Iowa Department of Human Services

Hospital Bed Tracking System Report

December 16, 2013

Executive Summary

The current system for finding and securing needed inpatient hospital psychiatric hospital services in Iowa is inefficient and cumbersome for all involved in the process. The legislature directed the Department of Human Services (Department) to report on the feasibility of developing and maintaining a centralized reporting system for available hospital in-patient psychiatric services. Iowa magistrates and hospitals share in the desire to develop such a system. After consultation with a group magistrates and hospital representatives it is recommended that the following occur:

- An electronic information system should be used to track the availability of inpatient hospital psychiatric services in Iowa.

- The electronic information system should be either:
  - An increased utility of the Iowa Department of Public Health's Center for Disaster Operations and Response (CDOR), electronic information system, EMResource or
  - Developed as a standalone system by a private contractor selected through a request for proposal process.

- The hospitals that have psychiatric programs would maintain the information in the system and would work collaboratively to implement policies and procedures to develop an effective system.

- The electronic information system would include a minimum data set of information that would be necessary for those seeking hospital psychiatric services.

Introduction

The 2013 legislature through Senate File 406 directed the Department to conduct a study regarding the possible development of a hospital bed tracking system in order to efficiently and effectively serve the needs of persons with mental illness.

Today, when it is determined that an individual needs inpatient psychiatric hospital services an appropriate, available psychiatric hospital placement must be found for the individual.   Because hospitals in the immediate area often do not have an available bed for the individual and a wider search must take place. To find an available bed hospital staff, the magistrate or other county personnel may have to call all 30 hospitals with licensed inpatient psychiatric hospital beds.   Until a bed is found, the individual who is often highly agitated, anxious or displaying disruptive behaviors often waits in either the emergency room or another room which may be very disruptive to other hospital patients. Until the bed is found, the hospital must deploy staff to monitor the individual and when a legal order has been issued, for a sheriff to guard the individual. When a bed is found, usually the sheriff must drive the person to the hospital that has been located with the potential of arriving to find that the vacant bed has been filled.

Iowa currently has 26 hospitals and four state Mental Health Institutes licensed to provide inpatient psychiatric services. The hospitals are licensed for 689 beds and report that 588 are operational. Hospitals may have more beds licensed than they have operational. Because there is no electronic system to identify what beds are available there is an enormous amount of inefficiency due to the time it takes to find a bed for those in need. This directly impacts all parties involved – the individuals who need the services and their families, courts, magistrates, hospital emergency rooms, law enforcement, and other county personnel.

The Department held two meeting with a group of fourteen interested magistrates, the Iowa Hospital Association, and a number of hospitals with inpatient psychiatric programs to discuss the problem and potential solutions. The membership is found in Attachment 1. The first meeting on November 11, 2013 provided the opportunity to establish a common understanding of the problem, discuss possible solutions, and identify outstanding issues that would need to be addressed. The group agreed to form a smaller committee and an additional meeting was held November 22, 2013 to expand on the discussion and to discuss recommendations.

Discussion

The following was generally agreed to by the group: the Department and the group of magistrates and hospital representatives:
- The current system is highly inefficient and requires a great deal of work to find an appropriate available bed.
- There likely exists a relatively inexpensive information technology solution that can gather and share the availability of inpatient psychiatric hospital beds around Iowa.
- There needs to be real time access to a directory of open beds for individuals needing inpatient psychiatric services.
- To ensure that an electronic system would be effective, the answers to the following questions would need to be addressed. These procedural questions include, but are not limited to:
    - Identifying how the data on psychiatric hospital bed availability would be maintained including:
        - Who would ensure the data is entered and is correct.
        - How frequently the data would need to be entered and is it in real time.
        - Whether or not there would need to be a memorandum of understanding.
    - Identifying that key characteristics or capability of the available psychiatric hospital bed is included in the system (i.e., genders, ages, and severity of individuals that can be accepted for admission).
- There are issues that an electronic system cannot address:
    - Issues related to the Emergency Medical Treatment & Labor Act (EMTALA) will need to be addressed. EMTALA may prevent hospitals from "holding" a bed for a person in transit to the facility.

- o Issues related to ensuring that the person needing services is medically stable before placement occurs.
- o Issues related to whose role it is to conduct the search for an open bed.
- o Issues related to the role of the central point of coordination at the counties, soon to be the point of local access for the region.
- Any electronic system will not eliminate calls being made to hospitals. A hospital will still need to be contacted to confirm bed availability and admittance procedures and to share patient specific information.

The committee further discussed the type of information that should be contained in a data base. The preliminary consensus was that the minimum data set should include:
- The hospital name and address
- The restrictions regarding who could be served:
  - o Male, female, or either
  - o Adult, adolescent, or children
  - o Whether the program was locked or unlocked
  - o Whether or not the program accepted commitments including Iowa Code Chapter 229 (mental health), Iowa Code Chapter 125 (substance abuse) or dual commitments
  - o Whether or not the program served individuals that may be violent

The committee agreed that the information would be entered by the 30 hospitals that have inpatient psychiatric programs. Ideally the information should be entered contemporaneously. The information should include only those beds that are "operational" and not total licensed beds.

The committee suggested exploring the feasibility of using the Iowa Department of Public Health's Center for Disaster Operations and Response (CDOR), electronic information system, EMResource as a method for gathering the needed information. This system is not specifically designed for this purpose, but perhaps could be modified to meet the need. See Attachment 1 for more information about the EMResource

The committee recommended that, should another existing data base not be available, a contract be issued to a third party to construct and maintain a stand-alone system.

The committee acknowledged the following procedural issues need to be addressed to ensure any new data system would meet the need as expected:
- The data base will only reduce the number of calls that must be made to find available inpatient psychiatric services. The data base will not replace person to person contact to make arrangements for admission.
- The data base will not eliminate the need for some hospitals to ensure that the individual is "medically clear" before being admitted to the facility.
- Federally required EMTALA rules prevent hospitals from unequivocally holding beds for individuals being transported to their facilities.

It is believed that hospitals will see a benefit in participating and would utilize the system.

Recommendations

Based on the above discussion, the Department recommends the following:

- An electronic information system should be used to track the availability of inpatient hospital psychiatric services in Iowa.

- The electronic information system should be either:
    - An increased utility of the Iowa Department of Public Health's Center for Disaster Operations and Response (CDOR), electronic information system, EMResource *or*
    - Developed as a standalone system by a private contractor selected through a request for proposal process.

- The hospitals that have psychiatric programs would maintain the information in the system and would work collaboratively to implement policies and procedures to develop an effective system.

- The electronic information system would include a minimum data set of information that would be necessary for those seeking hospital psychiatric services that includes who could be served:
    - Male, female, or either
    - Adult, adolescent, or children
    - Whether the program was locked or unlocked
    - Whether or not the program accepted commitments including 229, 125 or dual commitments
    - Whether or not the program served individuals that may be violent

- Potential costs of an electronic information system:
    - It is estimated that if the CDOR system can be used the costs would be:
        - One-time cost of $50,000 for upgrades
        - Annual maintenance costs would be $120,000
    - If a stand-alone system needed to be developed, a request for proposal would be used. It is estimated that costs for the system would be:
        - One-time costs up to $200,000 for system customization
        - Annual maintenance and hosting costs would be $25,000

Attachment 1: Members of the Group

The group of Magistrates and hospital personnel that met with the Department to discuss the problem and potential solutions:

Magistrates:
        Marion James
        Michael C. Vance
        Jim Pedersen
        Martin Fisher
        Rolg Aronsen
        David Forstyh
        Linzy Marin
        Daniel Kitchen
        William Early

Iowa Hospital Association and hospitals with inpatient psychiatric programs:
        Dina Nightingale
        Dan Royer
        Linda Hemminger
        Steve Blanchard

Department of Justice:
        David Boyd

Attachment 2: Iowa Department of Public Health's Center for Disaster Operations and Response EMResource

The Iowa Department of Public Health's Center for Disaster Operations and Response (CDOR) uses the electronic information system called EMResource. EMResource is a communications and resource management system that streamlines communications between medical response teams and healthcare providers by monitoring healthcare assets, emergency department capacity and behavioral health and dialysis bed status. The system equips all involved in emergency medical response with real-time communication tools. Hospitals are only requested to enter information during a real event or exercise. Polk County utilizes the system day to day to track emergency room status. The success of EMResource is dependent on a designated person at each hospital or facility entering the data for real-time results. Currently in Iowa there is not a mandate for hospital participation.

The EMResource system has the capacity to be utilized in additional ways and would require a software adaptation that would separate mental health bed usage from the CDOR usage needs. The Iowa Department of Public Health has memorandum of understanding (MOU) documents in place with all hospitals in Iowa and staff have been designated and trained to enter into the database when it is activated. Modifications to the MOU documents would need to occur to assure that it meets the specifications and requirements of use for the hospitals that have inpatient psychiatric beds. Additional language would also be necessary for the other users, such as court and county personnel, that will access the system. The system primarily has only hospital users but has some limited public health and EMA providers.

The EMResource system is 100% funded with disaster preparedness dollars. If the system were to be used for tracking inpatient psychiatric beds other funding would need to be identified to cover the costs to enhance the system, add additional users, and provide ongoing support.