

SEVERITY OF ILLNESS AMONG POLICE-ESCORTED PSYCHIATRIC
EMERGENCY ROOM PATIENTS BEFORE AND AFTER THE
IMPLEMENTATION OF A REGIONAL, PUBLIC-SECTOR
MANAGED BEHAVIORAL HEALTH CARE PROGRAM

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DEDICATION

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by

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Managed behavioral health care organizations are growing, but the clinical impact of managed care policies is largely unknown. The following study examines the clinical characteristics of police-escorted patients seen in the psychiatric emergency room of a large public hospital in metropolitan Dallas. Samples of patients seen in 1996 and 2004 are compared to determine whether an increase in severity of illness is evident, which demographic groups have been most vulnerable

to changes in the system of care, and whether patients have become more overtly dangerous. Increased severity of illness among police-escorted psychiatric emergency room patients may be interpreted as a kind of cost-shifting as law enforcement officers and patients react to the diminishment of mental health resources in the managed care era.

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LIST OF DEFINITIONS

APOWW – Apprehension by a Peace Officer Without a Warrant

BHO – Behavioral Health Care Organization

CMHC – Community Mental Health Center

DANSA – Dallas Area NorthSTAR Authority

EMTALA – Emergency Medical Treatment and Labor Act

HMO – Healthcare Maintenance Organization

LMHA – Local Mental Health Authority

MIW – Mental Illness Warrant

NIMH – National Institute of Mental Health

PER – Psychiatric Emergency Room

SFY – State Fiscal Year

SSI – Social Security Supplemental Income

TANF – Temporary Aid to Needy Families

TDMHMR – Texas Department of Mental Health and Mental Retardation

CHAPTER ONE

Introduction

In 2002 it was estimated that managed behavioral health care organizations (MBHOs) managed behavioral health benefits for 164 million people, or 66% of all persons with health insurance (Open Minds, 2002, October 30). Gradually states have joined the managed care trend, “carving out” certain funds and services for separate management by a governmental agency or managed care vendor. As of 1999, 17.2 million people in 42 states were enrolled in some form of public-sector managed behavioral health care program (Coleman et al., 2005). In spite of these numbers, the clinical impact of managed care policies is largely unknown.

Existing studies have inferred the clinical impact of managed care by measuring changes in service utilization within the plan. For example, studies of the Medicaid carve-outs in Massachusetts and Utah found no increase in use of emergency room services by Medicaid-enrolled adults with severe and persistent mental illness (Christianson et al., 1995; Dickey et al., 1996; Dickey et al., 1995). These findings suggest that managed care organizations are able to reduce costs by decreasing the length of inpatient hospitalization and diverting patients to outpatient services (Coffey et al., 2000, July; Grazier & Eselius, 1999) without causing the patients to seek emergency care.

These findings do not show the whole picture, however. While it may seem logical to assume that the only people affected by managed care policies are those

who are enrolled in managed care plans, other patients may be impacted as well. Managed care policies may indirectly influence service utilization among people who are not insured by managed care plans through the mechanisms of adverse selection (Frank & McGuire, 2001) and financially-driven reductions in outpatient provider capacity (Appelbaum, 2002, 2003). As managed care's low payment rates and high administrative costs undermine community-based support services, more people with serious mental illness, with and without insurance, may fall through the "thinner and porous psychosocial safety net" (Morrissey, 1996, p. 11) and "deteriorate to the point where urgent intervention is required" (Appelbaum, 2003, p. 113). Studies are needed to show the impact of managed care on all patients, not just those covered by managed care plans.

Hospital emergency rooms are a good place to study the potential impact of managed care. The Emergency Medical Treatment and Labor Act (EMTALA), also known as the patient anti-dumping statute, requires Medicare-participating hospitals to provide an appropriate medical screening examination to determine whether or not an emergency medical condition exists, for every individual who presents at a hospital's dedicated emergency department seeking examination or treatment of a medical condition, including mental illness. If an emergency condition does exist, the hospital must supply stabilizing treatment within its capability, and the hospital may not delay screening or stabilization services in order to inquire about the individual's method of payment or insurance status (Department of Health and Human Services, 2003, Sept. 9; Social Security Act § 1867, as amended through Jan.1, 2003). As a

result, hospital emergency rooms are vulnerable to direct and indirect cost-shifting if patients are underserved because of managed care. If patients receive less care on a regular basis, hospital emergency rooms are likely to see the most vulnerable and least resilient.

One clinician has observed,

Emergency rooms are seeing a steady increase in the number of patients coming in for psychiatric evaluations. Clinicians in those settings have the impression that the increase in numbers is paralleled by a rise in the level of psychopathology and degree of acuity. (Appelbaum, 2003, p. 113).

Is this true? Only one published study, a recent report by Claassen, Kashner, Gilfillan, Larkin, & Rush (2005) at Parkland Hospital in Dallas County, Texas, has objectively measured a change in psychiatric emergency room utilization in relationship to managed care, considering all emergency room patients regardless of insurance status. The researchers found no increase in the number of initial or return psychiatric emergency room visits by voluntary patients after a managed behavioral health care system was implemented. However, the number of initial visits by police-escorted patients increased significantly, from 32.0% to 52.6%, “suggesting that increasing numbers of patients with mental illness in need of treatment were coming to the attention of law enforcement officials after managed care was implemented” (Claassen et al., 2005, p. 691).

Further analysis of the characteristics of police-escorted psychiatric patients may help illuminate managed care’s impact on this population. Previous studies of police-escorted psychiatric emergency room (PER) patients indicate they are more likely to show violent or dangerous behavior (McNiel, Hatcher, Zeiner, Wolfe, &

Myers, 1991; Redondo & Currier, 2003; Sales, 1991; Watson, Segal, & Newhill, 1993; Way, Evans, & Banks, 1993), require more acute-level intervention in the PER (Redondo & Currier, 2003; Sales, 1991), and are at least as likely to be hospitalized (McNiel et al., 1991; Redondo & Currier, 2003; Sales, 1991; Way et al., 1993), compared to other PER patients. An increase in the severity of illness among police-escorted PER patients would mean increased resource utilization for all agencies involved and, as a form of indirect cost-shifting by managed care, may have serious financial and political implications for the hospital, the police department, and the local mental health authority.

CHAPTER TWO

Review of the Literature

Interactions between Law Enforcement Personnel and People who have Mental Illness

When the public mental health system underwent a series of fundamental changes in the 1960s, 70s and 80s, researchers questioned how law enforcement officers would balance the competing demands of crime prevention, public protection, and *parens patriae*, with deinstitutionalization and a lack of community-based mental health programs. Deinstitutionalization left more people with severe and persistent mental illness living among the general population; those who did not conform to social norms came to the attention of police officers; and police were left to decide the most appropriate action based on their own experience, local traditions, and legal guidelines.

Criminal Arrest as a Default Option

Seminal work by Bittner (1967) suggested that law enforcement officers' decision-making process could be influenced by situational factors, including the perceived efficacy and availability of alternatives. When police officers tried to channel people to the mental health system, they experienced resistance and uncertainty, whereas any person with questionable mental health status could be

confined in the criminal justice system for a simple misdemeanor. Not surprisingly, criminal arrest became the default option for police officers faced with uncooperative or potentially dangerous individuals showing both illegal behavior and psychiatric symptoms.

Officers were reluctant to take these offenders to hospital emergency rooms because they either failed to meet commitment criteria or, if admitted, they were subsequently released due to a shortage of beds. In most instances, law enforcement took the mentally ill to jail where it was more of a certainty that these offenders would be removed from the community. (Pogrebin & Poole, 1987, p. 119)

Published studies focused on increases in the number of people with mental illness who were being arrested and jailed (e.g, Bonovitz & Bonovitz, 1981; Pogrebin & Poole, 1987; Steadman, Cocozza, & Melick, 1978). This became known as the “criminalization” of people with mental illness: the “inappropriate diversion to the criminal justice system” of “large numbers of persons with severe mental illness who have committed minor crimes” (Lamb, Shaner, Elliott, DeCuir, & Foltz, 1995, p. 67).

Pattern of Involuntary Psychiatric Referral

Change in the number of individuals detained by police officers for emergency psychiatric evaluations seems to have gone largely unreported. Over the past decade there has been a significant increase in the utilization of hospital emergency rooms for psychiatric care (Hazlett, McCarthy, Londner, & Onyike, 2004; Sills & Bland, 2002), but electronic database searches of published research in medicine, psychology, and criminal justice found few studies measuring whether any part of

the observed increase in emergency room utilization could be related to police-escorted patients. Based on a limited number of localized studies, the percentage of police cases that end in referral for an emergency psychiatric evaluation appears to be falling (Bonovitz & Bonovitz, 1981, 34%; Pogrebin, 1986-87, 43%; Teplin & Pruett, 1992, 12%; Green, 1997, 1%).

Impact of Managed Care on Interactions between Police Officers and People with Mental Illness

Continued Criminalization

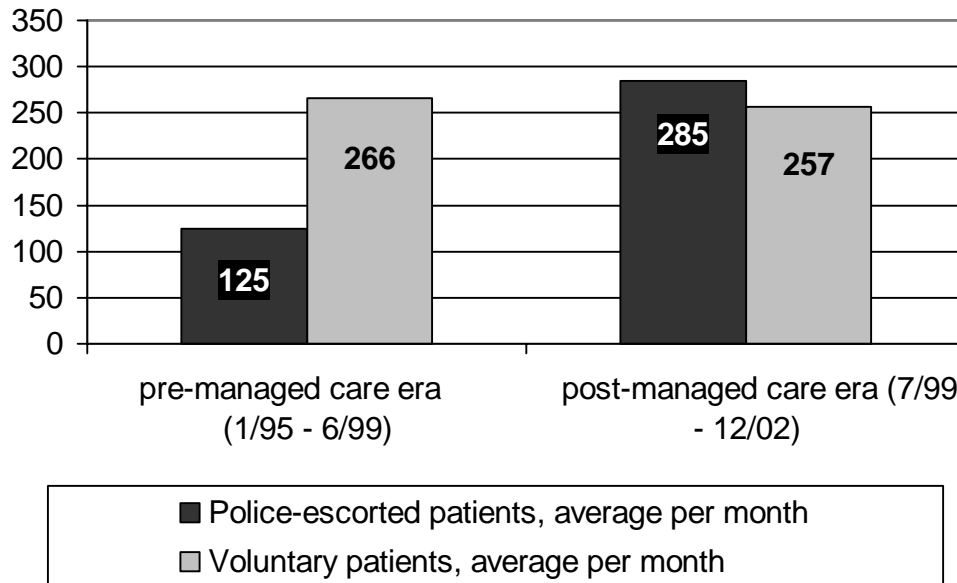
As managed care creates additional pressures to shift costs to “someone else’s budget”, more and more people with mental illness are expected to enter the criminal justice system (Morrissey, 1996). National data on the number of people with mental illness in jail and prison (c.f. Beck & Maruschak, 2001, July; Ditton, 1999, July) support this theory. More directly, a recent study in Washington State (Domino, Norton, Morrissey, & Thakur, 2004) found “a strong increase in the probability of all kinds of jail use for persons on Medicaid” (p. 1392) after the county changed from a fee-for-service system to a capitated payment system managed and administered by a private sector insurer. There was no increase in utilization of state hospital services. This suggests that the managed care organization under-served clients, some of whom committed criminal, dangerous or disruptive acts, which drew

the attention of law enforcement officers, who put them in jail rather than referring them back to the mental health care system.

New Information on Psychiatric Referral

Numbers from one public hospital in the Dallas area suggest that criminal arrests, though they may be increasing in number, have not replaced psychiatric referrals for police officers handling cases involving people with mental illness. Researchers at Parkland Memorial Hospital in Dallas tracked the number of voluntary and involuntary patients who arrived in the psychiatric emergency room (PER) before and after a public-sector managed care plan was implemented in the region. A significant increase in the number of police-escorted patients was found. Over the 54 months from 1/95 to 6/99 (the “pre-managed care era”), 6771 patients seen for an index visit (32.0% of all index visits) were escorted by police. Over the 30 months from 7/99 to 12/02 (the “post-managed care era”), 8538 patients seen for an index visit (52.6% of all index visits) were escorted by police (Claassen et al., 2005). Extrapolated from the researchers’ reported data, the number of police-escorted PER patients increased from an average of 125 per month before managed care to an average of 285 per month after managed care (see Figure 1).

Figure 1. Index visits to Parkland's psychiatric emergency room in the pre- and post-managed care eras.



Notes. Graph created from data reported in Claassen et al. (2005). An index visit was defined as a visit to the emergency room that was not followed by a repeat visit within 26 weeks. The number of repeat visits by police-escorted patients was not reported. The percentage of involuntary patients reported by Claassen et al. after the implementation of managed care (52% of all index visits to the psychiatric emergency room were brought by police officers) is quite high compared to most studies. Sales (1991) reported 22%; Way et al. (1993) reported a range of 10-53% across 10 facilities; Watson et al. (1993) reported 24%; Dhossche & Ghani (1998) reported 36%; Redondo & Currier (2003) reported 26%.

These numbers seem to bear out Appelbaum's observation that, as a result of managed care, "emergency rooms are seeing a steady increase in the number of patients coming in for psychiatric evaluations". Is his other statement also true, that "the increase in numbers is paralleled by a rise in the level of psychopathology and degree of acuity" (Appelbaum, 2003, p. 113)?

Clinical Profile of People Brought to the Psychiatric Emergency Room by Law Enforcement Personnel

Past research has indicated that police officers are highly selective in determining which cases should be handled with a referral for psychiatric evaluation rather than informal problem-solving or criminal arrest. Studies of the individuals referred by law enforcement officers for emergency psychiatric evaluation and treatment have found the referrals (sometimes called "mental illness apprehensions" or "mental hygiene arrests") are appropriate, and the option to make such referrals is possibly under-used. Compared to other psychiatric emergency room (PER) patients, police-escorted PER patients show more violent or dangerous behavior (McNiel et al., 1991; Redondo & Currier, 2003; Sales, 1991; Watson et al., 1993; Way et al., 1993), more severe impairment in functioning (McNiel et al., 1991; Watson et al., 1993), and require more acute-level intervention in the PER (Redondo & Currier, 2003; Sales, 1991). The clinical profile of police-escorted PER patients has been found to be similar to other PER patients in terms of diagnosis (McNiel et

al., 1991; Redondo & Currier, 2003; Sales, 1991; Way et al., 1993) and severity of mental illness (Way et al., 1993), and they are at least as likely to be hospitalized (McNiel et al., 1991; Redondo & Currier, 2003; Sales, 1991; Way et al., 1993).

No published studies have assessed whether this profile has changed under managed care.

CHAPTER THREE

Local Background

Managed Behavioral Health Care in Texas: NorthSTAR

NorthSTAR Program Structure

Starting July 1, 1999, mental health services were carved out of Texas' "STAR" Medicaid waiver programs, combined with substance abuse services, and placed under the administration of a new program called NorthSTAR. NorthSTAR uses federal, state and local funds to serve Medicaid and indigent populations. As described in a report to the 78th Legislature,

The NorthSTAR pilot pools funds from Medicaid, indigent services (pure general state revenue) and substance abuse services into a single stream...The goal is to pool state funds and contract on a capitated basis with specialized mental health managed care companies or BHOs, to provide a single unified set of benefits to eligible clients. Community centers and other providers in the region then contract on a fee-for-service basis as network providers with the BHOs. ([Texas] Senate Committee on Health and Human Services, 2002, November, 1.57)

NorthSTAR follows an "authority-provider separation model." The Dallas Area NorthSTAR Authority (DANSA) coordinates strategic planning, oversees consumer issues, provides ombudsman services, and monitors service quality. The BHO, ValueOptions, "bears the financial risk of the program" and "is responsible for maintaining an adequate provider network and paying network providers, in addition to managing care for NorthSTAR enrollees" (Lyndon Baines Johnson School of Public Affairs at the University of Texas, 2003, September, p. 4).

The NorthSTAR program structure, shown in Figure 2, is unique to a seven-county region in north central Texas, shown in Figure 3.

Thinning of the Psychosocial Safety Net

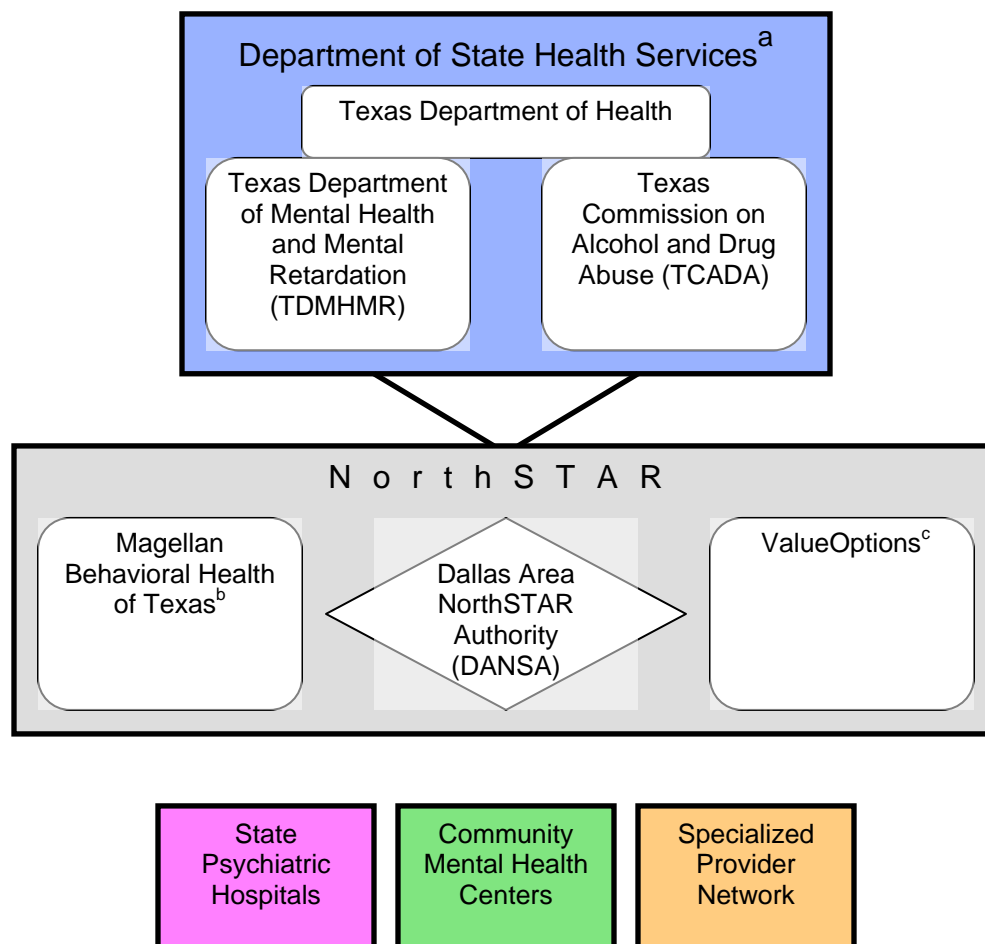
As of September, 2004, ValueOptions received insurance premiums from the state for 1.22 million “Covered Lives” (monthly average) in the NorthSTAR region (Dallas Area NorthSTAR Authority [DANSA], 2004, September). DANSA defines Covered Lives as “individuals who, if they have a clinical need for NorthSTAR services, would be served” (2004, September, p. v). Change in the number of “Covered Lives” in the NorthSTAR region from 2000 to 2004 is shown in Figure 4.

To receive services through NorthSTAR, individuals must be indigent (income below 200% of the federal poverty level) or eligible for Medicaid, and meet state criteria for the “priority population”. The priority population is defined as

Adults who have severe and persistent mental illnesses such as schizophrenia, major depression, bipolar disorder, or other severely disabling mental disorders that require crisis resolution or ongoing and long-term support and treatment. ([Texas] Senate Committee on Health and Human Services, 2002, November, 1.50-1.51)

As of September, 2004, DANSA reported that 18,000 people (monthly average) were receiving NorthSTAR services. This is a substantial increase over past years, as shown in Figure 5. As stated by NorthSTAR, “Demand for services continues to grow which presents a problem not only locally, but statewide” (DANSA, 2004, September, p. v). ValueOptions has been able to “break even” financially for only a few quarters in its 5-year history (DANSA, 2004, September).

Figure 2. Administrative Organization of NorthSTAR.



^a On September 1, 2004, the Texas Department of Health, TDMHMR, and TCADA were integrated into the new Department of State Health Services.

^b A carve-out structure with two BHOs was requested by the state legislature to give consumers a choice of insurance providers, but Magellan dropped out of NorthSTAR in 2001 due to financial losses and has not been replaced.

^c ValueOptions is the second-largest managed behavioral health care organization in the U.S. (Open Minds, 2002, October 30).

Figure 3. NorthSTAR Region of Texas.

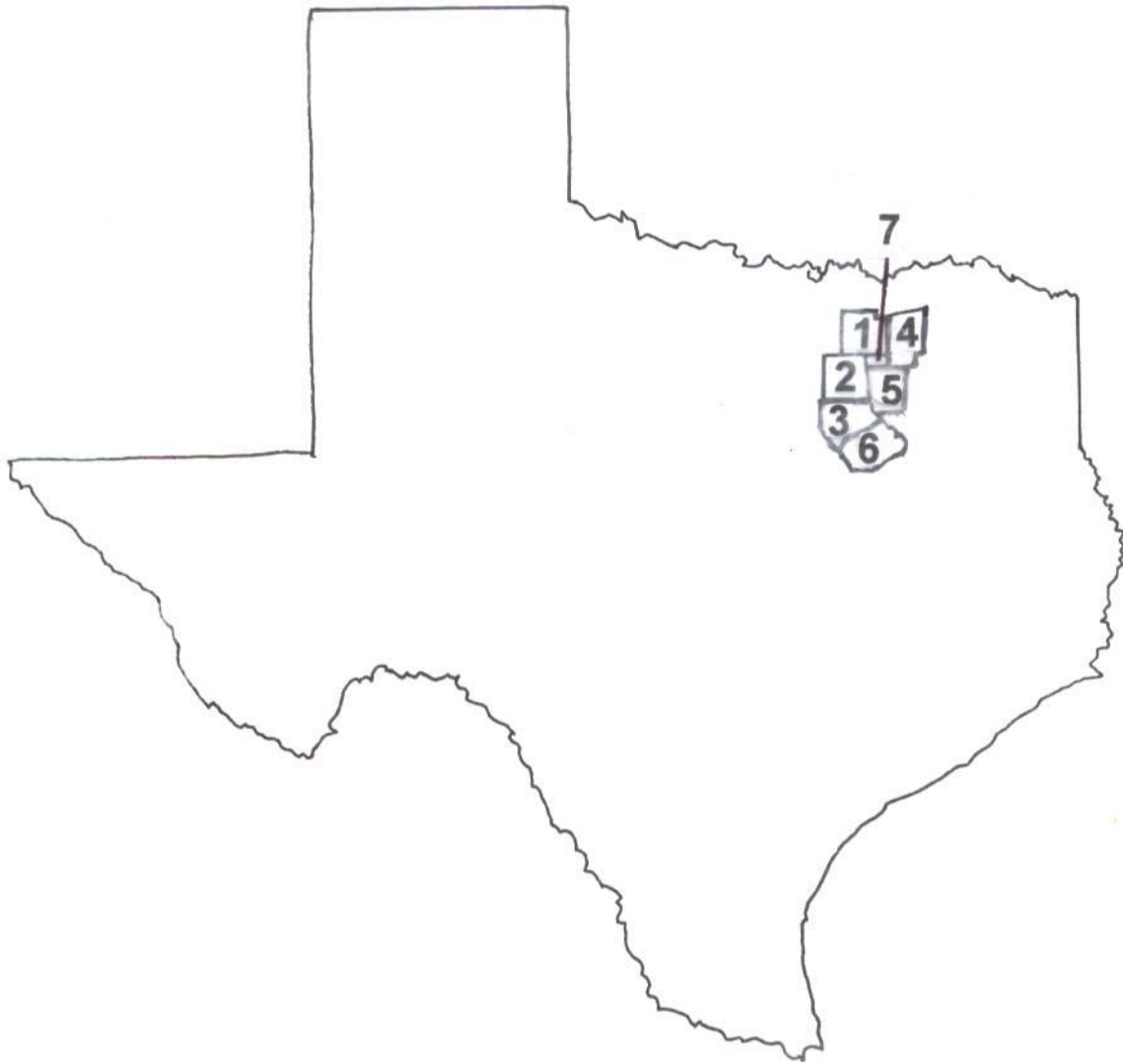
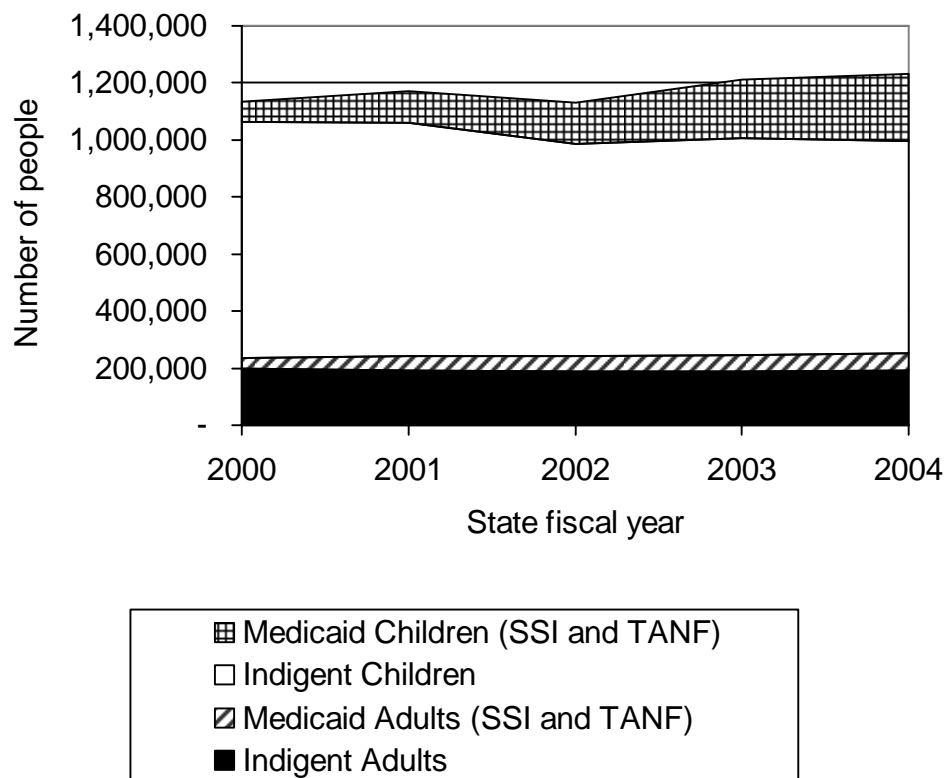


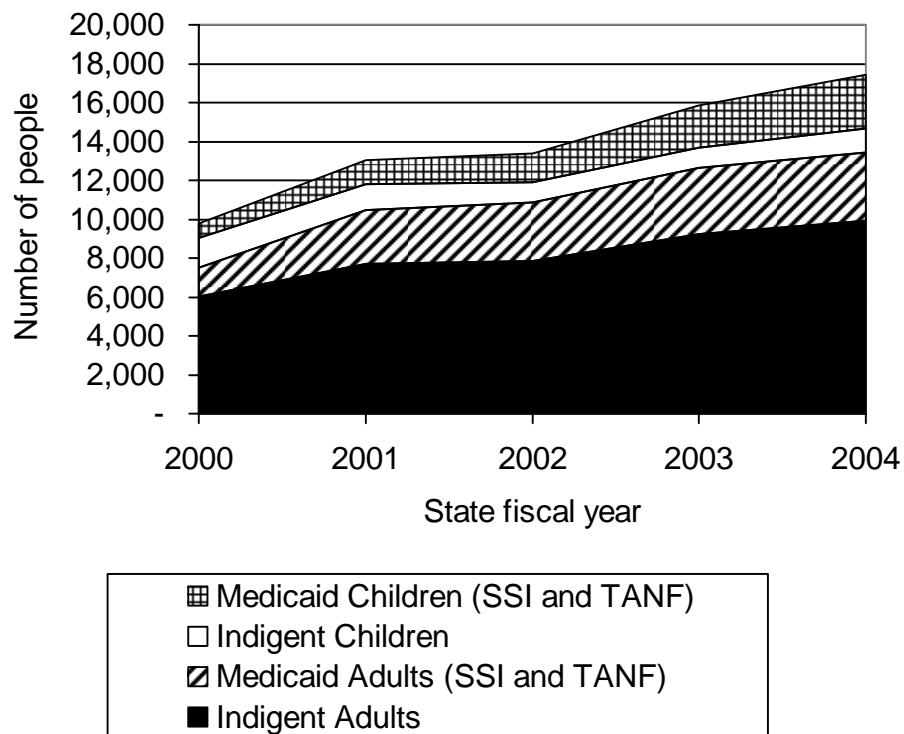
Figure 3. The seven adjoining counties that compose the NorthSTAR region are: Collin (1), Dallas (2), Ellis (3), Hunt (4), Kaufman (5), Navarro (6), and Rockwall (7). The combined population of these counties is 3,058,047 (U.S. Census Bureau 2002 estimate).

Figure 4. NorthSTAR "Covered Lives", Average per Month, State Fiscal Years 2000-2004.



Note. This table shows the number of premiums the state paid to Value Options, not the number of individuals who were eligible to receive services. The origin of the "Covered Lives" figure is unclear, but it may be an estimate of the number of people in the 7-county NorthSTAR Region who were expected to be "indigent" (having an income below 200% of the federal poverty level) plus the number of people expected to have Medicaid. Of this pool, only those who demonstrated clinical need could receive services. Data for this figure was obtained from the NorthSTAR Quarterly Data Book (2004, September).

Figure 5. NorthSTAR “Persons Served”, Average per Month, State Fiscal Years 2000-2004.



Note. People with SSI (Supplemental Social Security Income) or TANF (Temporary Aid to Needy Families) are eligible for Medicaid-funded medical services (i.e., federal Medicaid funds help pay for a range of mental health services). People in the “Indigent” category do not have Medicaid. Services for people who are in the Indigent category must be funded from general state revenue or local sources without federal match dollars. Data for this figure was obtained from the NorthSTAR Quarterly Data Book (2004, September).

Funding has not kept up with the growth of the NorthSTAR program.

At current funding levels, survivability of NorthSTAR depends on use of the priority population definition, and a 200% of poverty eligibility criterion for indigent persons. The current influx of customers threatens survivability even with those controls. (DANSA, 2004, September, p. viii)

Service Disparity

Beginning in 1995, there were “extensive efforts to obtain Medicaid eligibility for persons served by the TDMHMR” to help finance the operations of the Texas Department of Mental Health and Mental Retardation (Texas Department of Mental Health and Mental Retardation [TDMHMR], 2002, January, p.1) and, later, NorthSTAR. From 1997 to 2001, Medicaid spending for mental health services increased 36% (TDMHMR, 2002, January).

Increasing the number of people enrolled in Medicaid produced more federal funds to pay for a variety of TDMHMR services for Medicaid-eligible patients, but there were unexpected repercussions for the state and for indigent patients. Since both state-match Medicaid dollars and funds for indigent services come from general state revenue, more money spent on state-match Medicaid left less money for the indigent (TDMHMR, 2002, January; [Texas] Senate Committee on Health and Human Services, 2002, November). Many community mental health and mental retardation centers eliminated programs not funded by Medicaid (TDMHMR, 2002, January).

As a consequence, an increasing proportion of funds available to the medically indigent is limited to medication services, and a decreasing

proportion of funding is available to provide other important services such as rehabilitation and service coordination. (TDMHMR, 2002, January, p. 6)

The difference between services available to medically indigent patients and services available to Medicaid-eligible patients is termed "service disparity."

The reduction in services for medically indigent patients has adverse clinical, social, and financial consequences: as the percentage of indigent patients receiving state-funded medication-only services has gone up, so has the number of indigent patients with substance abuse problems and criminal justice system involvement (TDMHMR, 2002, January).

The impact of this disparity on the system is significant... Both criminal justice involvement and substance abuse may suggest the state's overall costs of treating these individuals will be higher than what would have been the case if they had been adequately treated in the mental health system initially. ([Texas] Senate Committee on Health and Human Services, 2002, November, 1.66)

In spite of problems related to service disparity, NorthSTAR's efforts to increase the proportion of Medicaid-supported enrollees "must be maintained if not increased to insure the continued viability of the project" (DANSA, 2003, March, p. vi). Under these conditions, contacts between police officers and medically indigent patients can be predicted to increase, and police officers may have to make more decisions about whether cases should be handled with informal problem-solving, criminal arrest, or referral to the hospital for emergency psychiatric services. As previously noted, police officers' decision-making process in these cases may be influenced by the perceived efficacy and availability of alternatives.

Higher Criteria for Hospital Admissions

Following national trends, the number of inpatient beds in Texas state psychiatric hospitals declined 81% from 1970 to 1999 (Heikes, Arrigona, & Eisenberg, 2000, February), before NorthSTAR was implemented (see Figure 6). After 1999 bed occupancy numbers leveled off at a point where demand pressures were sufficient to oppose any further reduction in the use of state beds. In 2004, Texas state hospitals were reported to be functioning “at or near full capacity” with 98% of 2,260 beds occupied (The Associated Press, August 2, 2004).

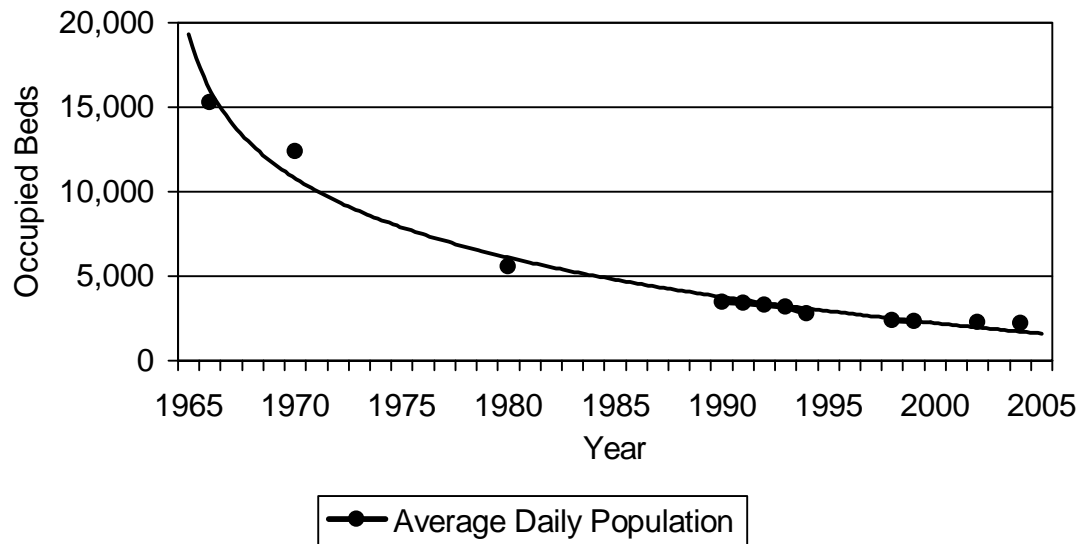
Fewer occupied beds does not mean fewer admissions, however.

While there has been an overall reduction in the number of hospitals providing psychiatric care as well as a reduction in the number of available psychiatric beds, there has not been a concomitant reduction in admissions to state mental health facilities. In fact, there has been an overall increase in the number of admissions to state mental health facilities. (TDMHMR, 2002, June)

Between 1996 and 2005, state hospital admissions for all of Texas increased 55%, with a 100% increase in stays of 30 days or less and a 48% decrease in stays of 91 days or more (Department of State Health Services, working draft 04-2005).

This pattern of utilization of state mental health facilities by the local community mental health authorities has increased state mental health facility operating costs by substituting the more expensive short length-of-stay for the relatively less expensive, longer length-of-stay. (Department of State Health Services, working draft 04-2005; Texas Department of Mental Health and Mental Retardation, 2002, June)

Figure 6. Utilization of Inpatient Beds at Texas State Hospitals, 1966-2004.



Note. Numerical data to create this graph was obtained from Window on State Government (1995; 1999), [Texas] Senate Committee on Health and Human Services (2002, November); [Texas] Criminal Justice Policy Council (Heikes et al., 2000, February); and The Associated Press (August 2, 2004).

Single Portal Policy

Since NorthSTAR was implemented in 1999, one of its most persistent problems has been the difficulty of containing costs for state hospital services. Under the current system, NorthSTAR receives an allocation of state hospital inpatient services based on population. (For example, in state fiscal year 2000, the allocation was 4,380 bed days per year per 100,000 population). If bed use by NorthSTAR patients exceeds allocation, the added costs must be shouldered by ValueOptions (“full risk”). ValueOptions is therefore highly motivated to minimize the utilization of inpatient beds at the state hospitals.

When NorthSTAR “significantly overused its state hospital resources, increasing overall costs” in its first two years of operation ([Texas] Senate Committee on Health and Human Services, 2002, November, 1.57), an analysis of state hospital admission data in 2001 showed that the vast majority of state hospital admissions came from Dallas County, where there had been a significant increase (NorthSTAR, 2001, June). To address this problem, NorthSTAR created a “single portal” policy and designated a county hospital, Green Oaks, to act as Dallas County’s “front door” to the state hospital system. The NorthSTAR Reference Guide states that indigent patients, whether enrolled in NorthSTAR or not, can present to any hospital emergency room, but they “must be transferred to a designated inpatient facility for triage or final eligibility determination” (Central Office of the Texas Department of Mental Health and Mental Retardation, 2002, “Process for Acute Emergency Presentation-Non Medicaid”). In keeping with the “single portal”

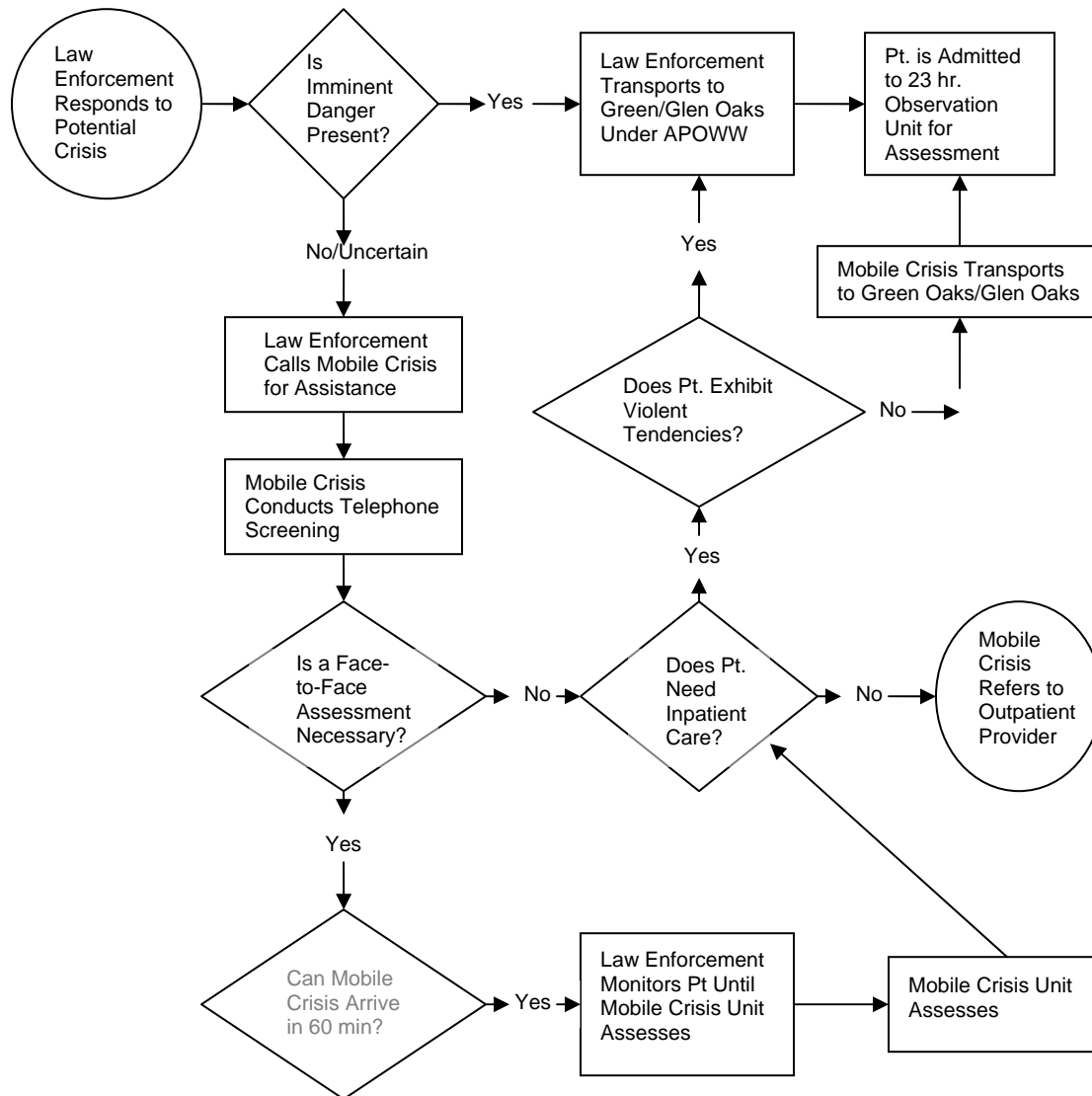
policy, DANSA indicated that all individuals detained by law enforcement officers for an emergency psychiatric evaluation should also be transported to designated inpatient facilities (see Figure 7). Diversion and referral services were consolidated at Green Oaks, and a 23-hour observation room was established to prevent unnecessary admissions. As a result of these changes, Dallas County admissions to Texas State Hospitals through Green Oaks dropped 50% from February to June, 2001 (NorthSTAR, 2001, June). Eleven percent of the patients seen at the Green Oaks portal were admitted to a state hospital: 2% admitted directly and 9% admitted to Green Oaks first and transferred to a state hospital later (NorthSTAR, 2001, June).

Currently the threshold for state hospital admission is very high.

There are no voluntary admits to the State Hospitals today. All state hospital admits are under an order of protective custody (OPC). Usually they present or are taken to Parkland and/or Green Oaks and if they need more than a couple of days (1 to 4) to stabilize an OPC is pursued for admit to the state hospital. (DANSA, Personal communication, 11/10/04)

If police officers are frustrated or discouraged by the low likelihood of hospitalization through Green Oaks, they may be inclined to handle more cases with criminal arrest; or, ignoring NorthSTAR's directions, they may transport more detainees to a non-NorthSTAR facility like Parkland where the likelihood of psychiatric hospitalization seems to be greater. If this is the case, police officers may be the inadvertent agents of cost-shifting between the mental health system and the criminal justice system, and/or between Green Oaks and Parkland.

Figure 7. Behavioral Health Emergency Procedures for Law Enforcement Officers.



BEHAVIORAL HEALTH EMERGENCY PROCEDURES

Note. Flowchart has been edited to omit hospital procedures. The original source is Dallas Area NorthSTAR Authority (2004), *Behavioral health emergency procedures for law enforcement officers*, <http://dansatx.org/docs/Behavioral%Health%Emergency%20Procedures%20Flowchart.doc>.

Local Laws and Law Enforcement Procedures Regarding People with Mental Illness

Police Discretion

When confronted with a person who appears to have mental illness, how do law enforcement officers decide whether to make an arrest, a psychiatric referral, or to resolve the situation informally? State laws and local policies set the legal criteria for the involuntary detention of persons with mental illness, but law enforcement officers still have wide latitude.

Although the law legitimizes the police officer's power to intervene, it does not – and cannot – dictate the officer's response in any given situation. As with all law enforcement decisions, the police must exercise discretion in choosing the most appropriate disposition. (Teplin, 2000, p. 9)

Embedded in police officers' discretionary authority in mental illness cases is the traditional doctrine of *parens patriae*, which allows police officers “to act on the behalf of mentally ill individuals who cannot protect their own welfare” (Durham, Carr, & Pierce, 1984, p. 581).

Criminalization in Texas

Data from the Criminal Justice Policy Council (Heikes et al., 2000, February) suggest that a substantial number of police cases involving people with mental illness end in criminal arrest. From 1988 to 1998, the number of mentally ill offenders in the Texas state criminal justice system increased in excess of the overall growth

in prison population. The number of people with mental illness among the total prison population increased 262%; the number of people who received inpatient mental health services in the prison system increased 262%; and the number of people who received outpatient mental health services increased 429%. Of 550,000 adults involved in the Texas criminal justice system in 1998 (in jail or prison, on parole or probation), 25,000 were receiving treatment, under specialized direct supervision, or were part of a specialized mental health caseload because of mental illness (Heikes et al., 2000, February). It remains unclear whether these numbers represent an increase in the total number of mentally ill persons coming to the attention of police officers, a shift in police officers' method of dealing with those cases, or just improvement in the identification of individuals with mental health needs after they have entered the criminal justice system. Possibly, more people with mental illness are entering the criminal justice system because they are not receiving adequate mental health services in the current managed care environment.

Apprehension by a Peace Officer Without a Warrant (APOWW)

In Texas, the legal action through which individuals with suspected mental illness can be involuntarily detained and transported to a hospital by law enforcement officers for an emergency psychiatric evaluation is called Apprehension by a Peace Officer Without a Warrant (APOWW). Section 573.001 of the Texas Statutes specifies that a law enforcement officer may take a person into custody

without a warrant if the officer believes the person is mentally ill and “because of that mental illness there is a substantial risk of serious harm to the person or to others unless the person is immediately restrained” (Health and Safety Code, 2002). In addition to threatening, destructive, or reckless behavior, the law enforcement officer’s judgment about whether there is “substantial risk of serious harm” can take into account the report of a credible witness, the circumstances in which the apprehended person is found, and “evidence of severe emotional distress and deterioration in the person’s mental condition” (§573.001). “Deterioration” may be evidenced by inability to provide for basic needs such as food, clothing, shelter, or medical care, such that the person’s health and safety are clearly at risk (Castellano-Hoyt, 2003). The criteria for an APOWW apprehension thus approximates the “danger to self, danger to others, or grave disability” standard that is widely used in state laws governing involuntary psychiatric hospitalization (Hoge, Appelbaum, & Greer, 1989; Lamb, Weinberger, & DeCuir, 2002; Segal, Watson, Goldfinger, & Averbuck, 1988). Relevant sections of the Mental Health Code (§ 573.001 of the Health and Safety Code, Texas Statutes, 2002) are presented in Table 1.

In addition to the Mental Health Code, Dallas law enforcement personnel are guided by policies and procedures outlined in the General Orders Code of Conduct and Patrol S.O.P. Relevant sections of these documents are reproduced in Tables 2 and 3.

Table 1

Mental Health Code (Health and Safety Code, Texas Statutes, 2002)

§ 573.001. Apprehension by Peace Officer Without Warrant

- (a) A peace officer, without a warrant, may take a person into custody if the officer:
- (1) has reason to believe and does believe that:
 - (A) the person is mentally ill; and
 - (B) because of that mental illness there is a substantial risk of serious harm to the person or to others unless the person is immediately restrained; and
 - (2) believes that there is not sufficient time to obtain a warrant before taking the person into custody.
- (b) A substantial risk of serious harm to the person or others under subsection (a)(1)(B) may be demonstrated by:
- (1) the person's behavior; or
 - (2) Evidence of severe emotional distress and deterioration in the person's mental condition to the extent that the person cannot remain at liberty.
- (c) The peace officer may form the belief that the person meets the criteria for apprehension:

Table 1 (continued)

Mental Health Code (Health and Safety Code, Texas Statutes, 2002)

<ul style="list-style-type: none"> (1) from a representation of a credible person; or (2) on the basis of the conduct of the apprehended person or the circumstances under which the apprehended person is found.
<p>(d) A peace officer who takes a person into custody under Subsection (a) shall immediately transport the apprehended person to:</p> <ul style="list-style-type: none"> (1) the nearest appropriate mental health facility; or (2) a mental health facility deemed suitable by the local mental health authority, if an appropriate mental health facility is not available.
<p>(e) A jail or similar detention facility may not be deemed suitable except in an extreme emergency.</p>

Note. Section 573.001 of the Health and Safety Code did not change from 1996 to 2004. However, related sections of the Mental Health Code not shown here were revised in 2001 to require the development of a jail diversion pilot program to minimize the incarceration of persons with mental illness.

Table 2

General Orders Code of Conduct (Dallas Police Department, 2000)

315.09 Intoxication

- D. An intoxicated person in need of medical treatment at the time of arrest will be booked for the record, the charge released, and referred to Parkland Memorial Hospital for treatment. Do not place a hold on an intoxicated person sent to the hospital unless the individual was booked into jail prior to the need for hospitalization or is suspected of an offense other than public intoxication.

315.11 Mentally Deranged Persons

- A. Mentally deranged persons will be handled in accordance with Article 5547 of the Revised Civil Statutes titled the *Texas Mental Health Code*. Officers will make arrests only in keeping with the statutes; i.e., that the person accused is contacted under circumstances that indicate the individual is mentally ill, and because of this, is likely to injure himself or others if not immediately restrained.
- B. Mentally deranged persons taken into custody will be processed according to Patrol Operations S.O.P. 1600, which will be available for reference.

Note. The sections of the General Orders Code of Conduct shown here did not change from 1996 to 2000, but subsequent revisions may have occurred. Newer versions of this document were requested from the Dallas Police Department but had not become available at the time of this printing.

Table 3

Patrol S.O.P., Mentally Ill Persons, Procedure 1600 (Dallas Police Department, 1992)

- F. Proposed patients will be handled in accordance with Article 5547, Revised Civil Statutes titled the "Texas Mental Health Code". Officers will make warrantless apprehensions only in accordance with such code. Officers will take proposed patients into custody when:
1. The officer has reason to believe and does believe upon the representation of a credible person, that the person is mentally ill and the mental illness represents a substantial risk of serious harm to himself or others unless immediately restrained or;
 2. The officer, upon the basis of the conduct of a person or the circumstances under which the person is found, believes that the person is mentally ill and the mental illness represents a substantial risk of serious harm to himself or others unless immediately restrained.
 - a. The potential harm may be demonstrated either by the persons' behavior or by evidence of severe emotional distress in his mental condition to the extent that the person cannot remain at liberty. The proposed patient DOES NOT have to be conducting himself in a violent manner at the time that the officer observes the proposed patient.

Table 3 (continued)

Patrol S.O.P., Mentally Ill Persons, Procedure 1600 (Dallas Police Department, 1992) (capitalization in original)

(1) An officer observing the proposed patient, and/or based on information from a credible person, that comes to the conclusion that the proposed patient should be immediately restrained, not having sufficient time to obtain a warrant, (see page 5 for Magistrate's Warrant Process), may take the proposed patient into custody and transport to Parkland Hospital, and immediately file for the proposed patient's detention.

(2) In no case shall a jail or similar detention facility be deemed suitable except in an extreme emergency.

G. AN OFFICER COMING INTO CONTACT WITH A PROPOSED PATIENT, EITHER ON CALL OR ON VIEW, THAT MEETS THE CRITERIA AS OUTLINED ABOVE, WILL USE THE FOLLOWING PROCEDURE:

1. IGNORE VERBAL ABUSE FROM THE PERSON, AVOID EXCITEMENT, BE EVER ALERT.
2. MAKE EVERY EFFORT TO CALM THE PROPOSED PATIENT, IF REQUIRED.
3. TRY TO APPEAR CASUAL WHILE REMAINING ALERT AND ON GUARD.

Table 3 (continued)

Patrol S.O.P., Mentally Ill Persons, Procedure 1600 (Dallas Police Department, 1992) (capitalization in original)

4. TAKE AS MUCH TIME AS NECESSARY; DO NOT RUSH THE SITUATION.
5. NEVER THREATEN OR INTIMIDATE. EMPATHY AND UNDERSTANDING ARE USUALLY MORE PRODUCTIVE THAN THREATS OR FEAR.
6. AVOID USE OF TERMS WHICH MAY FURTHER EXCITE, SUCH AS "CRAZY", OR "PSYCHO", ETC.
7. AVOID LYING TO A PROPOSED PATIENT; DECEIT CAN MAKE IT DIFFICULT TO GAIN THE PROPOSED PATIENT'S CONFIDENCE.
8. OFFICERS ARE ENCOURAGED TO REQUEST ASSISTANCE OF THE CRISIS INTERVENTION TEAM AS AN ALTERNATIVE (SEE PAGE 7) OR THE BUREAU SOCIAL WORKER DURING DUTY HOURS.
9. IF FORCE MUST BE USED IN ADDITION TO HANDCUFFS, CONSIDER LEG RESTRAINTS. THE PROPOSED PATIENT COULD BE WRAPPED IN A BLANKET. USE EVERY EFFORT TO KEEP THE PROPOSED PATIENT FROM HARMING THEMSELVES, OTHERS, OR ANY OFFICERS.

Table 3 (continued)

Patrol S.O.P., Mentally Ill Persons, Procedure 1600 (Dallas Police Department, 1992) (capitalization in original)

<p>10. THE OFFICER IS NOT RESPONSIBLE FOR FINAL DETERMINATION AS TO WHETHER INVOLUNTARY COMMITMENT WILL BE MADE, BUT ONLY DETERMINES IF IMMINENT HARM IS LIKELY.</p> <p>H. The supervisor, on arrival, will confer with the initial officer, and observe the situation. If the initial officer made his assessment based on representation of a credible person, the supervisor will confer with that person. On agreement that immediate restraint is necessary the following will occur:</p> <p>NOTE: If criminal felony charges are also pending, the supervisor will confer with assigned investigators before sending the proposed patient to Parkland Psychiatric Emergency Room.</p> <p>I. APPOW [sic] Process</p> <p>1. Officers will transport the proposed patient directly to Parkland Hospital. On arrival, in the absence of other medical problems, officers will take the proposed patient directly to the Psychiatric Emergency Room. Obtain from, complete and return to Parkland Psychiatric Emergency Room personnel an APPOW Form (Peace Officers Application for Emergency Detention Without a Warrant). Officers will note "Clear" or "Charges Pending" on the upper right corner of the APPOW.</p>

Table 3 (continued)

Patrol S.O.P., Mentally Ill Persons, Procedure 1600 (Dallas Police Department, 1992) (capitalization in original)

NOTE: Officers do not have to drop charges in order for the PMH

Psychiatric Emergency Room to examine possible mentally ill person.

a. If there are charges other than investigation of mental illness, the officers will:

- (1) Inform Parkland Psychiatric Emergency Room personnel of any pending criminal charges and whether there are city or investigative holds. At this point, Parkland will take complete custody of the proposed patient;
- (2) Complete all applicable offense and arrest reports. Officers will contact the Booking Supervisor to ensure that the booking process is complete and all paperwork has been approved;
- (3) Clear, upon completing the booking process; and,
- (4) Jail personnel will place the paperwork in the Parkland file, pending 72 hour mental illness probable cause hearing at the Mental Diagnostic Center. Depending on the outcome, MDC personnel and Booking Supervisors will arrange to drop charges or transport prisoner to Lew Sterrett.

NOTE: The 72 hour filing deadline starts once the subject reaches Lew Sterrett.

Table 3 (continued)

Patrol S.O.P., Mentally Ill Persons, Procedure 1600 (Dallas Police Department, 1992)

- b. If no criminal charges are pending, the officers will:
- (1) Complete an offense/incident report documenting the circumstances of the apprehension, and
 - (2) Complete the original only of a "Warrants Only" arrest report, listing all available information. If the proposed patient's name cannot be obtained, the report will be handles in accordance with the Legal Services Division Standard Operating Procedures which will be available for reference. Any related service numbers should be indicated on the form which is not an arrest report as such, but suffices to provide a locator entry into the Criminal System. The report will be processed according to Legal Services Division Standard Operation Procedures.

Note. The sections of the Patrol S.O.P. shown here were considered "current" as of 2001, but subsequent revisions may have occurred. Newer versions of this document were requested from the Dallas Police Department but had not become available at the time of this printing.

It may be noted that references to Parkland Memorial Hospital in the Dallas Police Department's General Orders Code of Conduct and Patrol S.O.P. are not entirely consistent with NorthSTAR's "Behavioral Health Emergency Procedures for Law Enforcement Officers" flowchart. The Dallas Police Department's documents indicate Parkland Memorial Hospital is an appropriate receiving facility, while NorthSTAR's flowchart specifies Green Oaks and Glen Oaks, two county hospitals under contract with NorthSTAR. The difference seems to be based on two different readings of section 573.001(d) of the Mental Health Code. Traditionally police officers have used Parkland, a "near" and "appropriate" mental health facility (573.001(d)(1)). NorthSTAR, on the other hand, thinks the phrase "deemed suitable by the local mental health authority" (573.001(d)(2)) gives DANSA the power to designate other sites (TDMHMR legal department, personal communication, June 4, 2003).

Further inquiry suggests there has been some accommodation if not agreement. Police officers continue to use Parkland for people who need emergency psychiatric evaluations, "allowing Parkland to act in its historical role as a provider of important services, including treating APOWWs" (NorthSTAR representative, personal communication, June 10, 2004). ValueOptions reimburses Parkland for billed emergency services and has designated Parkland as an "enrollment site" "to facilitate access" (NorthSTAR representative, personal communication, June 10, 2004). Parkland, in turn, continues to provide emergency assessment and stabilization services for police-escorted patients (at an increasing rate, as shown in

the 2005 study by Claassen et al.) but may transfer some psychiatric emergency room patients to Green Oaks for hospitalization if inpatient care seems needed.

These political and procedural issues make it hard to correctly interpret the increase in number of police-escorted psychiatric emergency room patients found in the Claassen study. Has the total number of police-escorted psychiatric emergency room patients increased in the Dallas area, or are police simply routing a larger proportion of them to Parkland? If the total number of “APOWWs” has increased, is it because police officers are encountering more severely ill people with mental illness, or because they are applying existing laws and procedures more liberally? A new study that looks at severity of illness might help answer these questions.

CHAPTER FOUR

New Study

Overview

The following study will examine the clinical characteristics of police-escorted psychiatric emergency room (PER) patients seen at the same large public hospital in metropolitan Dallas as where the 2005 Claassen et al. study took place. A new set of data will be gathered retrospectively from patient charts to compare patients seen in 1996 to those seen in 2004. A brief medical necessity scale for mental disorders developed at the University of Washington (Roy-Byrne et al., 1998) will be used to measure several aspects of illness severity, including psychosis, depression, suicidality or homicidality, hostility or aggression, uncooperativeness, treatment noncompliance, substance abuse, physical dysfunction, role dysfunction, and lack of social support. Demographic variables such as age, ethnicity, and insurance status will also be compared to ascertain which groups have been most vulnerable to recent changes in the system of care.

Although the concept of “before and after managed care” is being greatly simplified by using the full-implementation date of the local public-sector managed behavioral health care program (2000) as a point of reference, this division point is not entirely arbitrary. The impact of the managed care program, NorthSTAR, is believed to be pervasive. NorthSTAR covers a 7-county region with more than 3

million people. It manages state and local funds for the indigent as well as Medicaid funds, for inpatient and outpatient services for substance abuse and mental health. Few public-sector carve-outs in the U.S. are as comprehensive. In state fiscal year 2003, direct service expenditures by NorthSTAR's managed care vendor totaled over \$100 million (Dallas Area NorthSTAR Authority, 2004, September).

Hypotheses

The first two hypotheses of the study concern demographic variables. First, it is hypothesized that a greater proportion of police-escorted psychiatric emergency room patients seen at Parkland in 2004 will be non-white, compared to those seen in 1996. Examination of service utilization by minorities is appropriate in this context because “racial and ethnic minorities bear a greater burden from unmet mental health needs” (U.S. Department of Health and Human Services, 2001, p. 3). Due to pre-existing socioeconomic conditions, minorities may be more vulnerable than whites to psychiatric crises and police attention if their access to services has been reduced under the new managed care system.

Second, it is hypothesized that a greater proportion of police-escorted psychiatric emergency room patients seen at Parkland in 2004 will be medically indigent, compared to those seen in 1996. “Medically indigent” will be defined as having no insurance at the time of arrival at the ER and lacking personal resources to pay for services. This hypothesis reflects concerns raised by the state legislature

about the possible impact of service disparity, and it also reflects findings by McAlpine and Mechanic (McAlpine & Mechanic, 2002) on the growing use of emergency rooms by uninsured persons with psychiatric disorders.

The third hypothesis is an overall increase in the severity of illness. This information is needed to understand the increase in number of police-escorted psychiatric emergency room patients arriving at Parkland. If increased severity of illness is found, it is unlikely that police officers have broadened their criteria for psychiatric apprehension or simply developed a preference for Parkland as a receiving site over other facilities.

Why would increased severity of illness be found? Professional literature on this topic suggests that the decision-making process of law enforcement officers in mental illness cases distills the number of people who need urgent care for mental illness to those who meet legal criteria for involuntary apprehension and are most likely to be admitted to the hospital (Bittner, 1967; Engel & Silver, 2001; Monahan, Caldeira, & Friedlander, 1979; Teplin & Pruett, 1992). As law enforcement officers perceive higher criteria for hospitalization in the managed care era, they may select only the most severely ill and clearly “psychiatric” cases for emergency psychiatric evaluations. Alternatively, police officers may be confronted with so many individuals with mental illness that they now resolve only the most severe cases with psychiatric apprehension, which is a time-consuming event, or they may be motivated by a desire to avoid criminalization. Accordingly, the third hypothesis in the following study is that the 2004 patients are, as a group, at least as severely ill as those seen

in 1996. To test this hypothesis, severity of illness will be measured in 2 ways: disposition from the ER (likelihood of hospitalization) and total score on the Roy-Byrne medical necessity scale.

The fourth hypothesis is an increase in overt dangerousness, operationally defined as higher scores on items 3 and 4 of the Roy-Byrne scale (suicidal/homicidal and hostility/aggression). The law allows police officers to detain for emergency psychiatric treatment individuals who appear to be “gravely disabled” due to mental illness (i.e., unable to provide for basic needs such as food, clothing, shelter, or medical care). Under managed care, however, hospitals may have to save inpatient services for patients who have demonstrated overt violence. The decreasing likelihood of hospitalization and shortening of hospital stays for nonviolent patients may persuade police officers not to “waste their time” on individuals who are severely impaired but not acutely dangerous. Gradually the population of police-escorted psychiatric emergency room patients may shift toward individuals who threaten or demonstrate violent behavior at the time of their apprehension, while those who are “quietly crazy” may be diverted to the criminal justice system or handled informally.

CHAPTER FIVE

Methodology

Site

Parkland Memorial Hospital is part of a hospital district of the State of Texas. It is one of just three public acute-care hospitals in Dallas County, the only public acute-care hospital in the City of Dallas, and the second largest of all Dallas County hospitals in terms of bed space (Center for Health Statistics, 2003, December). Parkland serves as the major teaching hospital for the University of Texas Southwestern Medical School. In 2002 Parkland Memorial Hospital ranked second among Texas acute-care hospitals in uncompensated care (Center for Health Statistics, 2004, February), reflecting the large number of indigent patients served by this facility.

The psychiatric section of the emergency room at Parkland provides acute psychiatric care and crisis intervention. The psychiatric emergency room served approximately 8,000 patients in 1993 (Gilfillan et al., 1998) and has been the site for several studies of psychiatric emergency room patients (e.g., Claassen, Gilfillan et al., 2002; Claassen et al., 1997; Claassen et al., 2005; Claassen, Pulliam et al., 2002). All patients in the psychiatric emergency room are treated by psychiatric residents and attending psychiatrists, with assistance from psychiatric interns, psychology interns, medical students, and nursing staff.

Participants

The psychiatric emergency room (PER) database, a de-identified list of the clinical and demographic characteristics of patients seen in the psychiatric emergency room of Parkland Memorial Hospital, will be used to select cases to be used for the study. Manner of arrival is a routinely-collected variable in the PER database, so lists of all police-escorted arrivals (specifically, those who arrived under APOWW) can be generated for 1996 and 2004. From these lists, every 20th visit will be chosen to form sample groups for the study. Paper and electronic charts for these patients will then be reviewed individually to collect specific study data.

Independent Variables

The independent variables in this study are APOWW status (Apprehension by a Peace Officer Without a Warrant; law enforcement officer initiated the apprehension of an individual with apparent mental illness and brought the person to the emergency room for a psychiatric evaluation) and year (1996 or 2004). The years 1996 and 2004 were chosen as “before and after managed care” because they are equidistant from the year the NorthSTAR program was fully implemented, 2000, to the farthest extents of the existing PER database.

Dependent Variables

The dependent variables in this study are ethnicity and indigent status (hypothesis 1); disposition from the emergency room and total score on the Roy-Byrne medical necessity scale (hypothesis 2); and overt dangerousness, operationally defined by scores on the suicide/homicide and hostility/aggression items on the medical necessity scale (hypothesis 3).

Instruments

The “brief medical necessity scale for mental disorders” to be used in this study was developed by a multidisciplinary team at the University of Washington “to quantify the multiple aspects of a patient’s condition needed to decide whether a mental health treatment is medically necessary” (Roy-Byrne et al., 1998, p. 412-413). The scale consists of 10 items (psychosis, depression, suicidality or homicidality, hostility or aggression, uncooperativeness, treatment noncompliance, substance abuse, physical dysfunction, role dysfunction, and lack of social support), each rated on a 0-6 Likert scale with descriptive behavioral anchors to encourage interrater reliability. The scale was developed in the post-managed care era. It includes concepts important to managed care organizations deciding level of care, law enforcement officers deciding the appropriateness of involuntary psychiatric referral, and PER clinicians deciding the need for hospitalization. It has a Cronbach’s

alpha coefficient of .65, and interrater reliability for the total score is .95 (Roy-Byrne et al., 1998). Interrater reliabilities for individual items range from 0.68 to 0.88, except for homicidality (0.28) (Roy-Byrne & Russo, 1999). Scores have been found to correlate with length of inpatient stay and discriminate between patients requiring and not requiring hospitalization (Roy-Byrne & Russo, 1999). After development and validation, the medical necessity scale was used in a study of acute-care psychiatric patients participating in a regional public managed mental health care plan who were seen in the emergency room of a large public hospital (Wingerson, Russo, Ries, Dagadakis, & Roy-Byrne, 2001).

Data Analysis

Chi square tests will be used to compare categorical variables such as ethnicity, insurance status, and discharge status, for APOWW patients who arrived at the psychiatric emergency room in 1996 vs. 2004.

Scores for all variables on the brief measure of medical necessity will be treated as interval data and compared using the t test for the difference in means, with an alpha level of .05 or less for statistical significance after Bonferroni correction.

Mathematical analyses will be aided by the use of a statistics software program (SPSS Inc., 1999).

CHAPTER SIX

Expected Results and Implications

Hypothesis 1

Expected Result

Police-escorted psychiatric emergency room patients were significantly more likely to be non-white in 2004 than in 1996.

Presentation of Data

Table _

Ethnicity of Police-Escorted Psychiatric Emergency Room Patients at Parkland, 1996 vs. 2004

Ethnicity	1996 sample		2004 sample		<u>Grp Diff</u>
	(n=___)		(n=___)		$\chi^2(df)$ p-value
	N	%	N	%	
White					
Black					
Latino					
Asian					
Other					

Implications of Hypotheses 1

If the expected result is found (the percentage of non-white patients was larger in 2004 than in 1996), it may indicate that non-white people are more vulnerable to acute psychiatric crises with police intervention under the NorthSTAR system. NorthSTAR may need to increase its efforts to penetrate minority populations and increase access to outpatient services. Further investigations may be needed to understand and address cultural barriers to voluntary outpatient mental health services.

If the expected result is not found (the percentage of non-white police-escorted psychiatric emergency room patients stayed the same or fell), NorthSTAR would appear to be serving minorities at least as well as the previous system.

Hypothesis 2*Expected Result*

Police-escorted psychiatric emergency room patients were significantly more likely to be medically indigent in 2004 than in 1996.

Presentation of Data

Table __

Insurance Status of Police-Escorted Psychiatric Emergency Room Patients at Parkland, 1996 vs. 2004

Insurance at ER entry	1996 sample		2004 sample		<u>Grp Diff</u>
	(n=___)		(n=___)		$\chi^2(df)$ p-value
	n	%	n	%	
Private insurance					
Medicare					
Medicaid					
State					
Parkland payment plan					
or no insurance					
Other					

Implications of Hypotheses 2

If the expected result is found (the percentage of medically indigent, uninsured patients was larger in 2004 than in 1996), it may indicate that a high-cost, high-risk population is being missed by the NorthSTAR program. It may be necessary to revise the “priority population” definition so that more indigent people qualify for services. More coordination between agencies may be needed to identify

people who need mental health services before and after they become involved with the criminal justice system. Parkland's emergency room may serve as an important point of interface for individuals to be linked with support services, particularly low-cost options for those who do not have insurance or cannot afford traditional therapies.

If the expected result is not found, it would be an important finding because it would contradict the national trend of increased use of emergency rooms for psychiatric services by uninsured patients (McAlpine & Mechanic, 2002).

Further analysis of the data, comparing change over time across insurance categories, may yield further information about the differences in service utilization between patients with different plans.

Hypothesis 3

Expected Result

As a group, police-escorted psychiatric emergency room patients seen in 2004 showed a greater severity of illness than those seen in 1996.

Presentation of Data

Table __

Number of Police-Escorted Patients Admitted to the Hospital from the Psychiatric Emergency Room, 1996 vs. 2004

APOWW patients	1996 sample		2004 sample		<u>Grp Diff</u>
	(n=___)		(n=___)		$\chi^2(df)$ p-value
	n	%	n	%	
Admitted at Parkland					
Transferred to other facility for admission					

Table __

Total "Medical Necessity" Scores of Police-Escorted Psychiatric Emergency Room Patients at Parkland, 1996 vs. 2004

Brief medical necessity scale for mental disorders	1996 sample	2004 sample	Test
	(n=___)	(n=___)	statistic
	mean \pm SD ^a	mean \pm SD	
Total score			

Implications of Hypothesis 3

If the expected result is found, it may indicate that managed care has changed the profile of involuntary psychiatric patients seen in the emergency room. Police officers appear to be following the pattern found in previous research, reserving involuntary detention and referral to the psychiatric emergency room for individuals who are severely ill and likely to be hospitalized. Law enforcement personnel may be aware of the higher criteria for hospitalization under managed care and may be initiating emergency apprehensions for the patients they perceive to be most likely to be admitted. There is no evidence that police officers have informally broadened their criteria for psychiatric apprehension, so the increase in the number of involuntary patients found in the Claassen et al. (2005) cannot be simply attributed to more a generous use of the statutes by law enforcement.

Further investigations are needed to determine whether police officers may be under-utilizing the emergency room option because of wait times, expected rate of hospitalization, or other issues. A comparative study using the same variables is also recommended to find out if police-escorted psychiatric patients at Parkland are different from those arriving at Green Oaks, which may reflect political and clinical divisions between the facilities.

If the expected result is not found (2004 patients have lower “medical necessity” scores and/or are less likely to be hospitalized compared to patients seen in 1996), further analysis is needed to determine whether police officers’ criteria for involuntary psychiatric apprehension has changed and why.

Hypothesis 4

Expected Result

As a group, police-escorted psychiatric emergency room patients seen in 2004 were more overtly dangerous than those seen in 1996.

Presentation of Data

Table _

Scores on Roy-Byrne "Medical Necessity" Instrument, 1996 vs. 2004

Characteristic ^a	1996 sample (n=___) Mean±SD ^a	2004 sample (n=___) Mean±SD	Test statistic
Psychosis			
Depression or Anxious Mood			
Suicidal/Homicidal			
Hostility/Aggression			
Treatment Noncompliance			
Outpt Tx Involvement Probs			
Alcohol and/or Drug Problems			
Physical Dysfunction			
Role Dysfunction			
Unreliability of Social Support			

^a Possible scores range from 0 to 6, with higher scores indicating greater severity of symptoms.

Implications of Hypothesis 4

If the expected result is found, the type of individual selected by police officers for psychiatric evaluation would appear to have shifted toward a more overtly violent type. Why this has occurred requires further investigation. Additional studies are needed to evaluate police officers' internal criteria for involuntary psychiatric apprehension, and to determine whether police cases involving less overtly dangerous people with mental illness are being resolved appropriately (with criminal arrest or informal problem-solving). A similar study at another local facility, such as Green Oaks, may help determine whether the shift in the profile of police-escorted psychiatric emergency room patients is unique to Parkland, or can be generalized to other facilities and patients within the NorthSTAR area. Replication of this study in other states with and without public sector managed behavioral healthcare systems may help determine whether the change in patient profile found in this study is widespread or unique to the local area.

Parkland personnel may need additional protections and training, with added precautions during periods of high patient volume. Further study is needed to assess the actual costs associated with this change in patient profile, their impact on the hospital's financial status, and the utility of specific interventions.

CHAPTER SEVEN

Conclusions

“Cost-shifting” is when one agency reduces its own expenditures in a way that makes it more likely that consumers will obtain needed services from a different provider and payer (Domino et al., 2004). Greater severity of illness among police-escorted psychiatric emergency room patients over a time period when a managed care approach was applied to public sector mental health services suggests indirect and unintended cost-shifting may be occurring, from service providers like state psychiatric hospitals and outpatient clinics to the police department and general hospital emergency room. Along with other managed care insurers, NorthSTAR may be under-serving patients, under-paying treatment providers, and ultimately causing increased severity of illness among the most vulnerable and least resilient populations. Efforts to contain costs for NorthSTAR may be forcing greater expenditures at other points in the mental health and criminal justice systems.

Providing emergency intervention, evaluation, and treatment services at the hospital, with police involvement, is a costly method of providing assistance to people with urgent mental health care needs. The expense of providing such services for a growing number of patients should be considered when evaluating the cost-effectiveness and financial requirements of the NorthSTAR program.

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VITAE

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