# Psychiatric Service Utilization Trends in Delaware's Public Mental Health System Following the OLMSTEAD Settlement Agreement

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### **Abstract**

The Olmstead Settlement Agreement between the U.S. Department of Justice (DOJ) and the State of Delaware (July 6, 2011) required Delaware to reduce its long term and acute psychiatric service utilization and expand community-based outpatient treatment and support programs for adults. The Olmstead Supreme Court decision targets many of the structural forms of discrimination that have been a barrier to community living for individuals with serious and persistent mental illness (SPMI). The 2011 Olmstead Settlement Agreement between the U.S. Department of Justice (DOJ) and the state of Delaware (DE) addressed a need for enhanced opportunities for individuals with SPMI and their families in the community. The state redesigned their mental health system, implementing a host of programmatic enhancements that are considered consumer-centered and community-focused.

Delaware asked the University of Pennsylvania's Center for Mental Health Policy and Services Research to evaluate the results of their Olmstead implementation strategies. This paper describes the service systems' outcomes and is focused on the changes in the type and patterns of community care for the "at risk" population of seriously mentally ill individuals (SPMI), based on criteria jointly developed by DOJ and the Delaware Division of Substance Abuse and Mental Health (DSAMH). A person level analysis was also completed using both quantitative and qualitative techniques to monitor clinical and social outcomes and service use for a small subset of the most vulnerable individuals discharged from the state hospital and enrolled in an intensive outpatient program known as the Community Re- Integration Support Program (CRISP). This utilization study reported here was approved by the University of Pennsylvania's Institutional Review Board (IRB) and by Delaware's Department of Health and Social Services (DHSS) IRB.

# **Service System Redesign**

Prior to the Olmstead Settlement Agreement, public mental health services for the uninsured population of SPMI individuals in Delaware were provided by DSAMH and consisted of one state hospital, Delaware Psychiatric Center (DPC), Community Continuum of Care Programs (CCCP), which provided intensive outpatient services for ~ 1200 to 1500 individuals, 4 state operated community mental health centers (CMHCs) throughout the state, group homes contracted through state funds, and a host of other specialized programs.

"Institutional placement of persons who can handle and benefit from community settings perpetuates unwarranted assumptions that persons so isolated are incapable or unworthy of participating in community life." -Supreme Court Olmstead Decision 1999

The Delaware Olmstead Settlement Agreement resulted in a plan to increase outpatient, crisis, housing and employment services and decrease psychiatric inpatient acute and long term care services.

During the five year period, the following services were developed: 16 Assertive Community Treatment (ACT) teams of approximately 100 individuals each; the CRISP program, which provides intensive services and access to housing, employment, clinical services, medications and other services for approximately 100 former state hospital consumers; over 650 new housing units, ranging from supervised apartments to independent living; 3 Intensive Case Management (ICM) programs (less intensive than ACT); the Recovery Response Center (RRC), a walk-in crisis center serving consumers in the southern part of the state; and additional mobile crisis capacity was created. Additionally, a peer support program was formalized and expanded. Peer Specialists were trained and hired by State and community programs to provide peer recovery services.

A further consequence of the Olmstead action was the forging of a partnership between the Division of Medicaid and Medical Assistance (DMMA) and DSAMH. Prior to the development of this partnership, the two agencies provided psychiatric services separately to the publically funded population in Delaware. The Olmstead Settlement provided the impetus for coordinating services to Medicaid consumers with SPMI using an amendment to the 1915(c) Medicaid waiver; one of many options available to states to allow the provision of long term care services in home and community based settings under the Medicaid program. This program allows for case management (i.e. supports and service coordination), homemaker, home health aide, personal care, adult day health services, habilitation (both day and residential), and respite care. States can also propose "other" types of services that may assist in diverting and/or transitioning individuals from institutional settings into their homes and community. Given the large number of individuals with SPMI who are Medicaid beneficiaries, this partnership has enhanced services dramatically for this "at risk" group. DSAMH also began contracting with private, not-for-profit agencies to deliver outpatient mental health treatment, redesigning their state-funded CMHCs for assessment, screening and referral purposes.

# **Service System Evolution**

New service models were implemented as a result of the settlement agreement. The purpose of the system redesign was to 1) reduce the need for long term inpatient psychiatric care at DPC; and 2) decrease the use of acute care episodes at the three Delaware private community psychiatric hospitals serving the public sector population. In 2012, newly formed ACT teams began enrolling "at risk" consumers. Other new programs became operational over the following 18 months.

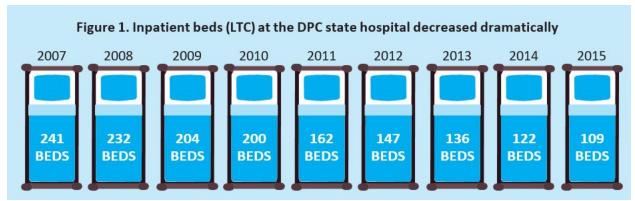
In order to determine if the changes were successful, an evaluation design was developed that followed inpatient and outpatient trends pre and post the 2012 program implementation phase. The expectation was that as new services were implemented, service use patterns for individuals with SPMI would change. The two major outcomes of interest were whether inpatient psychiatric use decreased and outpatient community services increased as a result of the system changes. These measures were examined annually over the study period.<sup>1</sup>

Multiple sources of administrative data were used, including Medicaid and DSAMH records collected routinely on service use. Persons with SPMI were identified using diagnostic and service data. Utilization was linked with these individuals to construct annual patient histories of admissions, discharges and visits. Each year a new group of individuals were identified as SPMI based on criteria jointly determined by DSAMH and DOJ. Thus the population or denominator of "at risk" individuals grew from 5,630 in 2010 to 16,830 in 2015.

## Long Term Care Beds Decreased at DPC State Hospital.

DPC beds were strikingly reduced from a 241-bed capacity in 2007 to a 109-bed capacity in 2015 (Figure 1). Forty beds are used for forensic patients and cannot be closed. Currently, DPC operates as an acute and intermediate facility primarily for individuals who are uninsured or receiving forensic services. In 2015, approximately 262 non-forensic individuals were in DPC versus 386 in 2010.

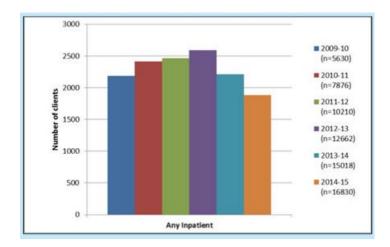
Figure 1. Inpatient Beds at DPC State Hospital Decreased Dramatically



#### Acute Psychiatric Inpatient Use in Community Hospitals Decreased.

The number of people experiencing an inpatient psychiatric episode in community or DPC acute ward units began dropping slowly beginning in 2012. The total number of hospitalized individuals with SPMI declined from 2,187 in 2010 to 1,683 in 2015. This decrease occurred despite the increase over time in the "at risk" population (Figure 2). On a national level, discharges from acute care facilities for psychiatric disorders have been increasing since 1988.<sup>2-4</sup>

Figure 2. Psychiatric Inpatient Use in DE 2010-2015

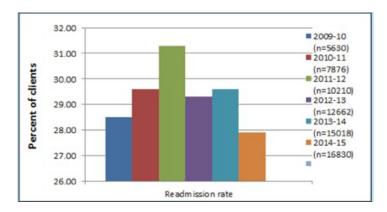


#### Recidivism Rates Remained Stable.

As DPC state hospital beds were reduced, the possibility existed that people may be readmitted to acute care community psychiatric hospitals more frequently.

The recidivism or readmission rate to acute care beds, however, remained a constant (28%) in both 2010 and 2015, although it increased somewhat in the interim to 30% (Figure 3). Few individuals had more than two stays annually. A very small group of individuals had repeated stays over several years.

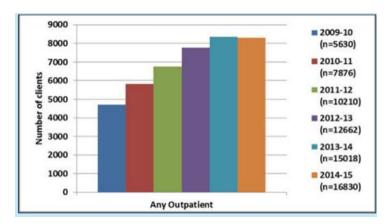
Figure 3. Acute Psychiatric Inpatient Readmission Rates, 2010-2015



### **Outpatient Treatment Rates Increased.**

The number of people using psychiatric outpatient services increased dramatically during the same time period (2010-2015). The increase was driven by greater use of outpatient services alone and in combination with other crisis services, reflecting better system connectivity. Most of the new outpatient programs developed by DSAMH were operational by 2013 (Figure 4).

Figure 4. Psychiatric Outpatient Use 2010-2015



Olmstead's central holding is that the Americans with Disabilities Act (ADA) prohibits states from unnecessarily institutionalizing persons with disabilities and from failing to serve them in the most integrated setting.

# Future Efforts to Integrate Individuals into the Community Using a Recovery Focus

The results of the service system analysis show a pattern of success in reducing long term state hospital bed use through expanding and enhancing outpatient services and housing programs. Over 650 new housing units were created for the at risk population during this period. Acute hospital use has proved more difficult to decrease, although the number of individuals with an inpatient admission did begin to go down in 2012-13 and continued to decrease over the next two years.

Challenges remain in that Delaware's general hospital emergency departments (ED) experienced a threefold increase in psychiatric patient visits from 1,589 SPMI individuals in 2010 to 4,625 individuals in 2015. This despite the addition by DSAMH of free-standing and mobile crisis programs.<sup>5</sup> This ED phenomenon has also occurred nationally, particularly for emergency visits in general hospitals.<sup>6</sup> The National Hospital Ambulatory Medical Care Survey, an annual survey by the Centers for Disease Control and Prevention, reported that between 2002 and 2011, the annual number of visits to EDs by adults in the US rose by 30% (from 82.2 million to 106.8 million), but psychiatric visits increased even more dramatically, by about 55 percent (from 4.4 million to 6.8 million).<sup>7</sup>

## **Conclusions**

Deinstitutionalization has led to a reduction in state and county psychiatric inpatient facilities in the country that cut capacity from about 400,000 beds to fewer than 50,000 beds between 1970 and 2006. Acute care psychiatric beds have also been reduced since the 1990's when behavioral health managed care was implemented. These bed declines are purported to be straining the resources of the ED where patients are staying for long periods before an appropriate discharge or transfer can be made. 10

Some clinicians and advocates for persons with mental illness believe that there is a psychiatric bed crisis and are calling for an increase in bed capacity.<sup>8,11</sup> Contrary to this view, proponents of deinstitutionalization, leaders of the recovery movement and the DOJ believe that most

individuals with SPMI can be treated effectively in community settings given the appropriate ambulatory treatment, housing and social support network.

The State of Delaware has made significant progress in meeting the bed reduction targets and the community based outpatient services established in the five-year DOJ agreement. However, reducing psychiatric hospitalization further will require additional services to divert hospital admissions from emergency rooms to outpatient and home and community-based care programs. Additionally, there is a need to improve hospital discharge planning to ensure fewer non-essential readmissions and to enhance the community outpatient care system and housing programs that support recovery and positive change.

Promoting positive change in the lives of individuals with serious and persistent mental illness (SPMI).

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