

## Editorial

Massimo Moscarelli, M.D. Agnes Rupp, Ph.D.

The articles in this issue consider the cost of providing substance abuse treatment coordination for offenders through probation agencies (Alemi *et al.*), the effectiveness of mental health and substance abuse treatment in reducing crime committed by juveniles (Evans Cuellar *et al.*), the cost-effectiveness of two interventions for facilitating the treatment of depression in primary care (Schoenbaum *et al.*), and the cost-effectiveness of restricting the anti-psychotic medication clozapine to third-line status in the care of schizophrenia (Wang *et al.*).

Alemi *et al.* (p. 51) examine the costs of “seamless” probation, a demonstration project funded by the U.S. Office of Drug Control Policy designed to integrate drug treatment with traditional supervision services, that requires substance abusing offenders to undergo the following: (i) a minimum of 9 months of intensive treatment, including joint management by a probation agent and treatment provider; (ii) graduated sanctions or responses to non-compliance (such as positive drug tests); and (iii) drug testing at an accelerated rate of three times a month. Seamless probation focuses primarily on face-to-face contact between the probation agent, the treatment clinician and the offender and allows treatment and supervision to occur at the same location. In contrast, in traditional probation, offenders have to seek treatment at different sites and drug testing is optional or at the discretion of each agency. The authors focus on one jurisdiction (with a population of 130,000) providing both seamless and traditional supervision, develop a survey for monitoring probation officers’ activities, and analyze the costs of probation with and without treatment coordination. The comparison of seamless and traditional supervision activities showed major differences in terms of the probation officers’ activities; overall, the cost per client per day in seamless probation was 77% higher than in traditional supervision. The authors emphasize the explorative value of the study.

Evans Cuellar *et al.* (p. 59) analyze the potential role of substance abuse and poor mental health among the determinants of juvenile crime (such as economic, family, peer and educational factors). The study analyzes the effectiveness of mental health and substance abuse treatment in reducing crime committed by juveniles. Detention, substance abuse and mental health treatment data were collected for 6,088 youths (aged 13-18) who received child welfare services in the state of Colorado over a three-year period. The child welfare population was selected because the majority of the children in foster care programs come from abusive or neglectful homes, and as a result, these

children exhibit more chronic medical, emotional, and psychological problems than other youth, and are considered at risk for engaging in criminal behaviors. The authors analyze the impact of treatment in delaying or preventing this group of at-risk youth from engaging in criminal behavior (with a separate analysis for violent crimes). They report that mental health and substance abuse treatment decreases the probability of being detained for any offence; that youths living in areas with greater treatment availability are less likely to enter detention; and that higher beer prices lower the detention hazard. According to the authors, these preliminary findings suggest the possible value of the expansion and easy accessibility of health services targeted to these youth in reducing juvenile crime.

Schoenbaum *et al.* (p. 69) estimate the cost/effectiveness of two methods of training general practice teams, the first aimed at facilitating medication management (QI-Mds) and the other focused on psychotherapy (QI-Therapy), to enhance the provision of care for depression in primary care. The study screened for depression in 27,332 consecutive patients in 46 primary care practices in the U.S. A final sample of 443 patients were enrolled in usual care, 424 in QI-Meds and 489 in QI-Therapy. The analysis, at 24-month follow-up, addressed outpatient health care costs, quality adjusted life years (QALY), depression burden, employment, and costs per QALY. The authors report that relative to usual care, QI-therapy resulted in significantly fewer depression burden days for Latino patients and increased days employed for white patients. Relative to usual care, the estimated costs per QALY for Latinos were US\$ 6,100 under QI-therapy and US\$ 90,000 under QI-Meds, while for whites they were around US\$ 30,000 under both methods. According to the authors, QI-therapy, which enhances resources for evidence-based psychotherapy for depression, was highly cost-effective for Latino patients, due both to very positive outcomes and very modest costs. For this group the estimated costs per QALY relative to usual care were much lower than those of many accepted medical interventions.

Wang *et al.* (p. 77) analyze the potential use of clozapine as a first-line agent in the treatment of schizophrenia. Currently, the use of clozapine in the U.S. is restricted to patients who have failed at least two trials of other antipsychotic medications, due to the 1% mortality found in pre-marketing studies, mainly due to fatal agranulocytosis. The authors review changes concerning this drug over the past decade. Clozapine is significantly more likely than other conventional antipsychotics to improve psychotic episodes and reduce relapses, is relatively free of extrapyramidal side-

effects associated with traditional antipsychotics, and is associated with lower rates of completed and attempted suicide. In addition, the costs associated with clozapine therapy have decreased, due to generic forms now available and to the U.S. Food and Drug Administration's relaxing of the weekly blood cell count requirement. The authors draw on data from randomized control trials and epidemiological studies to model the clinical and economic outcomes of the two strategies (third and first-line status) in a hypothetical

cohort of patients with schizophrenia undergoing an acute psychotic episode. They find that using clozapine as a first-line agent would lead to modest gains in life expectancy as well as quality-adjusted life expectancy. The cost-effectiveness ratio of administering clozapine first versus using clozapine only after two trials of conventional antipsychotics would be US\$ 24,100 per QALY. The authors conclude that clozapine should not necessarily be confined to its role as a third agent.