

Perceived Impact by Administrators of Psychiatric Emergency Services after Changes in a State's Mental Health System

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ABSTRACT: As a safety net, psychiatric emergency services are sensitive to system changes. To determine the impact of a state's changes in its mental health system, administrators of publicly funded psychiatric emergency services were surveyed. They reported few ($M = 0.8$) negative changes in coordination of care but 77% endorsed change in administrative burden (54% saying it negatively affected quality of services). Reporting negative effect of administrative burden was associated with treating more persons with substance abuse problems and greater challenge posed by distance to local providers. These results suggest that impact of state-level changes was not uniform but associated with local characteristics.

KEY WORDS: psychiatric emergency services; mental health system; behavioral health system; integration of services; coordination of care.

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INTRODUCTION

Changes in the financing or the organization of mental health systems may disrupt ongoing care (Domino, Norton, Morrissey, & Thakur, 2004; Ray, Daughterty, & Meador, 2003). One classic example is deinstitutionalization (Lamb, 1984). The change from reliance on long-term care psychiatric hospitals to community care disrupted the ongoing care for mentally ill patients. Although it can be argued that the disruption was due to under-funding of community care, the change still represented a massive re-organization of the mental health system. One consequence of the change was an increase of persons who frequented psychiatric emergency services (PES) (Bassuk & Gerson, 1980).

PES from its inception in 1963 was viewed as a first responder to crisis. Over time, it evolved to also include provision of care, including those without access to other treatment options (Currier & Allen, 2003) who may come to rely on it for care. These frequent PES users are viewed as failures of the overall system (Arfken et al., 2004; Pasic, Russo, & Roy-Byrne, 2005). As both first responder and provider of care, the PES can be seen as an integral part of the safety net (Bassuk & Gerson, 1980). In this role it has been called a barometer as it “measures the integrity of the entire health care system” (Mendoza, 1999, p. 5). It also has been seen as “one way of assessing outcome in community-based systems of care” (Claassen, Kashner, Gilfillan, Larkin, & Rush, 2005, p. 691). The PES itself has changed over time from being exclusively hospital-based to encompassing many models of care (Lee, Renaud, & Hills, 2003). However, it still remains an important portal into the mental health system (Edelsohn, Braitman, Rabinovich, Sheves, & Melendez, 2003).

In this study, we examine the perceived impact on PES associated with changes in the organization of a state’s publicly funded mental health system. Beginning in the late 1990s, Michigan moved towards a managed care mental health service delivery model (Michigan Department of Community Health, 2002). In response to Medicaid regulations requiring open competition for delivery of mental health services, Michigan received a waiver to give first opportunity to existing Community Mental Health Service Programs (CMHSP) to develop plans for managing and providing mental health services as Pre-paid Health Plans (PHP). Priority status was given due to their expertise and experience working with the target population and existing coordination linkages with other community resources. It was believed that

they would be better positioned to enhance coordination of care, provide continuity of care, and ensure that state policies in areas such as person-centered planning, health and safety and recipient rights were upheld. However, as PHPs, the CMHSPs also needed to demonstrate that they were capable of performing the administrative, management and regulatory oversight functions of a managed care plan. If the CMHSPs did not develop acceptable plans, the state would open the competition to other entities, including national for-profit managed behavioral health organizations.

To enhance competition and collaboration as well as decrease administrative costs, each PHP had to encompass a minimum of 20,000 but fewer than 100,000 eligible individuals. This resulted in consolidation between some of the CMHSPs and the establishment of three competitive networks within one urban CMHSP. In October 2002, the re-organized CMHSPs were awarded contracts as PHPs.

Because the newly formed PHPs were given first priority, in part, due to their perceived ability to enhance coordination and integration of care over other managed care entities we were particularly interested in how this change impacted coordination of care in the PES. While it was anticipated that it would improve or remain unchanged, there was the possibility that consolidation and restructuring of payment mechanisms and services would have a negative impact on the ability of the PES to coordinate care.

Understanding that changes happen within a context, we also examined the local context including demographics of the surrounding area (Bruffaerts, Sabbe, & Demyttenaere, 2004; Mulder, Koopmans, & Lyons, 2005). Local case-mix, or characteristics of persons seeking care at the PES, may include subgroups requiring more complex care e.g., individuals who are homeless or drug dependent, whose care challenges organizations undergoing change (McNiel & Binder, 2005; McQuiston, Finnerty, Hirschowitz, & Susser, 2003). Other local contexts include perceived local challenges, slack resources at the PES, and PES organizational complexity. In practice, size is the frequently used proxy measure for slack resources (Judge & Elenkov, 2005; Knudsen & Roman, 2004). Those organizations with more complex internal structure (i.e. more services offered) usually fare better in turbulent environments than do their less complex counterparts (Ashmos, Duchon, & McDaniel, 2000). The influence of these local contexts led to the secondary objective, to examine if changes were uniformly felt throughout the state.

METHODS

Survey

A survey was sent to PES administrators May 2003 (eight months following the change). Domains were suggested from reviews of published surveys (Currier & Allen, 2003) and discussion with local administrators. The survey covered descriptions of ownership, structure, services, and local patient demographics. It also listed areas of potential challenges to the PES with a request to rate the degree of challenge on a Likert scale. The administrators were asked if they experienced any changes to their coordination of care with outpatient providers, case managers, inpatient facilities, crisis residential facilities and substance abuse treatment providers in October 2002. They were then asked to what they ascribed the change (from a pre-specified list) and the direction of the change (positive, negative or neutral). Changes not attributed to the mental health system were excluded from analysis. They were also asked if they had experienced changes in administrative burden and to what degree they believed it to impact the quality of their services.

The administrators were identified by calling each CMHSP in the state and requesting the names of all the PES administrators in their area. Altogether, 60 surveys were sent out with a cover letter explaining the purpose of the study, reimbursement for their time to complete the survey, and a stamped self-addressed envelope for returning the completed survey. The administrator had the option of mailing the completed survey, faxing the survey or responding verbally by telephone. A second mailing was followed by telephone calls. As some administrators are responsible for multiple areas, we counted responses by administrators. Altogether, 30 (50%) completed questionnaires were received after the two mailings and telephone follow-up. No bias was observed for geographic distribution, population size, density and median county income between those counties with an administrator responding and those counties where the administrator did not respond. Analysis was primarily descriptive with the secondary objective of determining the homogeneity of perceived changes being addressed by contrasting the demographics of the area, perceived local challenges, case-mix, size and organizational complexity with *t*-tests.

RESULTS

The PES's of the responding administrators varied in ownership and included community mental health agency (69%, $n = 22$), private non-profit agency (14%, $n = 4$), healthcare system (14%, $n = 4$) and private for-profit agency (3%, $n = 1$). They also varied in their settings and included outpatient clinic (40%, $n = 12$), hospital (30%, $n = 9$) or a free-standing building (23%, $n = 7$).

To characterize the case-mix of the persons served, administrators were asked about distribution of payment sources, age groups, diagnoses and resources of their population served. The percentage of persons with Medicaid varied from 10 to 85% with a mean of 50% across administrators. Other payment sources were uninsured ($M = 20%$,

S.D. = 9.6), Medicare ($M = 13\%$, S.D.=13.2) and self-pay ($M = 2\%$, S.D. = 4.9). The mean proportion of children served was 17% and a mean of 10% for older persons. The percentage of persons with a psychotic disorder varied from 2 to 80% ($M = 31\%$). The percentage of persons with a substance use disorder varied from 5 to 75% ($M = 32\%$). An additional characteristic that may affect treatment and service delivery is the resources available. The percentage of persons arriving with family varied from 5 to 60% ($M = 26\%$), arriving with guardian varied from 0 to 30% ($M = 8\%$) and are homeless varied from 0 to 40% ($M = 12\%$).

For organizational complexity, the numbers of services the facilities offer were tallied from a list of 11 distinct services. Most frequently offered was referrals (97%), evaluations (93%), crisis intervention (90%), administer medications (67%), medication management (60%), substance abuse screening (50%), residential facilities (47%), mobile teams (47%), and dispense medications (43%). Detoxification (17%) and holding areas (13%) were less commonly offered. The range of services offered were 1–10 services ($M = 6.5$, S.D. = 2.5).

As documented above, the PES's serve distinct populations with a different array of services. To assess the challenges they face, administrators were asked to estimate the difficulty associated with each of seven listed items on a scale from 1 to 5 with 1 = no difficulty to 5=major difficulty. The challenge with the highest mean score across the sample was lack of substance abuse treatment facilities ($M = 3.47$, S.D. = 1.11) followed by transportation ($M = 3.03$, S.D. = 1.30), lack of providers ($M = 2.77$, S.D.=1.28), sharing information across systems ($M = 2.72$, S.D. = 0.92), distance to providers ($M = 2.57$, S.D. = 1.19), hiring and retaining staff ($M = 2.43$, S.D. = 1.28) and regulatory requirements for inpatient admission ($M = 1.97$, S.D. = 1.05). No other challenges were proffered.

The administrators were then asked for changes to the coordination of care dating to the change in the state's organization of the mental health system using the below pre-specified list with the option to add to the list. These questions were followed by questions on what was driving the change and the direction of the change (positive, negative or neutral). For the following summary statistics, we only counted those changes attributed to the change in the mental health system. The coordination of care change most frequently mentioned was inpatient units (43%), followed by outpatient (33%), case management (27%), substance abuse treatment (27%), crisis residential (23%), shelters

(0%), and faith-based organizations (0%). Overall, the administrators reported a mean of 1.5 changes with a range of 0–5 and with 30% either not reporting any change or not attributing any change to the mental health system. When counting only those changes considered negative, the mean drops further to 0.8 with 57% not reporting any negative change. The reported negative changes were distributed across coordination of care with inpatient units ($n = 6$), outpatient ($n = 5$), substance abuse treatment ($n = 6$) crisis residential ($n = 5$) and case management ($n = 3$).

The administrators were then asked to indicate if there had been a change in administrative burden and if so, its impact on *quality* of services. For those who reported that there was a change in burden (77%), 10% rated the impact of change on quality of service as “very negative” and 44% as “somewhat negative”.

Due to the high prevalence of change in administrative burden and low prevalence of perceived changes with coordination of care areas, the homogeneity of administrative burden across the state was examined. There was no association with population size, density, median household income or percentage of patients covered by private insurance. However, those administrators who reported a negative administrative burden on quality of service also reported greater challenge of distance to providers ($M = 3.15$ vs. $M = 2.13$, $t = 2.48$, $df = 27$, $p = .02$). In addition, they also reported a higher mean percentage of persons served with substance abuse problems ($M = 41.4$ vs. $M = 25.3$, $t = 2.18$, $df = 25$, $p = .039$). No association was found for ownership, setting, size or complexity of services.

Administrators were asked to add comments. To demonstrate the range of responses, some examples are supplied here. For integrating substance abuse treatment, one administrator wrote: *...needs improvement, not much money for substance abuse treatment—services hard to obtain*. Another administrator succinctly summarized it as: *It's a mess!*

For overall effect on their system, one administrator wrote: *Rapid changes—in system, in requirements, in expectations (sometimes hidden), move to managed care*. Another administrator wrote: *Increased responding to CMH consumers who are anxious about reduction in services; increased pressure to find additional, non-CMH sources of financial support for crisis services; increase risk accepted as CMH agencies affiliate and generate single contracts for crisis work, leaves us with less diversification of funding sources*. Another wrote: *Confused*

communications. One extreme change was evident by this response: Our program did not exist prior to October 1, 2002 so everything is new. Another perspective was added by these two administrators: Push to capitation means earlier outreach and more service coordination and: coordination of care will improve as electronic system is implemented.

Finally, concrete actions that the change brought about were reflected in these two responses: *Change substance abuse affiliation and: In preparing for the bid-out, [the organization] and affiliates were required to do a number of things: (1) obtain JACHO or CARF accreditation; (2) implement a performance improvement process on the provider side to enhance organization performance; (3) create a regional managed care organization (MCO) to handle access management, member services, claims processing, fiscal management, development of a provider network, and quality management; (4) develop consumer councils for each target population in order to increase input from the primary consumer and their families; (5) establish a system for grievance and appeal of service denials, (6) upgrading policies and procedures with respect to Recipient Rights Office to coincide with the revised Mental Health Code; (7) development of further policies and procedures to ensure compliance with HIPAA; (8) development and further enhancement of processes for person centered planning and self-determination, etc.* The most ominous report was this final one: *Increasing number of patients coming from other areas because of limited or no urgent/emergency mental health care available.*

DISCUSSION

Changing the organization of a publicly financed system would be predicted to have an impact on PES. It may affect other components of the system but we focused on the perceived impact on PES as it is widely seen as a barometer of the health care system. Within the PES, we refined our focus on changes to the coordination of care as it was an emphasis in the development of the new system. We found some impact but it was experienced differently across the state. In fact, only one measure of impact was reported by over half the respondents. That measure, administrative burden, may not be surprising to those who have undergone organizational changes. What was surprisingly was that it was not uniformly perceived as negatively impacting quality of services.

The perceived impact on administrative burden on quality of service was not related to the organizational factors measured (ownership, location, complexity) or to the population size and income of the county. Cognizant that lack of difference may be due to limited variability, we noted that administrators reported a wide variety of PES configurations and a wide mix of services, consistent with national data (Olson, 1993). Only two local factors appeared associated with perception of administrative burden on quality of care. These factors were a higher rating for distance to other providers as a challenge and reporting a higher percentage of persons served with substance abuse problems.

Although the study is limited by the response rate, perception of the administrator and multiple comparisons, it is possible that increased distance to other providers makes it more difficult to plan treatment follow-up from the PES. Such a finding does not mean that less populated regions experienced the change more acutely as population size or population density were not related to their perception of the change.

As the change emphasized enhanced integration of mental health and substance abuse care, it was not surprising that administrative burden impact on quality of services was negative for those facilities serving more patients with substance abuse problems. This finding held when excluding the most populous county, meaning the difficulty was not due to one county's implementation. Other investigators had found PES administrators do not feel they have adequate referral options for substance abuse problems (Currier & Allen, 2003), consistent with our finding that lack of substance abuse treatment facilities was a major challenge faced by PES's. The lack of consistent problem for coordination of care with substance abuse treatment may be due to the CMHSP's varying approach to enhancing integration of mental health and substance.

The administrators were asked how they handled the burden and what steps were taken to avoid burden but few answered the open-ended questions. Those that did provided insight to how varied they were involved in planning for the change and how varied the steps taken to avoid burden and reaction to the change were. Additional information on leadership in dealing with change would be useful in managing future changes. The survey did not request information on staff or visit load changes, important areas of impact. Other investigators have shown changes in number of visits following changes in publicly financed mental health systems (Catalano, Coffman, Bloom, Ma, & Kang, 2005; Claassen et al., 2005) Anecdotally, some of the

administrators did ask the researchers to pass along any tips they heard as they were trying to do more with less money.

These findings confirm that changes to the organization of mental health care will be felt in the PES and planning is needed to minimize the stress on the service. Although this was a case study of one state's changes, it offers lessons to other states contemplating changes. It also showed that while the impact was felt in the PES, it does not have to negatively affect quality of services. Consistent with the state change emphasizing coordination of care and integration of mental health and substance abuse services, those facilities serving more patients with substance use disorders and greater problems with distance to other providers were more likely to report increased administrative burden resulting in negative impact on quality of services from the change. The findings support surveillance of PES's to monitor the impact of future changes to systems and future research to address leadership and organizational factors that may ameliorate the impact.

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REFERENCES

- Arfken, C. A., Zeman, L. L., Yeager, L., White, A., Mischel, E., & Amirsadri, A. (2004). Case-control study of frequent visitors to an urban psychiatric emergency department. *Psychiatric Services, 55*, 295–301.
- Ashmos, D. P., Duchon, D., & McDaniel, R. R. (2000). Organizational responses to complexity: The effect on organizational performance. *Journal of Organizational Change Management, 13*, 577–594.
- Bassuk, E., & Gerson, S. (1980). Chronic crisis patients: A discrete clinical group. *American Journal of Psychiatry, 137*, 1513–1517.
- Bruffaerts, R., Sabbe, M., & Demyttenaere, K. (2004). Effects of patient and health-system characteristics on community tenure of discharged psychiatric inpatients. *Psychiatric Services, 55*, 685–690.
- Catalano, R. A., Coffman, J. M., Bloom, J. R., Ma, Y., & Kang, S. H. (2005). The impact of capitated financing on psychiatric emergency services. *Psychiatric Services, 56*, 685–690.
- Claassen, C. A., Kashner, T. M., Gilfillan, S. K., Larkin, G. L., & Rush, A. J. (2005). Psychiatric emergency service use after implementation of managed care in a public mental health system. *Psychiatric Services, 56*, 691–698.
- Currier, G. W., & Allen, M. (2003). Organization and function of academic psychiatric emergency services. *General Hospital Psychiatry, 25*, 124–129.

- Domino, M. E., Norton, E. C., Morrissey, J. P., & Thakur, N. (2004). Cost shifting to jails after a change to managed mental health care. *Health Services Research, 39*, 1379–1400.
- Edelsohn, G. A., Braitman, L. E., Rabinovich, H., Sheves, P., & Melendez, A. (2003). Predictors of urgency in a pediatric psychiatric emergency service. *Journal of the American Academy of Child, Adolescent Psychiatry, 42*, 1197–1202.
- Judge, W. Q., & Elenkov, D. (2005). Organizational capacity for change and environmental performance: an empirical assessment of Bulgarian firms. *Journal of Business Research, 58*, 893–901.
- Knudsen, H. K., & Roman, P. M. (2004). Modeling the use of innovations in private treatment organizations: The role of absorptive capacity. *Journal of Substance Abuse Treatment, 26*, 51–59.
- Lamb, H. R. (1984). Deinstitutionalization and the homeless mentally ill. *Hospital and Community Psychiatry, 35*, 899–907.
- Lee, T. W., Renaud, E. F., & Hills, O. F. (2003). Emergency psychiatry: An emergency treatment hub-and-spoke model for psychiatric emergency services. *Psychiatric Services, 54*, 1590–1594.
- McNiel, D. E., & Binder, R. L. (2005). Psychiatric emergency service use and homelessness, mental disorder, and violence. *Psychiatric Services, 56*, 699–704.
- McQuiston, H. L., Finnerty, M., Hirschowitz, J., & Susser, E. S. (2003). Challenges for psychiatry in serving homeless people with psychiatric disorders. *Psychiatric Services, 54*, 669–676.
- Mendoza, R. (1999). The vicissitudes of emergency psychiatry: A service systems perspective. *New Directions for Mental Health Services, 82*, 3–8.
- Michigan Department of Community Health. (2002). Specialty Pre-Paid Health Plan 2002 Application for Participation. http://www.michigan.gov/documents/Afp_7961_7.pdf. Accessed 11/3/05.
- Mulder, C. L., Koopmans, G. T., & Lyons, J. S. (2005). The admission process untangled: Determinants of indicated versus actual level of care in psychiatric emergency services. *Psychiatric Services, 56*, 452–457.
- Olfson, M. (1993). The array of psychiatric services in general hospitals. *General Hospital Psychiatry, 15*, 277–283.
- Pasic, J., Russo, J., & Roy-Byrne, P. (2005). High utilizers of psychiatric emergency services. *Psychiatric Services, 56*, 678–684.
- Ray, W. A., Daugherty, J. R., & Meador, K. G. (2003). Effect of a mental health “carve-out” program on the continuity of antipsychotic therapy. *The New England Journal of Medicine, 348*, 1885–1894.