

Measuring and Tracking Indicators of the Social Determinants of Health in NL

Objective

To identify, document, address, and track indicators of social determinants of health (SDH) in NL, in an ethically transparent and publicly accessible manner, at the point of care in the health system and at community, regional, and provincial levels.

Practice Points

1. Measuring indicators of SDH in NL is essential to assess the extent of the problem, plan implementation of interventions, and determine trends over time.
2. Several jurisdictions measure indicators of SDH, but may not identify them as such. In NL (and many other places) these measurements are not systematic, comprehensive, or consistent and are dispersed across multiple different information sites. Some countries have developed National Wellbeing Indicators. Wales collects, documents, and tracks forty-six such indicators.
3. Kaiser Permanente Northwest, an integrated health care system providing care to more than 600,000 clients in 34 medical clinics and two hospitals, have proposed an approach to identify, document, and track SDH.

Data

1. Wellbeing of Wales: national indicators. <https://gov.wales/wellbeing-wales-national-indicators>
2. Toward Addressing Social Determinants of Health: A Health Care System Strategy. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6207437/pdf/18-095.pdf>

Results

- Kaiser Permanente Northwest uses specifically trained patient navigators to identify and address patients' SDH, identified at three points: initial contact; referral from a clinician; and proactive assessment. The training of patient navigators includes motivational interviewing, trauma-informed care, and mental health first aid. Once a SDH is identified, using a standardized social needs assessment tool, education about and referral to appropriate and available resources take place. The navigator facilitates connection to these resources. Importantly, all the information is captured in the electronic health record.

Table 1. Possible Indicators for Poverty Measurement and Tracking

Economic	Housing	Food Security
Gross disposable household income per head	Homelessness rates	Household Food Security Survey Module (HFSSM), included in Canadian Income Survey*
Gross value added per hour worked	Affordability - Housing burden (% of income spent on housing) - Households with unpaid rent or mortgage	Food bank usage
Percentage of people in employment	Composite measures such as the Housing Security Index#	Experience-based food insecurity scales (e.g., FIES)
Percentage of people living in households with income poverty relative to NL median; measured for children, working age and those of OAS age	Quality - Issue with housing/ neighborhood that is sub-standard but not an imminent threat to health	Expenditures on food
Regional data for Canadian Index of multiple deprivation	Safety - Proportion of households or neighborhoods reporting one imminent threat to health (e.g., heating, and/or structural issues) - Households who live in neighborhoods with undesirable characteristics, and low access to services and amenities nearby, but do not represent an imminent health or safety threat	Market Basket Measure (MBM)
	Stability - Percentage of households living in overcrowded conditions	

*<https://www.canada.ca/en/health-canada/services/food-nutrition/food-nutrition-surveillance/health-nutrition-surveys/canadian-community-health-survey-cchs/canadian-community-health-survey-cycle-2-2-nutrition-2004-income-related-household-food-security-canada-health-canada-2007.html#appa>

#<https://citymonitor.ai/housing/us-housing-security-index>

Table 2. Possible Indicators for Social Determinants of Health, Other Than Poverty

General	Children	Climate/Environment	Inclusion
Per Cent Live Single Births <2500g	Comprehensive School Health Assessment Survey	Air Quality Index	Gender Pay Difference
Healthy life expectancy at birth including the gap between the least and most deprived (currently 5.9 years in Canada, PHAC data)	Foundation Phase Profile* of children's development	Water Quality Index (% of communities in NL with acceptable WQI)	Percentage of people who feel able to influence decisions in their local area
Percentage of adults who have fewer than two healthy lifestyle behaviours	Number of children with complex medical needs	Amount of non-recycled waste generated per person	Percentage of people satisfied with their ability to access the facilities and services they need
Percentage of children who have fewer than two healthy lifestyle behaviours	Proportion of children in care who have been seen by a multidisciplinary team in the last year	Capacity (in million watts) of renewable equipment installed	Percentage of people agreeing that they belong to the local area; that people from different backgrounds get on well together; and that people treat each other with respect

*<https://gov.wales/sites/default/files/publications/2018-03/foundation-phase-profile-handbook-revised-september-2017.pdf>

Table 3. Point of Care SDH Indicators*

Social	Economic	Environmental	Health Education
Caregiver stress	Financial problems	Fall risk	Dental well-care counselling
Family stress	Food insecurity	Stressful work schedule	Referral to mental health service
Needs assistance with community resources	Homelessness	Foster care status	Illiteracy and low-level literacy
Unavailability/inaccessibility of helping agencies	Intentional underdosing of medications	Problem related to social environment	Nutrition and exercise counselling
Social isolation	Unemployment		

Table 3 continued

Social	Economic	Environmental	Health Education
Legal issues	Low income		
Problems related to release from prison	Inadequate material resources		
	Centre for Effective Practice Poverty tool#		

*Abstracted from Kaiser Permanente Northwest. Collected by Patient Navigator using standardized tools.

#<https://cep.health/clinical-products/poverty-a-clinical-tool-for-primary-care-providers/?®ion=9>

Conclusions

- NL should Implement new and co-ordinate existing measures of SDH in NL at community, regional, and provincial levels.
- Integrate trained patient navigators into multidisciplinary teams to assess, document, and address SDH at the point of care in the community.
- Ensure that all indicators of SDH are accessible for care delivery, tracking, and evaluation in a linked and safe manner.
- Utilize a governance structure to ensure the collection, quality, co-ordination, transparency, and analysis of SDH indicators.
- Commit to making indicators of SDH accessible and publicly available.

Timeline

- Co-ordination of existing indicators can begin immediately.
- Implementation of new population level SDH indicators is feasible in the short-term.
- Creation of a point of care SDH program is a medium-term goal and its medium and long-term success is critically dependent on the availability of an integrated health information system.