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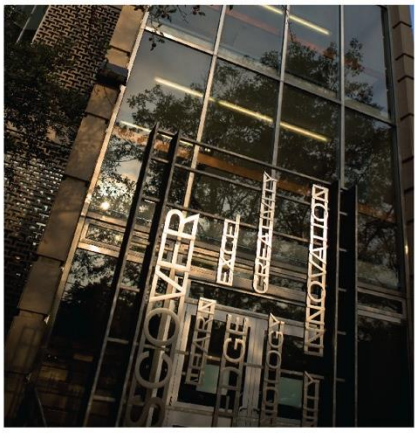
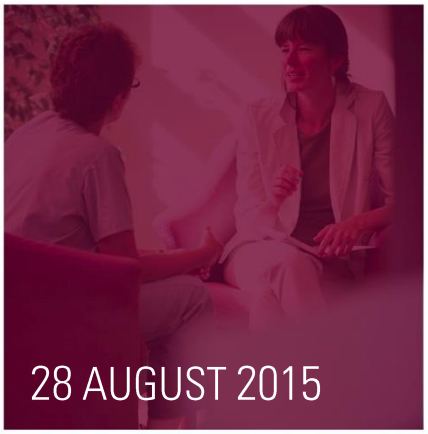
McMaster HEALTH FORUM

EXAMINING THE IMPACT OF DROP-IN CENTRES

RAPID SYNTHESIS (30-DAY RESPONSE)





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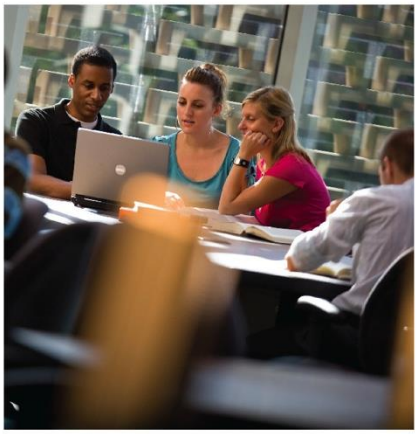

EVIDENCE >> INSIGHT >> ACTION

Rapid Synthesis:
Examining the Impact of Drop-in Centres

28 August 2015

McMaster Health Forum

For concerned citizens and influential thinkers and doers, the McMaster Health Forum strives to be a leading hub for improving health outcomes through collective problem solving. Operating at regional/provincial levels and at national levels, the Forum harnesses information, convenes stakeholders, and prepares action-oriented leaders to meet pressing health issues creatively. The Forum acts as an agent of change by empowering stakeholders to set agendas, take well-considered actions, and communicate the rationale for actions effectively.

Authors

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Timeline

Rapid syntheses can be requested in a three-, 10-or 30-business day timeframe. This synthesis was prepared over a 30-business day timeframe. An overview of what can be provided and what cannot be provided in each of the different timelines is provided on McMaster Health Forum's Rapid Response program webpage (http://www.mcmasterhealthforum.org/policymakers/rapid-response-program).

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Conflict of interest

The authors declare that they have no professional or commercial interests relevant to the rapid synthesis. The funder played no role in the identification, selection, assessment, synthesis or presentation of the research evidence profiled in the rapid synthesis.

Merit review

The rapid synthesis was reviewed by a small number of policymakers, stakeholders and researchers in order to ensure its scientific rigour and system relevance.

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KEY MESSAGES

Question

- What are the impacts of drop-in centres?

Why the issue is important

- Hard-to-reach communities (e.g., drug users, people living with HIV, people from sexual minority communities, asylum seekers, refugees, people from ethnocultural communities, and homeless people) face many barriers to accessing needed care and support and, as a result, are often alienated from health and social services.
- One possible approach (among many) to overcoming these barriers is to provide drop-in centres, which typically provide immediate services, such as food, clothing, showers, laundry and bus tokens, as well as peer support, support groups, and longer-term services such as case management.
- To inform decisions in community-based organizations (that often provide drop-in centres), there is a need to identify the best available research evidence regarding the impact of centres and/or their constituent components.

What we found

- Twenty systematic reviews and eight primary studies with some relevance to the question were identified.
- Three reviews and six primary studies focused on drop-in centres, and the remaining 17 reviews and two primary studies (economic evaluations) provide evidence about peer-support interventions and support groups, which are important components of drop-in centres.
- Key findings related to drop-in centres
  - Two of the reviews (both of medium quality) related to drop-in centres focused on adult day centres for older adults, indicate that adult day centres have been found to improve overall wellness of participants, physical and emotional problems, and perceived psychosocial well-being, as well as the competence of caregivers who provide care to people with dementia.
  - The third review found that street-connected youth accessing a drop-in centre had significantly fewer sexual partners than those who accessed the same drop-in centre and received a specialized therapeutic intervention, suggesting there may be no significant benefit for providing additional interventions beyond standard services offered in shelters and drop-in centres.
  - The primary studies evaluated drop-in centres for female sex workers, people with brain injuries, and homeless or disadvantaged inner-city populations, and found a range of benefits including reduced drug use, and reduced exchange of sex for drugs, as well as improvements in social participation/engagement, mental health, days housed (although no improvements securing permanent housing were found) and access to sexual and reproductive health services.
- Key findings related to peer-support interventions
  - Twelve systematic reviews assessed peer-support interventions for people living with mental illness, people living with HIV, people trying to managing chronic diseases and for breastfeeding mothers, and found either mixed or insufficient evidence regarding the impact of peer support.
  - Some possible benefits that were identified in the reviews included:
    - reduced inpatient service use, improved patient-provider relationships and increased engagement with care, empowerment and hopefulness for recovery in people with severe mental illness;
    - improved sexual risk behaviour, attitudes and cognitions, HIV knowledge, and substance use;
    - improved clinical outcomes for people with Type 2 diabetes; and
    - increased duration of exclusive breastfeeding among new mothers.
- Key findings related to support groups
  - Support groups: 1) were found to improve rates of viral suppression and reduce drop-out rates from therapy for adolescents living with HIV; 2) are most effective for older adults when they are developed based on theory, offered social activity, and actively engaged older adults as participants; and 3) improved psychological well-being, depression, burden and social outcomes for caregivers of people living with dementia.

QUESTION

What are the impacts of drop-in centres on the health of individuals and populations?

WHY THE ISSUE IS IMPORTANT

Hard-to-reach communities (e.g., drug users, people living with HIV, people from sexual minority communities, asylum seekers, refugees, people from ethnocultural communities, and homeless people) face many barriers to accessing care and, as a result, can often be alienated from health and social services.(5;7) For example, barriers for these hard-to-reach communities to access needed health and social services may include negative past experiences with accessing services, inconvenient location and opening times of services, and how services are funded and managed (e.g., for youth, the fear that parents and social services will be contacted).(5;7;8)

One possible low-cost approach (among many) to overcoming these barriers is to provide drop-in centres, which typically provide immediate services, such as food, clothing, showers, laundry, transit fare, peer support and support groups, as well as longer-term services such as case management.(5;9) However, to inform decisions in community-based organizations (where drop-in centres are often provided), there is a need to identify the best available research evidence regarding the impact of centres and/or their constituent components.

Box 1: Background to the rapid synthesis

This rapid synthesis mobilizes both global and local research evidence about a question submitted to the McMaster Health Forum's Rapid Response program. Whenever possible, the rapid synthesis summarizes research evidence drawn from systematic reviews of the research literature and occasionally from single research studies. A systematic review is a summary of studies addressing a clearly formulated question that uses systematic and explicit methods to identify, select and appraise research studies, and to synthesize data from the included studies. The rapid synthesis does not contain recommendations, which would have required the authors to make judgments based on their personal values and preferences.

Rapid syntheses can be requested in a three-, 10- or 30-business-day timeframe. An overview of what can be provided and what cannot be provided in each of these timelines is provided on the McMaster Health Forum's Rapid Response program webpage (http://www.mcmasterhealthforum.org/policymakers/rapid-response-program)

This rapid synthesis was prepared over a 30-business day timeframe and involved five steps:

1) submission of a question from a health system policymaker or stakeholder (in this case, The AIDS Network in Hamilton, Canada);
2) identifying, selecting, appraising and synthesizing relevant research evidence about the question;
3) drafting the rapid synthesis in such a way as to present concisely and in accessible language the research evidence; and
4) finalizing the rapid synthesis based on the input of at least two merit reviewers.

WHAT WE FOUND

Twenty systematic reviews and eight primary studies with some relevance to the question were identified. While only three of the reviews focused on drop-in centres,(10-12) six of the included primary studies (one of which is a non-systematic review) focused specifically on drop-in centres.(1-6) Despite the remaining 17 reviews not addressing drop-in centres, they are included in the synthesis along with two economic evaluations,(13;14) given that they provide evidence about peer-support interventions (13-27) and support groups,(13;14;28-31) which are typically central components of drop-in centres. In addition, two studies that were initially included in the synthesis were subsequently excluded given that they were evaluations of interventions that were delivered to participants recruited through drop-in centres instead of evaluations of the drop-in centres themselves.(32;33)

The findings from systematic reviews are presented along with an appraisal of whether their methodological quality (using the AMSTAR tool for a score out of a possible 11) is high (scores of 8 or higher), medium (scores of 4 to 7) or low (scores less than 4) (see the appendix for additional details about the quality appraisal process). In addition, the recency with which reviews were conducted is also highlighted, with recent reviews defined as the search being conducted within the past five years.

Drop-in centres

The three reviews with evidence regarding the impact of drop-in centres were conducted recently. Two of the reviews (both of medium quality) focused on adult day centres for older adults,(10;11) and the third (a high-quality review) focused on interventions for promoting reintegration and reducing harmful behaviour in street-connected youth.(12) In general, adult day centres are designed to "support the health, nutritional, social, and daily living needs of adults with functional limitations in a group setting during daytime hours."(10) In addition to supporting the needs of older adults, day centres also provide support to family caregivers, which often includes offering respite from caregiving responsibilities.(10) Findings from the two medium-quality systematic reviews indicate that adult day centres have been found to improve overall wellness of participants, physical and emotional outcomes, and perceived psychosocial well-being,(10) as well as the competence of caregivers who provide care to people with dementia.(10;11)

The high-quality review focused on interventions for promoting reintegration and reducing harmful behaviour in street-connected youth, and found that specialized therapeutic interventions did not result in better outcomes as compared to those who accessed shelters or drop-in centres without such interventions.(12) The same review found that street-connected youth accessing a drop-in centre had significantly fewer sexual partners than those who accessed the same drop-in centre but also received a specialized therapeutic intervention. As a result, the review concluded that there is no significant benefit for providing additional services (e.g., specialized therapeutic interventions) beyond standard services offered in shelters and drop-in centres.(12)

Three of the five included primary studies with evidence related to the impact of drop-in centres were conducted in Canada (two in Vancouver and one in Toronto).(1-3) The five studies evaluated drop-in centres for female sex workers,(2) people with brain injuries,(3) and homeless or disadvantaged inner-city populations.(1;5;6) A non-systematic review was also included given that it provided considerations for opening and sustaining a drop-in centre for homeless youth, which were derived from the authors' long-term experiences in this area.(4)

The study of a drop-in centre for female sex workers used data from a cohort study in Vancouver, Canada that included 547 female sex workers, and found that 330 (60%) of the sample utilized the services from a drop-in centre (Women's Information Safe Haven Drop-in Centre – WISH) over a three-year period.(2) The study found that use of the drop-in service was independently associated with age, Aboriginal ancestry, injection drug use, exchange of sex for drugs, and accessing sexual and reproductive health services. The authors indicated that the findings suggest that such services can link highly stigmatized populations with needed health and social support services.(2)

Box 2: Identification, selection and synthesis of research evidence

Research evidence was identified (systematic reviews and primary studies) by searching (in July 2015) Health Systems Evidence (www.healthsystemsevidence.org), HealthEvidence and The Cochrane Library for "drop-in" or "drop in" in the title and abstract. Additional searches were conducted in Health Systems Evidence by combing the group care category (under delivery arrangements) with an open search for "peer" OR "drop-in" in the title and abstract fields.

Given that none of the identified reviews were directly relevant to the question, we supplemented these searches with the following searches of PubMed:

- "drop-in centre" or "drop-in center" or "drop in centre" or "drop in center"; and
- (support group or peer support) AND (drop-in or drop in) [searched using Health Services Research topic filter for outcomes assessments).

The results from the searches were assessed by one reviewer for inclusion. A document was included if it fit within the scope of the questions posed for the rapid synthesis.

For each review included in the synthesis, the focus of the review, key findings, last year the literature was searched (as an indicator of how recently it was conducted), methodological quality using the AMSTAR quality appraisal tool (see the Appendix for more detail), and the proportion of the included studies that were conducted in Canada were documented. For primary research (if included), the focus of the study, methods used, a description of the sample, the jurisdiction(s) studied, key features of the intervention, and key findings were documented. The extracted information was then used to develop a synthesis of the key findings from the included reviews and primary studies.

The cross-sectional study with people with brain injuries was conducted in Vancouver and assessed whether drop-in centres improved social participation (i.e., involvement in social and leisure activities within a social network.(3) The study found that of the 42 participants included in the study, the 23 who attended a brain-injury drop-in centre were found to have significantly higher levels of social participation than the 19 participants who did not access the drop-in centre. The difference in social participation between the groups was more pronounced when the drop-in centre group was compared against the 12 of 19 participants who did not attend but would have liked to.(3)

The remaining three studies and the non-systematic review focused on drop-in centres for homeless or disadvantaged inner-city populations. One study found significant improvements up to 12 months after baseline in substance use, mental health and days housed (with increased housing resulting in decreased drug and alcohol use) among homeless youth who requested case management or treatment services through an urban drop-in centre.(5) However, most youth in the same study did not find permanent housing, education or employment, and their use of medical services did not change over time.(5)

Another study assessed consumer preference for drop-in centres for homeless individuals with mental illness (and often addictions).(6) The study randomly assigned homeless participants to a drop-in centre that emphasized consumer choice, or to control programs with a traditional continuum of care where housing and services are contingent on sobriety and progress in treatment. The centre emphasizing consumer choice provided three types of services that were offered in whatever sequence or combination the individual chose, including: medical, psychiatric and social services; development and implementation of rehabilitation plans that emphasized securing housing; and opportunities to meet and socialize with others. Those who accessed the drop-in centre emphasizing consumer choice reported:

- having improved access to food, a place to sleep and ability to stay clean;
- participating in more services (e.g., day programs and self-help groups)
- receiving help with alcohol and drug problems, financial entitlements and health insurance;
- having less contact with police (but equivalent levels of court or jail involvement);
- having improved life satisfaction and reduced levels of anxiety, depression and thought disorders;
- spending less time on the street; and
- increasing the amount of time spent in a community setting (but only a minority of participants receiving the intervention were able to find stable, independent housing in the community).(6)

The third study assessed the effectiveness of an intervention to increase the use of screening mammography among disadvantaged women at an inner-city drop-in centre in Toronto, Canada. The intervention was a partnership between an inner city drop-in centre and a nearby hospital, and consisted of a collaborative breast cancer screening initiative where project staff of the drop-in centre accompanied small groups of women for mammography visits at a weekly pre-arranged time.(1) For the seven years prior to the intervention (1995-2001), annual mammography rates among 158 clients using the drop-in centre averaged 4.7%. The screening rate increased significantly in 2002 with 26 of 89 (29%) clients accessing screening, suggesting that linked programming with drop-in centres can increase access to health services.(1)

Lastly, the non-systematic review provides guidance for how to open and sustain a drop-in centre for homeless youth, with the recommendations provided being derived from the experiences of a team that started and maintained two drop-in centres in two U.S. states.(4) The review noted that many studies consistently conclude that establishing trust with youth is essential for them to be accepting of more intensive support interventions, and that drop-in centres allow trust to develop as they provide an opportunity for interaction between youth and drop-in centre staff. The guidance provided in the review for how to open and sustain a drop-in centre for homeless youth is structured based on five core considerations,

1) Program philosophy
    - the philosophy adopted in the drop-in centres which the authors developed and sustained "emphasizes the importance of unconditional positive regard, genuineness and empathy among

program staff towards the youth", as this allows trust to be established, and youth are likely to be inclined to consider other services offered by staff.

2) Funding
   - securing funding (e.g., from private donors, charitable organization and/or government sources) is essential unless staff are volunteers and the site for the drop-in centre is donated.
3) Building and location
   - needs to be accessible to the target population in terms of the physical location, surrounding community, level of safety and emotional accessibility.
   - "the drop-in should provide an environment that promotes the belief that youth are capable of reaching their life goals and are capable of doing so in a safe and supportive community. In order for this to occur, it is vital that collaboration between the surrounding community and the drop-in centre
   - is fostered through meetings, communication or shared activities. Community support will help ensure that the youth are viewed positively, which will also create an environment conducive to the program philosophy."
4) Organization of the centre
   - a drop-in centre is more likely to initially appeal to youth by meeting their most basic needs including food, healthcare, clothing, and hygiene products.
   - the layout of a drop-in centre should include different rooms or separate spaces, which reduce crowding and conflict among youth.
   - a variety of activities should be offered to meet youths' interests and provide structure, while always ensuring the dignity and respect for the youth is maintained by staff.
   - a plan should be in place to address behaviours that may create an unsafe or counter-productive environment.
5) Staff
   - well-trained and supported staff are essential, and "due to the high levels of stress that staff may experience, it is important that they be given time to process their experiences and receive feedback. These procedures might reduce staff burn-out and turn-over."

Peer-support interventions

Twelve systematic reviews (15-25;27) focused on impacts of peer-support interventions, which could be used as key components of drop-in centres. The reviews assessed peer-support interventions for people living with mental illness,(15;18-20) people living with HIV,(21;25) people trying to managing chronic diseases (16;17;22;24;26) and supporting breastfeeding mothers.(23;27) The key findings from these reviews are summarized in Table 1.

Target of peer-support intervention	Key findings from systematic reviews
People living with mental illness	• Three recent reviews evaluated peer-support interventions for people with severe mental illness, with: o a high-quality review finding that there is little evidence evaluating the effects of this type of intervention for people with severe mental illness, and concluding that current evidence does not support requirements for mental health services to provide peer-support programs;(19) o a high-quality review concluding that there is weak evidence that peers can have a positive impact on psychosocial and clinical outcomes in patients with severe mental illness;(18) o a medium-quality review that assessed the effects of peer-support services delivered by individuals in recovery to those with serious mental illness, concluding that there is moderate evidence that peer supports added to traditional services, provided as part of existing roles and through delivery of curricula, reduced inpatient service use, improved patient-provider relationships and increased engagement with care, empowerment, patient activation and hopefulness for recovery.(18) • A recent high-quality review evaluating consumer-providers of care for adult clients of statutory mental health services, concluded that partnerships employing past or present

	consumers of mental health services as providers of mental health services achieves psychosocial, mental health symptom and service use outcomes that are no better or worse than those achieved by professional staff in providing care.(20)
People living with HIV	• A recent medium-quality review found that no clear evidence exists regarding the effectiveness of peer-education interventions for HIV prevention, adolescent pregnancy prevention and sexual health promotion for youth.(25) • A recent low-quality review found that the majority of the 117 included studies provided some support for peer interventions, especially in terms of improving sexual risk behaviour, attitudes and cognitions, HIV knowledge, and substance use.(21)
Chronic disease management	• A recent medium-quality review evaluated the experience and impact of chronic disease peer-support interventions and found: o evidence that those receiving peer-support interventions re-evaluated their sense of being in the world and redefined what was important to them; o mixed evidence regarding feelings of isolation among those receiving peer-support interventions (e.g., depending on the mentor's familiarity with a mentee's condition); o expectations that peer-to-peer relationships are unidirectional and asymmetrical, but that being a peer mentor provides opportunities for mutual sharing and benefits; o emotional entanglement as a potential risk that could place the mentor's well-being at risk; and o evidence that connecting mentees with other supportive networks prior to intervention can limit over-dependence on a mentor.(17) • Two high-quality reviews (one recent (26) and one older (16)) as well as an older low-quality review (24) evaluated peer support for diabetes control with the high-quality reviews finding that: o peer-support programs with moderate or high frequency of contact with patients significantly improved glycated hemoglobin (HbA_{1c}) levels in people living with Type 2 diabetes, whereas programs with low frequency of contact showed no significant reduction;(26) and o peer telephone support improved a range of health outcomes (rates of mammography screening, change in diet, continuation of breastfeeding among mothers at three months post-partum, and depressive symptoms).(16) • A recent high-quality review found positive effects for telephone self-management interventions delivered by lay health workers and peer-support workers for patients with vascular disease on outcomes related to diabetes control.(22)
Breastfeeding mothers	• A recent high-quality review found that both lay supporters and professionals have positive impacts on breastfeeding outcomes, and that face-to-face support is associated with better outcomes than telephone-based support.(27) • A recent high-quality review found that peer support can increase the duration of exclusive breastfeeding in low- and middle-income settings, but that more evidence is needed to determine optimal timing and spacing of counsellor visits.(23)

Support groups

Four systematic reviews (28-31) and two economic evaluations (13;14) were identified that focused on support groups. A recent high-quality review found one study indicating that 90-minute group therapy sessions combined with a peer-support session every six weeks for half a year resulted in a higher proportion of adolescents living with HIV achieving viral suppression as compared to those who did not participate.(31) The same review also found that offering peer-support groups was associated with a lower risk of participants dropping out of therapy.(31) An older medium-quality review assessed the effects of support groups for addressing social isolation in older adults and found that common characteristics of effective interventions were those that were theory based, offered social activity and/or support in a group setting, and actively engaged older adults as active participants.(29) Another older medium-quality review found that support groups significantly improved psychological well-being, depression, burden and social outcomes in caregivers for people living with dementia.(28) Similar to the review focused on support groups for older adults, this

review also found that support groups for caregivers that used theoretical models and that lasted more than eight weeks with more than 16 hours improved psychological well-being significantly more than shorter groups or groups that did not use a theoretical model.(28) The fourth review, which was older and of medium-quality, evaluated health-related virtual communities and electronic support groups, but found no robust evaluations of consumer-led peer-to-peer communities.(30)

The two economic evaluations found that:

1) a peer-support group provided in addition to standardized care for people with Type 2 diabetes had a mean cost of €246 per patient (approximately $317 CAD based on an average currency exchange of .7741 per $1 CAD at the time of publication in 2012) and was associated with an average cost savings of €637.43/patient in healthcare costs (approximately $823.44 CAD at the time of publication) and €623.39/patient in total costs (approximately $805.30 CAD at the time of publication);(13) and
2) there were no relevant differences in costs or quality of life between those attending minimally guided peer-support groups for psychosis as compared to those receiving usual care, and the authors suggest that wider implementation may be warranted given increases in social contacts and esteem support were achieved without increases in overall healthcare expenses.(14)

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APPENDICES

The following tables provide detailed information about the systematic reviews and primary studies identified in the rapid synthesis. The ensuing information was extracted from the following sources:

- systematic reviews - the focus of the review, key findings, last year the literature was searched and the proportion of studies conducted in Canada; and
- primary studies - the focus of the study, methods used, study sample, jurisdiction studied, key features of the intervention and the study findings (based on the outcomes reported in the study).

For the appendix table providing details about the systematic reviews, the fourth column presents a rating of the overall quality of each review. The quality of each review has been assessed using AMSTAR (A MeaSurement Tool to Assess Reviews), which rates overall quality on a scale of 0 to 11, where 11/11 represents a review of the highest quality. It is important to note that the AMSTAR tool was developed to assess reviews focused on clinical interventions, so not all criteria apply to systematic reviews pertaining to delivery, financial or governance arrangements within health systems. Where the denominator is not 11, an aspect of the tool was considered not relevant by the raters. In comparing ratings, it is therefore important to keep both parts of the score (i.e., the numerator and denominator) in mind. For example, a review that scores 8/8 is generally of comparable quality to a review scoring 11/11; both ratings are considered "high scores." A high score signals that readers of the review can have a high level of confidence in its findings. A low score, on the other hand, does not mean that the review should be discarded, merely that less confidence can be placed in its findings and that the review needs to be examined closely to identify its limitations. (Lewin S, Oxman AD, Lavis JN, Fretheim A. SUPPORT Tools for evidence-informed health Policymaking (STP): 8. Deciding how much confidence to place in a systematic review. *Health Research Policy and Systems* 2009; 7 (Suppl1):S8).

All of the information provided in the appendix tables was taken into account by the authors in describing the findings in the rapid synthesis.

Appendix 1: Summary of findings from systematic reviews about individual- and population-level health effects of drop-in centres

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
What are the impacts of drop-in centres? • Reviews focused on drop-in centres	Interventions for promoting reintegration and reducing harmful behaviour and lifestyles in street-connected children and young people (12)	Eleven studies were included and compared specialized therapeutic interventions with service as usual (SAU). The specialized interventions were based off of emotional, cognitive, behavioural and systemic orientations, and therapeutic models. The characteristics of SAU are not described in most of the studies reviewed. Eight interventions recruited participants through shelter, drop-in service, or a hostel-based approach. Three studies employed multiple strategies by recruiting newly homeless youth through community-based organizations (e.g. shelters or schools), direct recruitment (e.g. flyers), 'word-of-mouth', or through street intercept locations, or agencies. There is evidence that supports the conclusion that services do not have to be very specialized or technical to generate positive change among street-connected youth recruited by shelters or drop-ins. Specialized interventions offering some therapeutic program have not been shown to be better than shelter or drop-in service. There is evidence of an increased number of sexual partners among youth whom are a part of a social-enterprise intervention, compared to a control group from the same drop-in centre who had significantly reduced numbers of sexual partners. There is evidence that although family-oriented therapy is partially effective, referral to a mainstream service may not be as effective as interventions involving shelters or drop-in services. Overall there is evidence to suggest that there are favourable changes for outcomes for most participants in all therapy interventions and standard services. There is evidence that time-limited, therapeutically based programs were not more effective than standard drop-in or shelter services. The review concluded that there was no significant benefit for 'new' interventions compared to standard services for street-connected children and young people.	2012	10/11 (AMSTAR rating from McMaster Health Forum)	0/11
	Effectiveness of adult day services for older adults (10)	Adult day centres (ADS) "support the health, nutritional, social, and daily living needs of adults with functional limitations in a group setting during daytime hours. ADS also support family caregivers by enabling them to remain in the workforce and receive respite from caregiving responsibilities." Studies investigating whether adult day centres improve the overall wellness of participants suggest that attendance is associated with improvements in	2011	4/10 (AMSTAR rating from McMaster Health Forum)	Not reported

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		physical and emotional problems and perceived psychosocial well-being, and positive changes in social support and quality of life. Socialization and social support from other adult day centre clients was found to have a positive impact on the physical and mental well-being of participants.			
	Influence of day care centres for people with dementia on family caregivers (11)	Day centres for people with dementia were accessed by family caregivers as a respite service, and to some extent as a support service. Day centres were found to improve caregivers' competence in caring for the people with dementia. The authors conclude that day centres for people with dementia have the potential to give family caregivers a feeling of safety and relief, reduce the caregivers' burden, and increase their motivation towards their role as caregivers.	2013	5/9 (AMSTAR rating from McMaster Health Forum)	0/19
What are the impacts of drop-in centres? • Reviews focused on peer-support interventions	Effects of peer support at improving glycemic control in patients with Type 2 diabetes (26)	Peer-support programs with moderate or high frequency of contact with patients significantly improved glycated hemoglobin (HbA_{1c}) levels in people living with Type 2 diabetes, whereas programs with low frequency of contact showed no significant reduction	2014	9/11 (AMSTAR rating from McMaster Health Forum)	0/13
	Describing the content, typologies and outcomes of different organized, community-based, peer-support interventions for people with severe mental illness (19)	This review identified 18 randomized trials (n=5,597 participants) of non-residential peer-support interventions for severe mental illness. Findings related to post-treatment effects included: • mutual support intervention studies indicated a non-significant effect on hospitalization and a large significant effect on quality of life; • no differences in overall psychiatric symptom changes or hope were reported by one study, though effects were seen on depression and anxiety, recovery and empowerment; • peer-support studies were found to have no beneficial effect on hospitalization outcomes and duration of admission; • no effect was reported on psychosis symptoms, quality of life, psychiatric symptoms, depression and anxiety symptoms, empowerment and user satisfaction; • a small positive effect was found on recovery and hope; and • no significant difference for peer-delivered services was reported for hospitalization, and a small negative effect was found on satisfaction. Four studies of peer support provided follow-up data and found no effect at six month follow-up on psychosis symptoms or overall psychiatric symptoms, and on three- and six-month follow-up on quality of life. A small	2013	9/11 (AMSTAR rating from McMaster Health Forum)	1/18

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		positive effect was found on depression, recovery, hope and empowerment. Overall, despite promotion and uptake of peer support, there is little clinical trial evidence exploring peer support effects for people with severe mental illness. Current evidence does not support recommendations or policy-related requirements for mental health services to provide peer-support programs.			
	Summarizing evidence on the effectiveness of non-healthcare professional (lay health workers and peer support workers) telephone self-management interventions for patients with vascular disease and associated long-term conditions (22)	Ten studies were included, primarily based in community settings in the United States, primarily with diabetic participants where peer support workers who shared characteristics with the patients were involved. The pooled analyses presented in the review showed modest effects on self-management and HbA1c, but did not show an effect on mental health quality of life. Data on health care utilization were limited, and none were found on cost effectiveness. Overall, positive effects for patients were found for telephone self-management interventions via 'lay workers' and 'peer support workers' on diabetes control and self-management outcomes, but the overall evidence base was limited in scope and quality.	2013	8/11 (AMSTAR rating from McMaster Health Forum)	1/10
	Consumer-providers of care for adult clients of statutory mental health services (20)	The partnership roles in this review encompassed peer support, coaching, advocacy, case management or outreach, crisis worker or assertive community treatment worker, or providing social support programs. Five of the 11 studies compared consumer-providers to professionals who had similar mental health service roles (case management and facilitating group therapy). The evidence shows that there are no significant differences between the two groups in terms of care recipient quality of life, mental health symptoms, satisfaction, use of mental health services, or on the number of drop-outs from the studies. Six of the 11 trials compared mental health services with or without the addition of the consumer-provider partnership. The evidence showed no significant differences between the study groups in quality of life, empowerment, function and social relations, client satisfaction, attendance rates, hospital use. None of these six studies reported on clients' mental health symptoms, adverse outcomes for clients, or the costs of providing the services Overall, the evidence concludes that a partnership employing past or present consumers of mental health services as providers of mental health services achieves psychosocial, mental health symptom and service use outcomes	2012	11/11 (AMSTAR rating from McMaster Health Forum)	0/11

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		that are no better or worse than those achieved by professional staff in providing care.			
	Effectiveness of peer-delivered interventions for severe mental illness and depression on clinical and psychosocial outcomes (18)	Peers were defined as persons with a "history of mental illness or persons in recovery who received training and regular supervision from clinical coordinators or project staff during intervention delivery." Peer-delivered interventions were compared with treatment as usual (TAU) which consisted of mental health care delivered by various community-based agents. Of the eight severe mental illness (SMI) trials reviewed, group interventions consisted of weekly sessions based on manual-based recovery and disease self-management models where the peers provided social support, psycho-education, and information about the disease and strategies to overcome disease problems. Individual interventions were based in support and befriending patients. No peer-delivered SMI intervention had an active psychotherapeutic component. The superiority SMI trials provided evidence about long-term outcomes (a six month or greater follow-up), and three trials reported short-term (a six months or less follow-up) outcomes. Clinical outcomes were observed where there were changes in psychiatric symptoms, quality of life, social functioning and hope reported across all SMI trials. The two SMI equivalence trials were community-based group disease self-management programs delivered by a peer in six weekly sessions. Evidence for clinical symptoms or quality of life were not significant between the peer-based care and TAU groups. Evidence suggests that peer-delivered care to persons with SMI can positively influence a patient's clinical and psychosocial outcomes. There is some evidence that interventions which are delivered in an individual format can work better than group interventions. This effect seems to level off over the long term, and is not sustainable beyond six months. With regard to depression, no effect of peer-delivered interventions on improvements in clinical and psychosocial outcomes was found. Investigation of individual versus group interventions, short- versus. long-term follow-up, and the exclusion of low-quality studies did not change this result. For both depression and SMI, there is no evidence that peers negatively affect clinical or psychosocial outcomes of patient. This review overall concludes that there is weak evidence that peers can have a positive impact on psychosocial and clinical outcomes in patients with SMI. Additional high-quality evidence is needed to make a more definitive conclusion.	2012	8/11 (AMSTAR rating from McMaster Health Forum)	4/14
	Assessing level of evidence and effectiveness of peer-support	This review identified 11 randomized controlled trials (RCTs), six quasi-experimental studies and three correlational/descriptive studies, comparing	2012	6/10 (AMSTAR rating from	0/20

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	services delivered by individuals in recovery to those with serious mental illnesses or co-occuring mental and substance use disorders (15)	the impact of peer-support services versus services without peer support. The level of evidence across all three designs was moderate. Among 13 studies with a peer-support component added to a traditional service, eight demonstrated some positive benefit. Three of the six RCTs in this group documented a benefit: one suggested service users who had involvement from a peer mentor had fewer re-hospitalizations and hospital days; a second found better treatment engagement six months following treatment initiation (although they disappeared at 12 months); and the third demonstrated lower non-attendance rates and higher structured social care activity participation. The other three RCTs demonstrated no peer-related effect (client-focused teams with versus without peers versus standard care; intensive case management with peers versus without peers versus standard care; and peer volunteer versus non-peer versus no volunteer). Among the quasi-experimental and correlational/descriptive studies, peer-added service type interventions had more positive outcomes than the RCTs in general, with some studies showing positive benefits and two others showing no group differences. In terms of service by peers in existing roles, only one of three studies had positive effects, with patients of peers having significantly more community time and less inpatient time than those in standard care or assertive community treatment, in one study, and no significant differences seen in hospital admission rates, length of stay, readmissions, symptomatology, or functional outcomes in two others. In terms of service by peers delivering curricula, three RCTs demonstrated consistent results, generally reporting greater depression and anxiety symptom reductions, and increases in recovery, hope, quality of life, self-advocacy, empowerment, assertiveness with providers, patient activation, primary care visit rates, medication adherence, and physical activity. The review concludes that each peer support service type (added to traditional services, in existing roles, and delivering curricula) achieve a moderate level of evidence in terms of reducing inpatient service use, improving patient-provider relationships, and increasing engagement with care, empowerment, patient activation and hopefulness for recovery.		McMaster Health Forum)	
	Peer support and exclusive breastfeeding duration in low- and middle-income countries (23)	The evidence showed significant differences in study population, peer counsellor training methods, peer visit schedule, and outcome ascertainment methods. The effect of peer support was significantly reduced in settings with greater than 10% community prevalence of formula feeding as	2012	9/11 (AMSTAR rating from McMaster Health Forum)	1/11

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		compared to settings with less than 10% prevalence. No evidence was available regarding effect modification by inclusion of low birth weight infants, and there was no difference in the effect of peer support on duration of exclusive breastfeeding (EBF) at four versus six months. In a multi-centre trial, a peer-support intervention was found to significantly lengthen the duration of EBF at some sites where the availability of free infant formula to HIV-infected mothers boosted EBF, and significant marketing of commercial formula at other sites affected mothers' perceptions of EBF. Evidence suggests that taking into account the cultural context and uniformity of EBF messages is essential when planning a peer-support program. The effect of peer support on child health is not clear. Peer support was found to significantly decrease the incidence of diarrhea in some studies, but there was no effect on diarrhea in others. The varying effect of peer support on diarrhea morbidity can be attributed to differences in the method of infant feeding utilized by mothers who terminate EBF. Two studies that studied low birth weight infants found the strongest effect of peer counselling on EBF duration. One study found that the effect of peer support on EBF duration was significantly greater in trials with five or more planned visits. There was not enough evidence to make conclusions about the impact of multiple visits on the effect of peer support as only one study included more than one visit. There is evidence to suggest that comparing the effectiveness of peer-support interventions with different peer-support program timings and intensities are necessary to inform program planning. Evidence suggests that high intensity and frequent peer visits are not financially viable in resource-limited settings. There is little evidence on the effect of peer support when integrated into a packaged maternal and child health intervention. Peer support can increase the duration of EBF in low- and middle-income countries. In order to maximize the potential benefits of peer support, additional evidence is needed to determine the optimal timing and spacing of counsellor visits, best ways to integrate EBF messages into packaged maternal and child health interventions, and the cost effectiveness of these strategies taking into account varying baseline rates of EBF.			
	The experience and impact of chronic disease peer-support	The aim of this review is to summarize evidence about the experience and perceived impact of participating in peer-support interventions for	2011	6/9 (AMSTAR rating from	2/25

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
	interventions (17)	individuals with chronic disease. There is evidence that shows that mentors and mentees experience a sense of connection. Sharing the disease experience fosters a bond. The resulting supportive bond reduced feelings of isolation for the patients. Perceptions of a lack of similarity with peers hinder the sense of connection between mentee and mentors. There is evidence that mentors' personal life experiences were seen as "an essential resource" for peer mentoring. Mentors used these experiences to gain entry into mentees' lives, build relationships, steer mentees toward social, economic and proper health resources, and help them overcome fears. Mentees perceived mentors as role models, sympathetic and understanding, and as being authoritative, insightful and credible figures in their lives. As mentors, they are aware of the limits of their experiential and medical knowledge, and importance of maintaining confidentiality for peers within small communities. Evidence shows that through peer support, individuals undergoing peer-support interventions re-evaluated their sense of being in the world, and redefined what was important to them. There is mixed evidence regarding senses of isolation during peer-support interventions as participants can feel reduced or enhanced feelings of isolation within peer-support interventions, depending on the mentor's familiarity with a mentee's condition. Furthermore, there are expectations that peer-to-peer relationships are unidirectional and asymmetrical. However, being a peer mentor affords opportunities for mutual sharing, and can benefit reciprocity. Also, emotional entanglement was a potential risk associated with the emotional connections between mentors and mentees, which could place the mentor's well-being at risk. There is evidence that connecting mentees with other supportive networks prior to intervention can limit over-dependence on a mentor. Peer-support interventions can positively impact patients with chronic disease. It is important when developing and implementing peer-support interventions, that people are sensitive to the impact on both mentors and mentees.		McMaster Health Forum)	
	Support for healthy breastfeeding mothers with healthy term babies (27)	Support for breastfeeding mothers includes providing praise, reassurance, information, and the opportunity to discuss and respond to a mother's questions. There is evidence that all of the forms of extra support reviewed increased	2011	11/11 (AMSTAR rating from McMaster Health Forum)	2/52

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		the length of time mothers continued to breastfeed, and the length of time mothers breastfed without introducing any other types of liquids or foods to their children. There is evidence that both lay supporters and professionals have positive impacts on breastfeeding outcomes. In addition, face-to face support is associated with a better treatment effect compared to telephone-based support. Also, support that is a result of women seeking assistance is unlikely to be as effective as women being offered scheduling and ongoing visits. Support is more effective in settings with high initiation rates so efforts to increase breastfeeding uptake can have positive effects. There is no evidence about women's views about support interventions. However, evidence suggests that support should take into account setting and population-needs considerations. Overall, this review concludes that breastfeeding-support interventions increase the number of mothers continuing to breastfeed, and the number of mothers continuing to exclusively breastfeed, at up to six months and at up to four to six weeks.			
	Effectiveness of peer education interventions for HIV prevention, adolescent pregnancy prevention and sexual health promotion for young people (25)	The objective of the review is to determine the effectiveness of peer education programs for HIV prevention, adolescent pregnancy prevention and promotion of sexual health among young people. The review identified studies evaluating five interviews, of which three included sexual education programs and two included HIV prevention programs. The interventions were based in secondary schools and the participants were students of both sexes aged 12 to 20. All five interventions were implemented by peer educators. The peer educator programs provided students with information, practical skills and demonstrations. The program activities were carried out through games, printed materials, dramatization, role-playing, discussions and group activities. Although the proportion of girls who had one or more live births at the age of 21 was lower in the peer education led intervention, this difference was not statistically significant. Regarding the number of STIs, no significant differences were found between the intervention group and the control group. In addition, no statistically significant effect for condom use was found between the two groups. Regarding the number of sexual partners, no significant difference was found between the control group and the experimental group. Moreover, a significant increase in the percentage of students having sexual experiences is observed in the intervention group following the programs. With regards to knowledge acquisition as an outcome, there were mixed results between the control and intervention groups across interventions. No significant differences were found regarding	2010	4/9 (AMSTAR rating from McMaster Health Forum)	0/5

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		communication and negotiation skills between the control and intervention groups. The review concludes that when compared to no intervention or standard practice, no clear evidence exists regarding the effectiveness of peer education concerning HIV prevention, adolescent pregnancy prevention and sexual health promotion for young people in the European Union.			
	Evaluating the efficacy of peer-based interventions in HIV/AIDS (21)	This review identified 117 studies evaluating the efficacy of peer-based interventions in the area of HIV/AIDS. In terms of the outcome domains assessed: 60 of 78 (76.9%) studies of sexual risk behaviour provided at least one result in support of a peer intervention; 65 of 73 (89.0%) studies of attitudes and cognitions, 44 of 52 (84.6%) studies of HIV knowledge, 19 of 27 (70.4%) studies of substance use, six of 16 (37.5%) studies of biological markers, and five of nine (55.6%) studies of other non-self-reported outcomes provided at least one result in support of a peer intervention. Attitudes and cognitions, HIV knowledge and sexual risk behaviours were the most widely assessed domains. Overall, across a mixture of developing and developed country settings and intervention modalities involving peer support, the majority of the included studies provided some support for peer interventions, especially in terms of sexual risk behaviour, attitudes and cognitions, HIV knowledge, and substance use. Outcomes assessing biomarkers and non-self-reported variables provided less support for peer support interventions.	2010	3/10 (AMSTAR rating from McMaster Health Forum)	3/117
	A review of volunteer-based peer-support interventions in diabetes (24)	This article aims to review volunteer-based peer-support interventions and examines the implementation strategies and diabetes-related health outcomes associated with each. Peer supporters were recruited from multiple sources, including ads in diabetes-focused magazines, diabetes care centres, primary care practices, physician referrals, health promotion programs, community presentations, community postings, and word of mouth. In two of the 16 studies, the peer supporters were patients trained to support other patients with diabetes. Several studies outlined criteria used to identify and select peer supporters. Desirable characteristics and attributes included being actively engaged in community-based activities, being willing to be trained, proficiency in the target community's primary language, having good interpersonal skills, being similar to target participants, being respected in the community, and having inter- and intra-personal skills. Some studies only involved peer supporters	Not Reported (published in 2011)	4/10 (AMSTAR rating from McMaster Health Forum)	1/16

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		who were diagnosed with diabetes. Peer supporter training varied in duration and intensity. A large variety of training topics were taught in peer supporter training sessions. The training programs employed various instructional approaches, and some included interactions with professionals. Examinations included factual knowledge, written knowledge, understanding, application of knowledge, and observed practice sessions. Seven studies were of face-to-face, group-based interventions. They ranged in length from six weekly 90-minute group discussions to 46 weekly 90-minute group discussions. None of the interventions involved other healthcare providers. All of the group-based interventions involved skills-development components. Five studies tested telephone-based interventions, with two interventions engaging peers to help patients follow through on physician treatment recommendations. Two studies used an interactive voice response platform between two peer partners, and one study used telephone support as one modality of intervention delivery. With regards to clinical outcomes of peer-support interventions, nine studies measured glycemic control. Two reported improvements in glycemic control compared to the control group, and four found no differences between groups. Although four RCTs found no between-group differences, one of these studies compared a peer-led intervention to a professional-led intervention and found no differences by delivery source. No difference was found for lipid profiles or blood pressure for all studies between groups. BMI was assessed in five studies, and reported in four. No BMI changes were found between or within groups. With regard to self-care and knowledge outcomes, nutrition behaviours were measured in four studies. Of the two RCTs, one did not find any improvements in nutrition behaviour, and the other found the peer-support intervention to be associated with an increased following of a healthy diet and food labels. There were mixed results with peer supported physical activity. Evidence showed no significant enhancement in medication adherence or practising good self-care behaviours in all the studies. Regarding psychosocial outcomes, there is mixed evidence regarding reduction in health-related distress for the peer-support group, or improvements in overall quality of life. Studies that assessed depression yielded inconsistent results in the effect of peer support condition compared			

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		to usual care.			
	Peer-support telephone calls for improving health (16)	The aim of this review is to assess the effects of peer-support telephone calls in terms of physical, psychological, and behavioural health outcomes and other outcomes. In all seven studies the intervention was delivered by telephone to participants in their homes. The interventions were aimed at improving various outcomes in depression, diet, breastfeeding and mammography usage, and self-efficacy in diabetic individuals. The call frequency in the interventions reviewed ranged from one call in six months to up to 12 calls over 12 weeks. Five studies documented the telephone calls in some way. Two studies did not. There were various types of support provided by the peer support: emotional support only, informational support, emotional and appraisal support, and emotional, informational and appraisal support. Peer-support telephone call outcomes were associated with an increase in mammography screening, with 49% of women in the intervention group and 34% of women in the control group receiving a mammogram since the start of the intervention. Furthermore, evidence shows that peer-support telephone calls helped maintain mammography screening uptake for baseline adherent women. In addition, peer-support telephone calls for post myocardial infarction patients were associated at six months with a greater change in diet in the intervention compared to the control groups. There is evidence in other studies that among infarction patients there are no significant differences between groups for self-efficacy, health status and mental health outcomes. Another outcome of peer-support telephone calls was their association with greater continuation of breastfeeding in mothers at three months post-partum. Finally, peer-support telephone calls were associated with reduced depressive symptoms in mothers with postnatal depression. This review provides some evidence that peer-support telephone calls can be effective for certain health-related concerns. Additional studies are needed to clarify the cost and clinical effectiveness of peer-support telephone calls for improvement in health outcomes.	2007	10/10 (AMSTAR rating from McMaster Health Forum)	2/27
What are the impacts of drop-in centres?	Effectiveness of service delivery interventions to improve adolescents' linkage from HIV	This review identified 11 eligible studies, three of which were RCTs. Interventions applied at the community level, including peer support, tended to be intensive, applied in multiple sessions over weeks to months, and	2014	9/10 (AMSTAR rating from McMaster	0/11

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
• Reviews focused on support groups	diagnosis to antiretroviral therapy initiation, retention in HIV care and adherence to therapy (31)	personally tailored to be responsive to individual adolescent needs. With respect to antiretroviral therapy adherence, a non-random low-quality study where one group of 10 patients received a 90-minute group therapy and peer-support session once every six weeks for 26 months, and two other groups of 10 did not participate, demonstrated higher proportions achieving viral suppression amongst those who received peer counselling (intervention: 30% to 80% from baseline to 24 months; versus 33% to 56%, and 50% to 50%). Two other studies focusing on retention in HIV care found that the availability of peer-support groups was associated with lower therapy attrition risks, based on univariate analyses. Both studies were rated as having good methodological quality. The review concluded that peer counselling and support was an intervention for all HIV-infected adolescents that warranted further investigation, and overall, found that there was limited evidence on the effectiveness of service delivery interventions supporting adolescents' linkage from HIV diagnosis to therapy initiation, retention and adherence. Although only a small number of studies with methodological limitations provide evidence, individual and group education and counselling, financial incentives, increasing clinic accessibility and provision of specific adolescent-tailored services were also identified to be potentially effective interventions.		Health Forum)	
	Health-related virtual communities and electronic support groups (30)	The review found no robust evaluations of consumer-led peer-to-peer communities, given that most have been evaluated only as part of more complex interventions, or through involvement with health professionals. The authors indicate that given the dearth of evidence in the area, research in key areas is needed to better understand the conditions with which peer-to-peer groups are provided (e.g., unmoderated internet peer groups), for whom electronic support groups are most effective, and how the effects of electronically delivered social support can be maximized.	2003	4/10 (AMSTAR rating from McMaster Health Forum)	0/6
	Interventions targeting social isolation in older adults (29)	Thirty two studies were included in the review. Three outcome domains were assessed (social, mental and physical health), and 79% of group-based interventions and 55% of one-to-one interventions reported at least one improved participant outcome. Over 80% of the interventions that used a participatory approach resulted in	2009	7/10 (AMSTAR rating from McMaster Health Forum)	3/34

Question addressed	Focus of systematic review	Key findings	Year of last search/ publication date	AMSTAR (quality) rating	Proportion of studies that were conducted in Canada
		beneficial effects across social, mental and physical health domains, as compared to 44% of non-participatory interventions. Of interventions categorized as having a theoretical basis, 87% of theory-based interventions reported beneficial effects across social, mental and physical health domains, as compared to 59% of interventions with no explicit theoretical foundation. Regarding intervention type, 86% of those providing activities and 80% of those providing support resulted in improved participant outcomes, compared with 60% of home visiting and 25% of internet training interventions. Fifty-eight percent of interventions that explicitly targeted socially isolated or lonely older people reported positive outcomes, compared with 80% of studies with no explicit targeting. Common characteristics of effective interventions were that they were theory based, offered social activity and/or support in a group setting, and actively engaged older adults as active participants.			
	Effectiveness of support groups for caregivers of patients with dementia (28)	Support groups significantly improved caregivers' psychological well-being, depression, burden and social outcomes. Support groups that used theoretical models and that lasted more than eight weeks with more than 16 hours improved psychological well-being significantly more than shorter groups or groups that did not use a theoretical model. A higher proportion of female participants was associated with better outcomes for psychological well-being and depression. Older participant average age was associated with less favourable outcomes for social consequences.	2009	5/11 (AMSTAR rating from McMaster Health Forum)	Not reported

Appendix 2: Summary of findings from primary studies about individual- and population-level health effects of drop-in centres

Question addressed	Focus of study	Study characteristics	Sample description	Key features of the intervention(s)	Key findings
	Uptake of a women-only, sex-work-specific drop-in centre and links with sexual and reproductive healthcare for sex workers (2)	*Publication date:* 2015 *Jurisdiction studied:* Vancouver, Canada *Methods used*: Cohort study	Data from 547 female sex workers were drawn from the AESHA (An Evaluation of Sex Workers' Health Access) study, a community-based, open, prospective cohort of female sex workers from Vancouver, B.C., Canada	The intervention evaluated was the Women's Information Safe Haven Drop-In Centre Society (WISH), which is a service and support organization for street-involved women in sex work. Established in 1987, WISH provides the only late night drop-in space for female sex workers in Vancouver that is open seven nights a week. It serves approximately 160–180 women per night and provides low-threshold services, including hot meals, showers, hygiene items, clothing, harm reduction and safety supplies, and referrals to social and health support services. WISH also offers ongoing peer education and support programs, and clinics run by outreach nurses and nurse practitioners provide onsite basic primary care and referrals.	330 of the 547 (60.3%) female sex workers included in the analysis utilized the drop-in services from WISH over the three-year study period. Use of the drop-in service was independently associated with age, Aboriginal ancestry, injection drug use, exchange of sex for drugs, and accessing sexual and reproductive health services. The findings suggest that women-centred and sex-work-specific community strategies and low-threshold support services (e.g. drop-in centres and outreach) can successfully link highly stigmatized populations with healthcare services.
	Social participation between individuals who do and do not attend brain injury drop-in centres (3)	*Publication date:* 2012 *Jurisdiction studied:* Vancouver, Canada *Methods used*: Cross-sectional study	The study included 23 participants who attended a brain injury drop-in centre and 19 who did not attend a centre. To be included in the study, participants had to be aged 19–65, sustained a moderate-to-severe traumatic brain injury within the last year, lived in the community,	Brain injury drop-in centres are located in community settings (not hospitals or health centres), provide formal and informal social and recreational activities, peer support and educational in-services for adults with brain injury. Availability of services differs across centres with some open each weekday and others open one-to-three times per week. Access to a brain injury drop-in centre does not require a physician's referral or an appointment, and there is typically no waiting list. An	The participants who attended the brain injury drop-in centre were found to have statistically significantly higher levels of social participation than the comparison group. The difference was even higher when assessed against the 12 individuals in the comparison group who stated that they would attend a brain injury drop-in centre.

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			fluent in English, and able to provide informed consent.	individual may attend as often or little as they choose and for as long as they like. While the individuals who staff brain injury drop-in centres may have a background in community services or working with individuals with disabilities, they are not healthcare professionals. Centres typically have one-to-two paid staff for a dozen or more attendees in a day.	
	Cost-effectiveness of a group-based, peer-support intervention in general practice for patients with Type 2 diabetes (13)	*Publication date: 2012* *Jurisdiction studied:* Ireland *Methods used:* Incremental cost-utility analysis	395 patients with Type 2 diabetes in Irish general practice (20 practices)	The study evaluated peer-support intervention groups (peer support provided in addition to standardized care) as compared to standardized diabetes care.	The total cost of implementing the intervention was €54,457 (mean cost/patient: €246). An incremental cost analysis estimating the difference in mean healthcare, patient and total costs across treatment groups identified a reduction in mean healthcare cost of €560.08 (95% CI -1738.89 to 618.73), an increase in mean patient cost of €4.01 (-53.63 to 61.64), and a reduction in mean total cost of €527.83 (-1744.42 to 688.75) with the intervention. The intervention was associated with an average cost savings of €637.43/patient in healthcare costs and €623.39/patient in total costs. The intervention was also associated with an average increase in quality adjusted life years (QALYs) of 0.09 (95% CI -0.05 to 0.25). Overall, the intervention generates higher QALYs and involves lower mean costs, dominating the control.
	Costs and health outcomes of minimally guided peer-support groups for patients with psychosis (14)	*Publication date:* 2011 *Jurisdiction studied:* the Netherlands *Methods used:* Economic evaluation of 8-month RCT	106 patients with a history of psychosis in four outpatient clinics across the Netherlands	Intervention: Care as usual (various forms of care, depending on patient-specific needs and situation), plus minimally guided peer support (peer-support groups of ~10 patients, 16 90-minute biweekly sessions over eight months)	Mean costs of providing minimally guided peer support were €250/patient. Cost estimates corrected for baseline differences in costs and differences between centres over time demonstrated no relevant differences in mean total costs between groups (close to €5,750 over months for both groups). While mean score on the WHO quality of life scale (WHOQoL-Bref) was slightly higher at baseline in

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				Control: Care as usual	the peer-support group, no significant effects of intervention or time were found, and no indications of substantial differences between groups over time were identified. A sensitivity analysis identified that intervention adherence had a substantial impact on results. Overall, no relevant differences were found in costs or quality of life between patients attending peer-support groups and those receiving care as usual only. Minimally guided peer-support groups did not seem to affect overall healthcare expenses, and increases in social contacts, esteem support and other such outcomes may favour wider implementation.
	How to open and sustain a drop-in centre for homeless youth (4)	*Publication date:* 2008 *Jurisdiction studied:* United States *Methods used*: Review (non-systematic)	The paper provides guidance for how to open and sustain a drop-in centre for homeless youth between the ages of 14 and 24. The recommendations provided in the paper are derived from the experiences of the team who started and maintained two drop-in centres in two U.S. states.	Drop-in centres for homeless youth.	Many studies consistently conclude the establishment of trust is a necessary first step towards youth accepting more intensive intervention. At a minimum, drop-in centres allow trust to develop as it provides a context for interaction between youth and drop-in centre staff, and therefore provides the first step towards successfully addressing youth homelessness. Guidance towards how to open and sustain a drop-in centre for homeless youth is structured based on five core considerations: 1) program philosophy; 2) funding; 3) building and location; 4) organization of the centre; and 5) staff. *Program philosophy* "All other decisions regarding the structure and programs within the centre are based on this philosophy." The philosophy described in the current paper "emphasizes the importance of unconditional positive regard, genuineness and empathy among program staff towards the youth." This allows trust to be established, and youth are likely to be inclined to consider other services offered by staff. *Funding* Some form of funding will be required unless all staff are volunteers and the site is donated. Potential

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					funding sources include private donors, charitable organizations and/or government funding. *Building and location* The location and building should be accessible to the target population, with accessible referring to the physical location, the surrounding community, level of safety and emotional accessibility of the drop-in for the youth. "The drop-in should provide an environment that promotes the belief that youth are capable of reaching their life goals and are capable of doing so in a safe and supportive community. In order for this to occur, it is vital that collaboration between the surrounding community and the drop-in centre is fostered through meetings, communication or shared activities. Community support will help ensure that the youth are viewed positively, which will also create an environment conducive to the program philosophy." *Organization* Drop-in centres are more likely to initially appeal to youth by meeting their most basic needs, including food, healthcare, clothing and hygiene products. In addition, the layout of a drop-in centre should include different rooms or separate spaces, which reduce crowding and conflict among youth. Furthermore, a variety of activities should be offered to meet youths' interests and provide structure, while always ensuring the dignity and respect for the youth is maintained by staff. This should also be complemented with a plan to address behaviours that may create an unsafe or counter-productive environment. *Staff* A successful drop-in centre requires well trained and supported staff. "Due to the high levels of stress that staff may experience, it is important that they be given time to process their experiences and receive feedback. These procedures might reduce staff burn-out and turn-over."
	Outcomes among homeless youth accessing therapy and case management services through an	*Publication date:* 2008 *Jurisdiction studied:* Albuquerque, New Mexico, United States	Homeless youth (n=172) who requested case management and/or treatment	Outpatient drop-in centre for homeless substance abusing adults which aims to reduce substance use and mental health problems, and increase social	"Statistically significant improvements were found in substance abuse, mental health, and percent days housed up to 12 months post baseline. Decreased alcohol and drug use was associated with an increase in housing. However, most youth did not acquire

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	urban drop-in centre (5)	*Methods used*: Cohort study	services through a drop-in centre in an urban southwestern city (Albuquerque, New Mexico) between October 2002 and April 2005	stability	permanent housing, and education, employment, and medical service utilization did not significantly change over time."
	Effectiveness of a community- based intervention to increase the use of screening mammography among disadvantaged women at an inner-city drop-in centre (1)	*Publication date:* 2005 *Jurisdiction studied:* Toronto, Canada *Methods used*: Interrupted time series	Women 50 to 70 years old who were clients of an inner-city drop-in centre in Toronto, Canada, during the years 1995-2002 (n = 158 in 1995-2001 and n = 89 in 2002)	The intervention consisted of a partnership between an inner city drop-in centre and a nearby hospital, which consisted of a collaborative breast cancer screening project in which a staff member of the drop-in centre accompanied small groups of women for mammography visits at a weekly pre-arranged time.	In the seven years before the introduction of the intervention, annual mammography rates among women using the drop-in centre averaged 4.7%. During the intervention year, 26 (29.2%) of 89 women underwent mammography (p = 0.0001 for the change from pre-to post-intervention). The authors concluded that this approach may be useful to promote breast cancer screening among women affected by mental illness or homelessness who have contact with community-based agencies.
	Consumer preference for drop-in centres or a supported housing program among individuals who are homeless and have psychiatric disabilities (6)	*Publication date:* 2003 *Jurisdiction studied:* Not stated *Methods used*: Experimental choice study	The study evaluated two programs to reduce homelessness for 168 and 225 people with mental illness (many of whom also had substance abuse issues). Homeless participants were randomly assigned to a drop-in centre that emphasized consumer choice, or to control programs that offered the usual continuum of care (i.e., where housing and services are contingent on sobriety and	"The drop-in centre was modeled after other successful drop-in centers in New York City and included showers, lockers, laundry, telephones, library, computers, and television." "The center served as the primary point of contact between individual consumers and program staff. Three major types of services were offered in whatever sequence or combinations the individual consumer chose. These services included assistance with medical, psychiatric, and social services; development and implementation of individual rehabilitation plans with particular emphasis on housing; and opportunities to meet and socialize with others."	"The experimental group found it easier to get food, find a place to sleep, and keep clean than did the control group. They participated in more services, including day programs and self-help groups, and received more help with alcohol and drug problems, financial entitlements, and health insurance. They had less contact with the police, but equivalent levels of court or jail involvement." Participants who accessed the drop-in centre that emphasized consumer choice also reported significant improvement in life satisfaction, significant reductions in anxiety, depression, and thought disorder, and were more likely to achieve important goals. Time spent in the street declined for both groups, but the decrease for the intervention group (55%) was almost twice that of the control group (28%). At the conclusion of the study, 38% of the intervention group was residing in some type of community setting, compared to 24% of the control group.

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			progress in treatment).		However, only a minority of the participants in the intervention group were able to find stable, independent housing in the community.

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