

# Shared mental health care for a marginalized community in inner-city Canada

Stephen Kisely and Pamela Chisholm

**Objectives:** *This paper describes the experience and evaluation of a shared care project targeted at marginalized individuals living in the North End of Halifax, Nova Scotia. This population has high rates of psychiatric disorder, often comorbid with chronic medical conditions, and people have difficulty in obtaining the help they need. This primary care liaison service covers all ages and includes outreach to emergency shelters, transitional housing and drop-in centres. Collaborative care improved access, satisfaction and outcomes for marginalized individuals in urban settings. Primary care providers with access to the service reported greater comfort in dealing with mental health problems, and satisfaction with collaborative care, as well as mental health services in general. Results were significantly better than those of control practices when such data were available. The median wait time was 6 days in comparison with 39.5 days for the comparison site.*

**Conclusions:** *This model can complement other initiatives to improve the health of marginalized populations, and may be relevant to Australia.*

**Key words:** *collaborative care, marginalized populations, primary care, psychiatric disorder, shared care.*

Up to 50% of patients seen in primary care have mental health problems, the severity and duration of which are often similar to those of individuals seen in the specialized sector.<sup>1,2</sup> Shared or collaborative care is not restricted to mental health but can apply to any “positive interaction of two or more health professionals, who bring their unique skills and knowledge to assist patients/clients and families with their health decisions”.<sup>3</sup>

Although initial models emphasized collaboration between general practitioners (GPs), psychiatrists and nurses, collaborative care has expanded to involve patients, psychologists, social workers, occupational therapists, pharmacists and other providers.<sup>4</sup> Other developments have seen collaborative care aimed at specific groups such as children, adolescents, the over-65s and marginalized individuals who find access to services difficult. Collaborative care can include attachment or shared-base models, where mental health professionals see patients in primary care, and consultation-liaison services, where GPs and others are provided with education, advice, support and second opinions in their assessment and management of mental health problems.<sup>5</sup>

This paper describes our experience of a primary care liaison service with community outreach targeted at marginalized individuals living in Halifax (population 372 679), the provincial capital of Nova Scotia, Canada. The urban marginalized include individuals who are homeless, living with addiction, living with disabilities, street youth, sole support parents, Aboriginal Peoples, mentally ill persons, gay/lesbian/bisexual/transgender individuals, and racial minorities (including immigrants and refugees),

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who live in an urban setting and share common determinants related to social exclusion and poverty.<sup>6</sup>

Under the Canada Health Act, all Canadian residents are entitled to inpatient or outpatient care that is free at the point of delivery. Patients receive treatment at publicly funded facilities or are seen by private psychiatrists or general practitioners in the community, who then bill the provincial health plan.

## THE LOCALITY

The programme serves the North End, a socially deprived inner city area of Halifax. Median household income is in the lowest 10% of the range in Halifax.<sup>7</sup> The area houses a large number of emergency shelters, transitional housing and drop-in centres for marginalized groups (Table 1).

The service forms part of the collaborative care programme of the Capital District Health Authority (CDHA) of Nova Scotia. CDHA includes the metropolitan area of Halifax, as well as surrounding rural areas and covers approximately 40% of Nova Scotia's population. This wider programme covers 10 sites throughout CDHA.<sup>8</sup> The service operates out of the North End Community Health Centre (NECHC). The centre was founded in 1971 by local residents in response to a need for healthcare services in the North End.<sup>9</sup> NECHC is primarily funded by the Provincial Department of Health managed through the CDHA.<sup>9</sup> Health care services are provided by five nurses/nurse practitioners, five GPs, one addiction counsellor, a dietician and a social worker.<sup>9</sup>

## THE NEED

Mental illness and homelessness are interrelated in that people who are homeless have high rates of psychiatric morbidity, while individuals with severe and chronic mental illness are more likely to become homeless.<sup>10</sup> The most prominent mental disorders in homeless adults are depression, other affective disorders, substance abuse, psychotic disorders, schizophrenia, and personality disorders.<sup>11,12</sup> Approximately 75% of a study population in Alberta reported some psychiatric symptoms, while almost one-third reported significant symptoms.<sup>13</sup> Over 60% report problems with alcohol consumption, while illicit or prescription drug misuse estimates range from 20 to 30%.<sup>11</sup>

Data for Halifax reveal a similar picture. A study based on qualitative interviews with homeless individuals and a one-day snapshot survey reported that nearly two-thirds had some health condition, 33% reporting addiction, 20% mental illness, 15% a medical condition, and 4% disability.<sup>14</sup>

In addition, focus groups with primary care practitioners, community agency staff and consumers in the Halifax area in early 1998 revealed considerable dissatisfaction with local mental healthcare provision,

**Table 1: Emergency shelters, transitional housing and drop-in centres in Halifax**

<b>Emergency shelters</b>	
Adsum House	Emergency for youth over 16, women and children
Adsum Centre	Transitional housing for women
Barry House	Emergency housing for women and children
Bryony House/Veith House	Transitional housing for women and children escaping abuse
Metro Turning Point	Emergency housing for men
Phoenix Youth Shelter	Emergency housing for youth
Salvation Army	Emergency housing for single men and addictions program
<b>Transitional housing</b>	
Alice Housing	Supported transitional housing for women and children
Al-Care Place	Residential program for men with addictions
Freedom Foundation	Residential program for men with addictions
Marguerite Centre	Residential program for women with addictions
YWCA of Halifax	Supported housing for women
<b>Drop-in centres</b>	
Brunswick St. United Church	Breakfast program
Phoenix Centre for Youth	Drop in centre for homeless youth
Metro Non-profit Housing Support Centre	Support centre for homeless and at risk individuals
ARK	Drop in centre for homeless youth at risk
Feeding Others of Dartmouth	Soup kitchen
Mainline	Needle exchange program and outreach centre

including difficulties with access, referral and communication among healthcare providers.<sup>15</sup>

## THE SERVICE

The service began in 1997 at the North End Community Health Centre (NECHC) to serve the needs of marginalized populations, or those who are less likely to gain access to mental health services. The project was initially funded through Health Canada's Health

Transition Fund before being assumed by the local health authority. It offers child and adolescent, as well as adult, mental health services. The service initially consisted of one part-time adult psychiatrist and one full-time mental health nurse to provide clinical support in direct care, consultation, liaison and education. Over time, this has expanded to include social workers, other psychiatrists and family practices, with ebbs and flows in staff numbers.

Consultation-liaison to primary care is complemented by outreach to emergency shelters, transitional housing and drop-in centres, including needle exchange and methadone maintenance programmes (Table 1). This increases access, improves continuity and relevancy of care, and avoids duplication of services. Regular visits by the mental health worker allow a comprehensive view of individuals' physical and mental health, housing, finances, social ties and employment through direct daily observation. In these settings, care team members may observe levels of functioning and gain insight into areas of concern not readily reported or detected in a community health centre.<sup>6</sup>

The service is aimed at individuals who have difficulty in obtaining help through the traditional system or clients of front-line social agencies in frequent crises without appropriate supports. Other targets are primary care and front-line agency staff who are the initial contact for individuals in crisis, but who lack the time, training and support necessary to help.

All team members are salaried to allow for compensation when undertaking non-billable services such as care coordination and educational sessions. The full-time mental health worker acts as the liaison between the individual presenting with problems, agency staff, the shared care team and all other necessary community resources. After referral from agency staff or another advocate (including self-referral), the mental health worker decides if a referral to the GP is appropriate and when to involve other shared care team members, including the psychiatrist. The primary and shared mental health teams also discuss problems at weekly care coordination meetings. These meetings include the psychiatrist and other mental health workers, nurses, GPs, dietician and social worker. There are also educational sessions at 6-monthly retreats for primary care teams and mental health professionals at all the collaborative care sites in the CDHA programme.

## THE EFFECT

There have been two evaluations of the service. The first was a mixed-methods survey 2 years after implementation.<sup>15</sup> Data collection lasted over 12 months and included the NECHC, as well as two other sites offering collaborative care: an urban family medicine centre and a rural family practice. A pretest–posttest design was

used, and where possible the three intervention sites were compared to a control GP clinic without access to the service. All settings were a convenience sample. Outcomes studied included waiting times to being seen by a mental health worker, number of subsequent referrals to psychiatrists as opposed to other disciplines, and primary care staff satisfaction with the service. The NECHC and control clinic were similar in terms of staffing (13 and 16 full-time equivalents, respectively). Two hundred and forty-three patients were recruited at NECHC but only 29 at the control clinic. They were similar in terms of age (approximately 30 years old) and female gender (48% vs 60%) ( $\chi^2 = 1.14$ ,  $df = 1$ ,  $p = 0.38$ ).<sup>15</sup> NECHC had a higher proportion of homeless patients.<sup>15</sup>

Access was partly assessed by the median wait time, defined as the number of days between referral from a primary care provider to being seen by a mental health professional. The median wait time at the NECHC was 6 days, in comparison with 39.5 for the comparison site. There were statistically significant improvements in general (44 to 56) and mental health (40 to 53), as measured by the DUKE Health Questionnaire, not mirrored in the comparison site (37 and 39 to 45, respectively).<sup>15</sup> However, this may be due to the fact that only 10 subjects agreed to complete the questionnaire in the control practice. Patient satisfaction on the visit specific questionnaire was high, with between 71% and 78% being satisfied to extremely satisfied with the time to being seen, being seen in the community centre and their visit overall.<sup>15</sup>

In terms of the qualitative research, GPs also expressed satisfaction with the service and felt that collaboration has increased their knowledge and confidence in diagnosing and treating individuals with mental health problems.<sup>15</sup> There were no data from the control site on patient or GP satisfaction with the service.

This limitation was partly addressed by a subsequent survey of GPs ( $n = 101$ ) in CDHA.<sup>8</sup> This revealed that GPs who had access to collaborative care reported significantly greater knowledge in the areas of psychosis and childhood behavioural problems than those who did not have such access.<sup>8</sup> GPs in contact with collaborative care were also significantly more satisfied with mental health services in general, over and above shared care.<sup>8</sup> All these results remain significant, even after controlling for sex, level of interest and years of practice.<sup>8</sup> However, it was not possible to identify how many of the participating physicians came from the NECHC.

## LIMITATIONS

Limitations of the model include the generalizability to other settings such as 'fee-for-service' clinics. In the absence of provincial funding, the local health authority has remunerated GPs for activities such as education or case conferences not covered by provincial

billings. Another difficulty has been adequate funding and personnel, especially to meet the needs of patients under 19 years old. Finally, the model may be more applicable to urban settings with a high concentration of shelters, transitional housing schemes and drop-in centres where contact can be made. It may be less applicable to rural areas.

In terms of the evaluation, limitations include the absence of sufficient control data for many of the measures. Participation rates for some measures were low and neither of the evaluations was specifically of the service for marginalized populations. Where control data are available for comparison, it has not always been possible to separate out the effect of this particular service from other collaborative care programmes in the Halifax area. Other limitations include the absence of data on GP work practices, knowledge or interests concerning mental health care before the introduction of collaborative care, and the consequent reliance on retrospective information. Self-report data are subject to information bias.

## CONCLUSIONS

Collaborative care can improve access, satisfaction and outcomes for marginalized individuals in urban settings although further research is required given the limitations of the existing data. The results may be relevant to Australia. Primary care providers with access to the service reported greater comfort in dealing with mental health problems, and satisfaction with collaborative care as well as mental health services in general. Results were significantly better than those of control practices when such data were available. This model can complement other initiatives to improve the health of marginalized populations, such as movement away from large temporary shelters and institutions in favour of longer term supportive housing where tenants have enhanced access to health and community services with or without residential supervision.

## REFERENCES

1. Kates N, Fugere C, Farrar S. Family physician satisfaction with mental health services, findings from a community survey. *CPA Bulletin* 2004; **36**: 10–14.
2. Lesage A, Goering P, Lin E. Family physicians and the mental health system, a report from the mental health supplement to the Ontario Health Survey. *Canadian Family Physician* 1997; **43**: 25–26.
3. Enhancing Interdisciplinary Collaboration in Primary Health Care. *The Principles and Framework for Interdisciplinary Collaboration in Primary Health Care*, 2005. Available from URL: <http://www.eicp-acis.ca/en/principles/sept/EICP-Principles%20and%20Framework%20Sept.pdf>.
4. Craven MA, Bland R. Better practices in collaborative mental health care. An analysis of the evidence base. *Can J Psychiatry* 2006; **51**: 7S–72S.
5. Joint Consultative Committee in Psychiatry of the Royal Australian College of General Practitioners and the Royal Australian and New Zealand College of Psychiatrists. *Primary Care Psychiatry: The Last Frontier*. A report of the Joint Consultative Committee in Psychiatry. A National Mental Health Strategy Project, 1997.
6. Canadian Collaborative Mental Health Initiative. *Establishing Collaborative Initiatives Between Mental Health and Primary Care Services for Urban Marginalized Populations*. Ottawa: Canadian Collaborative Mental Health Initiative, 2006. Available from URL: [http://www.ccmhi.ca/en/products/toolkits/documents/EN\\_CompanionToolkitforUrbanMarginalized.pdf](http://www.ccmhi.ca/en/products/toolkits/documents/EN_CompanionToolkitforUrbanMarginalized.pdf)
7. Statistics Canada. *Spatial Structure of Census Tracts by Household Income*. Ottawa, Ontario: Statistics Canada, Geography Division, 2001.
8. Kisely S, Duerden D, Shaddick S, Jayabarathan A. Increased collaboration between primary care and psychiatric services. *Canadian Family Physician* 2006; **52**: 876–877. Available from URL: <http://www.cfpc.ca/cfp/2006/Jul/vol52-jul-research-kisely.asp?stype=advanced&>
9. North End Community Health Centre. *About the Centre*. Available from URL: <http://www.nechc.com/>
10. Hwang SW. Homelessness and health. *Canadian Medical Association Journal* 2001; **164**: 229–233.
11. Acorn S. Mental and physical health of homeless persons who use emergency shelters in Vancouver. *Hospital & Community Psychiatry* 1993; **44**: 854–857.
12. Reilly JJ, Herrman HE, Clarke DM, Neil CC, McNamara CL. Psychiatric disorders in and service use by young homeless people. *Medical Journal of Australia* 1994; **16**: 429–432.
13. Stuart HI, Arboleda-Flórez J. Homeless shelter users in the post-deinstitutionalization era. *Canadian Journal of Psychiatry* 2000; **45**: 55–62.
14. Halifax Regional Municipality. *Homelessness in HRM, A Portrait of Streets and Shelters, Vol. II*. Halifax, NS: Planning and Development Services, 2005.
15. McLean L, Rowan M, LeBlanc J. *Improving Identification, Early Intervention and Outcomes for People With Mental Illnesses in the Community, a Model for Primary Care Services Integration in the Area of Mental Health*. Report to Health Transitions Fund. Ottawa Ontario: Health Canada, 2000. Available from URL: [http://www2.itssti.hc-sc.gc.ca/hpb/hcpd/pchcd/projectc.nsf/ExecSum/NS421/\\$File/NS421.pdf](http://www2.itssti.hc-sc.gc.ca/hpb/hcpd/pchcd/projectc.nsf/ExecSum/NS421/$File/NS421.pdf)