



## Effect of increased private share of inpatient psychiatric resources on jail population growth: Evidence from the United States

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### ABSTRACT

There is a strong connection between the mental health and criminal justice systems. This research empirically tested whether the privatization of the inpatient mental health system alters this relationship, contributing to jail population growth. Using state-level panel data on U.S. states and the District of Columbia for the years 1985–1998, this study analyzed the relationship between the size of jail populations and private share of hospital psychiatric beds, first for overall private beds and then separately by private for-profit and nonprofit. Empirical models controlled for changes in mental health financing and resources, variations in criminal justice practice, and demographic and socio-economic factors as well as state and year fixed effects. A method of instrumental variables was employed to make a stronger case for causal inference. Results show that a one-percentage point increase in the private for-profit share of psychiatric beds contributes to the growth of jail inmates by approximately 2.3% annually. A greater private nonprofit share of psychiatric beds does not appear to influence the size of jail populations. These findings suggest that the increased private for-profit share of inpatient psychiatric resources undermines the safety-net and some control function of the mental health system and leads to a greater number of jail inmates.

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### Introduction

The expansion of the private sector in inpatient psychiatry has been remarkable in many countries (Das, 1989; Geller, 2006; Tsuchiya & Takei, 2004; Zechmeister, 2004). Often termed as privatization, this major trend in mental health policy has led to the rapid growth of private concentration on inpatient psychiatric care. In the United States, between 1970 and the mid-1980s, the private share of hospital psychiatric beds, defined as the proportion of private to total psychiatric beds, dramatically increased from 7% to 35% (Dorwart & Schlesinger, 1988). In 2002, private psychiatric beds comprised approximately 65% of all psychiatric beds in inpatient psychiatric facilities (Foley et al., 2006).

Fig. 1 illustrates the increasing role of privately owned psychiatric facilities in inpatient psychiatric care by ownership in the United States. The private nonprofit share of hospital psychiatric beds had uninterrupted increases from 23% in 1985 to 41% in 1998. The private for-profit market share had an overall increase from 10% to 14% during the same period, although its growth rate was

somewhat halted as private hospitals experienced major losses and consequently started to downsize or close. The massive expansion of managed care, the implementation of treatment in the least restrictive alternative, and burgeoning lawsuits contributed to the decline in the per-capita number of for-profit beds (Geller, 2006). Nevertheless, for-profit psychiatric facilities continued to serve an increasing number of patients with severe mental disorders. The proportion of discharges of patients with severe mental disorders in for-profit general hospitals nationwide increased from 13% to 28% between 2000 and 2002 (Watanabe-Galloway & Zhang, 2007).

An analysis of such a shift in the mental health system is not restricted to its within-system effects. Due to frequent contacts with law enforcement authorities among persons with psychiatric disorders, a link between changes in the financing and delivery of mental health services and variations in correctional populations has been empirically tested (Domino, Norton, Morrissey, & Thakur, 2004; Norton, Yoon, Domino, & Morrissey, 2006; Palermo, Smith, & Liska, 1991; Raphael & Stoll, 2009; Scott, Snowden, & Libby, 2002; Yoon, 2007). For example, Palermo et al. (1991), Raphael and Stoll (2009), and Yoon (2007) reported a negative relationship between the supply of hospital psychiatric beds and the size of jail and prison populations. Domino et al. (2004) found an increase in jail detentions among persons with severe mental disorders after the

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