Regional differences vital for understanding physician referrals to virtual care on Vancouver Island

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Part of the problem facing health care

Canada's seniors population outlook:

Uncharted territory

Over the next 20 years, Canada's seniors population is expected to **grow by 68%**

- 75+
- 65–74

1977	1997	2017	2037
2.0 million	3.5 million	6.2 million	10.4 million
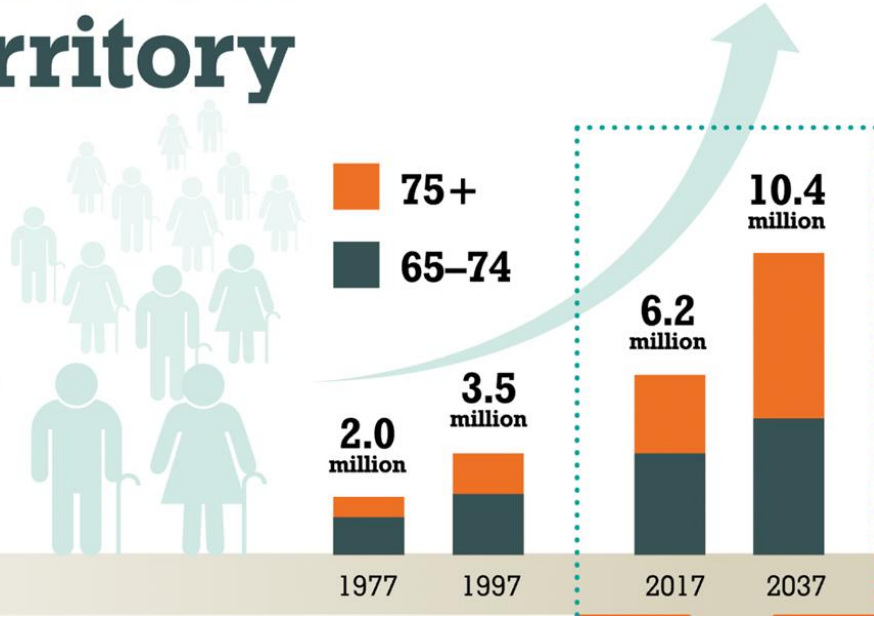
- 58% of older adults in Canada have 2 or more chronic conditions
- Island Health offers remote care for people over 65 with chronic conditions
- About 135,000 older adults in the Island Health regions could benefit
- But physician referrals to the program were lower than expected

BIG Difference BC 2023

How behavioural insights were incorporated

Intervention	Behavioural component and element (EAST framework)	Behavioural barriers targeted
Email	Timely - prompt	Limited knowledge Forgetting Limited attention
Checklist	Easy - checklist; simplification; reminder	Limited knowledge Forgetting Choice overload/complex choice environment Status quo bias/clinical inertia
Physician testimonial	Attractive - salience	Limited attention
Physician name	Attractive - personalize	Limited attention
Link to referral form	Easy - simplification	Limited time and attention Status quo bias/clinical inertia
Colleague and authority	Social - Messenger effect	Limited attention Status quo bias/clinical inertia

Email distribution timeline

1,611 Physicians
North and Central Island

Control: No email sent

1,526 Physicians
South Island

First Wave (March)

Email 1
Intervention
1,526 Physicians

Second Wave (April)

Email 2
Intervention
1,526 Physicians

Result: BI-informed emails had no significant effect on referrals

Referrals by Condition and Time

Referrals by Condition and Time

- Pre-Email (N=18 days)
- Post-Email (N=53 days)

Y-axis: Average Daily Referrals per 1,000 Physicians (0.1 to 0.9)

X-axis: Control North & Central Island, Intervention South Island

Error bars show +/- one standard error
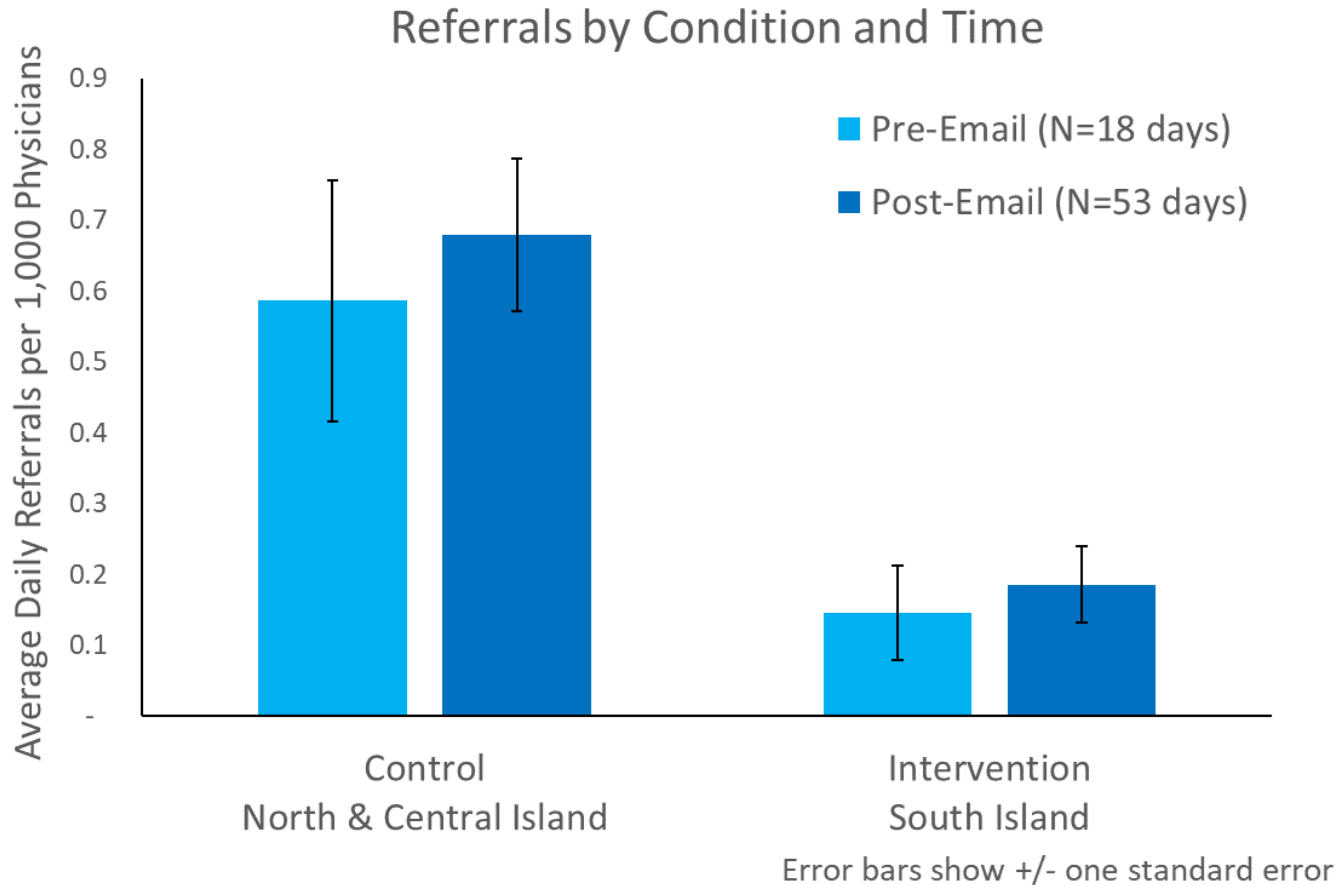
Results of ANOVA Test

Slight increase in referrals for both groups after emails

- Control: +16%
- Intervention: +27%

However, BI-informed emails did not have a significant effect on physician referral rates

The interaction effect of condition and time was not significant, $F(1,138) = 0.05$, **$p = 0.8$**, *partial η^2 = .00.*

Recommendations

Co-design solutions

- **Engage physicians** in the design process
- **Address their needs** and preferences
- Explore **regional differences**
- **Compensate** physicians

Photo by humberto chavez on Unsplash

Address limitations

- **Improve data collection**
- **Refine touchpoints** to reach physicians

Thank you!

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