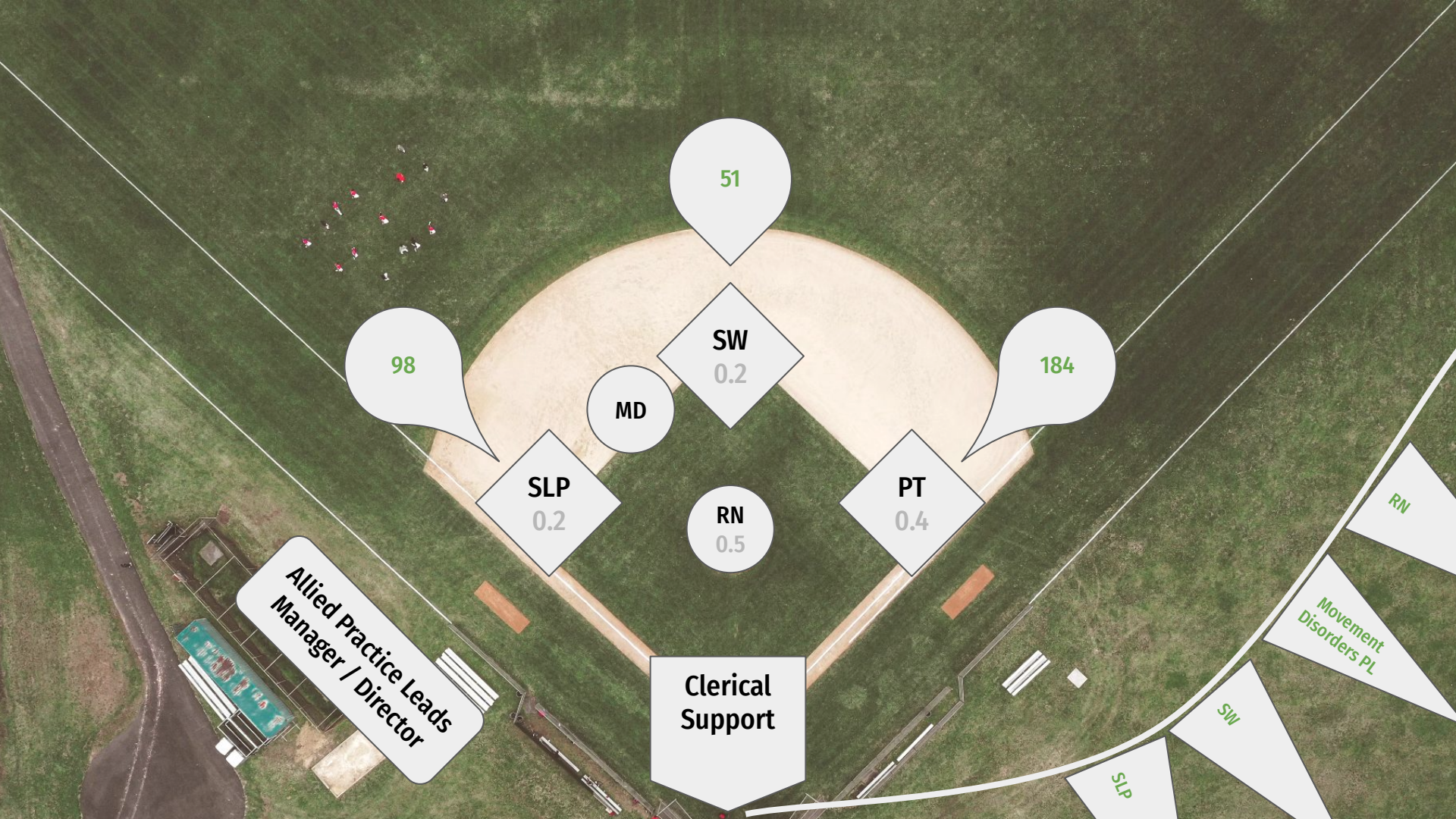


Source: PwC-Léger Survey, PwC Analysis

4.1.3 Insurance coverage for people living with Parkinson's

With respect to insurance coverage, survey results show that insurance is covering 74% of direct medical-related costs such as medications. Insurance covers in the 13-34% range for medical equipment, devices, aids, nurse or support worker, etc. Insurance covers less than 10% of the secondary costs related to living with Parkinson's, such as home modifications and home assistance services.

74%	of costs were covered for medications
34%	of costs were covered for adaptive equipment
33%	of costs were covered for nursing or personal support worker
28%	of costs were covered for communication aids
15%	of costs were covered for remote monitoring devices
13%	of costs were covered for long-term care
8%	of costs were covered for home modifications
7%	of costs were covered for additional specialized care services in long-term care
4%	of costs were covered for home assistance services



51

SW
0.2

MD

RN
0.5

SLP
0.2

PT
0.4

98

184

Allied Practice Leads
Manager / Director

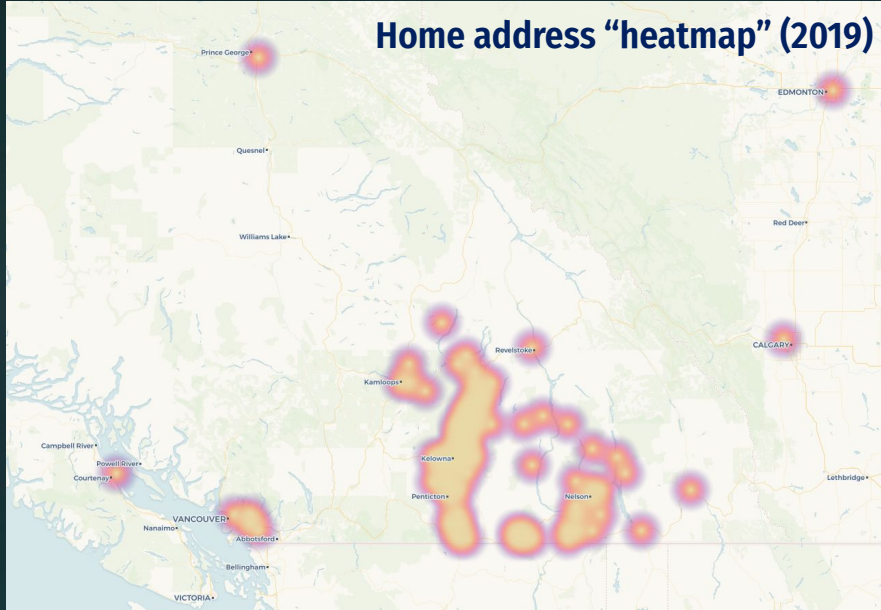
Clerical
Support

RN

Movement
Disorders PL

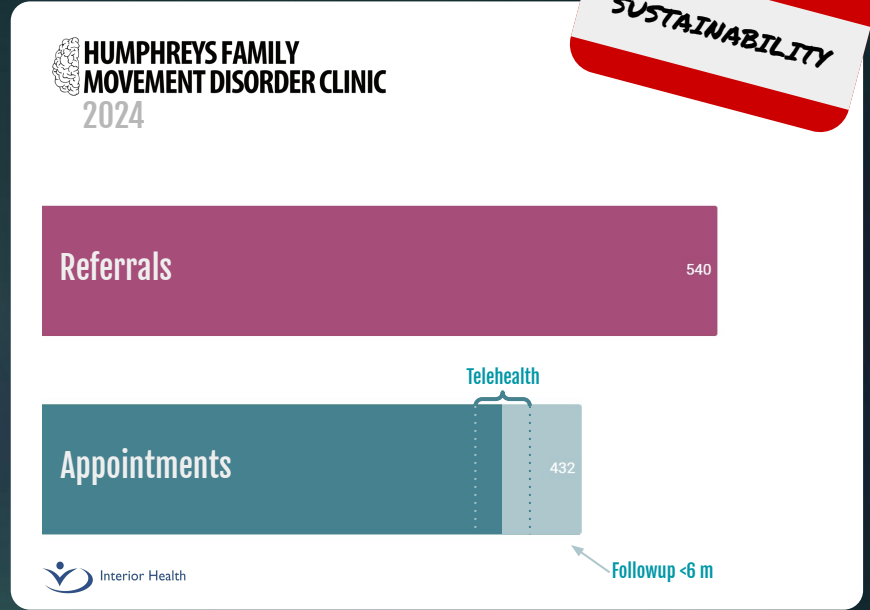
SW

SLP



Average travel: 76 km

Driving time: 65 min





Approaches to Care Gaps



- Allows primary care access to specialist advice
- Separate from hospital on-call service groups
- Providence Health Care (Partners: PHSA / VCH)
- Funding: Doctors of BC and Shared Care

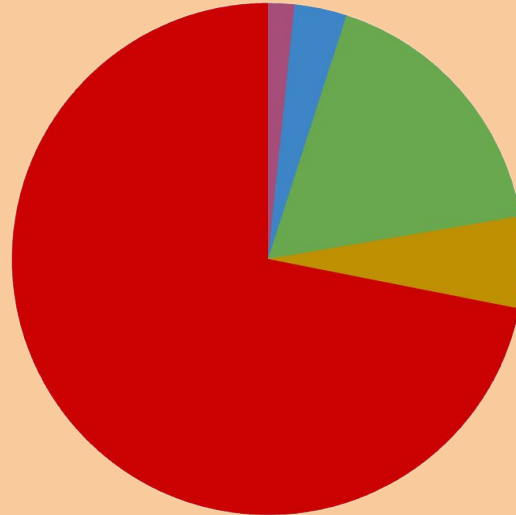
Specialty Areas

Provincial Vancouver Fraser Valley Region Vancouver Island Northern Specialties

• Parkinson's Disease and Other Movement Disorders

Usage 2024: 121 calls

Northern	2
Island	21
Interior	4
Fraser	7
Vancouver Coastal	87



ance in Dying Advice

ee Health

medical termination of Pregnancy Advice

(see List of Specialty Areas for more

disease and Other M

icine and Rehabilitt

Adult Eating Disord

Geriatric

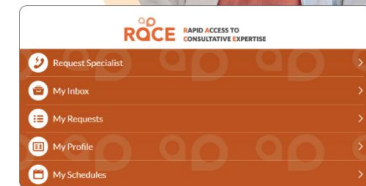
Perinatal

• Rheumatology – Pediatric

• Sexual Assault Service

• Sexually Transmitted Infection Service

• Sleep Disorders Service





Barrier: Capacity

Resources & Support ▾ Ways to Give ▾ Get Involved ▾ Events ▾ About Us ▾



Parkinson Canada
CareFinder

Resources & Support

Our friendly and knowledgeable staff is committed to offering support, sharing reliable information, and providing education for people with Parkinson's, caregivers, and healthcare professionals.



Speech and Hearing BC

About Us ▾ Learn ▾ Professionals ▾

Professional

For Physios ▾ Membership ▾ Continuing Education ▾



Find Physiotherapy in BC



Pathways™

Public Directories



Medical Care Directory

Information about doctors and medical clinics in British Columbia.

[Go to Medical Care Directory](#)



Community Service Directory

Publicly available services and programs, in participating communities.

[Go to Community Services](#)



ASK ME!
SUSTAINABILITY

SET TARGETS

SET BOUNDARIES

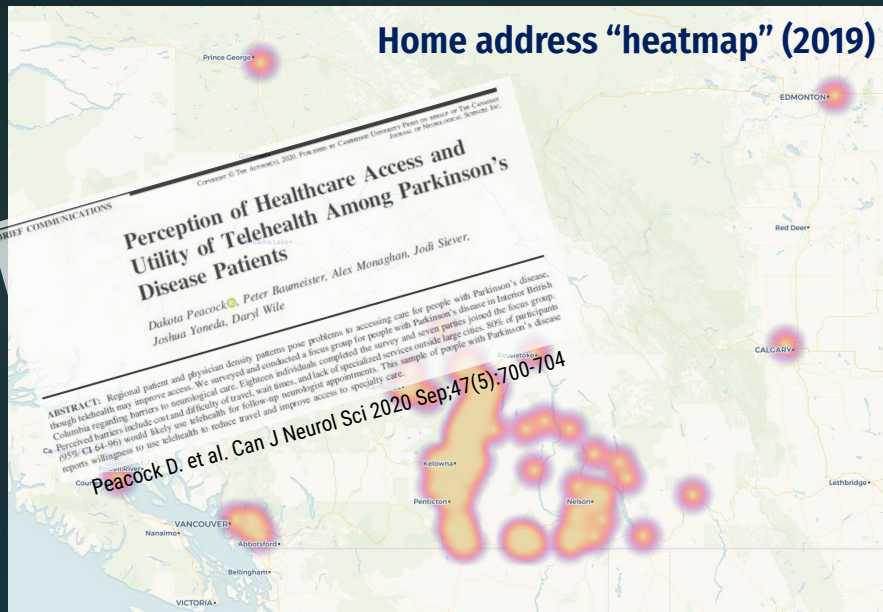
FOCUS ON CORE SERVICE

**REGIONAL NEUROLOGY
CAPACITY**

RECRUITMENT

**HEALTHY PRACTICE
ENVIRONMENT**

Home address “heatmap” (2019)



Average travel: 76 km

Driving time: 65 min

ASK ME!
SUSTAINABILITY

HUMPHREYS FAMILY MOVEMENT DISORDER CLINIC 2024

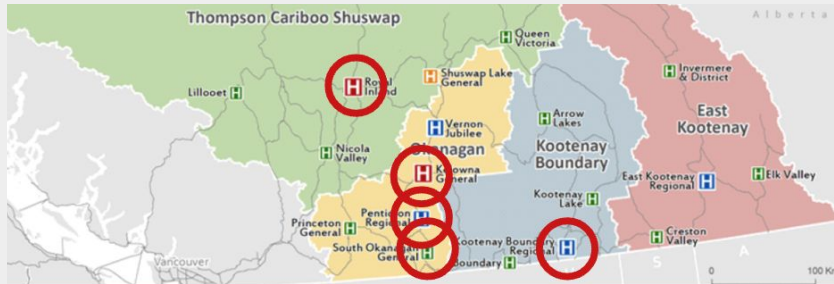


Interior Health

Followup <6 m

Safe Prescribing of Antipsychotics (SPADE)

- Cory Bendall (Stroke Network Director)
 - Lindsay Penner (SMP FLEX student)
 - Kathleen Scullion (f. Parkinson Disease Practice Lead)
 - IHA multidisciplinary/multi site team
 - IHA Quality office, Dr. Devin Harris
-
- Exploring contributors to antipsychotic use in people with PD in acute care, and reduction of risk in QI approach



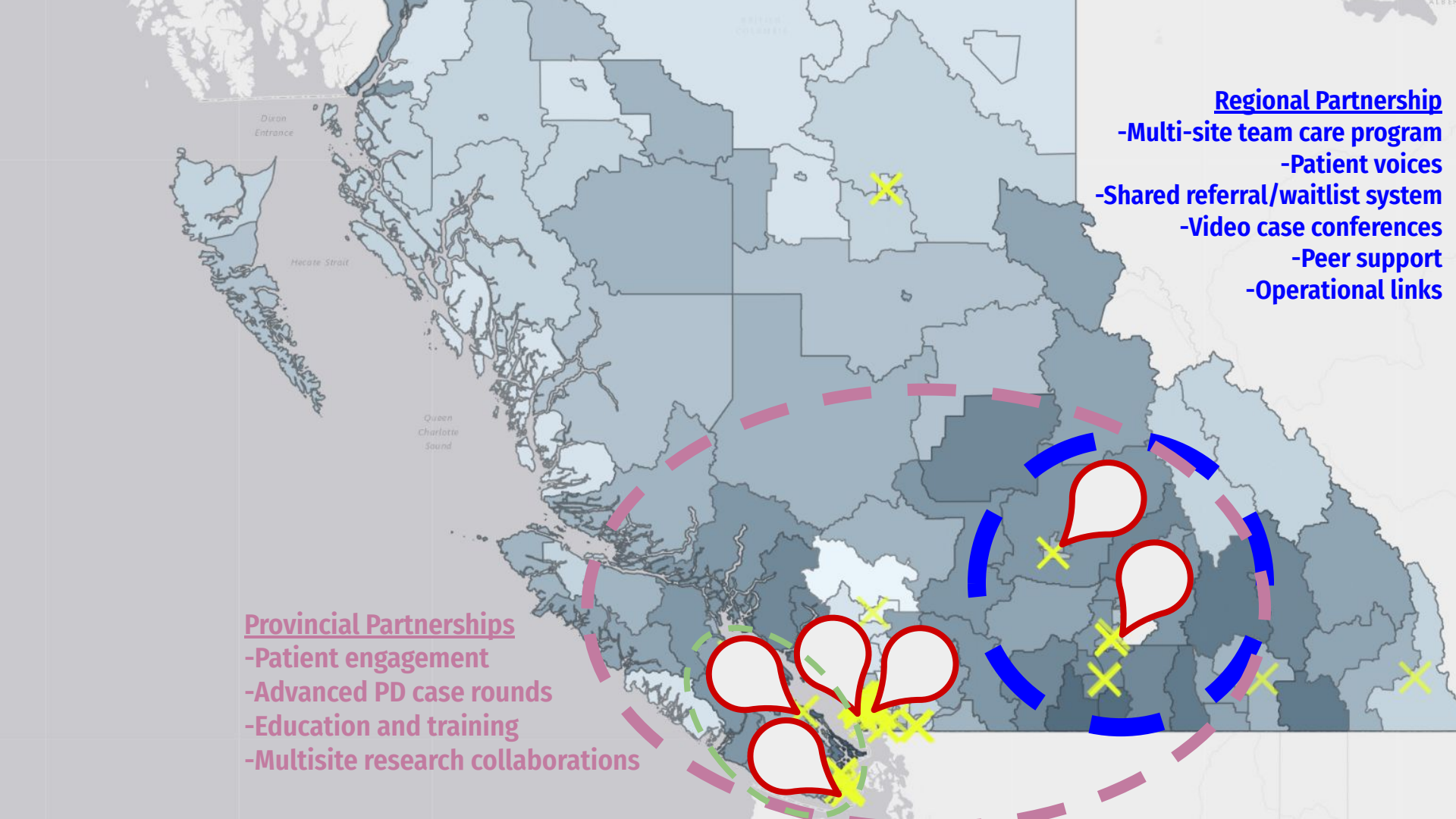
- Review of data from five acute care sites 2021 - 2023

Regional Partnership

- Multi-site team care program
- Patient voices
- Shared referral/waitlist system
- Video case conferences
- Peer support
- Operational links

Provincial Partnerships

- Patient engagement
- Advanced PD case rounds
- Education and training
- Multisite research collaborations

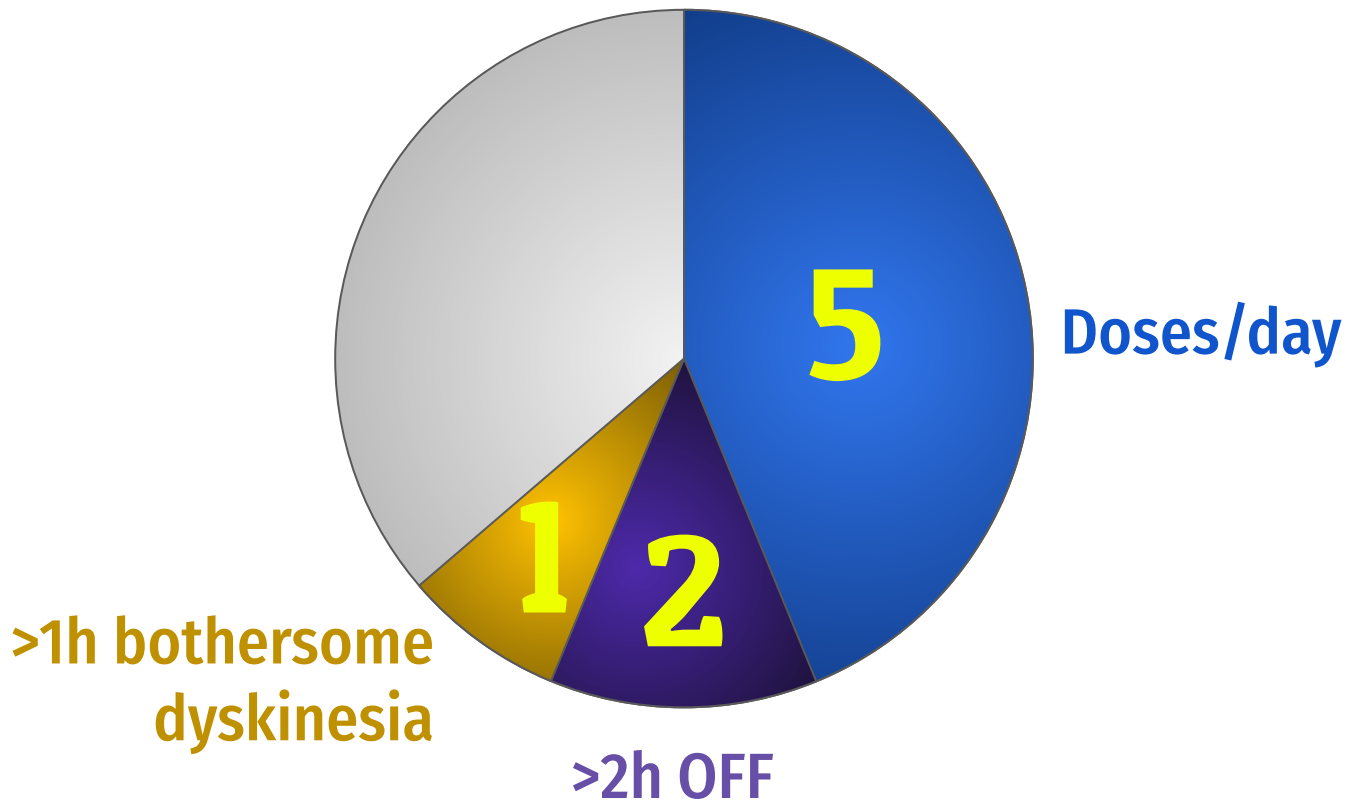




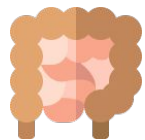
Advanced PD



Advanced Parkinson Disease



DUODOPA



VYALEV



DBS



Deliver dopamine

Deliver dopamine

Alter brain signaling

PEG-J tube

SC cannula

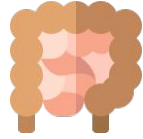
Intracranial electrode

Neurologist
GI specialist
Procedure resources
Specialized RN care
Titration process
(Wound care)

Neurologist
Specialized RN care
Titration process
(Infection monitoring)

Neurosurgeon
Specialized OR resources
Specialized RN care
Programming process

DUODOPA



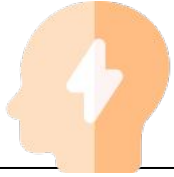
Neurologist
GI specialist
Procedure resources
Specialized RN care
Titration process
(Wound care)

VYALEV



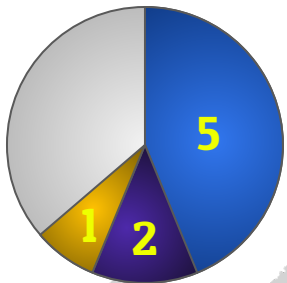
Neurologist
Specialized RN care
Titration process
(Infection monitoring)

DBS



Neurosurgeon
Specialized OR resources
Specialized RN care
Programming process

Advanced Parkinson Disease



115000

PD

16425

23000

aPD

3285

4000



****600**

300

VYALEV

****45**

300

DUODOPA

****45**

*Personal communication / Unpublished estimate figures; **Some BC estimates assume ~15% proportionality; ***aPD 20% figure is debated

Prevalence estimate “Advanced PD” aPD 2022/2023

PD

***aPD**

Northern
Island
Interior
Fraser
Coastal
BC

627

94

3378

507

2801

420

5683

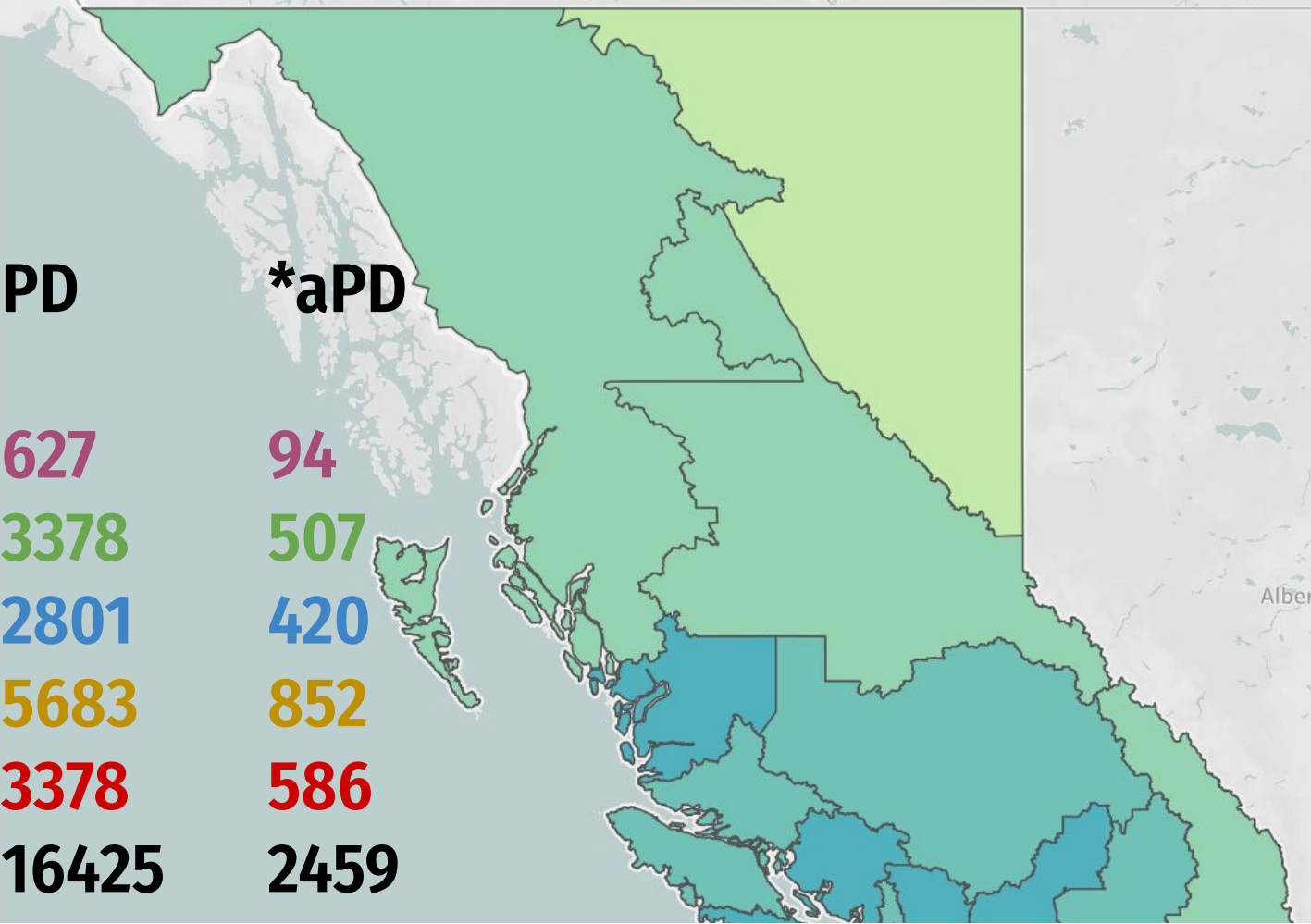
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3378

586

16425

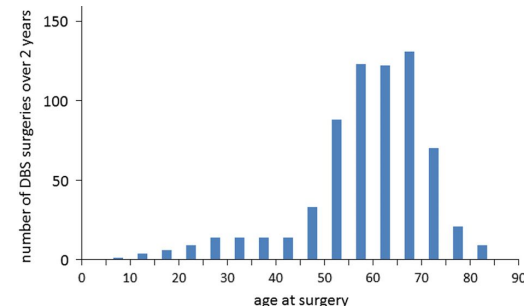
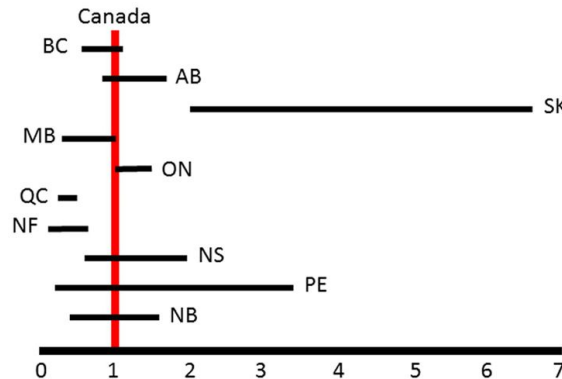
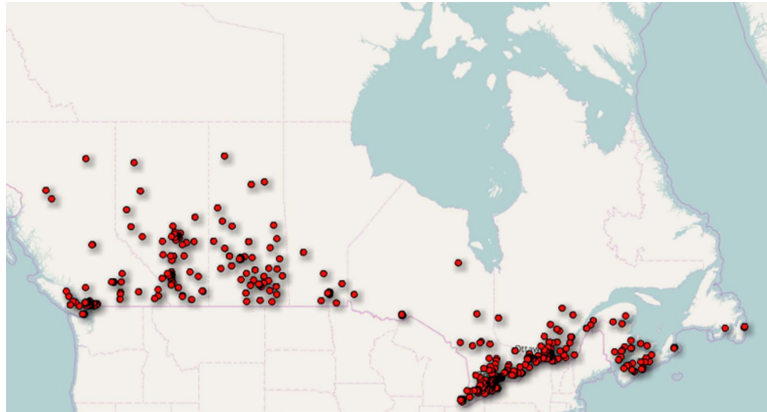
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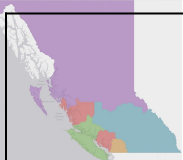


*Assumes 20% rate - a figure that is loosely justifiable as a crude estimate

Canadian Assessment of Deep Brain Stimulation Access: The Canada Study

C. Michael Honey, Armaan K. Malhotra, Mandeep S. Tamber, Michel Prud'homme, Ivar Mendez, Christopher R. Honey



	DUODOPA	VYALEV	DBS
Northern Health	-	-	
Island Health*	6	6	
Interior Health	6	8	
Fraser Health***	4-6	8-9	
Vancouver Coastal Health**	12	6	
BC	30	29	650-750 [#] 2024: 75 new, 100 battery ^{##}



Barriers: Advanced PD Treatment

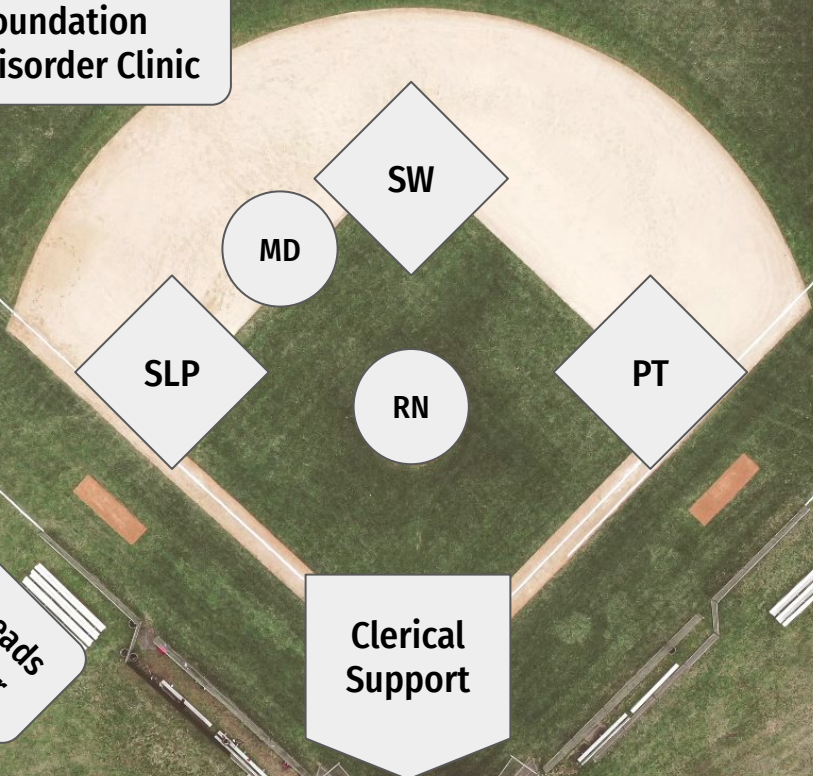
DUODOPA	VYALEV	DBS
<p>Neurologist GI specialist Procedure resources Specialized RN care Titration process (Wound care)</p>	<p>Neurologist Specialized RN care Titration process (Infection monitoring)</p>	<p>Neurosurgeon Specialized OR resources Specialized RN care Programming process</p>

Collaboration with

DBS Clinic Vancouver
Vancouver Coastal Health
Interior Health Authority
Kelowna General Hospital Foundation
Humphreys Family Movement Disorder Clinic



Allied Practice Leads
Manager / Director



SW

MD

SLP

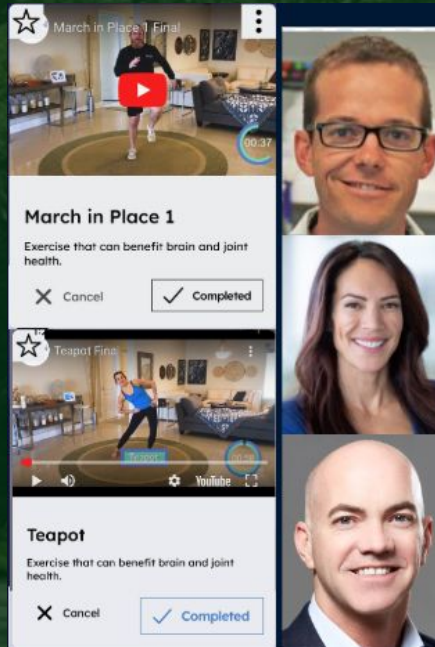
RN

PT

Clerical
Support

Parkinson's Disease & Exercise

- **Exercise Snacks** for People with Parkinson Disease: A Pilot Randomized Controlled Trial
- With Dr. Little (CCDPM), Dr. Jung (UBCO), Dr. Gibala (McMaster)
- The Judi Richardson Parkinson Canada Pilot Grant
- Short duration (2 minute) bouts of exercise - app-based system
- Improved access for people with unpredictable symptom limitations
- Accessibility for rural/remote areas with less facility / program access
- Appropriate for more advanced PD than most exercise studies

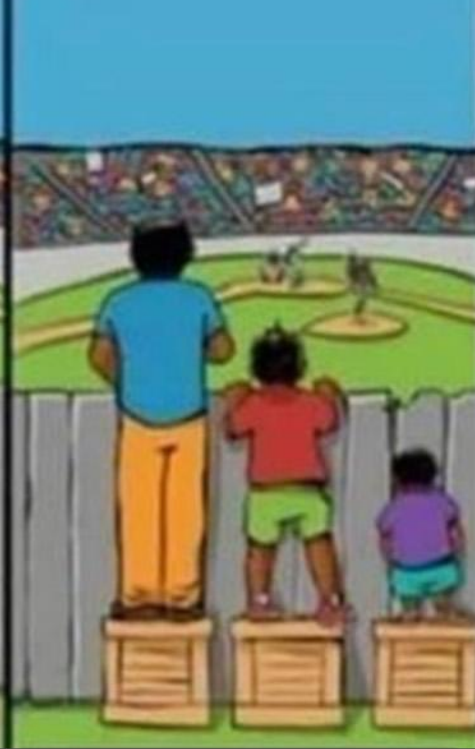


Clinical Trials

REALITY



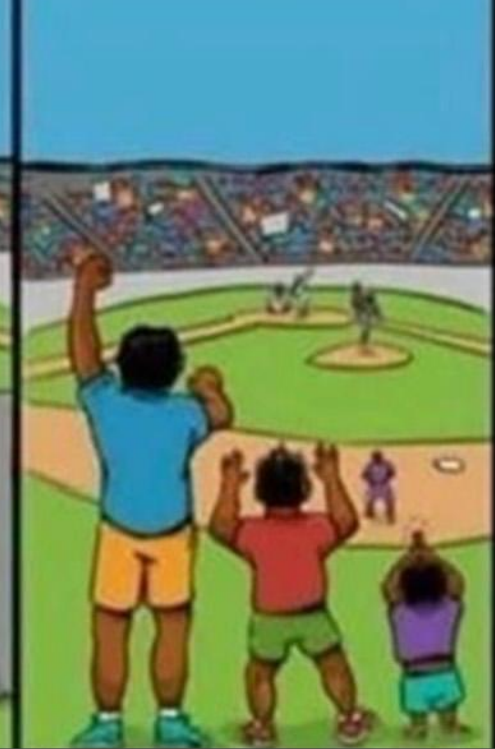
EQUALITY



EQUITY



JUSTICE



SOME GET MUCH MORE OR LESS THAN NEEDED

SAME SUPPORTS FOR ALL

EVERYONE GETS THE SUPPORT THEY NEED

CAUSE OF INEQUITY / SYSTEMIC BARRIER REMOVED



**What matters
to pwPD?**

**UBC Southern
Medical Program**

**Humphreys
Family &
HAB Foundation**

**Interior Health
Authority**

**Centre for
Chronic Disease
Prevention &
Management**

Aizen Family

okmove.ca

**Humphreys
Family Movement
Disorder Clinic
Team**

**Parkinson
Society BC**

**UBC Okanagan
Development
Office**

**Kelowna General
Hospital
Foundation**