Addressing the ecological determinants of health (EDH): contributions of Canadian CHCs until 2018

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Abstract

Historically, several Canadian CHCs have been actively involved in addressing environmental exposures in their communities. A scan of current activities revealed two CHCs with explicit environmental health programs and a wide variety of initiatives addressing ecological determinants of health. Indigenous CHC staff built on *traditional healing and teaching* approaches to connect the health of the land with its bounty and their clients' health. Community development activities *promoting healthy settings* included advocating for cleanup of contaminated water, soil and air. *Outdoor physical activity* initiatives included leading youth and those with mental health challenges on walks in parks, setting up hiking and snowshoeing trails along with equipment loans, and other ways of connecting with nature to improve mental and physical health. *Food-related programs* were incredibly diverse, connecting people to farming, gardening, sharing, preparing and eating together, and composting as ways of connecting with the life cycles of nourishment. Although impressed by the population focus with attention to equity (Indigenous, low-income, newcomers, youth) and community development character of CHC activities, we suggest ways in which other CHCs could address EDH in our time of global environmental change, to promote health and sustainability in CHC communities.

A. Introduction

Human economic activity in Canada has historically centred around the environment and the land, from indigenous traditions and sense of place, through the massive harvesting of natural resources prized by first the colonizers and then corporations, the cultivation of large tracts of land for agriculture, and industrial development working with these resources (Innis, 1956, 2017). Ignoring Indigenous teachings on the sacredness of the land, consideration of ecological or health impacts were historically minimal, often leaving communities and their health services to grapple with a burden of illness stemming from a degradation of the surrounding environment. Increasingly a range of approaches to environments, ecoregions, different species and health are being discussed (Buse et al. 2017) including addressing the ecological determinants of health (EDH) such as global environmental-climate change (CPHA, 2015).

Rooted in responding to diverse health needs of local populations, Canadian CHCs and their communities have historically been in the forefront of addressing environments and health in their communities: water contamination in Elora (Woolwich CHC), lead in soil in east Toronto (South Riverdale CHC, Chaudhuri 2000) and air pollution from a former coal-fired generating plant in western Toronto (LAMP CHC). CHCs and their clients are situated in a context that includes the regions, neighbourhoods, homes, streets, parks, watersheds, shops and workplaces where people live out their lives. While the health issues may be universal (access to a clean environment), the response from CHC's is most often tailored to the local geography or "the catchment area" (in keeping with watersheds thinking). In essence, CHCs can "Think globally and act locally" – a phrase often attributed to Town Planner Patrick Geddes (Stephen 2004). They can be mindful of overall planetary health, mobilize health services to screen for conditions resulting from environmental exposures, and engage in advocacy to effect change in environmental - ecological conditions which either adversely or positively affect community members' health.

As a group of one current CHC staff-member (PY), two former staff (DCC, CT) and one student of EDH (CWL), we wanted to find out more about what CHCs had been doing across Canada. We began with a search of CHC websites in the national database of Canadian Association of Community Health Centres (CACHC) and the Alliance for Healthier Communities in Ontario. The latter includes the province's CHCs, Family Health Teams, Nurse Practitioner Led Clinics, and Aboriginal Health Access Centres. After reading through the available programs and activities listed on the CHC websites, we focused on ecologically, outdoor, or environmentally oriented programming in CHCs and the philosophies of care that led to the development of these programs. For our purposes, ecological and environmental were defined as natural and built ecosystem-related, rather than market, social or spatial multi-level approaches to either analysis of problems or health promotion responses. We contacted colleagues in multiple CHCs (see acknowledgements) and deeply appreciate their stories and enthusiasm for our goal of sharing CHC experiences.

We turn first to examples of different approaches CHCs have taken across Canada. We include boxes and photos of different inspiring stories. We follow with reflections on CHC approaches in contrast to mainstream healthcare, in light of relevant frameworks. We conclude with some opportunities for CHCs to more fully address EDH and some thoughts on incorporating such changes in health service provision more generally.

B. CHC approaches and experiences addressing EDH with their communities

Through the CHC website scan, we were struck by the diversity of contexts, activities, and explicitness in programming aimed at addressing environments and EDH. We found one CHC (REACH, Vancouver, BC) which explicitly identified environment as a determinant of health in its mission and values statement, apparently at the behest of the board and community members during an earlier strategic planning exercise. A number of health centres included environmental health as part of their regionalized public health services, particularly in Alberta and British Columbia. Two CHCs have separate pages for Environmental Health programs - South Riverdale CHC and Flemingdon HC-Fairview Community Health. The latter includes a special category of "environmental engagement" activities. Other CHCs included programs and

activities addressing EDH implicitly, either alone or in partnerships with other organizations (see Table 1 for common examples).

Table 1: Common categories of CHC programs addressing Ecological Determinants of Health

	Example Programs	**Health Rationale**	**Ecological connections**	**Who & How**
Traditional Indigenous Healing & Teaching	- Incorporating Indigenous healing methods as part of health services, - Leading families and youth out to harvest traditional medicines, wild foods, game	- Health in a holistic manner, culturally safe, incorporating mental, spiritual, and physical health into philosophy of care - Connection with traditional ways of procuring food and medicines assists health	- Increases awareness of the land as a factor in all realms of health, - Earth as provider - closeness to other species	- Coordination with local Indigenous groups - Hiring full-time Traditional Healers
Healthy settings	- Reducing toxics in the home and community settings - School indoor air quality education and asthma policies	- Less exposure to air, water and soil contaminants will reduce environmental illness, particularly among vulnerable populations	- Less contaminated settings are better for all species	- Primarily community & parent organization, committees, and advocacy, core CHC staff
Outdoor Physical Activity	- Active transportation promotion, bicycle repair clinics, - Tai Chi, sports teams, equipment loans, youth camps -- Walking groups, mood walks - Cleanup of streams, parks, vacant lots	- Physically active time spent outdoors is good for mental and physical health - Increase access and personal skills - Serve as community builders	- Increases awareness of outdoor environments, species and greens space	- Implementation depends on community interest, partnerships, and core CHC staff
Food related	- Community gardens, rooftop gardens, school gardens - Sharing of harvests, farmers' markets and	- Reduces food insecurity -Improves access to fresh produce in vulnerable communities	- Extend the benefits of green spaces - Improves personal relationships with	- Coordination between CHC and community partners

	healthy produce delivery - Complementary nutritional education, and cooking skills - Migrant agricultural worker education & clinics	- Time outdoors in green space - Connects with farms - Increases community capacity and social interaction - Provides needed health services to population with access challenges	environment and plants - Learning re: ecological-organic agriculture - Transnational links	- On-site or collaboratively run off-site - Core CHC staff complemented by volunteers and contracted staff

Indigenous teachings offer an important perspective on the connections between our health and the health of our surrounding natural environment. We conducted interviews with three Indigenous staff running programs at CHCs and drew upon the Truth and Reconciliation Commission Report (TRC) for environment and health connections (see Box 1).

Box 1. Themes from the Truth and Reconciliation Report (2015)

The TRC report includes numerous references to the importance of nature and the land as central to Indigenous values and way of life, echoed in our interviews. A number of themes emerged on environment and health from an Indigenous perspective:

- Indigenous communities connect human health with ecosystem health
- Seven sacred teachings are central, these are: Love, Respect, Courage, Honesty, Wisdom, Humility, and Truth
- Decisions need to include seven generations into the future
- Health impacts result from a forced disconnect from the land and culture
- Indigenous peoples commonly regard land rights as culturally and religiously significant
- Mental and physical health impacts result from a lack of autonomy over local factors (e.g., housing, pollution, safety)
- Decision making processes should promote dialogue, active listening and round-table discussions
- Communications should include different methods (e.g., drawings, visuals (not just text), stories – oral tradition
- Not-for-profits including CHC's, need to contextualize their work historically with Indigenous stories
- Approaches to health should model hope, not scolding or blaming

Aboriginal Health Access Centres and CHCs serving substantial Indigenous populations draw on centuries of traditional healing activities (row 1 in Table 1). An Indigenous perspective situates human health into the broader context of overall ecosystem health, and it incorporates a longer timeline to ensure the health of future generations. That is to say, human health requires a respect for and connection to the ecosystems that support life. Teaching sessions helping people connect with nature and respect Mother Earth are an essential part of Chigamik

CHC's programs (See Box 2). The Director of Traditional Programs at Shkagamik-Kwe Health Centre in Sudbury coordinates medicine picking and a wild food bank, supplied by families harvesting to share with others, including game. Being out on the land, is seen a source of learning and sustenance in traditional programs coordinated by CHCs. "In the face of global warming, growing economic inequities & conflicts over large-scale economic development projects – there's an emerging consensus that the land that sustains us all must be protected for future generations." TRC Summary (STAND, 2016)

Box 2. Indigenous programs at Chigamik CHC - Conversation with Brian George, Indigenous Cultural Coordinator

Chigamik CHC hosts teaching sessions connected to the seasons and Earth's cycles. They promote respect for the Earth. It is important to include a connection to the land. We use Traditional Environmental Knowledge (TEK) in our work.

Some people have a consciousness to see a bird's flight pattern when all you see is a feather on the ground. No matter where you are, a connection with nature can be found. We need to develop respect, for example, to be aware that when you touch a tree, the tree is touching you as well. Respect the habitat of wildlife. This can be healing.

Chigamik teaches people to connect with their own spirit as individuals. There are millions of spirits in Nature to connect with as well. The Earth shares its power with those that seek to walk in balance with it. We cannot live without the Earth, she is our Mother.

Chigamik sees a growing interest in reconnecting with nature. People are seeking, trying to make sense of their world. Many of the people coming to Chigamik are non-Native and are interested in a more "natural way", seeking healing through Native expression.

Healthy settings were another important broad approach (see row 2 of Table 1), linked with the international Healthy Communities movement (Hancock, 1993). For example, Woolwich Healthy Communities began as a way to deal with contaminated groundwater (see Box 3) and continues with stream cleanups and community engagement on local planning policies. Woolwich CHC staff provide ongoing facilitation and support, though much of the work is done by community volunteers, often in coordination with municipal staff and councillors.

Box 3. Woolwich Healthy Communities (WHC) - Conversation with Joy Finney, Health Promoter

Initiated in 1990, WHC is a long-running *Healthy Communities* initiative. It began in response to industry leaking dioxin into the ground water near Elmira, ON. A new water supply was secured and clean-up actions were initiated. However, Woolwich wanted a more pro-active strategy.

A Township Councillor heard about the International *Healthy Communities/Healthy Cities* movement. She brought the model to the local health committee and the Woolwich CHC. They used a "guided imagery" process to create a long-range vision for environmental, social and economic health. Residents, elected representatives, and planners worked in groups, created images, and prioritized common themes (e.g., sustainable development). They defined "clean water" and actions to make it happen. Three groups emerged, Healthy Recreation (which became a trails group), Clean Waterways, a WHC Coordinating Committee and a well water quality group.

What does WHC do?

The Healthy Communities model is about community taking collective action to support health. WHC has influenced public policy, e.g., highway proposals, big box retail and official plans. They have annual stream rehabilitation events. They work to connect and improve hiking and biking trails. And they developed *guiding principles* to help council make decisions.

Woolwich identifies the following to keep the projects going:

- This is a community-lead group but is important to provide consistent support. Woolwich CHC staff help find resources, facilitators, researchers, draw in volunteers and play a connecting role.
- Sustain the volunteers and routinely connect them back to the original vision.
- Build on strengths, e.g., utilize local experts or nearby institutions (e.g., a university).
- Look at the impact. After creating the *Guiding Principles*, WHC then developed indicators.
- Be inclusive. Use tools to include "voice and choice" (e.g., surveys, workshops)
- Use popular education techniques to promote the group, the vision and the principles.

Similarly, LAMP staff have worked actively engaging with community members to push for reduced air pollution and improved air quality through better transit, while at the same time paying attention to important social determinants of health like the preservation of employment lands to preserve well-paying local jobs (see Box 4). Attention has also been turned to indoor environments, particularly schools, as places where exposures should be kept to a minimum for those with existing health conditions such as children with asthma (South Riverdale

CHC,Chaudhuri 2000). Interestingly similar approaches to children's environmental health have been advocated by the Anishinabek Health Secretariat (2009) for Indigenous children.

Box 4. LAMP CHC - Conversation with Carole Goyette

The work began with the need for transparency and public input on local planning and decision making, e.g., the protection of *employment lands* or local air quality. To improve local living conditions (including the environment), LAMP:

- Initiated a cycling advocacy group to improve active routes to school and install bike racks. The group now meets on their own.
- Helped establish SETAC (South Etobicoke Transit Action Committee), advocates for better transit. One person went on to LAMP's board of directors.
- Established a group with the Ontario Clean Air Alliance to close Lakeview – a major coal fired generation station. They planted 100 white crosses on the lawn of Lakeview. That received national media coverage.
- Supported an environmental group to work on local air quality study.
- Is now assembling all the community groups to establish an interface between the general population and decision makers by creating the Etobicoke Lakeshore Leaders Forum. It is about equity and access to decision making and will set out a series of town hall meetings on housing, transit and civic engagement as top priorities.

LAMP's initiatives resulted in planning policy changes, the preservation of employment lands, affordable housing, cleaner air, access to the lake front, better cycling infrastructure and better transit. Some of the community leaders are now moving into local politics.

For success, LAMP worked to:

- Engage the local population by highlighting local issues. This makes decisions more inclusive and helps reduce social isolation.
- Support community engagement - the core of the work. This can include simply hosting a meeting, providing facilitation and meeting space.
- Use community organizing and community development strategies
- Build community capacity. Create networks of people to support one another.

A next broad category of programs are diverse outdoor physical activities (see row 3 of Table 1). Active transportation promotion through initiatives, such as an advocacy group to improve road safety for cycling or offering bike repair clinics, were prominent. SRCHC works with a settlement agency on a bike-share program, Bike Host, to enable newcomers to discover neighbourhoods and parks in Toronto over a summer. Queens North CHC (Box 5) has developed trails in their adjoining woodland for walking and snowshoeing. To improve accessibility among low income families they have actively worked with libraries to develop loan programs for snowshoes, walking poles and cross-country ski outfits.

Box 5. Queens North CHC - Conversation with Katherine Houser

Queens North Community Health Centre near Minto, New Brunswick has a suite of programs to get people outdoors and active, in keeping with their population health promotion approach and interest in community connection. Having a woodland right out back of the CHC is a key asset, offering hiking-snowshoeing trails, a sliding hill and a zipline through the woods.

Right after its conversion from a rural hospital to a CHC, staff and board realized that they needed to shift the way the public understood health. Started as a way to portray the CHC as a positive health place, they organized their first Harvest Fest one September, ten years ago, right out of the parking lot. A suite of activities, free food with recipes chosen by the CHC dietician and lots of activities for all ages, including the woods.

To facilitate access among low income families, most activities are low cost with subsidy as needed or free. For example, they developed a snowshoe loan program in conjunction with nearby libraries and a mountain bike event through a renovated coal mine tailings area led by a CHC physician. To complement an 8-10 week spring Learn to Walk program, the health centre loans out Nordic poles to complement clinician recommendations to be take up walking. Last year, they added access to x-country skiing sets with the youth centre and schools, so young people have free access to equipment.

As the CHC's budget primarily covers staff time, many of the programs are developed through a combination of partnerships with other organizations (public and private) and joint fundraising efforts. Specific ones include the annual spring 5 km run with the Running Room subsidizing costs. An overall one is with the Grand Lake Wellness Network, one of six in the Capital region, to promote physical fitness and mental resilience.

Explicit promotion of the mental health benefits of 'mood walks' has been done in conjunction with conservation authorities and Canadian Mental Health Association partners at several CHCs. One of the most developed programs is oriented to youth who would not usually go into large parks or forested areas - through Scarborough Centre for Healthy Communities (SCHC, Box 6), Charanjit Singh initiated park walks to introduce youth to mindfulness in nature as part of connecting with green spaces. Youth have also actively participated in community clean-up, clearing garbage and litter in different public spaces, similar to the stream rehabilitation that Woolwich Health Communities promotes.

Many CHCs are active in a whole set of food related programs (see row 4 of Table 1) as ways to both address food security and nutritional needs, while at the same time connecting with the larger set of agri-food system components. For example, Stonegate CHC has a food access committee which supports a community garden with about 50 gardeners, runs a seasonal farmers' and mobile good food market, and links with Good Food Box and School Snack programs. Guelph CHC started The Seed, a comprehensive approach to transforming local food systems (https://www.theseedguelph.ca/) including food production, distribution and consumption. Flemingdon includes trips to farms for children.

SCHC (Box 6) has worked with youth to turn vacant plots into active community gardens while at the same time developing youth leadership (see Figure 1).

Box 6. Scarborough Centre for Healthy Communities (SCHC) Youth Programs - Conversation with Charanjit Singh

SCHC was founded as a not-for-profit in 1977, by 13 community agencies, a core group of community leaders and countless volunteers who identified emerging health and social needs within Scarborough. Now with over 155 staff, over 650 volunteers, 38 distinct and integrated services across 11 sites it includes a vibrant set of youth programs. Charanjit Singh was one such youth who growing up in Scarborough was concerned about the environment. Returning to SCHC after his degree, he reached out to neighbourhood centres (increasing staff and resources), connected with families, and contacted youth directly through flyers and social media. Participating youth range from 13-24, are members of Tamil, South Asian, and Chinese communities, among other identities, and are keen to be engaged in giving back.

Charanjit started taking youth for walks, into city parks, including Brimley Beach and Knobhill Park, forested areas which were foreign to them. He described how connecting with green spaces, mindfulness in nature, listening in ravines can re-wire their brains and promote health. An elderly lady always picking up garbage inspired the youth to form groups for cleaning up their neighbourhoods. This led to accessing unused land for growing vegetables and flowers to share among gardeners and community members. (see photos)

SCHC has developed a leadership program to positively engage youth in building health, green and vibrant communities. As a participant Elijah, said ""I really didn't expect much at first but the GROW program is now one of my favorite community experiences. I learned so much about gardening and the connection between the earth and the food we eat. I also got to meet many great people throughout the program. Most of all, it gave me a chance to give back to my community that has given so much back to me. This program not only has helped my community, but helped me grow as a person also." Such positive engagement of young people during the summer months gives them a sense of pride to be a part of a program that adds value to their own community. Furthermore, the program gives participants a more precise understanding of what it means to eat natural food and make healthy lifestyle choices.

Figure 1: Project GROW participants tending their garden (*with permission of participants)*

Access Alliance worked collaboratively with multiple community agencies to develop a green roof on their shared CHC satellite building (Guo and Mrosovsky, 2014). [Box 7] Further, they extended the work with newcomer communities to explore ‘green living’ more broadly, including evaluating the change in knowledge and practices associated with a series of workshops (Access Alliance, 2017). SRCHC has also retrofitted their building for a roof garden and related programming.

Box 7. Access Alliance Rooftop Gardens – Conversation with Lara Mrosovsky

AccessPoint On Danforth (APOD), Access Alliance's satellite site in the east end of Toronto, is the first Community Health Centre in Ontario to have an intensive Green Roof. The organization capitalized on an opportunity when transforming the former tile factory building into a community Hub. There was an existing flat roof, the landlord was amendable, capital funding was secured, leasehold renovations were sufficient to support a green roof and hence the 6,426 sq. ft (597 m2) rooftop garden became a reality.

Established in 2011, the Green Access Program at APOD uses the Green Roof as launching pad for activities that build skills around food and gardening. The initiative merges community development, environmental education, social inclusion, and health promotion.

The rooftop garden provides community members, most of who live in high-rise buildings with no personal access to outdoor space, the opportunity to participate in gardening activities. As noted by rooftop garden volunteer, "Thanks to the programs on the Rooftop Garden I learned to grow inside my own house where I grow over 12 tomatoes and chili peppers. This made me very proud. The garden programs definitely helped reduce my stress as it taught me new things, made me feel good and I was able to meet others and share knowledge with them".

One of the Green Access' innovative programs is the Enviro-Leaders Program that trains community members from the local neighbourhood about environmental issues and organic gardening practices. Enviro-Leaders are provided training and mentorship to develop workshops on different green living topics and later present workshops to members of the community.

Key factors that have contributed to the success of the Green Access initiative include: dedicated staffing with specialized food growing knowledge (there's only 7 inches of soil so need to know which crops to plant!); being situated within a well-established social service agency; linking with pre-existing programming in the Hub; offering multi-cultural programming; partnering with local school groups, public health and Toronto Urban Growers; and lots of volunteers.

Several Ontario CHCs have recognized that migrant agricultural workers (MAW) from Latin America, the Caribbean and South-East Asia are not only key producers of food, but also a population which requires different outreach approaches to meet their health needs. For example, Chatham-Kent CHC (founded 2010) early on worked with partners to identify MAW as a priority population for service at two of their sites. They collaborated with a Thai support organization to conduct a picnic survey of workers as to their health perceptions. In addition to corroborating work and health hazards, healthy eating was regarded as very important for their well-being. Working with a municipal economic development officer and a Thai worker advocate they worked with an agricultural employer to provide space for onsite clinical services, staffed by CHC personnel on a monthly basis.

C. Contrasts with mainstream healthcare

As evidence in section B, CHCs have addressed environments and ecological determinants of health in a broader set of ways than mainstream healthcare. They do so by linking with land, other community groups, municipal, health promotion and public health colleagues in a fascinating mix of activities. For many CHCs, 'rooted in community' has meant connections with place either spurred on by threats to health, such as toxic exposures in water, soil or air, or opportunities for health, such as green spaces or traditional land practices. As noted, Indigenous staff working in CHCs have re-kindled connections with land that are part of their and their patients' cultural heritage. Reconnecting with the land and other species is a strong part of both Indigenous and eco-health approaches to health (Parkes 2011) as well as a growing body of literature connecting experiences with nature and health (Hartig et al. 2014).

CHCs' population focus has been exemplified as those with: particular exposures e.g. children exposed more directly to soil lead; vulnerability e.g. asthmatics sensitive to air pollution; barriers to access e.g. low income people without means for certain kinds of outdoor activity or migrant agricultural workers without ready access to services; or cultural heritage e.g. indigenous people wanting to harvest traditional foods or newcomers wanting to grow familiar foods. Each of these is regarded as appropriate for the broad approach of CHCs responding to community interests, needs and opportunities. Striking were the number of programs fostering greater connection to sources of food and nature experiences. Substantial evidence exists for the benefits of proximity to green space, including better birth outcomes (Hystad et al. 2014) and cognitive development (Davand et al 2015), and reduced mortality (Crouse et al. 2017). Volunteering in green spaces, such as Scarborough youth, has been found to promote not only well-being but access to employment opportunities (Molsher and Townsend 2016).

Some of the population approaches taken by CHCs are explicitly culturally safe e.g. Indigenous teaching and traditional healing programs. Others are explicitly anti-oppression among racialized, newcomer communities e.g. Black Creek CHC's involvement in the food justice struggle in their community ((Black Creek Food Justice Network 2016). Both are consonant with environmental justice approaches (Teelucksingh 2017) to right historical and current challenges facing racialized communities (Waldron 2018). Inclusion of people in decisions about their neighbourhood and maintaining an equity focus i.e. that there are places for everyone (to live, play, socialize, work, etc.) regardless of status or income, are consistent with more critical approaches to environmental health promotion (Masuda et al. 2010).

While CHCs employ a range of health promotion strategies including health communication, health education, and promotion of self-help and mutual aid, their greatest strengths are in community development approaches aimed at policy reform and system change. One of the challenges many CHC populations face is lack of control over local factors: affordable housing, pollution, safety, transportation, and public, affordable space for physical activity (Meads and Exley 2018). Hence empowerment strategies are particularly important, as highlighted in the environmental justice literature (Masuda et al. 2010). These include: action committee facilitation e.g. active transportation-cycling committees; leadership development e.g. youth growing food and becoming active in community clean-ups; developing and growing linkages with other community initiatives and organizations e.g. in outdoor physical activity in rural New

Brunswick; and advocacy e.g. in participation in environmental impact assessments by South Riverdale CHC. Further, models of dialogue, active listening, round tables and participation on CHC boards, such as Indigenous people at Wabano CHC and community environmentalists on a number of CHCs, are all examples of responding, mobilizing and sharing governance to which CHCs are committed.

D. Directions

Based on our brief scan of programs and activities addressing EDH, we might ask: why so limited in an era of global environmental change? and what might be options? Although environment is not currently on many CHCs' agenda, other CHCs have found ways. Indigenous culture and programs which connect ecosystem health with human health provide an important inspiration for programs and services at CHC's.

"Reconciliation between Aboriginal and non-Aboriginal Canadians also requires reconciliation with the natural world and the practicing of reconciliation (not just talking about it) in their daily lives". (STAND, 2016)

As CHCs are eminently place-based, many could leverage their local mandate by examining the local environment within which their clients live and working with it more explicitly. Using data, community engagement and observations, CHCs could map out responsive programming, which helps re-connects people to the ecosystems that surround them.

There is a wide spectrum of opportunities, as illustrated by programs currently being offered in some CHCs, from fostering a better understanding of local air, water and soil quality to supporting outings in nature or connecting clients to places where food is grown. In addition to existing strategies, they could incorporate communications which reach a broader audience, including stories, aural communication and imagery. CHC's can support collective action for community change (e.g., Woolwich and LAMP CHCs) across a range of social-ecological issues facing communities (see Hallstrom et al. 2015 for options). In the process, CHC's can foster inclusive dialogue and exchange of ideas. They can work with community members to improve the places where people live so that local environmental factors support health rather than making people sick. Build on a settings approach more explicitly they could highlight health-environment connections in the broader context of sustainability (Poland & Dooris 2010). And they can promote inclusive, long-term visions of health for future generations (e.g., Indigenous teachings that consider seven generations) - a vision of self-determination at a community scale but with a mind to overall ecosystem health.

CHCs might also bolster clinical services to complement community development and health promotion approaches. They could recognize the value of Indigenous healing practices and use them in clinical care for Indigenous and other patients. Social prescribing is an emerging practice whereby the CHC patient is linked to non-clinical interventions to improve individual health through social connection, peer support and often physical activity (Kilgarriff-Foster and O'Cathain, 2015). Many evidence-informed examples include people re-connecting with their community and surroundings (e.g., group nature walks). CHC's can initiate the programs, often in partnership, or connect people to existing ones.

Among CHCs addressing the EDH, interviewees expressed interest in some kind of network, to learn from each other, support each other, and generate joint new ideas on programming that incorporates environment and health. Among these could be potential for funding of programs addressing EDH, in both rural and urban areas, perhaps in partnership with organizations like EcoHealth Ontario or the Canadian Association of Physicians for the Environment. Then more CHCs could be thinking globally and acting locally, as appropriate to their mandates and strengths.

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