



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale

Canadian Collaborative Mental Health Initiative

**National Conference on Shared Mental Health Care
Calgary, Alberta
May 2006**



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Identifying Better Practices in Collaborative Mental Health Care: An Analysis of the Evidence Base

Marilyn Craven MD PhD
McMaster University

Roger Bland MB FRCPC
AMHB and
University of Alberta
Supported by CCMHI

7th National Conference on
Shared Mental Health Care

May 11- 13, 2006
Calgary, Alberta



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Definition of Collaborative Care

Collaborative care involves **providers working together ...** to ensure that **individuals receive the most appropriate service ...**, **as quickly as necessary**, and with a minimum of obstacles. Collaboration ... involves ... **communication**, ... **personal contacts, sharing of clinical care**, joint educational programs and/or joint program and system planning.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Purpose of this study

- ❖ To identify and summarize the current experimental literature (RCTs and intervention studies with outcome measures) on the impact of collaborative practices in the delivery of mental health care in the primary care setting.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Methods

- ❖ Review of more than 900 articles
- ❖ 38 studies were identified which investigated the impact of collaborative mental health care in the primary care setting and using experimental methodologies (RCTs and intervention studies with outcome measures).
- ❖ These studies were systematically reviewed and analysed.
- ❖ Recent trends in collaborative mental health care research are summarized.
- ❖ Widely differing methodologies did not permit combining results to perform meta-analysis



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Recent research trends (1)

- Moved from purely descriptive accounts of collaborative models and enthusiastic reports of early program evaluation findings to more rigorous experimental studies.
- The focus of these studies has shifted:
 - earlier studies were most concerned with the **impact of collaboration on system outcomes** such as service utilization, referral rates to specialty mental health clinics and rates of inpatient admission.
 - Recent studies have focused more on **patient-level outcomes**, often combining collaborative interventions with guideline-driven treatment protocols in an effort to improve care processes.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Recent research trends (2)

- ❖ Another shift in the research has seen **collaboration** paired with **chronic disease management** and **quality improvement** initiatives.
 - Most of these studies have focused on depression and have entailed varying degrees of practice or service reorganization to achieve their outcomes.
- ❖ A fourth “wave” of research is now examining the ability of such research-based programs to be translated into “real world” settings.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Recent research trends (3)

- ❖ Collaborative interventions **targeted at specific patient populations** (eg serious and persistent mental illness, depression, the depressed elderly, substance abusers, high users of medical care),
- ❖ Involving professionals with different skill sets, different resource requirements and a range of implementation methods, including consumers, psychologists, social workers, occupational therapists, pharmacists
- ❖ Using a sufficiently powerful intervention that a difference from usual care could be detected, problems however:



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Recent research trends (4) some problems however:

- Populations noticeably absent from the experimental literature include aboriginal communities, the homeless, and rural communities.
- Diagnostic groups which are under-represented include anxiety disorders, personality disorders, eating disorders, attention deficit disorder and dementia.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (1)

- 1. Collaborative relationships between primary care physicians and other mental health care providers do not happen instantly or without work. They require preparation, time and supportive structures.**
 - Two of the studies reviewed^{13,31} had potentially good interventions which failed because of poorly implemented collaboration. In contrast, a study which built on pre-existing relationships in the primary care practice, resulted in high levels of collaboration and good patient outcomes¹⁶. **Ideally, collaborative care arrangements will grow out of pre-existing clinical relationships.**



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (2)

2. Co-location is important for both providers and patients.

- Providers who have not met face to face and/or do not have pre-existing clinical relationships are less likely to engage in a collaborative care relationship^{16,48}.
- From the patient's point of view, offering patients specialty mental health care within the primary care setting appears to produce greater engagement of patients in mental health care, a *sine qua non* for better patient outcomes^{24,47}.
- Collaboration between mental health specialists and primary care providers is likely to be most developed when clinicians are co-located.
- Most effective when the location is familiar and non-stigmatizing for patients. This may be particularly true for patients with substance abuse problems.

An emerging literature on co-location/integration of substance abuse treatment and primary care suggests that patients in integrated models do significantly better, and those with poorer health benefit the most^{26,52,53}.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (3)

3. Degree of collaboration does not in itself appear to predict clinical outcome.

- Although there was a trend toward positive outcomes occurring more often in studies with moderate or high levels of collaboration, some studies with lower levels of collaboration also had positive outcomes ^{6,9,12,22,37}.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (4)

4. The pairing of **collaboration with treatment guidelines** appears to offer important benefits over either intervention alone in patients with depressive disorders.
 - studies with positive outcomes in this patient population included decision support instruments, usually in the form of a research protocol, and/or established clinical treatment guidelines.
 - trials of clinical guidelines, treatment protocols or algorithms without collaborative interventions have not shown improvements in patient-level outcomes ^{54,55,56}.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (5)

- 5. Collaboration paired with treatment guidelines for depression may have a differential effect on outcome, with patients with more severe disorder responding better.**
 - Several of the studies reviewed showed improved outcomes only in subgroups of patients with higher depression severity scores ^{7,9,13,14}
 - At present, there is more evidence to support targeting collaborative interventions at major depressive disorders.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (6)

6. One of the most powerful predictors of positive clinical outcomes in studies of collaborative care for depression was the inclusion of **systematic follow-up as part of the study protocol.**

- In the studies reviewed, follow-up was delegated to another clinician or care manager, with varying degrees of collaboration with the primary care physician and for varying lengths of time.
- Those which included systematic follow-up and a mechanism for treatment to be altered when patients were not responding well (often a stepped approach), had positive outcomes^{6,7,9,11,12,16,18,22,33,35,37,39,41,47}.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (7)

- 7. Efforts to increase medication adherence through collaboration with other health care professionals (eg practice nurses) were also a common component of many successful studies.**
 - **Although improving medication adherence has strong face validity, analysis of these studies found no clear direct relationship between medication adherence and clinical outcome ^{10,11, 14,15,19,21}.**



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (8)

8. Collaboration alone has not been shown to produce skill transfer or enduring changes in primary care physician knowledge or behaviours in the treatment of depression.

- One study ⁴ demonstrated that the improvement in outcomes achieved during a multifaceted intervention for depression⁵ were not due to physician education alone, but required extensive service restructuring in addition.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (9)

- 9. Enhanced patient education about mental disorders and their treatment (usually by a health professional other than the primary care physician) was a component of many of the studies with good outcomes.**



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (10)

- 10. Collaborative interventions established as part of a research protocol may be difficult to sustain once the funding for the study is terminated ^{4,16}.**



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Findings (11)

11. Patient choice about treatment modality may be an important factor in treatment engagement in collaborative care.

- Research has shown that, given a choice, 26%-66% of primary care patients with major depression would prefer to be treated with psychotherapy rather than medication ⁵⁷.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Conclusions

- ❖ A body of experimental literature evaluating the impact of enhanced collaboration on patient outcomes - primarily in depressive disorders - now exists. Better practices in collaborative mental health care are beginning to emerge.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Clinical Implications

1. Collaboration is most successful when built on pre-existing clinical relationships.
2. Enhanced collaboration should be paired with disorder-specific treatment guidelines.
3. Skill transfer in collaborative relationships requires service restructuring to support behavioural change.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



Limitations

1. The number of experimental studies is relatively small.
2. Enhanced collaboration should be paired with disorder-specific treatment guidelines.
3. Skill transfer in collaborative relationships requires service restructuring to support behavioural change.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale

Canadian Collaborative Mental Health Initiative



www.ccmhi.ca

Roger Bland [waterloo@shaw.ca]

Funding for CCMHI was provided by Primary Health Care Transition Fund – Health Canada



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



References (1)

1. Craven MA, Bland R. Shared mental health care: a bibliography and overview. *Can J Psychiatry* 2002; 47 (Supp 1): 1S-103S.
2. Pautler K, Gagné M-A. Annotated bibliography of collaborative mental health care. Report prepared for the Canadian Collaborative Mental Health Initiative, Mississauga, Ontario, Canada; September 2005.
3. Canadian Collaborative Mental Health Initiative. www.ccmhi.ca.
4. Lin EH, Katon WJ, Simon GE, Von Korff M, Bush TM, Rutter CM, Saunders KW, Walker EA. Achieving Guidelines for the treatment of depression in primary care: Is physician education enough? *Medical Care* 2000;35 (8):831-842.
5. Katon W, Von Korff M, Lin E, Bush T, Russo J, Lipscomb P, Wagner E. A randomized trial of psychiatric consultation with distressed high utilizers. *Gen Hosp Psychiatry* 1992;14:86-98.
6. Katzelnick DJ, Simon GE, Pearson SD, Manning WG, Helstad CP, Henk HJ, Cole SM, Lin EHB, Taylor LH, Kobak KA. Randomized trial of a depression management program in high utilizers of medical care. *Arch Fam Med* 2000;9:345-351.
7. Katon W, Von Korff M, Lin E, Walker E, Simon GE, Bush T, Robinson P, Russo, J. Collaborative management to achieve treatment guidelines: Impact on depression in primary care. *JAMA* 1995;23 (13):1026-1031.
8. Hedrick, SC, Chaney EF, Felker B, Liu C, Hasenberg N, Heagerty P, Buchanan J, Bagala R, Greenberg D, Paden G, Fihn SD, Katon W. Effectiveness of collaborative care depression treatment in Veterans' Affairs primary care. *J. Gen Intern Med* 2003;18:9-16.
9. Katon W, Robinson P, Von Korff M, Lin E, Bush T, Ludman E, Simon G, Walker E. A multifaceted intervention to improve treatment of depression in primary care. *Arch Gen Psychiatry* 1996;53:924-932.
10. Wilkinson G, Allen P, Marshall E, Walker J, Browne W, Mann AH. The role of the practice nurse in the management of depression in general practice: treatment adherence to antidepressant medication. *Psychological Med* 1993;23:229-237.
11. Hunkeler EM, Meresman JF, Hargreaves WA, Fireman B, Berman WH, Kirsch AJ, Groebe J, Hurt SW, Braden P, Getzell M, Feigenbaum PA, Peng T, Salzer M. Efficacy of nurse telehealth care and peer support in augmenting treatment of depression in primary care. *Arch Fam Med* 2000;9:700-708.
12. Simon GE, Von Korff M, Rutter C, Wagner E. Randomised trial of monitoring, feedback, and management of care by telephone to improve treatment of depression in primary care. *BMJ* 2000;320:550-554.
13. Swindle RW, Rao JK, Helmy A, Plue L, Zhou XH, Eckert GJ, Weinberger M. Integrating clinical nurse specialists into the treatment of primary care patients with depression. *International J Psychiatry in Medicine* 2003;33 (1):17-37.
14. Peveler R, George C, Kinmonth A-L, Campbell M, Thomson C. Effect of antidepressant drug counseling and information leaflets on adherence to drug treatment in primary care: randomized controlled trial. *BMJ* 1999;319:612-615.
15. Adler DA, Bungay KM, Wilson IB, Yu Pei MPA, Supran S, Peckham E, Cynn DJ, Rogers WH. The impact of a pharmacist intervention on 6-month outcomes in depressed primary care patients. *Gen Hosp Psychiatry* 2004;26:199-209.
16. Rost K, Nutting P, Smith J, Elliott CE, Dickinson M. Managing depression as a chronic disease: a randomised trial of ongoing treatment in primary care. *BMJ* 2002;325:934-939.
17. Rost K, Pyne JM, Dickinson LM, LoSasso AT. Cost-effectiveness of enhancing primary care depression management on an ongoing basis. *Ann Fam Med* 2005;3:7-14.
18. Katon W, Von Korff M, Lin E, Simon G, Walker E, Unützer J, Bush T, Russo J, Ludman E. Stepped collaborative care for primary care patients with persistent symptoms of depression: A randomized trial. *Arch Gen Psychiatry* 1999;56:1109-1115.
19. Simon GE, Katon WJ, Von Korff M, Unützer J, Lin EH, Walker EA, Bush T, Rutter C, Ludman E. Cost Effectiveness of a collaborative care program for primary care patients with persistent depression. *Am J Psychiatry* 2001;158:1638-1644.
20. Walker EA, Katon WJ, Russo J, Von Korff M, Lin E, Simon G, Bush T, Ludman E, Unützer J. Predictors of outcome in a primary care depression trial. *J Gen Int Med* 2000;15:859-867.
21. Katon W, Rutter C, Ludman EJ, Von Korff M, Lin E, Simon G, Bush T, Walker E, Unützer J. A randomized trial of relapse prevention of depression in primary care. *Arch Gen Psychiatry* 2001;58:241-247.
22. Unützer J, Katon W, Callahan CM, Williams JW, Hunkeler E, Harpole L, Hoffing M, Della Penna RD, Noel PH, Lin EH, Arean PA, Hegel MT, Tang L, Belin TR, Oishi S, Langston C. Collaborative care management of late-life depression in the primary care setting. *JAMA* 2002;288(22):2836-2845.
23. Harpole LH, Williams JW, Olsen MK, Stechuchak KM, Oddone E, Callahan CM, Katon WJ, Lin EH, Grypma LM, Unützer J. Improving depression outcomes in older adults with comorbid medical illness. *Gen Hosp Psychiatry* 2005;27:4-12.
24. Bartels SJ, Coakley EH, Zubritsky C, Ware JH, Miles KM, Arean PA, Chen H, Oslin DW, Llorente MD, Costantino G, Quijano L, McIntyre JS, Linkins KW, Oxman TE, Maxwell J, Levkoff SE. Improving access to geriatric mental health services: a randomized trial comparing treatment engagement with integrated versus enhanced referral care for depression, anxiety, and at-risk alcohol use. *Am J Psychiatry* 2004;161:1455-1462.
25. Samet JH, Larson MJ, Horton NJ, Doyle K, Winter M, Saitz R. Linking alcohol-and drug-dependent adults to primary medical care: a randomized controlled trial of a multi-disciplinary health intervention in a detoxification unit. *Addiction* 2003;98:509-516.
26. Weisner C, Mertens J, Parthasarathy S, Moore C, Lu Yun. Integrating primary medical care with addiction treatment. *JAMA* 2001;286:1715-1723.
27. McLellan AT, Arndt IO, Metzger DS, Woody GE, O'Brien CP. The effects of psychosocial services in substance abuse treatment. *JAMA* 1993;269:1953-59.
28. Abrahams S, Udwin O. An Evaluation of a primary care-based child clinical psychology service. *Child and Adolesc Mental Health* 2002;7:107-13.
29. Warner JP, King M, Blizard R, McClenahan Z, Tang S. Patient-held shared care records for individuals with mental illness. *Br J Psychiatry* 2000;177:319-324.



Canadian
Collaborative
Mental Health
Initiative

Initiative
canadienne de
collaboration en
santé mentale



References (2)

30. Lester H, Allan T, Wilson S, Jowett S, Roberts L. A cluster randomised controlled trial of patient-held medical records for people with schizophrenia receiving shared care. *Br J Gen Pract* 2003;53:197-203.
31. Burns T, Millar E, Garland C, Kendrick T, Chisholm B, Ross F. Randomized controlled trial of teaching practice nurses to carry out structured assessments of patients receiving depot antipsychotic injections. *Br J Gen Pract* 1998;48 (437):1845-1848.
32. Kendrick T, Burns T, Freeling P. Randomised controlled trial of teaching general practitioners to carry out structured assessments of their long-term mentally ill patients. *BMJ* 1995;311:93-98.
33. Gater R, Goldberg D, Jackson G, Jennett N, Lowson K, Ratcliffe J, Saraf T, Warner R. The care of patients with chronic schizophrenia: a comparison between two services. *Psychol Med* 1997;27:1325-1336.
34. Bindman J, Goldberg D, Chisholm D, Amponsah S, Shetty G, Brown J. Primary and secondary care for mental illness: Impact of a link worker service on admission rates and costs. *J Mental Health* 2001;10 (6):637-644.
35. Cook S, Howe A. Engaging people with enduring psychotic conditions in primary mental health care and occupational therapy. *Br J Occupational Therapy* 2003;66:236-46.
36. Druss BG, Rohrbach RM, Levinson CM, Rosenheck RA. Integrated medical care for patients with serious psychiatric illness. *Arch Gen Psychiatry* 2001;58:861-868.
37. Lovell K, Richards DA, Bower P. Improving access to primary mental health care: uncontrolled evaluation of a pilot self-help clinic. *Br J Gen Pract* 2003;53:133-135.
38. Bower P, Richards DA, Lovell K. The clinical and cost-effectiveness of self-help treatments for anxiety and depressive disorders in primary care: a systematic review. *Br J Gen Pract* 2001;51:838-45.
39. Wells KB, Sherbourne C, Schoenbaum M, Duan N, Meredith L, Unützer J, Miranda J, Carney MF, Rubenstein LV. Impact of disseminating quality improvement programs for depression in managed primary care. *JAMA* 2000;283:212-220.
40. Unützer J, Rubenstein L, Katon WJ, Tang L, Duan N, Lagomasino T, Wells KB. Two-year effects of quality improvement programs on medication management for depression. *Arch Gen Psychiatry* 2001;58:935-942.
41. Sherbourne CD, Wells KB, Duan N, Miranda J, Unützer J, Jaycox L, Schoenbaum M, Meredith LS, Rubenstein LV. Long-term effectiveness of disseminating quality improvement for depression in primary care. *Arch Gen Psychiatry* 2001;58:696-703.
42. Wells K, Sherbourne C, Schoenbaum M, Etner S, Buan N, Miranda J, Unützer J, Rubenstein L. Five-year impact of quality improvement for depression. *Arch Gen Psychiatry* 2004;61:378-386.
43. Wells K, Sherbourne C, Duan N, Unützer J, Miranda J, Schoenbaum M, Etner SL, Meredith LS, Rubenstein L. Quality improvement for depression in primary care: Do patients with subthreshold depression benefit in the long run? *Am J Psychiatry* 2005;162:1149-1157.
44. Mildred H, Brann P, Luk ESL, Fisher S. Collaboration between general practitioners and a child and adolescent mental health service. *Aust Fam Physician* 2000;29:177-181.
45. Emmanuel JS, McGee A, Ukoumunne OC, Tyrer P. A randomised controlled trial of enhanced key-worker liaison psychiatry in general practice. *Soc Psychiatry Epidemiol* 2002; 37:261-266.
46. Byng R, Jones R, Leese M, Hamilton B, McCrone P, Craig T. Exploratory cluster randomised controlled trial of shared care development for long-term mental illness. *Br J Gen Pract* 2004;54:259-266.
47. Sharma VK, Wilkinson G, Dowrick C, Church E, White S. Developing mental health services in a primary care setting: Liverpool primary care mental health project. *International J of Social Psychiatry* 2001;47(4):16-29.
48. Bray JH, Rogers JC. Linking psychologists and family physicians for collaborative practice. *Professional Psychology* 1995;26:132-38.
49. Strathdee G, Brown RM, Doig RJ. Psychiatric clinics in primary care. The effect on general practitioner referral patterns. *Soc Psychiatry Psychiatr Epidemiol* 1990;25:95-100
50. Subotsky F, Brown RM. Working alongside the general practitioner: a child psychiatric clinic in the general practice setting. *Child Care Health Dev* 1990;16:189-96.
51. Jackson G, Gater R, Goldberg D, Tantam D, Loftus L, Taylor H. A new community mental health team based in primary care. A description of the service and its effect on service use in the first year. *Br J Psychiatry* 1993;162:375-84.
52. Friedmann PD, Zhang Z, Hendrickson J, Stein MD, Gerstein DR. Effect of primary medical care on addiction and medical severity in substance abuse treatment programs. *J Gen Intern Med* 2003;18:1-8.
53. Saitz R, Horton NJ, Larson MJ, Winter M, Samet JH. Primary medical care and reductions in addiction severity: a prospective cohort study. *Addiction* 2005;100:70-78.
54. Betz Brown J, Shye D, McFarland BH, Nichols GA, Mullooly JP, Johnson RE. Controlled trials of CQI and academic detailing to implement a clinical practice guideline for depression. *Joint Commission's Journal on Quality Improvement* 2000; 26:39-54.
55. Thompson C, Kinmonth AL, Stevens L, Peveler RC, Stevens A, Ostler KJ, Pickering RM, Baker NG, Henson A, Preece J, Cooper D, Campbell MJ. Effects of a clinical-practice guideline and practice-based education on detection and outcome of depression in primary care: Hampshire Depression Project randomized controlled trial. *Lancet* 2000;355:185-91.
56. Goldberg HI, Wagner EH, Fihn SD, Martin DP, Horowitz CR, Christensen DB, Cheadle AD, Diehr P, Simon G. A Randomized controlled trial of CQI teams and academic detailing: can they alter compliance with guidelines? *Joint Commission's Journal on Quality Improvement* 1998;24:130-142.
57. Davis DA, Thomson MA, Oxman AD, Haynes RB. Evidence for the Effectiveness of CME. A review of 50 randomized controlled trials. *JAMA* 1992;268:1111-1117.
58. Van Schaik DJ, Klijn AF, van Hout HP, van Marwijk HW, Beekman AT, de Haaan M, van Dyck R. Patients' preferences in the treatment of depressive disorder in primary care. *Gen Hosp Psychiatry* 2004;26:184-89.