Conclusions and Better Practices

Several messages are beginning to emerge from the experimental literature:

1. **Collaborative relationships between PCPs and other mental health care providers do not happen instantly or without work. They require preparation, time, and supportive structures.**

   The Swindle study (13) and the Burns study (31) demonstrate how a potentially good intervention can fail because of poor collaboration (and poor implementation). In contrast, the Rost study (16), which built on preexisting relationships in the primary care practice, resulted in high levels of collaboration and good patient outcomes. Even in this study, however, the investigators found that simply introducing a psychiatrist to the PCPs by telephone was not enough to establish a collaborative relationship. Ideally, collaborative care arrangements will grow out of preexisting clinical relationships.

   System-level collaboration also requires preparation, service reorganization, and time to develop. Byng’s (46) study of an intervention designed to support the development of shared care for patients with chronic SMI attempted to develop shared care arrangements between general practices and CMH teams over a short period of time and was only partially successful. It is likely that real change, sustained over long periods, needs to be gradual and introduced in a step-wise fashion. As the Mildred (44) and Emmanuel (45) studies show, the degree of staff “buy in,” institutional leadership, formal policy change, and performance monitoring are also key factors that will determine success or failure when agencies and organizations seek to improve their level of collaboration with primary care providers.

2. **Colocation is important for both providers and patients.**

   Rost found that providers who had not met face-to-face did not engage in a collaborative relationship (16). This finding is supported by an observational study by Bray and Rogers (48), who found that linking psychologists and PCPs worked best when the 2 providers worked in close geographic proximity and had known each other before the start of the study. From the patient’s point of view, Bartels’ study (24) showed that offering patients specialty mental health care within the primary care setting produces greater engagement of patients in mental health care, a *sine qua non* for better patient outcomes. This finding is also supported by Sharma’s study (47), where “no show” rates were lower in GP practice-based mental healthcare and by the observational and program evaluation literature (49–51). Collaboration between mental health specialists and primary care providers is likely to be most developed when clinicians are colocated and most effective when the location is familiar and nonstigmatizing for patients. This may be particularly true for patients with substance abuse problems. An emerging literature on colocation and (or) 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).

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).

4. **The pairing of collaboration with treatment guidelines appears to offer important benefits over either intervention alone in patients with depressive disorders.**

   The overwhelming majority of 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. A few studies with poor or mixed outcomes also used protocols or guidelines, but in some cases, these were poorly implemented (13,31). Guidelines and protocols dealt with both the content of treatment and also with such process issues as who should monitor, how often, and when to refer. Previous trials of clinical guidelines, treatment protocols, or algorithms without collaborative interventions have not shown improvements in patient-level outcomes (54–56).

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 we reviewed showed improved outcomes only in subgroups of patients with higher depression severity scores (7,9,13,14). This finding may represent a tendency for some forms of minor depression to improve spontaneously, treatment protocols that are not appropriate for minor
depression, or a combination of both. At present, there is more evidence to support targeting collaborative interventions at major depressive disorders.

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 PCP and for varying lengths of time. The studies, 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). A few studies (5,8,13,31) included follow-up and had poor outcomes, but in the latter 2 studies, the investigators were unable to implement the interventions adequately. The length of follow-up may be critical. Several studies with brief interventions reported only short-term benefits, whereas Unützer’s 12-month study (22) and Rost’s 2-year follow-up study (17) showed increasing clinical benefits over time. Again, this finding speaks to the need for practice reorganization to support primary care providers in providing adequate, systematic follow-up consistent with treatment guidelines.

7. Efforts to increase medication adherence through collaboration with other health care professionals (for example, practice nurses) were also a common component of many successful studies.

Although improving medication adherence has strong face validity, our analysis of these studies found no clear direct relation between medication adherence and clinical outcome (10,11,14,15,19,21). Hunkeler and colleagues (11) speculate that increased emotional support during adherence monitoring by nurses may be responsible for the positive findings in their study, despite lack of improved medication adherence. Until this issue is clarified, collaborative interventions to provide patient follow-up should focus on more than just medication adherence.

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

Only one experimental study (5) demonstrated a trend toward behavioural change in the PCP over time (increased prescribing for depression). Lin and colleagues (4) demonstrated that the improvement in outcomes achieved during a multifaceted intervention for depression (5) were not due to physician education alone, but required extensive service restructuring in addition. This conclusion is strongly supported by a large body of evidence about CME for physicians in general (57) and by Gater’s study (33), which focused on people with serious mental illness and made changes in service structure that had a lasting positive effect on the process of care. Collaborative interventions designed to produce changes in the practice patterns of primary care providers should include service restructuring specifically designed to support those changes.

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

Further work is needed to determine what, if any, contribution this intervention makes to the success of collaborative care. Lovell’s study (37), which focused on nurse-guided self-help and patient education, suggests that some patients may do very well with alternatives to traditional assessment and management approaches as part of a stepped-care approach and that these can be provided in a collaborative manner in the primary care setting.

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).

In contrast, Gater found that improvements in care established as part of an ongoing collaborative intervention involving permanent staff were sustained 2 years after the study ended (33). This highlights the importance of 1) sufficient funding to support collaborative care processes and practices and 2) the potentially disruptive effects of study interventions that are “parachuted” into clinical practice.

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% to 66% of primary care patients with major depression would prefer to be treated with psychotherapy rather than medication (57), and this preference may apply to other mental health disorders as well. In our review of the literature, Rost (16) and Unützer (22) gave patients a choice between medication and protocol-based psychotherapy, and Wells and colleagues (39) provided psychotherapy as one of the randomized options in this intervention makes to the success of collaborative care. Research has shown that, given a choice, 26% to 66% of primary care patients with major depression would prefer to be treated with psychotherapy rather than medication (57), and this preference may apply to other mental health disorders as well. In our review of the literature, Rost (16) and Unützer (22) gave patients a choice between medication and protocol-based psychotherapy, and Wells and colleagues (39) found sustained mental health-related QoL benefits for psychotherapy that did not occur with medication. Collaborative interventions should take patient preferences into account and be prepared to provide the option of psychotherapy whenever possible.