



Social Determinants of Health and Adverse Childhood Experiences

A Community Approach to
Patient-Centred Care



Presenter Disclosure

- Presenters:
 - Val Tregillus
 - Andrew Earnshaw
- Relationships with Commercial Interests:
 - None
- Biases to Manage:
 - None





The Economic Imperative

We need BIG MOVES
for system sustainability

"Blue Matrix" patient number predictions - increased illness burden for 1500 patient GP panel (adjusted for pop growth)

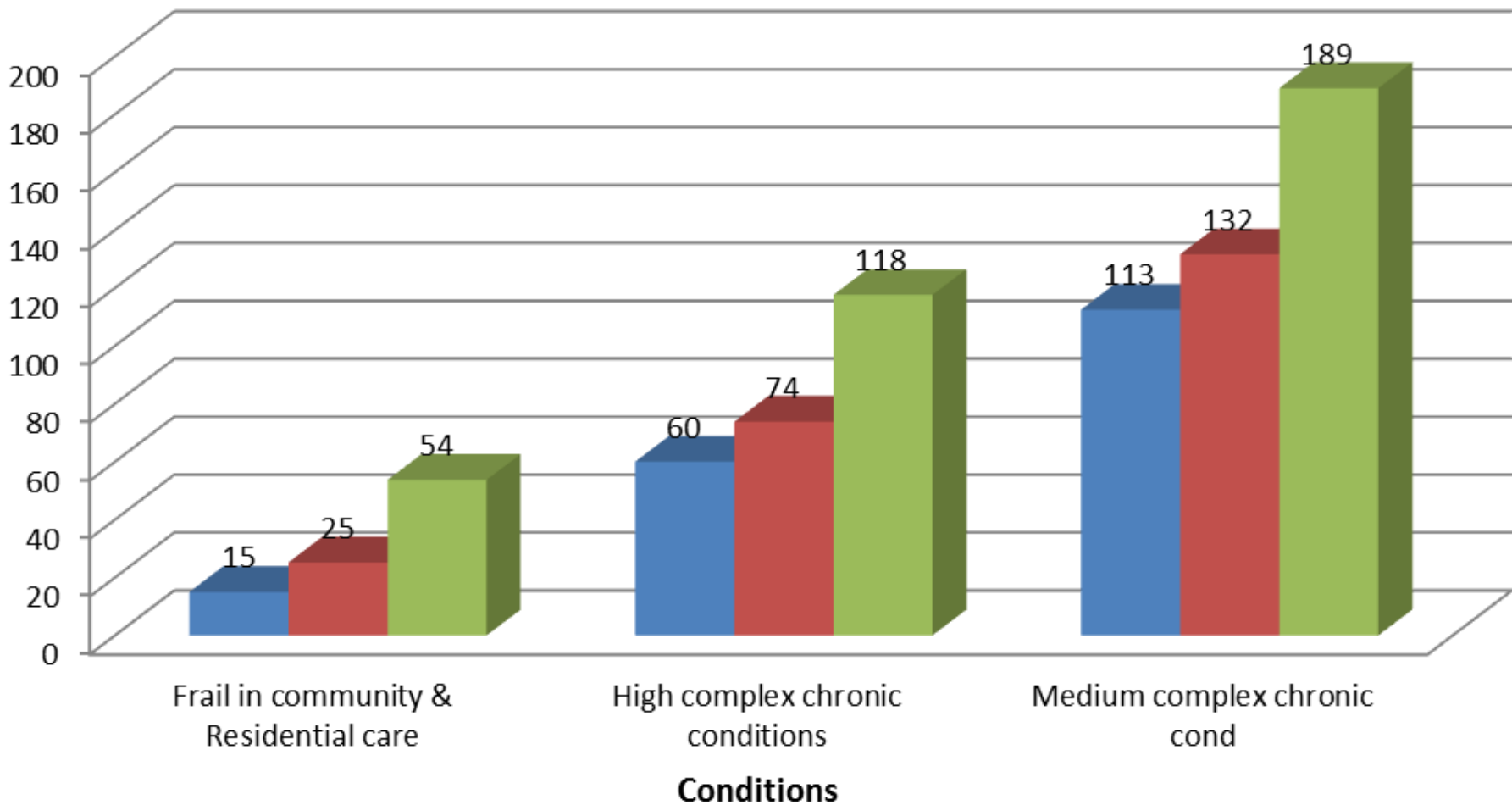
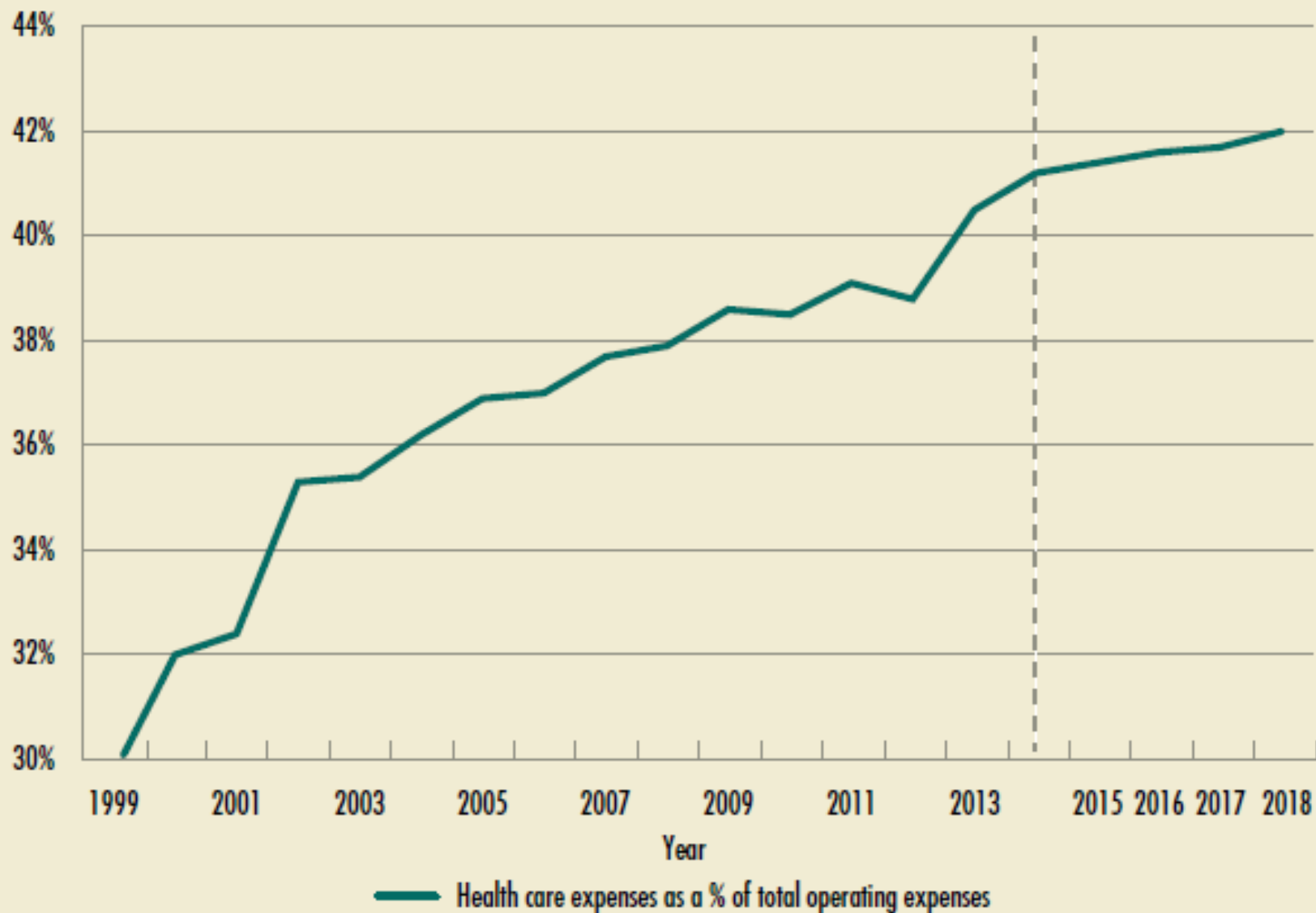


Exhibit 3: Health care expenses as a percentage of total operating expenses by fiscal year ended March 31st (actual to 2014 and planned to 2018)

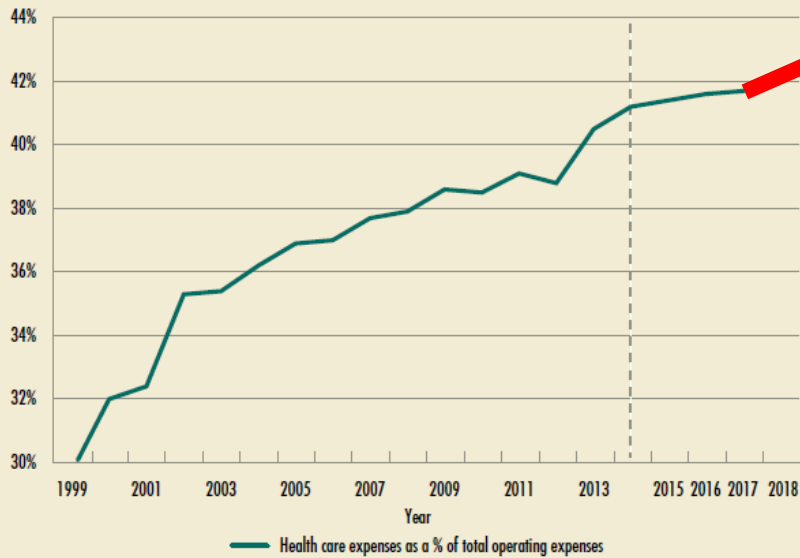


Source: Prepared by Office of Auditor General of British Columbia using data provided by the B.C. Ministry of Finance

60-70% ?

The Need for BIG MOVES

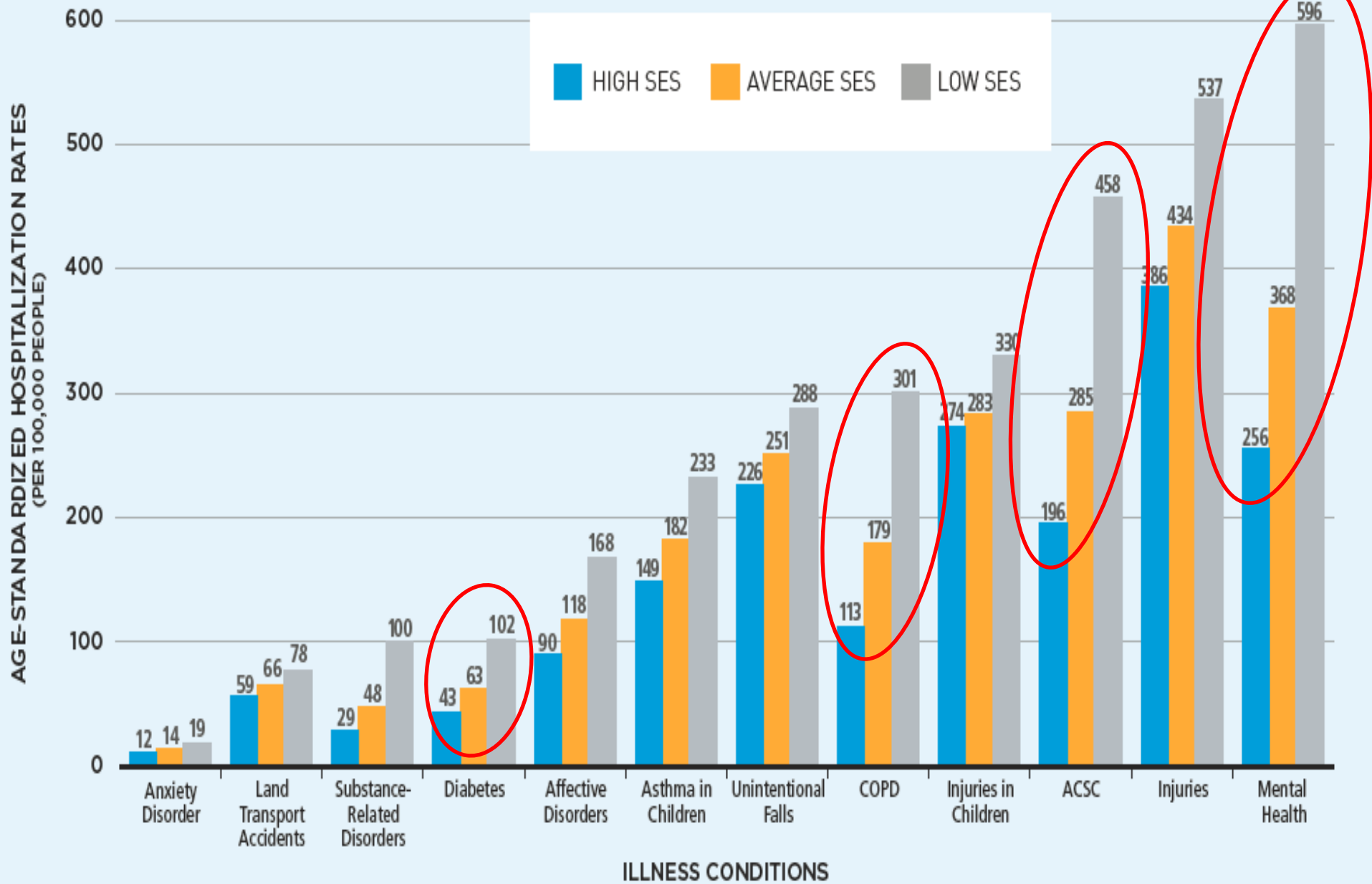
Exhibit 3: Health care expenses as a percentage of total operating expenses by fiscal year ended March 31^a
(actual to 2014 and planned to 2018)



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20 years?

Pan-Canadian age-standardized hospitalization rates by socio-economic status group



Cost of Poverty to the BC Health System

- 60% of the direct economic burden of ill health is incurred by the 20% of Canadians with the lowest income.¹
- Cost of poverty - to society - \$8 to \$9 billion; implementing a poverty reduction strategy - \$3-4 billion.²
- Health inequalities cost the provincial health care system \$2.6 billion annually (across all quintiles).³
- Raising the incomes of the poorest 20% to that of the 2nd poorest quintile, would save BC's public health care system at least \$1.2 billion per year.²



Mitigation & Adaptation

Building Partnerships

Health Risk Behaviors and Experiences

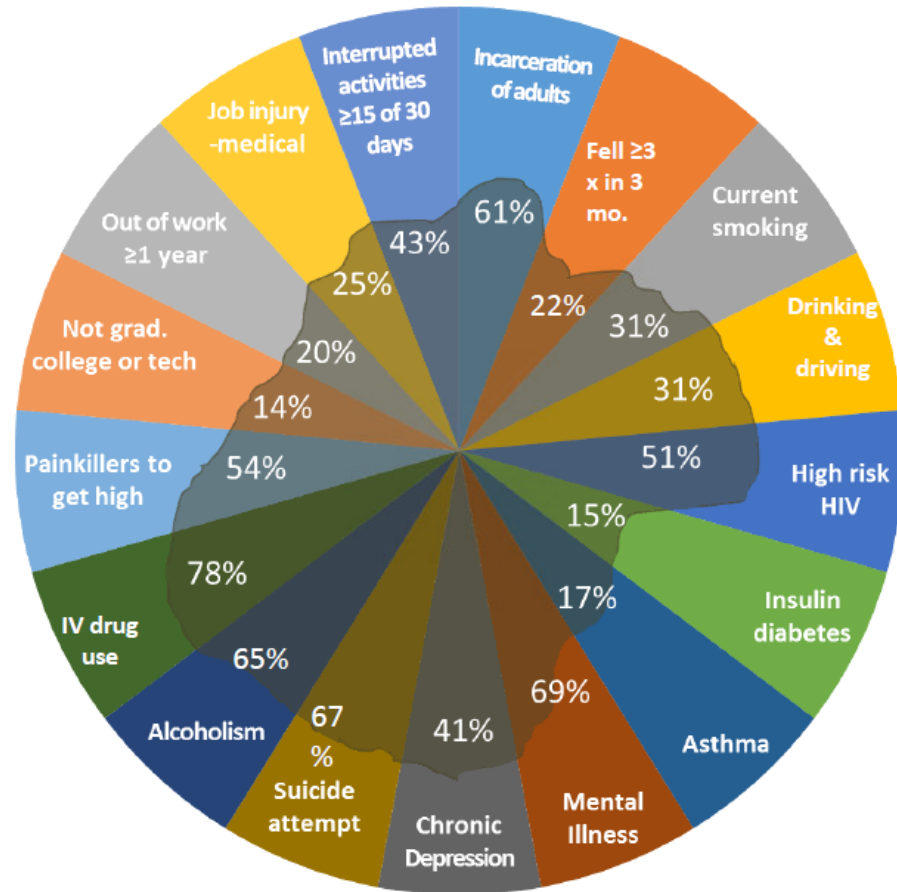
Physical Health

Mental Health

Relational Problems

Productivity Problems

Generational Transmission of Adversity





BIG MOVES for PMH/PCN

- Lived Experience Expertise
- SDH Data in Planning & QI
- Community Partnerships
- Adverse Childhood Experiences (ACEs)



Setting Priorities

YOU set the priorities on these BIG MOVES:

- a) each BIG MOVE introduced by two experts
- b) YOU decide what is most important and document on handout
- c) Check in with table companions

Leave your scoring on the table or at registration – we will report back on the results!

Patients as Partners: Valuing Lived Experience

Laurie Edmundson & Corey Reid



What are the Benefits?

- Have more active patients taking charge of their own healthcare
- Understand the barriers
- Generate new innovative ideas
- Make the patient feel that their opinion is valued and taken seriously
- Passionate hard working people

How to Engage Successfully?

- Meet the people where they're at – think outside the box!
- Pay them for their time.
- Give leaderships roles
- Report back to the patients

Now YOU set the priorities for moving forward...

Patients as Partners: Valuing Lived Experience

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Social Determinants of Health Data in Planning & QI

Trish Hunt & Dr Lee MacKay



Examining Health Equity Using Deprivation Scores for the Communities: *A Pilot Study of Kootenay-Boundary Communities to Support the PMH/PCN Planning*



BC Centre for Disease Control
An agency of the Provincial Health Services Authority

Trish Hunt

Senior Director, Health Promotion, Chronic Disease and Injury Prevention
Population and Public Health

POPULATION & PUBLIC HEALTH PROGRAM

VISION



- Healthy British Columbians
- Everyone has opportunities for health & well-being where we live, learn, work and play*

MISSION



- Influence policy & practice
- Promote population health & health equity
- Reduce the burden of chronic disease & preventable injury

STRATEGIC GOALS



- Be a trusted source of population health information & expertise
- Produce actionable analysis & support its adoption
- Catalyze & lead collaborative action

GUIDING PRINCIPLES



- Emphasize wellness
- Strive for equity
- Recognize populations with unique needs

POPULATION HEALTH SURVEILLANCE & EPIDEMIOLOGY & THE BC OBSERVATORY FOR PPH

FOOD SECURITY

HEALTHY FAMILIES & HEALTHY WEIGHTS

HEALTHY BUILT ENVIRONMENT

HEALTHY FAMILIES BC

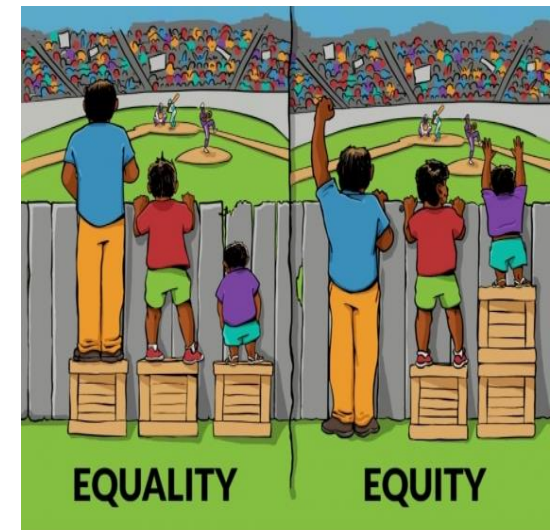
INJURY PREVENTION

HEALTH EQUITY

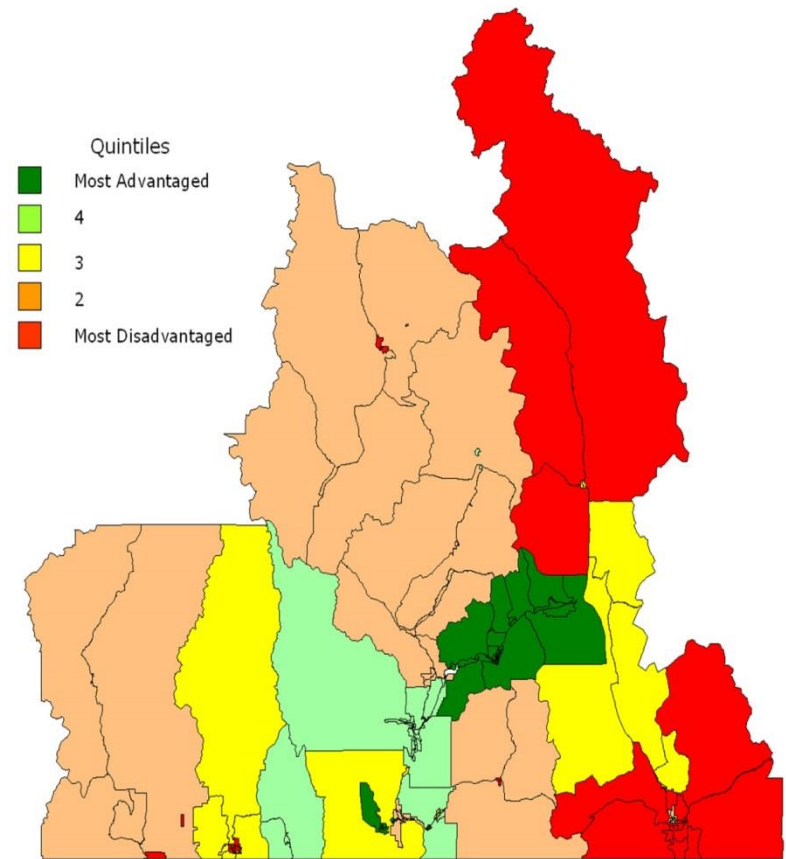
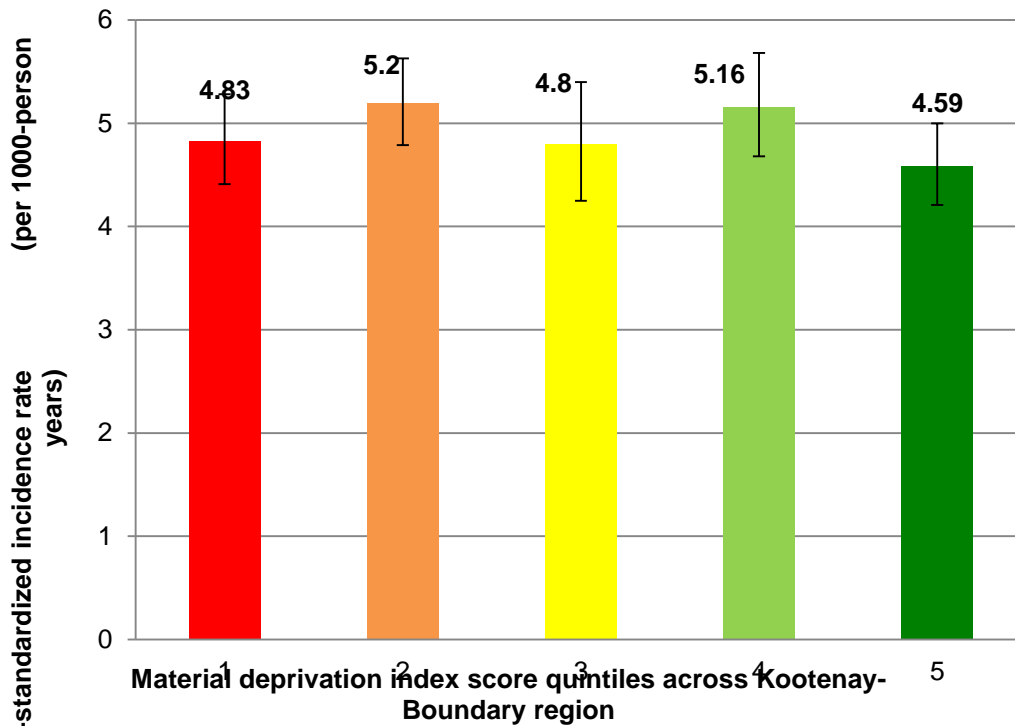
- BC's is one of the healthiest jurisdictions in Canada however not all communities enjoy the same level of health.
- There is increasing demand for local level data to fill the gaps in community data and information for health planning.
- The purpose of this pilot study is to support the health equity promotion by providing data evidence that informs PMH/ PCN planning in Kootenay-Boundary region.

- Material deprivation (MD): a mathematically derived variable comprised of *employment*, *income* and *education* sub-constructs and
- Social deprivation (SD): a mathematically derived variable comprised of *lone parenting*, *living alone* and *income* sub-constructs.
- Each of these area-based deprivation scores are transformed into 5 quintiles, which provide levels of equity measures.

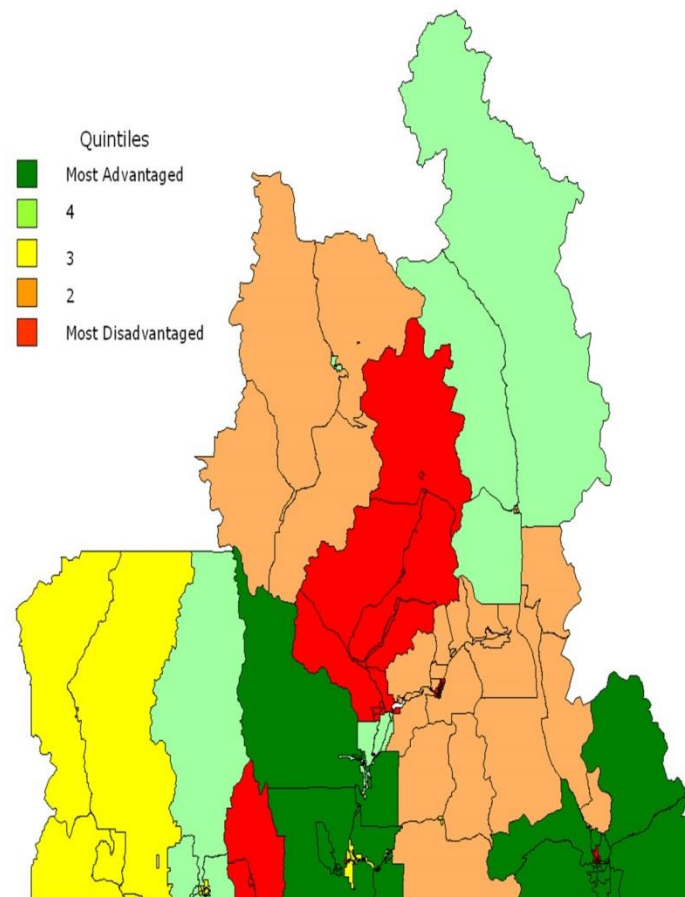
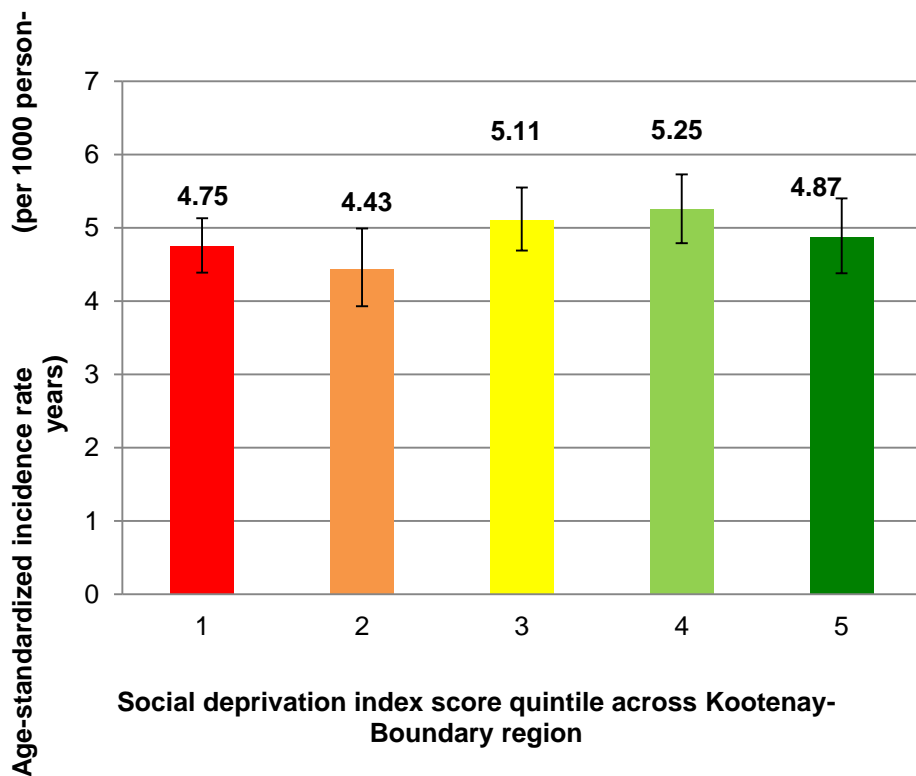
- PHSA and Kootenay- Boundary Division of Family Practice partnered to explore the application of the deprivation index as a measure of inequity at the community level.



Age-standardized diabetes incidence rate by MD index score quintile in Kootenay-Boundary communities, 2009-2013



Age-standardized diabetes incidence rate by SD index score quintile in Kootenay Boundary communities, 2009-2013



- The Kootenay- Boundary region is diverse with the area-based material and social deprivation scores, divided by distinct Quintiles.
- The differences in diabetes incidence rate by the MD and SD score quintiles are not statistically significant to demonstrate inequity in the distribution of this disease across the Kootenay-Boundary region.
- This work is in progress, and we are exploring further to determine if there exists inequities in various other chronic disease conditions.

Project Team:

Kootenay Boundary Division of Family Practice:

- **Dr. Jennifer Ellis**, QI Coordinator
- **Andrew Earnshaw**, Executive Director
- **Dr. Lee McKay**, General Practitioner

BCCDC, PHSA

- **Dr. Drona Rasali**, Project Director
- **Diana Kao**, Epidemiologist
- **Kamaljeet Guram, Svetlana Ristovski & Billie Jane Hermosura**, BCCDC-PPH Project Managers
- **Trish Hunt**, PHSA Executive Sponsor

Modelling Consultants

- **Dr. Hans Krueger & Dr. Bob Prosser** and UBC School of Population & Public Health

Contact us!

pph@phsa.ca

www.phsa.ca/populationhealth

Now YOU set the priorities for moving forward...

Social Determinants of Health Data

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Community Partnerships

Janet Austin & Dr Christine Loock



YWCA Metro Vancouver

- 120 years, 40+ locations
- 400 staff, 800 volunteers
- Evidence-based advocacy
 - *Child care, housing, violence prevention, sexualisation etc.*
- Focus on single moms & children
- Holistic, integrated services:
 - *Early learning & care*
 - *Affordable housing*
 - *Health & fitness*
 - *Food, nutrition, clothing*
 - *Legal, education & employment support*
 - *Youth transitioning from foster care*
 - *Leadership & mentorship*



Allie's Story

- FASD, parents told she would never read or write
- Experienced abuse in relationships, drug & alcohol addiction, homeless 10 years
- Pregnant at 26, child apprehended
- Referred to YWCA Crabtree Corner
 - Supportive housing child care & Sheway
 - Parenting & Single Mothers Support Group
 - Food, nutrition, clothing, legal assistance, etc.
- Education & Employment
 - Hired as FASD Facilitator, gained skills
 - YWCA Education Bursaries
 - Family & Community Counselling Diploma (Native Education College) – Class Valedictorian
 - Working in the community



Health & the YWCA



- RICHER Initiative, Dr. Chris Loocke
- Sheway, co-located with YWCA Crabtree Corner
- Public health & street nurses (pap smears, flu shots)
- Aboriginal Infant Development Program & FASD Key Support & Prevention
- BC Women's Hospital
 - New Beginnings Maternity Clinic (immigrant women)
 - Fir Square Combined Maternity Care Unit (pregnant women, substance use issues)
- Nutrition consultation, speech & language pathologists, supported child development, behavioural interventionists
- Partnerships:
 - Vancouver Coastal Health, Provincial Health Services, Vancouver Native Health, Vancouver Women's Health Collective, Detox Centres, Community Health Centres, Mental Health Teams, Safe Ride
- PHAC, CAPC (Community Action Program for Children)
- Dental care

Affordable housing



- YWCA Crabtree Corner & Sheway
 - Aboriginal population, FASD prevention, medical & pregnancy outreach, violence prevention, food & nutrition, public health practitioners, etc.
- YWCA / Vancouver Public Library – Cause We Care House
 - Literacy, employment
 - RICHER Initiative, place-based child/family centered (Dr. Chris Loocke)
- Transitional & long-term housing throughout Metro Vancouver
 - Legal, counselling, violence recovery, children who witness abuse, community resources, food & clothing, children’s services etc.
 - 6 new projects in development

Holistic services & community partnerships

Universal Child Care



- BC \$10/day – Robert Fairholm
 - GDP up 2.0% (\$5.8 billion)
 - 69,000 new jobs, employment up 2.8%
 - Labour force participation of women up
 - Poverty rate of single-mothers down
- Quebec Program – Dr. Pierre Fortin
 - GDP up 1.7% (\$5.0 billion)
 - Labour force participation of single moms up 22%
 - Single-parent on welfare down from 99,000 to 45,000
 - Poverty rate of single-mothers down from 36% to 22%
 - Median real after-tax income shot up by 81.3%

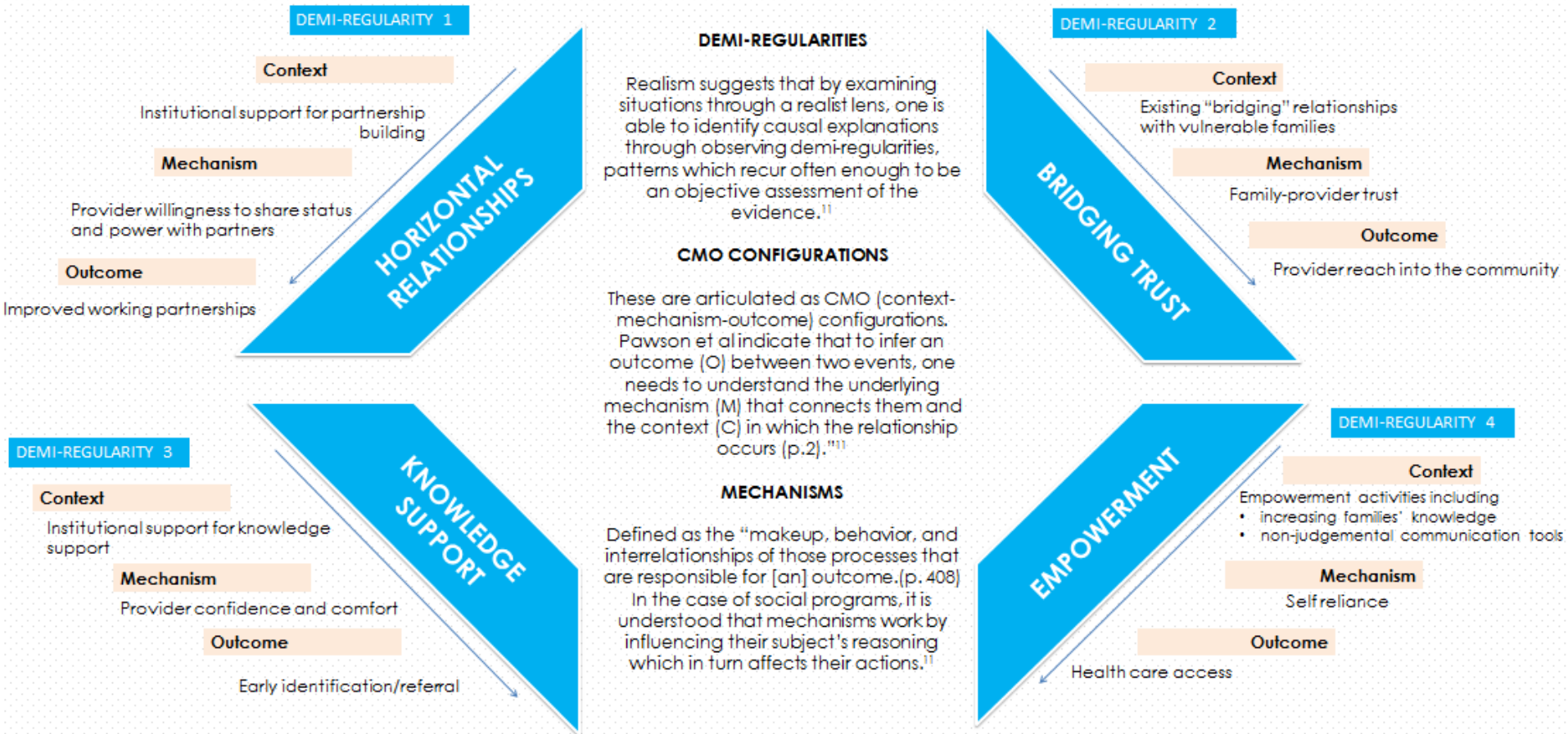
Tax returns to
government
exceed cost

Action taken & needed ...

- Canada Child Benefit reduces child poverty & living wage
- First Nations child welfare, education, housing & clean water on reserve
- National poverty reduction strategy
- Investment in affordable housing & transit
- Enact the TRC's recommendations
- Implement Jordan's principle
- Guaranteed Annual Income pilot projects



It Takes a Village



RICHER Model & Realist Synthesis CMO's "Context & Mechanisms & Outcomes" Linking In & Linking Across

1. Shared vision & values
2. Horizontal Relationships: Shared status & power
3. Knowledge Support: Inter-professional practice & training
4. Bridging Trust: Engagement, relationships & responsiveness
5. Empowerment of families & community
6. Accountability & evidence

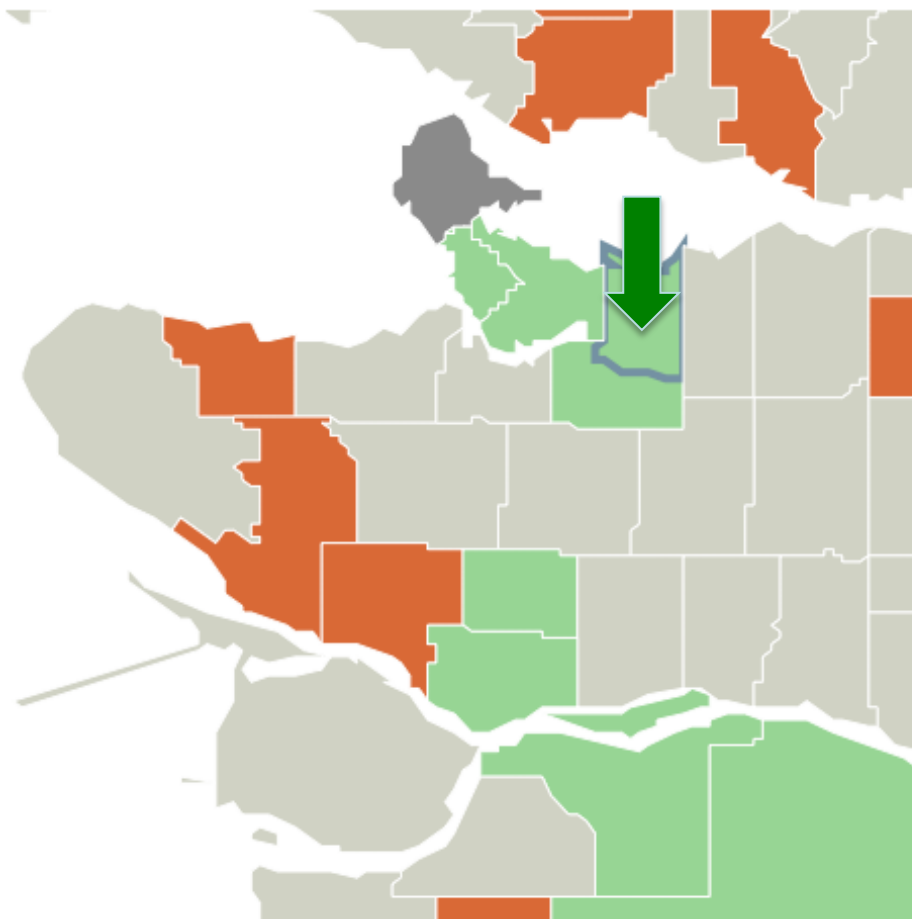
Strathcona: Critical Decrease in Vulnerability

Understanding Critical Difference.

Scale: **ONE OR MORE SCALES** PHYSICAL SOCIAL EMOTIONAL LANGUAGE COMMUNICATION

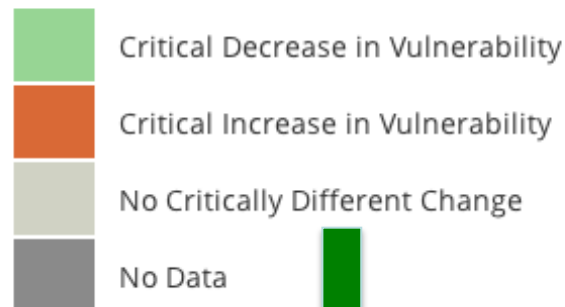
Base Wave: 2 **3** 4

Comparison Wave: 4 **5**



Strathcona

Vulnerable on one or more scales of the EDI



Wave	Count	Percent Vulnerable
3	56	70%
5	60	52%
Change		-18%

Data Source:
HELP EDI
Wave 2 04/05-06/07
Wave 3 07/08-09/09
Wave 4 09/10-10/11
Wave 5 11/12-12/13

Working with family physicians and pediatricians



- Engage with professional & community organizations
 - Doctors of BC, CPS, YWCA & peer agencies
- Advocate for:
 - High quality early learning & child care
 - Extended parental leave
 - Housing, transit & family supports
 - Policies that reduce inequality
- Referrals to community supports & resources
 - File taxes to receive Canada Child Benefit
 - Apply for child care subsidy, First Nations & Disability benefits
 - BC Housing, Legal Aid
- Develop intersectoral partnerships(schools, social work, rec, law,etc)
- Use measurements like the EDI (HELP)Maps

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Community Partnerships

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Adverse Childhood Experiences (ACEs)

Dr Linda Uyeda & Dr Jeanette Boyd



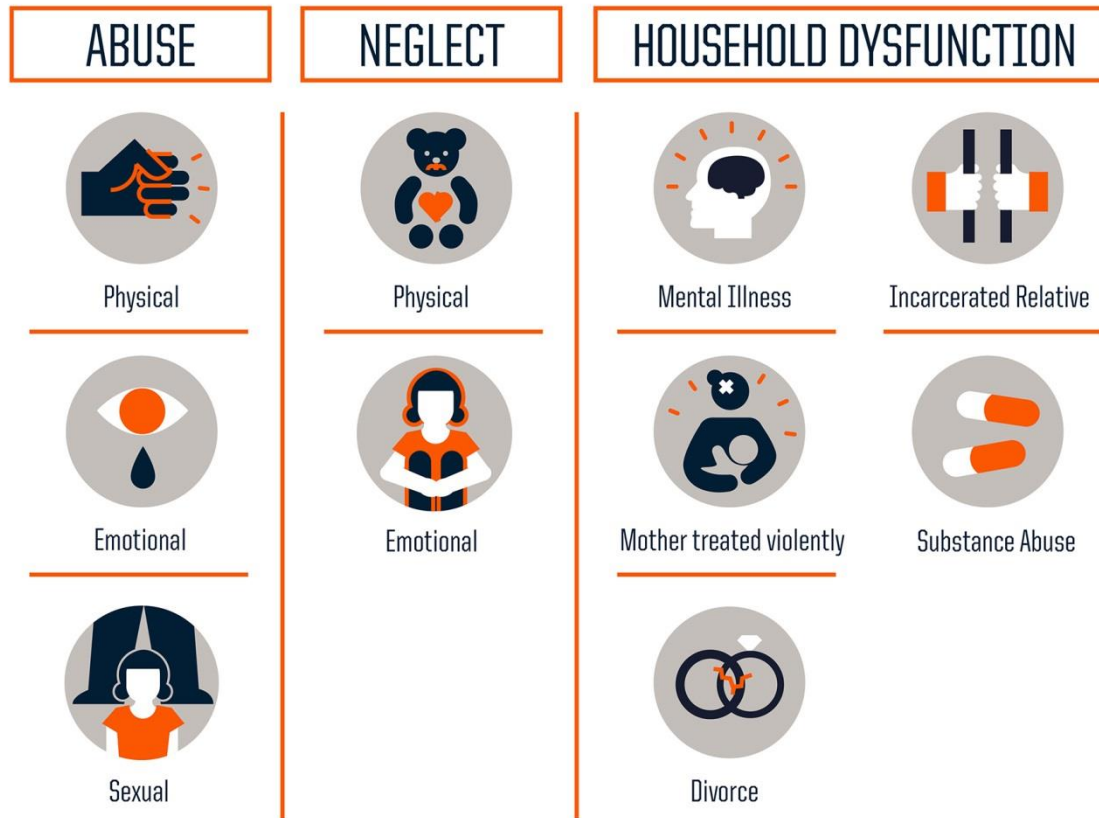
DAMMIT, JIM!



**I'M A DOCTOR, NOT A
MINDREADER!**

meme-generator.net

Adverse Childhood Experiences: ACEs


















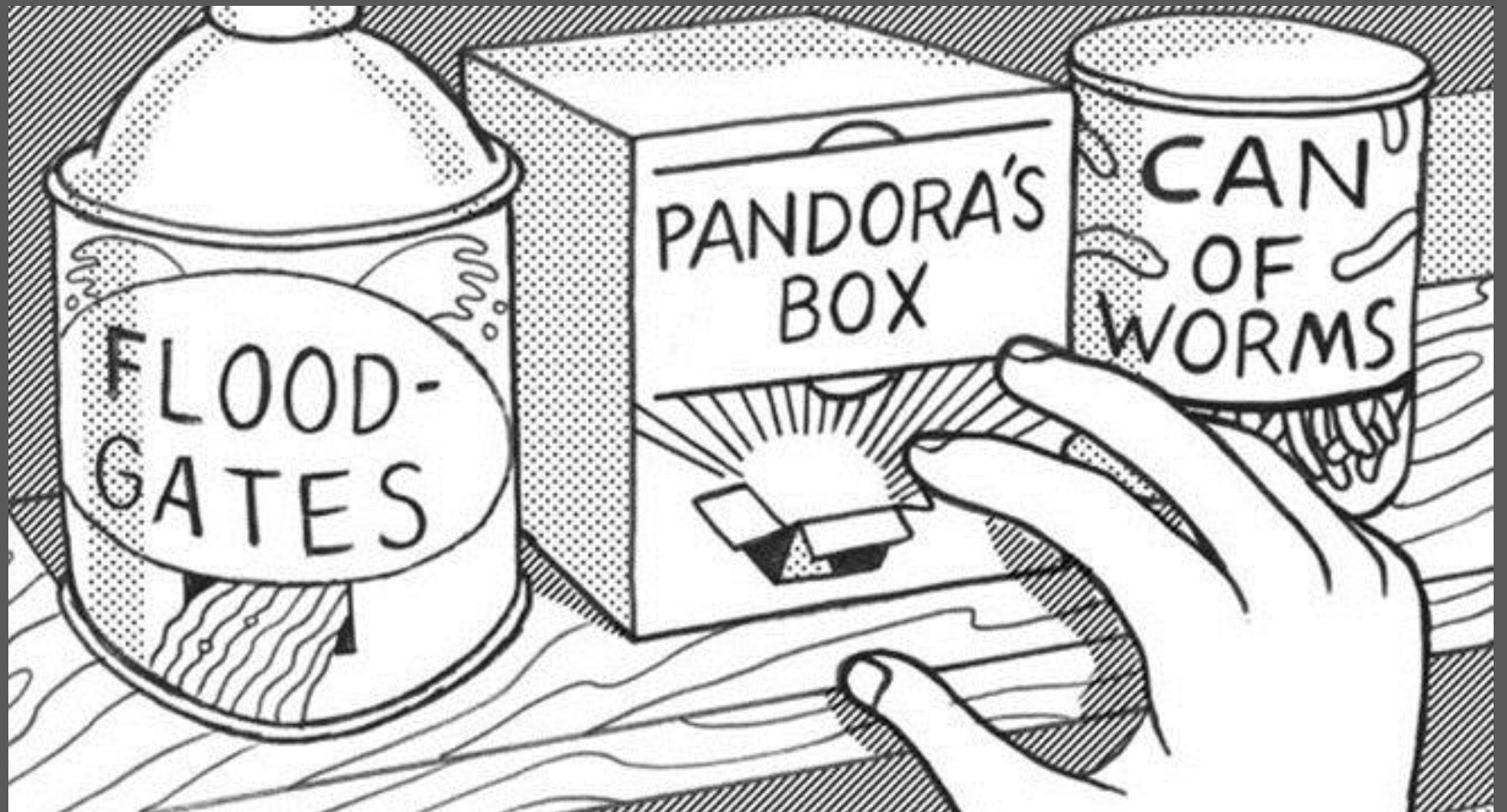
WHAT IMPACT DO ACEs HAVE?

As the number of ACEs increases, so does the risk for negative health outcomes



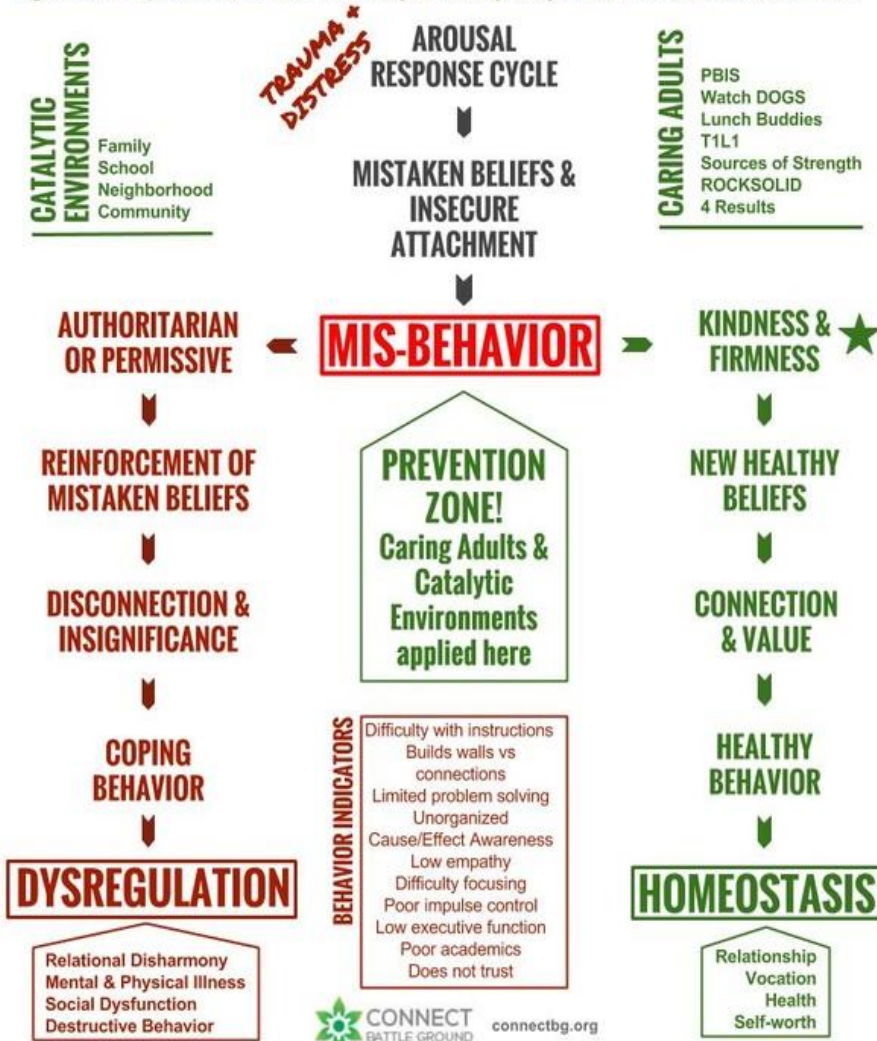
Possible Risk Outcomes:

BEHAVIOR				
 Lack of physical activity	 Smoking	 Alcoholism	 Drug use	 Missed work
PHYSICAL & MENTAL HEALTH				
 Severe obesity	 Diabetes	 Depression	 Suicide attempts	 STDs
 Heart disease	 Cancer	 Stroke	 COPD	 Broken bones



Resilience Strategy

The foundations of misbehavior are established before birth as children experience distress in their arousal response cycle and develop mistaken neurological beliefs and goals. If connection & significance experiences are reinforced early in life, trajectory can be directed toward resilience.



My Approach to ACEs

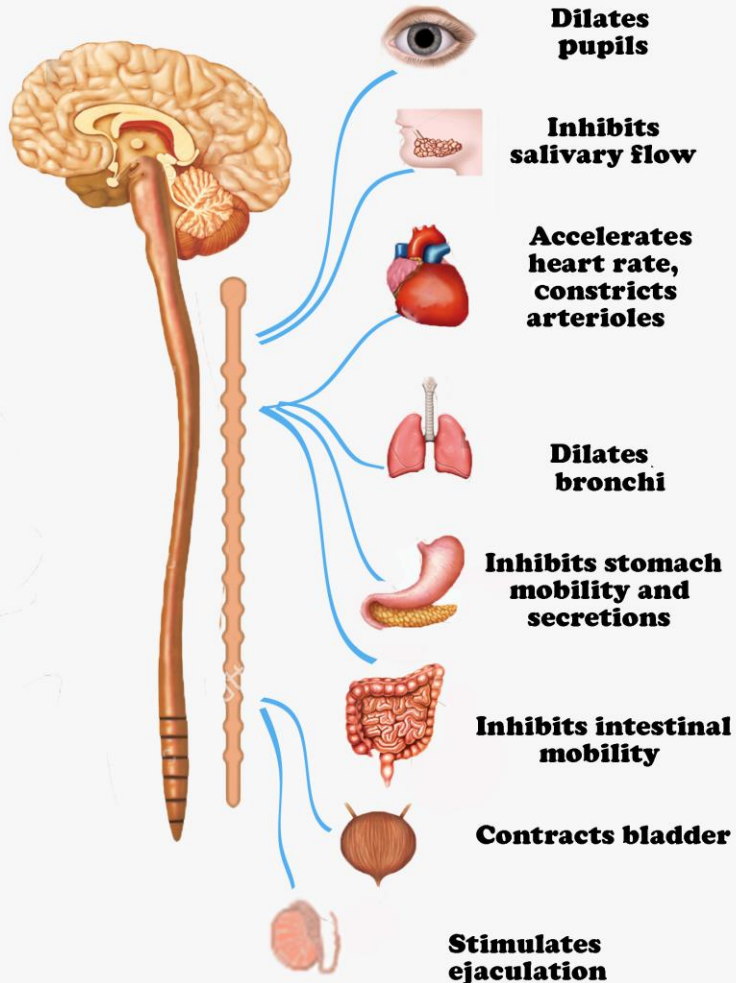


Dr. Linda Uyeda

1. Wife and **mother** of two children
2. **Family physician:**
 - MD, CCFP University of British Columbia
 - Forensic Psychiatric Hospital FP
 - Fraser Health Association Youth Clinic Physician
 - Mental Health and Parenting Educator: myumwelt.ca
3. **Mindfulness** practitioner > 10 years

ACEs and the Biopsychosocial Mix

Sympathetic Nervous System



The Kicker...





Parasympathetic Nervous System

Constricts pupils



Stimulates salivary flow



Inhibits heart rate, dilates arterioles



Constricts bronchi



Stimulates stomach mobility and secretions



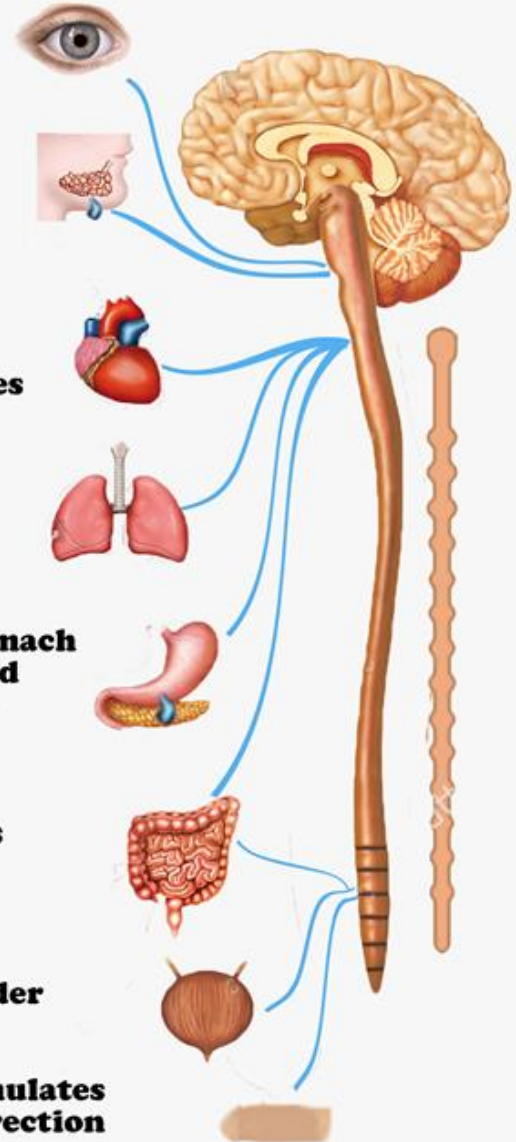
Stimulates intestinal mobility



Relaxes bladder



Stimulates erection



My Approach to the ACEs

- Doctor – Docere (Latin) – “to teach”
- Educating teachers, counselors and parents in a variety of settings
- Addictions small group meetings at the Forensic Psychiatric Hospital
- One on one counseling with patients

Feedback from those who took the quiz...

- “This information is powerful!”
- “My ACE score was high but it empowered me to learn about what I could do to help my child keep their ACE score low.”
- “Asking patients about their childhood histories is important.”
- “I believe the value of confronting these things & learning their effect outweighs any negative.”

Now What?



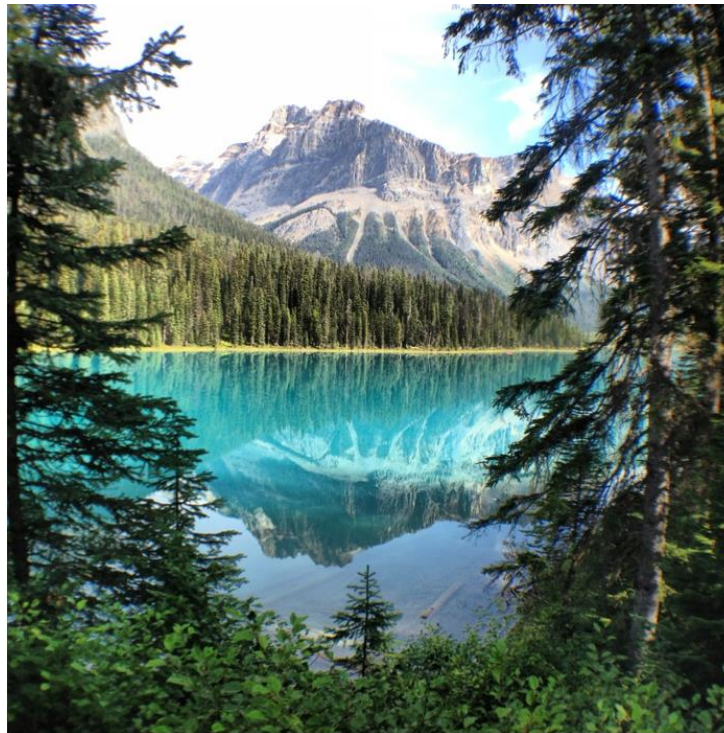
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Reflections & Closing

Dr Trina Larsen Soles



Thank you!

Please leave your scoring on
the table or at registration!

