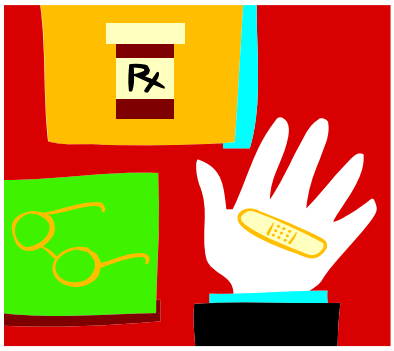
The Ottawa Shared Mental Health Care (SHARE) Project

Final Report

SHARE:
Shared mental
Health-care
Accessibility
Research and
Evaluation



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Prepared by:

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Primary Health Care Transition Fund

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Grant Details:

Primary Health Care Transition Fund Project G03-02606 – Shared Mental Health Care Linking General Hospital Acute Care Mental Health Services with Two Comprehensive Family Medicine Groups

- The current report provides findings emerging from the evaluation of the Ottawa Shared Mental Health Care Project (SHARE). The SHARE Project was a demonstration project funded by the Primary Health Care Transition Fund. Dr. J. Robert Swenson of the Department of Psychiatry, University of Ottawa and Dr. Nick Busing of the Department of Family Medicine of the University of Ottawa were the Co-Principal Investigators of the project. It was intended to implement a shared care model in which a multi-disciplinary team of mental health professionals from the Ottawa Hospital would provide services to patients at two family medicine practices in the City of Ottawa. The purpose of the project was to improve access to multidisciplinary mental health care within the primary care system, and also to improve access to primary care for patients of the mental health system who lacked a family physician by setting up a mental health team which bridges the two health care systems. The project was funded in March, 2004 and ended in July, 2006. The shared mental health service is to be transitioned into the two Ottawa Academic Family Health Teams which were funded by the Ontario Ministry of Health and Long-Term Care in 2006.

- The Centre for Research on Community Services (CRCS) at the University of Ottawa was commissioned to conduct the evaluation of the initial implementation of the program. An evaluation team was established to manage the evaluation process, comprised of Dr. Tim Aubry, Co-Director of CRCS; Sarah Pantin and Eleanor Riesen, Ph.D. students in Clinical Psychology participating in an internship placement at CRCS; and Vivien Runnels, Ph.D. student in Population Health. A collaborative approach to the evaluation involving frequent contact with program management was employed. Their complete report and in depth analysis of data is submitted as a companion to the SHARE final report.

- The Ottawa Health Research Institute (OHRI) Clinical Epidemiology Program also contributed to the evaluation by providing information technology and statistical expertise. Jennifer Clinch, M.A. was the biostatistician from the OHRI.

Executive Summary

Background and Rationale

It has become clear over the past two decades that there are a number of problems associated with persons with mental illness receiving appropriate primary and specialty health care. These problems appear to be two-fold: first, patients with mental illness tend to visit their family physician more frequently than other patient groups, and patients with mental illness may not receive an adequate level of care, as their psychiatric symptoms may interfere with their ability to access and follow medical treatment.

The principle of collaborative or "shared" care has been developed to try and address some of these problems. The goal is to improve access to both psychiatric and physical care for patients with mental illness. The model recognizes the pivotal role of the family physician in providing effective health care interventions. The approach fosters collaboration between the family physician and other mental health professionals. In addition to providing direct patient services, the aim of the collaboration is also to use psychiatric consultation to increase the knowledge of the family physician, thereby improving levels of primary care detection of mental illness, permitting earlier intervention and improving treatment outcomes.

This report provides findings emerging from the evaluation of the Ottawa Shared Mental Health Care (SHARE) Project. The SHARE Project is a demonstration project funded by the Primary Health Care Transition Fund. It is intended to implement a model in which a multi-disciplinary team of mental health professionals from the Ottawa Hospital Department of Psychiatry provide services to patients within two comprehensive family medicine practices in the City of Ottawa. The purpose of the project is to improve access to multidisciplinary mental health care within both the primary care system and the mental health system by setting up a team which links both systems.

Goals and Objectives

The underlying assumption of this project was that a multi-disciplinary mental health team linking the Ottawa Hospital psychiatric emergency service and outpatient mental health programs with two comprehensive family medicine practices would result in improved access to, and quality of both psychiatric and physical care for patients with mental health problems who are seen first within either (a) the primary care system, or (b) the acute care mental health system.

With respect to the *goals of the Primary Health Care Transition Fund*, the SHARE Project was anticipated to demonstrate a positive outcome in the following areas:

- improved access to primary health care
- improved quality and continuity of primary health care
- increased patient provider satisfaction

The object of the demonstration project was to develop a share care model offering mental health services to two family practices located in central Ottawa – the Ottawa Hospital Civic Campus

Family Medicine Centre and the Central Ottawa Family Medical Associates. The SHARE Team was set up as a multidisciplinary team which included a psychiatrist, an advanced-practice psychiatric nurse (APN), a psychiatric social worker, and a psychologist. Each member of the team of four mental health workers spent at least one and a half days per week each on this project, providing on-site services for at least one day per week at either of the two family medicine practices and another half day of either on-site or indirect care each week.

The SHARE team was intended to assist family physicians in two practices to treat their patients presenting with mental health difficulties. In addition, these services were expected to facilitate access to a family physician from these practices for patients seen at the Ottawa Hospital Outpatient Mental Health Services who have no family physician. In addition to providing direct patient care, the SHARE Project's objectives included increasing the capacity of family physicians and residents to provide ongoing mental health care by providing training and educational activities which would enhance their knowledge of mental health care.

Activities

At the start of the project a needs analysis of 18 family physicians and 30 family medicine residents was completed through a questionnaire which surveyed: attitudes and beliefs about managing patients' mental health problems, self-perceived knowledge about mental health issues, comfort with mental health care, and opinions about what would enhance there care of patients with mental health problems. Family physicians and residents reported that they believe they have the primary responsibility for provision of mental health care to their patients, however many family physicians and the majority of residents reported that time constraints limit their ability to enquire about a mental health problem.

Evaluation of the SHARE Project was done with qualitative and quantitative measures, including family physician and mental health professional focus groups and interviews, patient and provider rated symptom scales, severity of illness scales, and patient satisfaction scales. Knowledge dissemination occurred throughout the duration of the project, including local educational presentations to family physicians and residents, rounds presented at hospitals, presentations to local community stakeholders, and formal presentations at provincial, national and international academic meetings.

A total of 332 patients were referred by their primary care physician to the SHARE Team and of these 256 patients took part in the study. The SHARE Team offered a variety of services to SHARE patients . Most patients (93%) received an assessment, and recommendations for continuing patient care were communicated to the referral source from SHARE Team members. A large number of participants (over 50%) also received some form of counseling or therapy. Other services offered by the team included parenting skills, crisis management, medication management and other management strategies not otherwise described.

Outcomes and Key Results

Family physicians reported that primary care patient access to mental health services was improved greatly by the SHARE Project. During the project, access ranged from 1 to 2 months from the time the referral was made to the time the patient was seen, which was much less time

than the usual waiting period for psychiatric consultation in the community. However there were only 4 patients from the mental health system able to access primary care, due to the sudden closure of both family practices to new patients prior to the start of the project, because of the departure of some family physicians. The majority of patients seen (80%) had diagnosable mental health disorders by standard criteria, with a preponderance of anxiety and depressive disorders. About 40% of patients were rated by providers as showing moderate to severe impairment in some domain of illness severity. Most patients and family physicians expressed a high level of satisfaction with the different mental health services provided by the multidisciplinary team. With respect to effectiveness of care, there were significant improvements in patient and provider rated measures of symptom burden, illness severity, and quality of life of patients from baseline to the end of provision of mental health care by the SHARE Team.

Implications

Implications for policy and practice changes with respect to primary mental health care arising from this project are discussed under the headings of access to care, appropriateness (quality) of care, efficiency of care, acceptability (satisfaction) of care, safety and continuity of care, and effectiveness of care. With respect to access and quality of care, recommendations arising from the project include:

- Establish targets for wait times for urgent referrals (consider less than a 2 week waiting period) and non-urgent referrals (consider less than an 8 week waiting period).
- Link primary care services with hospital based mental health services using shared care teams. This would allow improved access to and communication with psychiatric emergency services and intensive outpatient services for primary care patients.
- Facilitate mental health system patients lacking family physicians with access to primary care with the back-up of a shared mental health team.
- Multi-disciplinary shared mental health teams are optimal to provide the highest quality of care for primary care patients. A multi-disciplinary shared care team could link with several family health teams, depending on patient populations and geography.
- Use evidence-based, time-limited mental health treatments such as cognitive-behavioural therapy or problem-focused therapy, depending on the patient's need.
- Referral back to family physician for ongoing mental health care is optimal. The shared mental health team should avoid providing long-term care but rather focus on episodic care in collaboration with the family physician for patients with long-term, severe mental illness.
- Providing education and training in collaborative mental health care concepts for mental health professionals, family physicians, residents in psychiatry and residents in family medicine is essential.

Sustainability

Application has been made to the Ministry of Health and Long-Term Care to sustain this project through permanent funding of the team as part of the two Ottawa Academic Family Health Teams.

Conclusions

Evaluation of the Ottawa SHARE Project demonstrated that it met the Primary Health Care Transition Fund goals of improved access to primary care, increased satisfaction of patients and providers, and improved quality and continuity of primary health care. With respect to the area of increased cost-effectiveness of primary care, suggestions are made for future studies based on results from this project.

Background and Rationale

This report provides findings emerging from the evaluation of the Ottawa Shared Mental Health Care (SHARE) Project. The SHARE Project was a demonstration project funded by the Primary Health Care Transition Fund. It was intended to implement a model in which a multi-disciplinary team of mental health professionals from the Ottawa Hospital Department of Psychiatry provide services to patients within two comprehensive family medicine practices in the City of Ottawa. The purpose of the project was to improve access to multidisciplinary mental health care within both the primary care system and the mental health system by setting up a team which links both systems.

It has become clear over the past two decades that there are a number of problems associated with persons with mental illness receiving appropriate primary and specialty health care. These problems appear to be two-fold: first, patients with mental illness tend to visit their family physician more frequently than other patient groups, both for initial assessment and for follow-ups (Daumit et al, 2002) and second, patients with mental illness may not receive an adequate level of care as their psychiatric symptoms are likely to interfere with their ability to access and follow medical treatment (Koran et al, 1989; Shore, 1996).

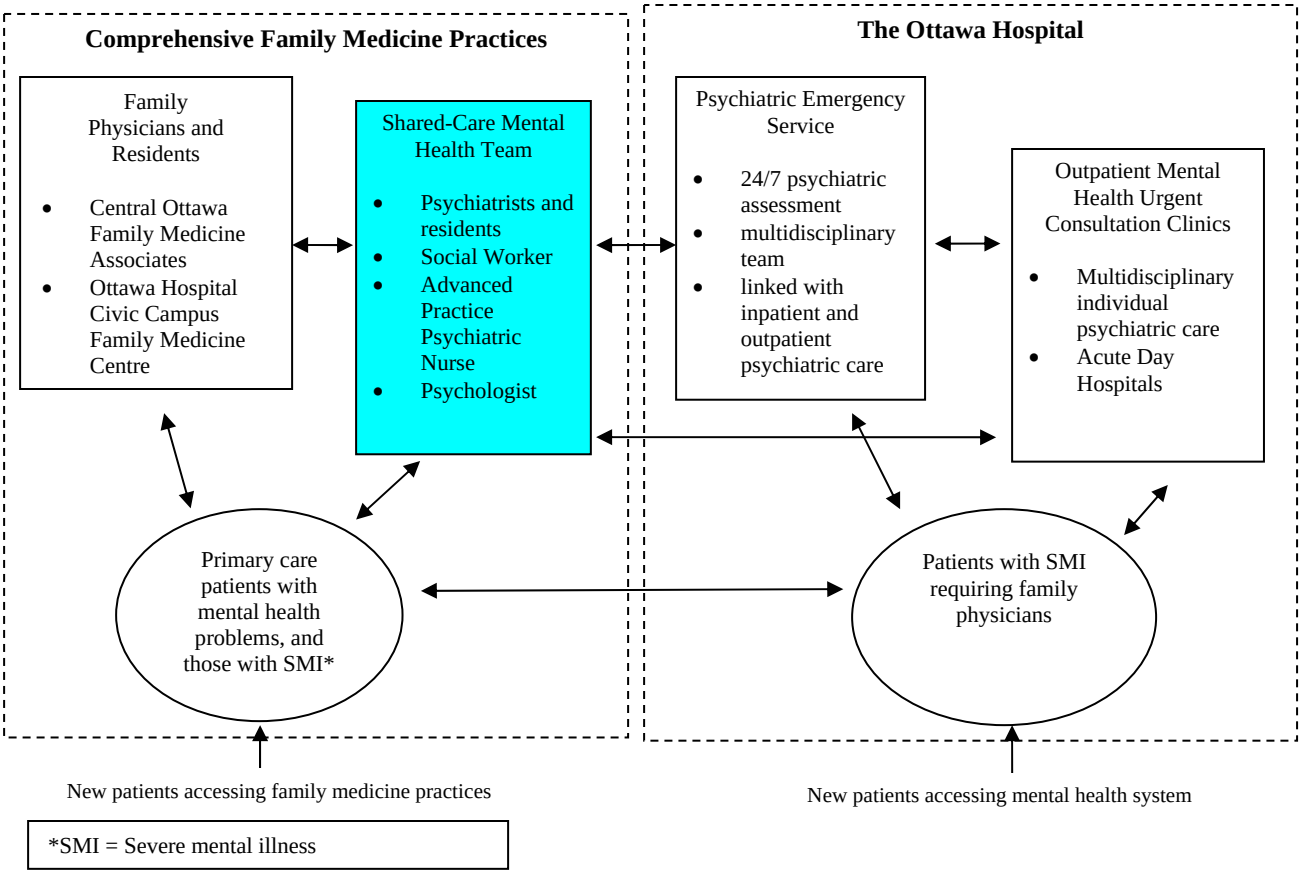
The principle of collaborative or "shared" care has been developed to try and address some of these problems. The goal is to improve access to both psychiatric and physical care for patients with mental illness. The model recognizes the pivotal role of the family physician in providing effective health care interventions. The approach fosters collaboration between the family physician and other mental health professionals (Kates et al., 1997, 2002) and sees it "as part of a continuum of care" (Kates, 2002). In addition to providing direct patient services, the aim of the collaboration is also to use psychiatric consultation to increase the knowledge of the family physician, thereby improving levels of primary care detection of mental illness, permitting earlier intervention and improving treatment outcomes. In other words, psychiatrists and other non-medical mental health professionals act as a consultants to the family physician but the family physician remains integrally involved in the treatment plan of their patients.

Various types of shared care model have been developed that vary in intensity and duration. Shared care services have varied from an initial consult model to a program that offers follow-up and maintenance care (Kates et al, 1992; Katon et al, 1995). Services have been successfully offered in various modalities including the use of telephone support. Studies to date have suggested that one of the central issues in providing high quality collaborative care is the relationship between family physicians and the consulting service provider (Burley, 2002). Kates (2002) suggests that the key elements for collaboration include strengthening personal contacts, improving communication, continuing education and, ultimately, integrating mental health services within primary care.

The SHARE Project evaluated in the current study follows the *liaison attachment* scheme which addresses many of the central collaborative themes. In this approach, a multidisciplinary team of mental health professionals that includes a psychiatrist and/or mental health workers of other disciplines is assigned to one or more primary care facilities and provides services similar to full-service outpatient programs (see figure 1). This type of model has been found to be successful in

providing services in an accessible and non-stigmatizing setting and has been found to increase the level of knowledge and skill of the family physician. (Craven & Bland, 2002). This model was also selected to facilitate transferring mental health system outpatients with stable mental illnesses who lack family physicians to a primary health care setting, providing backup from the mental health team to the family physicians accepting their transfer.

Figure 1. Access to mental health care and primary health care through a shared care model in the Ottawa Shared Mental Health Care Project



Goals and Objectives

The underlying assumption of the SHARE Project was that "*a multi-disciplinary mental health team linking the Ottawa Hospital psychiatric emergency service and outpatient urgent mental health consultation clinics with two comprehensive family medicine practices would result in improved access to, and quality of both psychiatric and physical care for patients with mental health problems who are seen first within either (a) the primary care system, or (b) the acute care mental health system"* (taken from the SHARE Logic Model, appendix 1).

The goal of the project was therefore to demonstrate that the SHARE model of collaborative mental health care would improve the quality of mental and physical health care, particularly for patients with severe mental illness.

With respect to the goals of the *Primary Health Care Transition Fund*, the SHARE Project was anticipated to demonstrate a positive outcome in the following areas:

- improved access to primary health care
- improved quality and continuity of primary health care
- increased patient provider satisfaction

The demonstration project developed a shared care model offering mental health services to two family practices located in central Ottawa – the Ottawa Hospital Civic Campus Family Medicine Centre and the Central Ottawa Family Medical Associates. The SHARE Team was set up as a multidisciplinary team which included a psychiatrist, an advanced-practice psychiatric nurse (APN), a psychiatric social worker, and a psychologist. Each member of the team of four mental health workers spent at least one and a half days per week each on this project, providing on-site services for at least one day per week at either of the two family medicine practices and another half day of either on-site or indirect care each week.

The psychiatrist, psychologist and social worker were employed at 0.3 FTE (1.5 days per week devoted to the project) and the APN was an 0.8 FTE, with 0.5 FTE devoted to clinical care and 0.3 FTE to overall care coordination. The SHARE Team was intended to assist family physicians in two practices to treat their patients presenting with mental health difficulties. In addition, the additional services were expected to facilitate access to a family physician from these practices for patients seen at the Ottawa Hospital Outpatient Mental Health Services who have no family physician.

The *Ottawa Hospital Family Medicine Centre (FMC)* is an academic family health network with rostered patients and a capitation payment system. There are 10 full-time academic family physicians with about 8,000 active patients. There are approximately 24 family residents training at the FMC and 4 to 6 residents are on site at any one time. It was estimated that about 30% of FMC patients would have a diagnosable psychiatric disorder in any one year. All charts are shared, and a shared care mental health team member had full access to the charts and documented patient visits on those charts.

The Central Ottawa Family Medicine Associates (COFMA) is a family health network with 9 physicians having an average of 1,000 patients each. Of the approximately 9000 patients at the COFMA practice at the start of the project, there were 720 patients reported to have a primary

diagnosis of Depression, Bipolar affective Disorder, Anxiety Disorder, Schizophrenia or Borderline Personality Disorder. COFMA is a fully automated practice using electronic medical record (EMR) software. Within COFMA, the SHARE team members had direct access to the patient's medical file. At the time the project was proposed, all physicians were taking new patients, however by the actual start of the SHARE Project all practices were closed to new patients due to a physician leaving COFMA and transferring most of his patients to the other COFMA physicians.

The *Ottawa Hospital Psychiatric Emergency Service (PES)* provides approximately 5000 psychiatric consultations to patients presenting annually to the emergency rooms of the Civic and General Campuses. These account for approximately 75% or more of the emergency room psychiatric consultations in the Ottawa region. It is estimated that between 20 and 25% of patients presenting to have no family physician. Mental health follow-up of patients seen in the emergency room is usually undertaken by the Urgent Care Clinic of the Outpatient Services, but an unmet need is the provision for ongoing physical and mental health care within the primary health care system for patients lacking family physicians.

Appendix 1 presents a program logic model for the SHARE Project that includes the project's goal, objectives, resources, service activities according to the different participating disciplines, outputs, short-term and long-term outcomes for both patients and family physicians or residents.

Activities

1. Needs Analysis

Method:

A written self-report questionnaire was given to 18 family physicians and 30 family medicine residents prior at the start of the project. The questionnaire contained sections devoted to:

1. Attitudes and beliefs about managing patients' mental health problems
2. Self-perceived knowledge of mental health care issues
3. Comfort level with mental health care
4. Opinions about what would enhance their management of patients' mental health issues.

Each question allowed for one of seven graded responses between two extremes. The survey participants were also asked to give suggestions about what they thought desirable activities of a psychologist, social worker and mental health nurse would be in the context of providing collaborative mental health care.

Results:

All 18 family physicians from both practices responded (100% response) and 22 out of 30 family medicine residents responded (73% response). Family physicians and residents reported that they believe they have the primary responsibility for provision of mental health care to their patients, however many reported that time constraints limit their ability to enquire about a mental health problem. Many family physicians and residents reported both a low level of knowledge and comfort about prescribing psychotropic medication for patients with psychosis and few family physicians and residents reported a high level of knowledge or comfort counseling patients with mental health problems. The great majority of family physicians and residents endorsed various collaborative strategies to enhance their management of patients' mental health problems including a psychiatrist visiting their office, telephone backup by a psychiatrist, in-office educational sessions by a psychiatrist, and information or assistance with referral to community mental health agencies. Overall, family physicians and residents reported that collaborative mental health care provision with on-site mental health professionals would enhance, but not replace their management of patients with mental health problems.

2. Evaluation

Purpose and Focus of the Evaluation:

In addition to conducting a formative evaluation, the SHARE Project also integrated monitoring of patient outcomes. Results of both the formative evaluation and the outcome evaluation are presented in this final report for the project.

Evaluation Questions:

The questions guiding both the formative evaluation and outcome evaluation of SHARE Project were organized around the dimensions of the Mental Health Accountability Framework of the Ontario Ministry of Health and Long-Term Care (MHLTC), namely *Access to Mental Health Care, Access to Primary Care, Appropriateness of Care, Efficiency of Care, Acceptability of Care, Safety and Continuity of Care,* and *Effectiveness of Care.* Details of the actual evaluation questions can be found in the accompanying report of the University of Ottawa Centre for Research on Community Services.

Evaluation Method:

Quantitative Methods:
Quantitative data were collected using a variety of measures that involved either clinical ratings completed by members of the SHARE Team or self-report measures completed by patients at the first visit and following termination. A member of SHARE Team familiar with a patient completed the Threshold Assessment Grid (TAG; Slade et al, 2000), Global Assessment of Functioning (GAF) scale (American Psychiatric Association, 1994), and the Brief Psychiatric Rating Scale (BPRS; Overall and Gorham, 1962) . Patients completed the Patient Health Questionnaire (PHQ; Spitzer et al, 1999) and SF-12 (Ware et al, 2002) at intake. At the end of their involvement with the SHARE Team, the BPRS was completed by the team member having most contact with the patient and the SF-12 and the 8-item version of the Client Satisfaction Questionnaire (CSQ-8; Attkisson & Greenfield, 1996) were administered to patients by telephone interview subsequent to their termination from the SHARE Project's services.

Qualitative Methods:
Qualitative data collection methods included: (1) two focus groups with primary care physicians; (separate focus groups were conducted for physicians from each of the two participating practices) (2) in-person and telephone interviews with members of the SHARE Team; and (3) telephone interviews with clients.

3. Knowledge Dissemination

A list of knowledge dissemination activities is found in Appendix 2 of this report. Highlights of the SHARE Project's dissemination activities are reported as follows:

Local Dissemination:
A Stakeholder and Advisory Board was constituted at the start of the project, which included representation from mental health consumers, community mental health providers, community health centres, family physicians and psychiatrists. These individuals were kept informed as the project develops through their involvement in the Stakeholder and Advisory Board, which met 4 times during the life of the project. Other local knowledge dissemination activities included regular weekly rounds to family physicians and residents provided by the SHARE Team, presentation at the City Wide Family Medicine University Rounds, and presentation at the Ottawa Hospital Department of Psychiatry rounds. The Ottawa Hospital senior management team was kept informed of the progress of the project on a regular basis.

Provincial Dissemination:
The SHARE clinical and research staff participated in the 2 Knowledge Exchange Days put on by the PHCTF directorate of the Ontario Ministry of Health and Long-Term Care in 2005 and 2006. This allowed exchange of project ideas, goals and strategies for evaluation and reporting of results; the knowledge gained in these meetings was very helpful in guiding the project to a successful conclusion. In addition, the clinical and research staff visited the Hamilton HSO Mental Health and Nutrition Program to exchange knowledge and lessons learned during the project. Dr. Nick Kates also visited Ottawa and provided input into the project. At the end of the project there was also a visit from Queen's University Department of Psychiatry and the Montfort Hospital of Ottawa which spent the day discussing shared mental health care and the Ottawa Hospital outpatient mental health services. The SHARE Project was also invited by the Homewood Health Care Centre at Guelph, Ontario to visit in October, 2006 in order to exchange knowledge about the SHARE Project and lessons learned about collaborative mental health.

National and International Dissemination:
The SHARE clinical and research staff presented the design and outcomes from the project at several scientific meetings including the National Conferences on Shared Mental Health in Ottawa, 2005 and Calgary, 2006. In the fall of 2005, the project results were presented in an invited keynote address at the University of Flinders and Deakin Research Showcase, in Halls Gap, Australia. The project results will also be presented in the fall of 2006 at the Canadian Health Services Research Foundation Primary Healthcare Network Symposium in Vancouver. In Australia. Finally arising from the SHARE project, there is a series of educational CD ROMs in preparation which focus on interviewing primary care patients with various mental health disorders which will be made available to all medical schools.

4. Clinical Activities

A total of 332 patients were referred by their primary care physician to the SHARE team: 132 from COFMA (40%) and 196 from FMC (60%). However, 76 patients did not enter the study for the following reasons: they refused to sign or revoked their consent (N=15); they were triaged by RN to more appropriate service (N=12); when contacted they declined referral (N=12); they did not show for their appointment (N=17); or their referral was cancelled by their family physician (N=17). Twenty-three of the referrals for patients not entering the study came from COFMA and 53 from FMC.

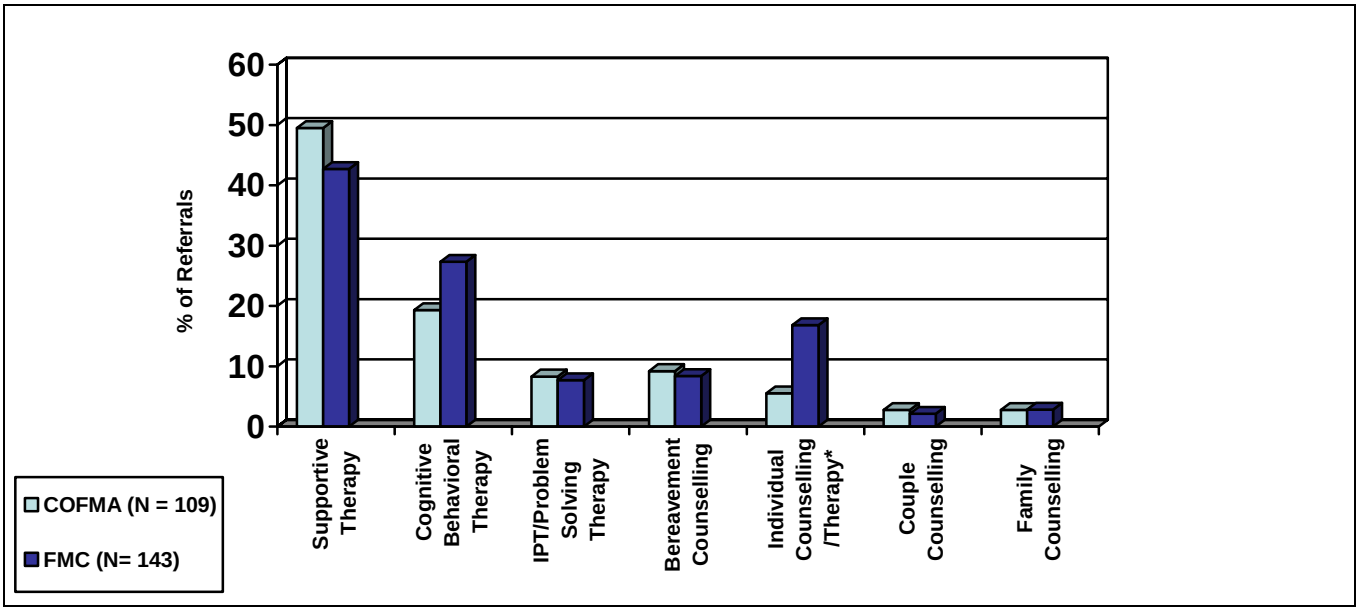
The average age of participants from FMC (46 years (SD = 13)) was significantly higher than from COFMA (39.7 years (SD = 13)).

Type of services which were provided by the SHARE team:

The SHARE Team offered a variety of services to SHARE patients. Most patients (93%) received an assessment and recommendations for continuing patient care were communicated to the referral source from SHARE team members. As shown in Figure 2, a large number of participants also received some form of counseling or therapy. Other services offered by the team included parenting skills, crisis management (only 1% of referrals), medication management and other management strategies not otherwise described.

Slightly less than half of the referrals were provided with supportive therapy (COFMA 50% and FMC 43%). Participants also received a range of other therapies including cognitive behavioral therapy (CBT) (COFMA 19.3% and FMC 27.3%), interpersonal therapy or problem solving therapy (COFMA 8% and FMC 8%) and individual counseling or therapy of unspecified orientation (COFMA 6% and FMC 17%). The team also provided other services such as bereavement counseling, family and couples counseling. A large number of participants also received client education (COFMA 54% and FMC 50 %).

Figure 2. Percentage of patients receiving different types of therapy or counseling by family practice.



The clinical activity for each SHARE team member is shown in Table 1. With respect to determination of the differences in roles of each of the disciplines represented on the SHARE Team, it was expected that some members of the team would focus on assessment and diagnosis (eg. the psychiatrist), some members on medication management and symptom follow-up (eg. the psychiatrist and APN), and some members providing more follow-up with a focus on psychosocial interventions such as short-term therapies (eg. the social worker and psychologist).

Table 1. Clinical activity* for each SHARE Team member.

Discipline	Initial consultation	Follow-up visits
Psychiatrist	188	131
Psychologist	44	189
Advance-practice Nurse	114	70
Social Worker	52	189
Total	398	579

* Note: This clinical activity did not capture telephone follow-up provided by the team members.

Follow-up after the episode of care was finished

Many patients received more than one disposition for follow-up for their mental health problem, and the most common disposition was to follow-up with their family physician as the ongoing provider of mental health care. There were also many patients referred to community mental health services, including psychiatrists, psychologists, and community mental health agencies. Only a few patients were referred to addictions services either in the community or hospital-based. Twelve patients were referred to the Ottawa Hospital for more intensive psychiatric intervention, most commonly the day hospital program, and one of these patients was referred to the regional eating disorder program at the Ottawa Hospital. Table 2 shows the disposition of patients after their episode of care provided by the SHARE Team ended.

Table 2. Disposition After Episode of Shared Care

Patient Follow-up Given	Number of Patients* (%)
Follow-up on mental health problem by primary care physician or other primary care professional	204 (80%)
Referred to addictions program	6 (2%)
Referred to hospital-based mental health services	12 (5%)
Referred to Community mental health provider (community psychiatrist, psychologist or agency)	118 (46%)
No mental health care follow-up deemed necessary or patient did not pursue follow-up	50 (20%)

*The same patient may have been given multiple follow-up dispositions so total N > 256

Outcomes and Key Results

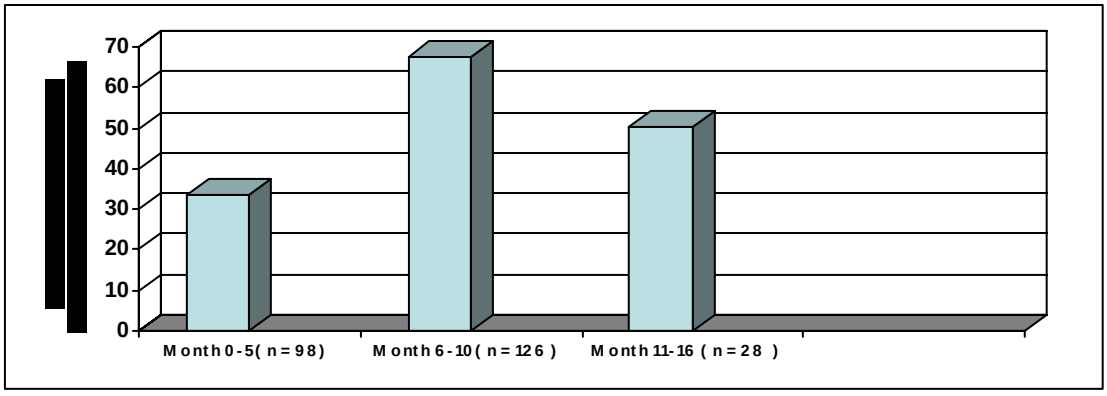
Outcomes and key results will be discussed under the following headings: access to care, appropriateness of care, acceptability of the program to patients and providers, and effectiveness of care. Results will incorporate data from both the process evaluation, based on qualitative data from focus groups, and outcome evaluation, based on quantitative data from standardized scales reported by patients and providers. Other outcomes that were evaluated include efficiency of care and safety and continuity of care, and these results are reported in the accompanying report of the University of Ottawa Centre for Research on Community Services.

Access to mental health care

What was the waiting time for patients in primary care to access mental health consultation during the SHARE Project?

Figure 3 presents the average number of days between the date of the referral form and the first appointment for patients for three time periods, which divided the duration of the SHARE project almost evenly. It can be seen that the waiting time increases as the project progresses, from an average of 33.7 days (SD = 27.7) for the first 5 months of the project, to an average of 67.5 days (SD = 47.2) in the second 5 months of the project, and 50.5 days (SD = 30.5) for the final 6 months of the project.

Figure 3. Average time from referral to first appointment by time period during the project.



The general consensus among the family physicians was that prior to the launching of the SHARE Project there were significant delays in accessing psychiatry, but fewer delays in accessing other mental health disciplines. These delays were attributed to an imbalance in supply and demand for psychiatric services, difficulty accessing hospital mental health resources from the community, and the practice of psychiatrists of seeing patients on an ongoing regular basis rather than seeing new patients for consultation. It was clear from the family physician focus groups that the SHARE Project substantially improved access to mental health workers, although when the team became busier over time, this access was less timely.

The majority of the physicians felt that following the launching of the SHARE Project there was a change in the nature of the delays, and that this change was positive. The most frequently stated comment was that a consult with the psychiatrist occurred much more quickly than prior to the initiation of the program, and that information from the psychiatrist was transmitted to the family physician in a timely manner which had not occurred in the past.

Furthermore, it was stated that even in situations where the psychiatrist had not seen a patient, the fact that the psychiatrist practiced in the same location as the physicians made it possible for her to provide useful suggestions about case management without the occurrence of a formal referral. However, it was also clear that in the speed of access to members of the SHARE Team varied across the life of the program. Although initially access to SHARE team members occurred very quickly, this process was slowed as the team became busier.

How many patients from the mental health system with moderate and severe mental illness accessed primary care since the launch of the Share program?

Four patients were referred from the Outpatient Psychiatry Department of the Ottawa Hospital to primary care providers at COFMA. There were 3 males and one female with a mean age of 39.7 years**.** The reason given for more patients from the mental health system not accessing primary care was that all family physician at both practices stopped taking on new patients just prior to the start of the SHARE Project. The loss of family physicians from their respective groups resulted in the other family physicians being obliged to take on the patients in the practice of physicians who left, thereby blocking any new referrals to their practices. Nevertheless, in focus groups, family physicians identified several other barriers to taking on patients with severe mental illness in primary care.

Working with people with moderate and severe mental illness was described as *"challenging"*, *"more difficult"* and *"more stressful"* when compared to working with other types of patients. In particular, it was noted by physicians that working with patients with diagnoses such as schizophrenia and bipolar disorder were perceived as more challenging than working with patients with depression and anxiety. Some physicians expressed frustration in working with patients with moderate and severe mental illness because specialized mental health services were not available when these patients needed them.

Physicians identified some specific challenges in treating patients presenting with moderate and severe mental illness in the context of a family practice.

1. *General practice challenges* included the small amount of time available in regular appointments to treat individuals in this patient group relative to their needs. Another challenge for physicians involved the difficulty in being able to adequately monitor and adjust treatments and medications for mental health problems.
2. *Diagnostic challenges* were identified by physicians in diagnosing mental health problems particularly in the context of co-morbidities such as substance abuse and chronic physical illnesses, which made treatment planning particularly difficult in some cases.
3. *Challenges presented by patients with mental health problems:* Overall, physicians gave the impression that usually working with patients presenting with mental health problems was

fairly routine. However, it was also noted that in some cases the mental illness of patients contributed to missed appointments or showing up late, requiring frequent appointments, failing to follow a medication regimen and/or taking up significant time with office staff on the telephone. These situations posed particular challenges to delivering effective health care in a busy family practice. Patients experiencing mental health crises were also identified as particularly challenging.

4. *Challenges accessing mental health services:* Difficulty accessing much-needed mental health services and supports for patients with moderate and severe mental illness was described as a significant and pervasive problem encountered by family physicians. Waiting lists for mental health services were described as being extremely long and unpredictable in terms of when a patient would be able to see a psychiatrist. Moreover, the prospect of accessing psychologists in the private sector was simply not possible for many patients because of them not having the financial means to pay for these services. Overall, the mental health system was characterized by family physicians as currently failing to meet the needs of their patients. One physician described the situation as he or she *"not (being) meaningfully connected to the (mental health) system"* and *"they aren't part of that system"*.

Appropriateness of Care

When evaluating the appropriateness of care provided by the SHARE Project, several aspects were considered:

- The severity of patients' mental health problems was evaluated by several patient and provider rated measures, including the Patient Health Questionnaire (PHQ), Threshold Assessment Grid (TAG), the SF-12 quality of life scale, and the Global Assessment of Function Scale (GAF).
- The perceptions of the usefulness of the services provided by the various disciplines of the SHARE team were assessed through focus interviews with family physicians.

What is the baseline severity of mental health problems of patients referred to SHARE?

Figure 4 shows the percentage of patients from the two referring family practices that satisfied diagnostic criteria for different disorders using the PHQ. The most common difficulties reported by patients referred to the SHARE Team were depression, anxiety-based problems, and somatic symptoms. Over half of the patients were identified on the PHQ as having a major depressive syndrome or depressive symptoms. As well, over half of the patients merited on the PHQ an anxiety-based syndrome. Twenty percent of patients from the overall group did not qualify as having a psychiatric diagnosis on PHQ, however some of these patients did not complete the self-report scale adequately.

Figure 4. Percentage of patients from each family physician's practice source satisfying the Patient Health Questionnaire diagnostic criteria.

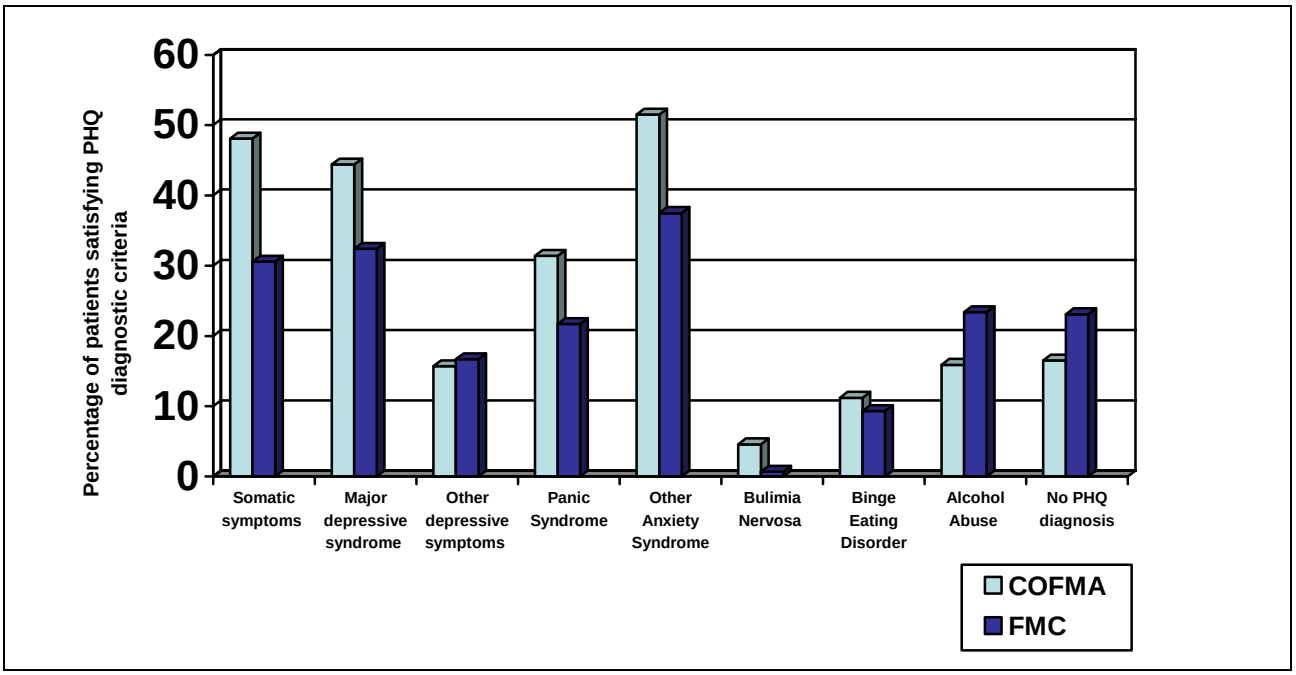
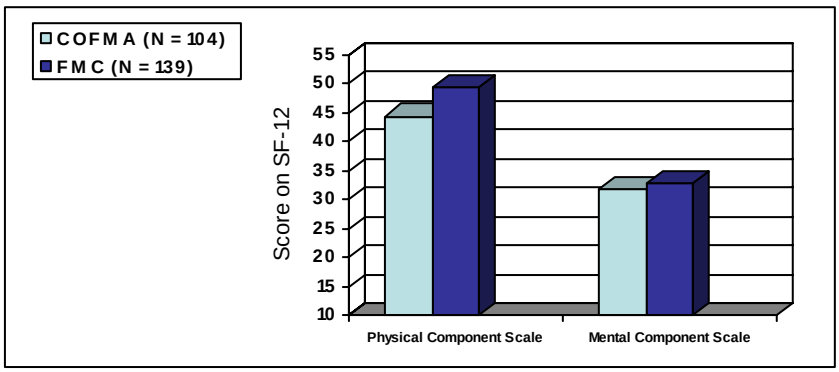


Figure 5 presents a comparison of FMC and COFMA patients on the SF-12 Quality of Life Scale summary scales (higher scores indicating better quality of life in either the mental or physical domains). It is important to note that the mean of the normative sample drawn from the American population is 50 with an standard deviation of 10 for both the physical health scale and the mental health scale. Not surprising, both groups of patients (FMC and COFMA) report lower levels of mental health than the general population.

Figure 5. Patients' baseline scores on Mental and Physical Component Scale of the SF- 12 Quality of Life Scale by family physician's practice.



The 7-item Threshold Assessment Grid (TAG) is a provider-rated scale designed to rate the severity of mental problems experienced by an individual. The clinician is required to make an

assessment of the level of concern about symptoms in a variety of domains: safety, risk, and needs and disabilities. The score for each domain runs from zero indicating that there is no risk in this area to a score of 4, indicating that there is an immediate and severe risk. Table 3 gives details on the number of patients from both sites being rated with moderate, severe or very severe scores in each of the domains:

Table 3. Number of patients with a moderate, severe or very severe Threshold Assessment Grid rating:

Symptom domain	Number of patients with moderate, severe or very severe rating (%); Total N=250
Intentional self-harm:	8 (3.2)
Risk from others (abuse)	10 (4.0)
Risk to others (violence)	6 (2.4)
Survival risk (lack of resources)	7 (2.8)
Psychological distress	108 (43.2)
Social isolation or impaired relationships	95 (38.0)
Total score ≥ 5	94 (37.6)

The Global Assessment of Function Scale (GAF) is designed to measure psychological, occupational and social functioning along a continuum from 0 to 100, with a higher score indicating better levels of functioning. It appears that 23% of participants were assessed as having moderate (GAF 51 to 60) or serious symptoms or impairment (a GAF score of less than 50). Almost half of the patients (48%) were assessed as having some mild symptoms or some difficulty in social or occupational functioning (GAF score between 61 and 70) and 22% were assessed as having transient symptoms (GAF score between 71 and 80). Eight percent of patients were assessed as having minimal symptomatology (GAF score between 81 and 90)

Taken together these findings suggest that most SHARE patients had at least one psychiatric diagnosis at the time of referral. It can be seen from Figure 4 that the majority of participants had some depressive or anxiety related symptomatology, but the large majority of patients were judged by SHARE team members to be experiencing mild or transient symptoms by their GAF rating. Nevertheless, a significant percentage was rated as having moderate, severe or very severe levels of psychological distress or social isolation/impaired relationships by their TAG ratings. With respect to self-harm, risk to others, risk of abuse, or survival risk, only small numbers of patients were rated in the moderate, severe or very severe risk categories

To what extent is the consult received from the SHARE team perceived by physicians as meeting their needs?

Physicians agreed in the focus groups that consultations delivered by the SHARE Team were meeting their needs. They noted that there was an advantage to all the services being under the same roof. This arrangement enabled them to have higher levels of contact with mental health specialists and to receive more detailed information about the treatment of their patients. For

example, one physician commented that "*having everyone under the same roof makes a huge difference – you know what is going on*".

Physicians also expressed appreciation with the increased level of contact they had with a psychiatrist. This had two advantages: first, that the psychiatrist provided timely and useful consultation reports that helped guide treatment planning; second, that the psychiatrist was available on site for informal consultations.

For some physicians, however, there was a mismatch between the mandate of the SHARE team and the physicians' requirements. Some physicians felt that what their patients needed a longer term solution to their problems and were therefore disappointed with the time-limited treatment plans delivered to their patients by the SHARE Team. In some cases, physicians felt that the SHARE Team should have taken over the responsibility of the patient. In these situations, it appeared that there may have been a lack of correspondence between physician expectations for services and the type of services that the SHARE Project was intended to deliver. Some physicians also noted that in some cases the triage system was not working properly resulting in decreased access to the social worker and psychologist at some points during the project.

Physicians reported that they found the consults useful in a number of ways. Physicians from both practices said that they used the service for help with medication, particularly when a patient was not showing signs of improvement, for help with diagnosis, and with the development of treatment plans that included multiple options. Physicians and SHARE Team members also reported the benefits of using electronic medical records (EMR) and said that this contributed to the usefulness of the consult. There were several advantages to this technology. The whole medical record was easily available to the consulting mental health specialist. After seeing the patient, the SHARE team member put his or her notes directly into the patient's electronic file so that they were immediately available for the next physician who saw the patient.

The majority of physicians believed that the consults had had an educational benefit. In particular, physicians felt that the contact with the SHARE Team had enhanced their knowledge of psychotropic medications. For example, a physician stated that "*it was helpful to have information on how to adjust medication ….. (and on) which medication (to use) for which conditions*". As well, the detailed treatment plans worked by psychiatrists in response to consultation referrals allowed physicians to learn strategies for use with future patients presenting with similar problems. Some physicians also found that the informal and formal consults with SHARE team members had increased their knowledge of local community resources and potential referral sources.

At the teaching hospital, there was a strong emphasis on the SHARE Team providing education on mental health problems and their treatment to medical residents. The education of residents was done in two different ways, through didactic meetings and informal consults on patients. Both residents and SHARE team members reported that the noon-hour didactic meetings were excellent and said that the material was delivered clearly and concisely. In particular, residents noted the usefulness of the suggestions covered in the meetings on how to phrase questions during the intake and how to deal with suicidal ideation. SHARE team members reported that

they noticed that as residents grew in confidence they would also approach SHARE team members for informal consults.

What is the perceived value for family physicians to have a multi-disciplinary team to refer to for mental health consultation?

Physicians reported in focus groups that there was considerable benefit in having a multi-disciplinary team of mental health professionals to whom they could refer. A multi-disciplinary team facilitated the delivery of a wide range of mental health services. One physician observed that *"the whole idea is to share care … everyone has a different skill set …. the patient can get what they need from the person who can best offer it"*. Another physician indicated that it was *"helpful in a multidisciplinary approach to get someone else in on the diagnosis"*. For one of the physicians, the SHARE Team provided important information about community resources because they were new to the city - *"It is ideal for us to be able to refer to a team especially if we are new to the area and do not know the specialists"*

It was noted by SHARE team members, that for optimal outcomes, SHARE team members needed to function as a team. In particular they stressed the need for good levels of communication, a high level of cohesion within the team, and excellent administration.

Acceptability of Care

Table 4 presents summary scores of the Client Satisfaction Questionnaire (CSQ) that was completed by 208 patients at the end of their episode of care provided by the SHARE Team. Detailed analysis of the questionnaire responses is included in the accompanying report from the Centre for Research on Community Services. As can be seen, 90% of patients reported either medium or high levels of satisfaction with their care. Levels of satisfaction were similar to that reported in the literature for mental health services, counseling services or in primary care (see the accompanying report by the Centre for Research on Community Services).

Table 4. Summary Scores of SHARE Patients at the end of Their Episode of Care (N=208)

Satisfaction Level	CSQ Score	SHARE patients (%)
Low	8-16	20 (9.5)
Medium	17-24	51 (24.3)
High	25-32	139 (66.2)

There were a number of aspects of the SHARE Project that patients liked, including the speed and flexibility of the referrals, the composition, attitude and competency of the team members, the high level of support and understanding offered to patients, and the advantages of being treated by a team in close contact with the family physician.

There appeared to be two main advantages to patients in using a team approach: the advantage of a broader base of mental health professionals involved in treatment and diagnosis and second the SHARE team member working as a team with the family physician. One patient referred to the "*many different people who could help*" and also appreciated the more "*holistic*" nature of the

team. Many other patients described the relief of finally getting treatment. "*The best thing is that it's well rounded and based on my needs as a client*". "*Just the end result, a medication that was appropriate. Finding a doctor that was able to normalize, properly diagnose and apply medication to my condition*". Others applauded the excellent communication between the family doctor and the team. One respondent reported particularly that s/he liked "*the interaction between my family physician and the psychologist"* which appeared to be central to effective treatment.

The three main issues that patients wanted to improve about the SHARE care service were accessibility, the number and length of sessions and the nature of the treatment. There were also some comments about the need to be more organized, the location (the room was under construction), and providing services in French. Many patients found that scheduling of SHARE appointments to be restrictive, particularly if they were at work. As one patient put it "*more flexibility in hours – hard to go when you work*". The majority of patients wanted a greater number of sessions and follow-up, even if this was on the telephone. A limited number of patients felt that the length of the session was too short and did not allow the doctor time to get into the patient's problems. Most patients also wanted the program to continue, although for some it appears that they believed the treatment was time limited because the demonstration project was time limited. A couple of patients raised the issue of continuity – they did not like being seen by more than one person, and confidentiality – having the nurse or a resident present during the session in addition to the psychiatrist.

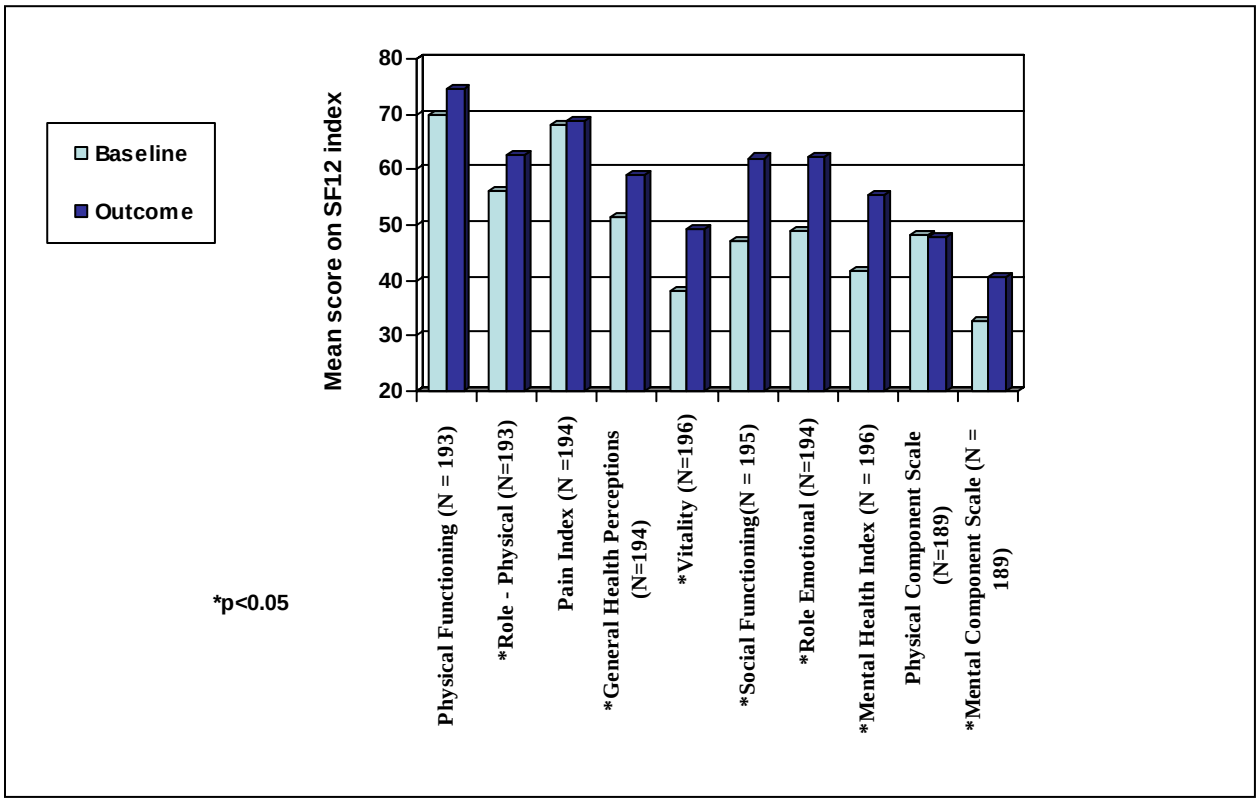
Effectiveness of Care

Based on changes in the ratings on the BPRS, SHARE patients showed significant improvements in the severity of their psychiatric symptoms. In particular, the mean BPRS score for patients at intake to the SHARE team was 38.14 (SD = 7.84) which was significantly higher than the mean score at termination of care (M = 32.48, SD = 7.21), $p<0.05$. Similar significant improvements were also demonstrated on TAG and GAF scores from baseline to the end of care (see the accompanying report of the Centre for Research on Community Services for details).

Is there an improvement in patients seen by the SHARE team in terms of quality of life?

Figure 6 shows the mean scores on the component indices of the SF-12 at baseline and outcome. Significant improvements over the course of patients receiving treatment from the SHARE team were found in the mean scores in the areas of physical functioning, role-physical, general health perceptions, vitality, social functioning, role-emotional, and mental health. For the two standardized summary component scores, there was a significant improvement on the mental health component scale, but not in the physical component scale. Overall, these findings suggest that patients who participated in the SHARE program report that they are functioning significantly better in the area of mental health but show no overall changes in physical health. Although there are no perceived changes in overall physical health, the mean score for physical functioning, role-physical and general health increased significantly suggesting that participants are now able to lead more active lives.

Figure 6. Baseline and Outcome Scores for Component Indices of SF- 12 (higher scores denote better quality of life in each domain)



Implications for Policy and Practice Changes

Access to Primary Mental Health Care

Improved access to multidisciplinary mental health care for primary care patients was perceived by family physicians as the most important result of this project, and similarly patients rated this aspect of the program as contributing to their satisfaction. For a small number of primary care patients with more severe mental illness and need for more intensive therapy than could be provided in the primary care environment, the linkages of the shared care team to the Ottawa Hospital facilitated access to outpatient mental health services and improved communication with the hospital mental health services. This model thus created a continuum of mental health care between hospital and community-based primary care. Equally important, albeit for a small number of patients, the linkage also facilitated access to primary care for mental health system patients with severe mental illness who lacked family physician. Recommendations arising from this project with respect to access to primary mental health care include the following:

- Establish targets for wait times for urgent referrals (consider less than 2 week waiting period) and non-urgent (consider less than 8 week waiting period). Recent guidelines published by the Canadian Psychiatric Association for waiting times for various psychiatric conditions might be consulted for guidance (Canadian Psychiatric Association, 2006).
- Link primary care services with hospital based mental health services using shared care teams. This would allow improved access to and communication with psychiatric emergency services and intensive outpatient services for primary care patients.
- Ensure mental health system patients have access to primary care, with back-up of a shared mental health team.

Appropriateness of Care

With respect to appropriateness of care, family physicians and patients both reported that they highly valued the care provided by the multidisciplinary mental health care team. It seemed that the various disciplines represented on the SHARE Team provided different types of care according to their expertise and patient needs: the psychiatrist and advance practice nurse focused on providing initial diagnostic assessments and medication management, whereas the psychologist and social worker provided various types of therapy including short-term psychotherapies and couple or family psychosocial interventions. The optimal number of full-time equivalents (FTEs) per patient population for various disciplines providing collaborative mental health care in primary practices is not clear from the literature; however the project did demonstrate that limited resources can easily become overwhelmed by the number of referrals causing longer waiting times, especially for non-urgent referrals. Recommendations with respect to appropriateness of care include:

- Multi-disciplinary shared mental health teams are optimal to provide the highest quality of care for primary care patients. A multi-disciplinary shared care team could link with several family health teams, depending on patient populations and geography.

- Use evidence-based, time-limited mental health treatments such as cognitive-behavioural therapy or problem-focused therapy depending on the patient's need.
- Referral back to family physician for ongoing mental health care is optimal. The shared mental health team should avoid providing long-term care but rather focus on episodic care in collaboration with the family physician for patients with long-term, severe mental illness.
- Providing education and training in collaborative mental health care concepts for mental health professionals, family physicians, residents in psychiatry and residents in family medicine is essential.

Efficiency of Care

Feedback from the SHARE providers, family physicians and patients with respect to efficiency of care focused mainly on the need for an efficient triage system for management of referrals. The electronic medical record was highly valued by the SHARE Team. Recommendations include:

- Set up an efficient triage system for referrals focusing on urgent versus non-urgent patient problems.
- An electronic medical record is necessary to facilitate efficient communication amongst health professionals.
- Family physicians and mental health staff should agree on duration of mental health care provided by the team for various mental health problems.
- Establish protocol for patient needing longer-term, intensive mental health care which will likely involve referral to hospital based mental health services or community mental health agencies and providers.

Acceptability of Care

Overall, the great majority of patients and the referring family physicians were satisfied or highly satisfied with the mental health care provided by the team. Clear communication about the purpose of the collaborative mental health care team forms the basis of these recommendations:

- Referring physicians need to be clear about reasons for referral to both their patients and the shared mental health team.
- Patient expectations about mental health services need to be clarified from onset (especially duration and types of care offered).

Safety and Continuity of Care

There were no major patient safety issues which arose during the project. Linkage of the team to hospital mental health services was an important factor in the ability of the SHARE Team to facilitate emergency or intensive-level psychiatric care for the patients who required this during the project. Concerns were expressed by some family physicians and mental health providers about the legal aspects of collaborative mental health care with respect to shared liability for patient care. Evaluation of the continuity of care demonstrated that the majority of patients were

referred back to their family physicians for ongoing mental health care, but a sizable number were also referred to community mental health programs for longer-term support (see data about disposition of patients after an episode of shared care in the accompanying report of the University of Ottawa Centre for Evaluation of Community Services). Recommendations about safety and continuity of care include the following:

- The family physician must be the provider of ongoing mental health care – not the shared care team
- Primary mental health care teams need links to emergency and crisis services which provide for 24/7 mental health care
- Knowledge of available community mental health services is essential. Collaborative mental health care does not replace the need for these services.
- The scope of practice for each mental health professional on a shared care team needs to be defined according to their regulatory college guidelines, and liability issues of collaborative care needs to be clarified for mental health professionals and family physicians.

Effectiveness of Care

Within the limitations of this project evaluation, it appeared that the care provided by the SHARE team was likely a factor in improved patient outcomes, demonstrated by improved quality of life measures, reduction in psychiatric symptoms and reduced severity of illness at the end of their episode of mental health treatment. Recommendations concerning effectiveness of care include:

- Implementation and outcome program evaluation is important for newly set up collaborative mental health programs, and ongoing evaluation is also need for monitoring quality of care in established programs.
- Training of mental health professionals who wish to work in collaborative mental health care is essential, as primary care is different than hospital-based mental health services.
- Future research should focus on randomized, controlled trials to conclusively demonstrate the effectiveness of collaborative care in providing treatment for various mental health disorders within a primary care setting.

Sustainability

Sustainability of this project has been clearly facilitated by the Ontario Health Care Transformation Agenda, and in particular the formation of Family Health Teams (FHTs). A review of the objectives of FHTs shows that almost all apply to collaborative mental health care. Evaluation of the SHARE Project substantiates that the model of care attained the following objectives of the Ontario Family Health Teams:

Ontario Family Health Teams objectives attained by the SHARE project:

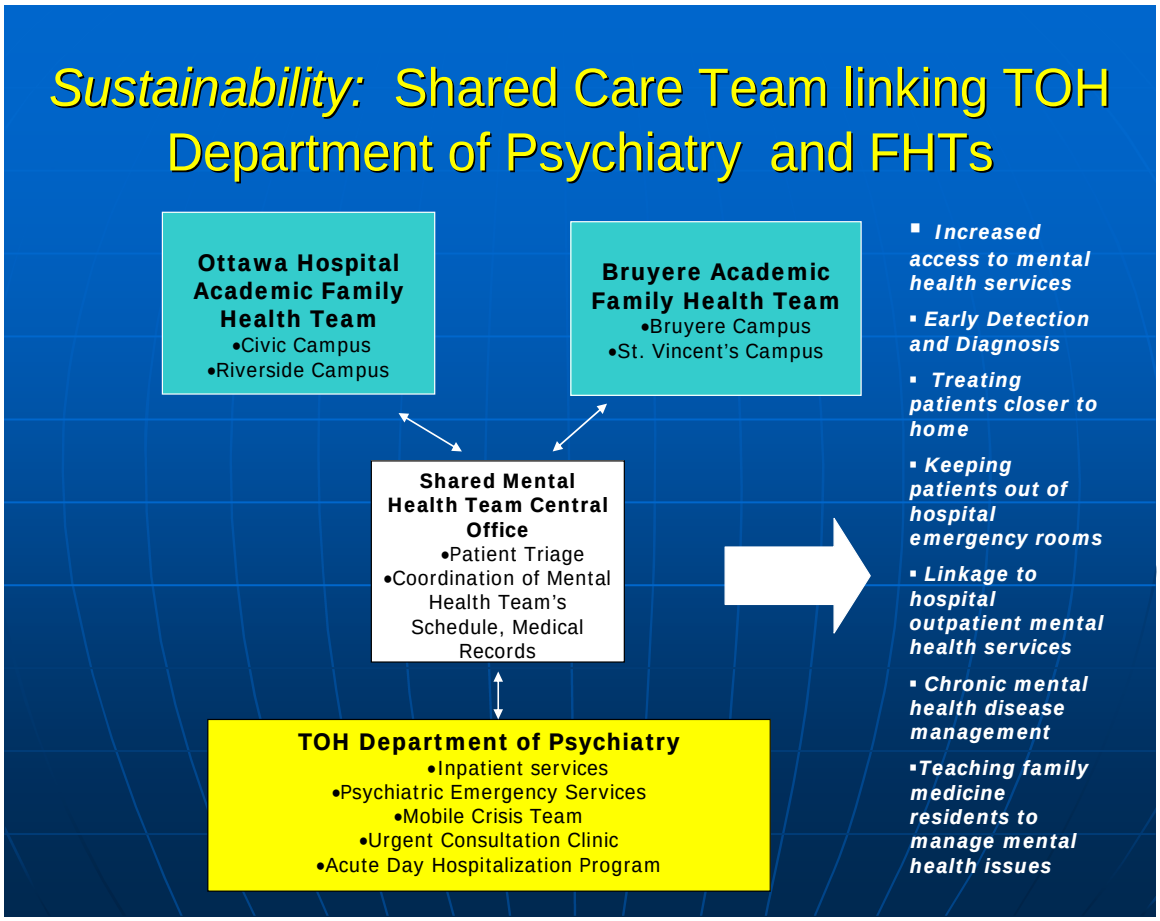
- *Provide comprehensive primary health care through interdisciplinary teams* – the SHARE Team was clearly multidisciplinary in nature, and this was highly valued by patients and family physicians.
- *Provide patient-centred care* – care provided by the SHARE Team was individualized, with a wide range of short-term psychotherapies and medication management provided to patients. In addition, patients were linked to longer-term mental health care in the community, or if needed, they were provided access to more intensive care at the Ottawa Hospital.
- *Provide expanded access to care* – the SHARE Project improved access to mental health care according to qualitative and quantitative data from this evaluation.
- *Provide system navigation and care coordination* – this was accomplished by the linkage of the SHARE Project to hospital-based services and also community-based mental health services
- *Emphasize health promotion, illness prevention, and early detection/diagnosis* – this objective was clearly met by the SHARE project, particularly in terms of early detection and intervention in the primary care setting, thus avoiding patients potentially deteriorating and using hospital-based mental health services.
- *Develop chronic disease management and self-care programs* – patients were given information on self-management of depressive and anxiety conditions, and family physicians were given a booklet of community mental health resources developed by the SHARE Project, in order to provide ongoing care of patients with chronic mental health problems.
- *Link with other health care organizations* – the link with the Ottawa Hospital mental health services has been an integral part of the SHARE Project.
- *Use information technology* – at the COFMA primary health care group, the SHARE Team benefited by the electronic medical record already in place, and this was clearly a success in improving communication between the mental health team and family physicians.

With respect to the sustainability of the SHARE Project, the Ottawa Hospital Department of Psychiatry has partnered with two academic FHTs which have been approved by the Ontario Ministry of Health and Long-Term Care – the Ottawa Hospital Academic Family Health Team and the Bruyere Academic Family Health Team. We have applied for funding to support a multidisciplinary mental health team linking these two academic FHTs with the Ottawa Hospital Department of Psychiatry. The mental health team will provide on-site mental health services at four primary health care settings (each academic FHT is based at 2 sites). In addition to

providing patient care, the mental health team will participate in the training of family medicine residents, psychiatry residents, and other health care professions in collaborative mental health care, thereby expanding the knowledge gained by the SHARE Project.

At the time of submission of this report, the funding application was being reviewed by the Ontario Ministry of Health and Long-Term Care. Figure 7 shows the structure of the proposed shared mental health care team linking the 2 Ottawa Academic FHTs.

Figure 7. Proposed shared mental health team linking TheOttawa Hospital mental health services with the two Ottawa Academic Family Health Teams



Conclusions

Improved access to primary health care

Process and outcome evaluation of this project demonstrated that a multidisciplinary mental health team working on site in primary care greatly improved access to mental health care compared to the access patients had to mental health services prior to the start of the project. Improved access was highly valued by both patients and family physicians. Recommendations arising from the SHARE Project include establishing target waiting times for urgent and non-urgent referrals, linking primary care services with hospital-based mental health services with shared mental health care teams, and ensuring mental health system patients have access to primary health care with the backup of a shared mental health care team.

Increased patient and provider satisfaction

Patient satisfaction outcome measures and qualitative data from family physician focus groups suggest that both groups valued the relative ease and speed of access to mental health care situated within the primary care setting. Furthermore, there were positive comments from patients and providers with respect to access to the multidisciplinary team of mental health professionals and the close communication between these mental health professionals and family physicians provided by the shared mental health care model.

Improved quality and continuity of primary health care

The quality of care in this project was in large part measured by multiple measures of the effectiveness of care, including ratings of patient symptom burden, quality of life and severity of illness. All measures showed significant improvement from the start to end of an episode of mental health care, although in the absence of a randomized clinical trial with a control condition, it is not possible to ascribe improvement solely to the shared mental health intervention. Other measures of quality of care included evaluation of the types of care provided, and results show that treatments were largely a range of different types of evidence-based short-term interventions tailored to patient requirements.

Continuity of care was strongly demonstrated in this project, occurring through the linkages between the family practices, hospital-based mental health services and community mental health services. There were a small number of patients from primary care referred for more intensive care to the Ottawa Hospital and a small number of patients from the mental health system of the Ottawa Hospital who gained access to primary care because of the project. There were a much greater number of patients referred to community mental health services for longer-term mental health care by the shared care team, after their more acute mental health issue was addressed in the primary care setting. The demonstration of this project that linkages from hospital to primary care to community mental health services were necessary and effective, makes a case for promoting hospital-primary care-community provider linkages in collaborative mental health care.

Increased cost-effectiveness of primary health care services

Cost-effectiveness of this project was not directly evaluated. Nevertheless some results of this project could form the basis of future studies of cost-effectiveness in collaborative mental health care. Evaluation of the severity of illness of the patients participating in the SHARE project demonstrated that 80% met diagnostic criteria for anxiety and depressive disorders, and 40% were judged to have moderate or severe levels of distress or social impairment. Without early diagnosis and treatment in the primary care setting, a percentage of these patients would likely need urgent psychiatric intervention, and with the difficulty in access to services, end up in the emergency rooms of general hospitals and in some cases be admitted to hospital. Providing mental health care in the primary care environment allows for earlier access to services which in many cases provides for early detection and intervention of mental health problems, thereby preventing deterioration and the need to access hospital emergency services. Future cost-effectiveness studies might focus on possible cost avoidance of the use of hospital emergency and inpatient services for patients of primary care settings having access to collaborative mental health care compared to those primary care settings without collaborative care.

With respect to the cost of setting up multidisciplinary shared mental health teams similar to the SHARE model, the cost of administrative support to put in place an effective triage system needs to be considered. In addition to salary support, other costs include information technology to provide for an electronic medical record, which clearly facilitated communication amongst the SHARE professionals and the family physicians.

References

American Psychiatric Assocation. Diagnostic and Statistical Manuel of Mental Disorders, Fourth Edtion. Washington, DC, American Psychiatric Association, 1994.

Attkisson CC, Greenfield TK. 1996. The Client Satisfaction Questionnaire-8 and the Service Satisfaction Questionnaire-30. In Sederer LI, Dickey B (eds.) Outcomes Assessment in Clinical Practice. Baltimore (MD): Williams & Wilkins; pp 120-127.

Burley HJ. 2002. Shared care: what do family physicians want from psychiatrists? CPA Bulletin de l'APC. Dec.; 29-31.

Canadian Psychiatric Association. Wait time benchmarks for patients with serious psychiatric illnesses. Canadian Psychiatric Association Policy Paper, Ottawa, March, 2006.

Craven MA, Bland R. 2002. Shared mental health care: a bibliography and overview. Can J Psychiatry 47(1 Suppl):1S-98S.

Daumit GL, Pratt LA, Crum RM, Powe NR, Ford DE. 2002. Characteristics of primary care visits for individuals with severe mental illness in a national sample. Gen Hosp Psychiatry 24:391-5.

Kates N, Craven M, Bishop J, Clinton T, Kraftcheck D, Leclair K, Leverette J, Nash L, Turner T. 1997; Shared mental health care in Canada. Ottawa (ON): Canadian Psychiatric Association and College of Family Physicians of Canada. Position Paper no. 1997-38. 12p. Available from: CPA, 260-441 MacLaren St., Ottawa, Ontario K2P 2H3.

Kates N, Craven M, Webb S, Low J, Perry K. 1992. Case reviews in the family physician's office. Can J Psychiatry 37(1):2-6.

Kates N, Crustolo AM, Farrar S, Nikolaou L. 2002. Counsellors in primary care: benefits and lessons learned. Can J Psychiatry 47:857-62.

Katon W, Von Korff M, Lin E, et al. 1995. Collaborative management to achieve treatment guidelines: impact on depression in primary care. JAMA 273(13):1026-31.

Koran LM, Sox HC, Marton KI, Moltzen S, Sox C, Kraemer HC, Imai K, Kelsey TG, Rose TG, Levin LC, Chandra S. 1989. Medical evaluation of psychiatric patients. Arch Gen Psychiatry 46:733-40.

Ministry of Health and Long-Term Care, Government of Ontario. 2003. Mental health accountability framework. Toronto (ON): Queen's Printer for Ontario.

Overall JE, Gorham DR. 1962. Brief Psychiatric Rating Scale. Psychol Rep 10:799-812.

Shore JH. 1996. Psychiatry at a crossroad: our role in primary care. Am J Psychiatry 153: 1398-1403.

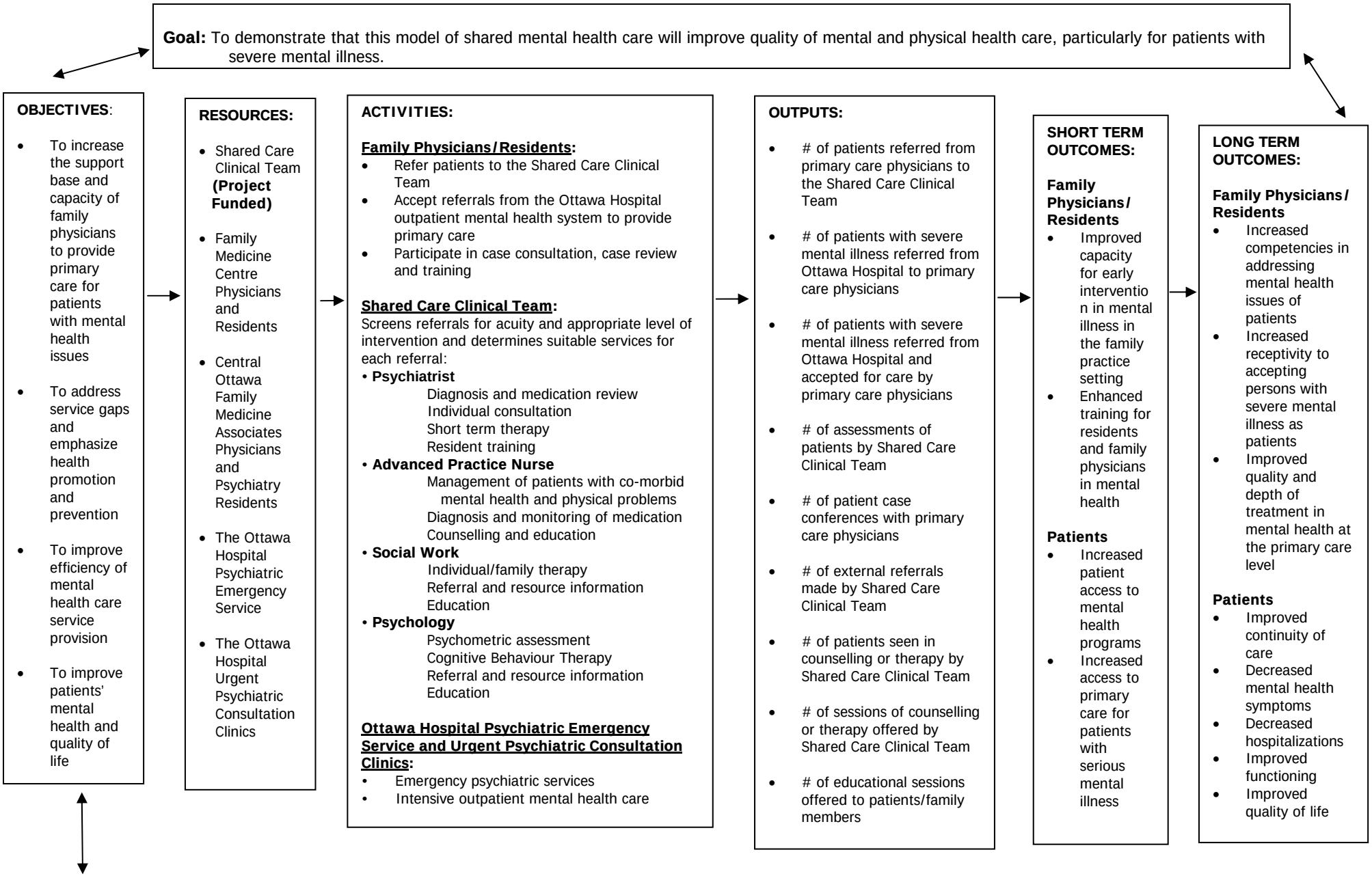
Slade M, Powell R, Rosen A, Strathdee G. 2000. Threshold assessment grid (TAG): the development of a valid and brief scale to assess the severity of mental illness. Soc Psychiatry Psychiatr Epidemiol 35:78-85.

Spitzer RL. Kroenke K. Williams JB. 1999. Validation and utility of a self-report version of PRIME-MD: the PHQ primary care study. JAMA. 282(18):1737-44.

Ware, J. E., Kosinski, D., Runer Bowker, B., Gandek, R. (2002). How to Score Version 2 of the SF-12 Health Survey (With a Supplement Documenting Version 1). Lincoln, RI: Quality Metric Incorporated.

Appendix 1. Logic Model: The Ottawa Shared Mental Health Care Project

Assumption: That a multi-disciplinary mental health team linking The Ottawa Hospital psychiatric emergency service and outpatient urgent mental health consultation clinics with two comprehensive family medicine practices will result in improved access to, and quality of, both psychiatric and physical care for patients with mental health problems who are seen first within either (a) the primary health care system or (b) the acute care mental health system.



Appendix 2: SHARE Knowledge Dissemination Activities

Local Knowledge Dissemination Activities:

1. Weekly mental health rounds at the Family Medicine Centre Civic Campus delivered by the SHARE Team to family physicians and residents.
2. Establishment of the Stakeholder and Advisory Board with representation from mental health consumers, family physicians, psychiatrists and community mental health agency providers. There were 4 advisory meetings during the SHARE Project.
3. April, 2005. Share Team: Overview of the SHARE Demonstration Project- presented to staff of TOH (Civic and General) and the Royal Ottawa Hospital (May, 2005)
4. Booklet on Ottawa Community Mental Health Services for Family Physicians.
5. January, 2006. Katherine Gillis, Colleen MacPhee, Robert Swenson. The Ottawa Shared Mental Health Care Project. Presentation at the City Wide Family Medicine Rounds of the University of Ottawa.

Provincial Knowledge Dissemination Activities:

1. May, 2005. The Ottawa Shared Mental Health Project. Knowledge Exchange Day. Ontario Ministry of Health and Long-Term Care. Toronto.
2. May, 2005. Colleen MacPhee. Advance Practice Nursing in Shared Mental Health Care. The University of Ottawa Annual Clinical Nursing Research Conference, Ottawa.
3. July, 2006. Robert Swenson. Results from the Ottawa SHARE Project. Knowledge Exchange Day, Ontario Ministry of Health and Long-Term Care, Toronto.

National and International Knowledge Dissemination Activities:

1. May, 2005. Colleen MacPhee. Bridging the Gap – Advance Practice Nursing in Shared Care (poster).
2. June, 2005: Robert Swenson, Jennifer Clinch, Nick Busing, Jay Mercer, Gary Viner, Katherine Gillis. Needs and attitudes of family physicians and family medicine residents concerning the provision of collaborative mental health care (poster). 6th National Conference on Shared Mental Health. Ottawa, Ontario.
3. June, 2005: Robert Swenson, Tim Aubry, Nick Busing, Colleen MacPhee, Katherine Gillis, Beth Lynch, Jennifer Clinch. Evaluation of a shared mental health program: Strategies and challenges. 6th National Conference on Shared Mental Health. Ottawa, Ontario.
4. June, 2005: Colleen MacPhee, Robert Swenson, Beth Lynch, Katherine Gillis, Donna Klink, Jay Mercer, Nick Busing. The Ottawa Shared Mental Health Program: Clinical services and interdisciplinary team functioning. 6th National Conference on Shared Mental Health. Ottawa, Ontario.
5. November, 2005. Research seminar given to the Greater Green Triangle University Department of Rural Health on depression and cardiac disease and collaborative mental health care at Deakin University, Warrnambool, Australia

6. May, 2006. Robert Swenson, Nick Busing, Tim Aubry, Jay Mercer, Colleen MacPhee, Katherine Gillis, Carmel Martin. Evaluation of the Ottawa Collaborative Mental Health Demonstration Project and its relevance to the Ontario health care transformation agenda. 7th National Conference on Shared Mental Health Care, Calgary, Alberta
7. May, 2006. Prasuna Reddy, James Dunbar, Edward Janus, Steve Bunker, Robert Swenson. Toward the development of a collaborative chronic disease model of care for patients with comorbid coronary artery disease and depression. 7th National Conference on Shared Mental Health Care, Calgary, Alberta
8. May, 2006. Colleen MacPhee, Katherine Gillis, Donna Klinck, Robert Swenson, Nick Busing, Jay Mercer. Collaborative care – meeting the challenge of integrating psycho-education into a busy family practice setting. 7th National Conference on Shared Mental Health Care, Calgary, Alberta
9. September, 2006. Robert Swenson. Evaluation of a collaborative mental health care demonstration project in primary care. Sustaining Primary Healthcare Renewal 2006 CHSRF Primary Healthcare Network Symposium, Vancouver.

Ongoing Knowledge Dissemination

Development of a series of CD ROMs devoted to teaching interview skills in collaborative mental health care to family physicians and residents. (Dr. Katharine Gillis, Colleen MacPhee, Dr. Robert Swenson)