

Schedule 13
Funding Request for the 2012-13 Budget Cycle

Department: Human Services
 Request Title: Electronic Health Record and Pharmacy System Feasibility Study at the Mental Health Institutes
 Priority Number: R-2
 Dept. Approval by: *Will R. [Signature]* 10-12-11 Date
 OSPB Approval by: *Erin M. [Signature]* 10/19/11 Date

- Decision Item FY 2012-13
- Base Reduction Item FY 2012-13
- Supplemental FY 2011-12
- Budget Amendment FY 2012-13

Line Item Information		FY 2011-12		FY 2012-13		FY 2013-14
		1	2	3	4	5
	Fund	Appropriation FY 2011-12	Supplemental Request FY 2011-12	Base Request FY 2012-13	Funding Change Request FY 2012-13	Continuation Amount FY 2013-14
Total of All Line Items	Total	87,622,442	0	89,096,876	75,000	0
	FTE	1,147	0	1,147	0	0
	GF	73,736,309	0	74,979,682	75,000	0
	CF	7,572,834	0	7,682,061	0	0
	RF	6,313,299	0	6,435,133	0	0
	FF	0	0	0	0	0
	MCF	4,129,919	0	4,196,912	0	0
	MGF	2,064,716	0	2,098,456	0	0
	NGF	75,801,025	0	77,078,138	75,000	0
(8) Mental Health and Alcohol and Drug Abuse Services, (C) Mental Health Institutes, Mental Health Institute-Ft. Logan	Total	18,973,703	0	19,273,397	16,224	0
	FTE	206.3	0.0	206.3	0.0	0.0
	GF	16,789,133	0	17,056,411	16,224	0
	CF	1,829,651	0	1,849,154	0	0
	RF	354,919	0	367,832	0	0
	FF	0	0	0	0	0
	MCF	0	0	0	0	0
	MGF	0	0	0	0	0
	NGF	16,789,133	0	17,056,411	16,224	0
(8) Mental Health and Alcohol and Drug Abuse Services, (C) Mental Health Institutes, Mental Health Institute-Pueblo	Total	68,648,739	0	69,823,479	58,776	0
	FTE	940.2	0.0	940.2	0.0	0.0
	GF	56,947,176	0	57,923,271	58,776	0
	CF	5,743,183	0	5,832,907	0	0
	RF	5,958,380	0	6,067,301	0	0
	FF	0	0	0	0	0
	MCF	4,129,919	0	4,196,912	0	0
	MGF	2,064,716	0	2,098,456	0	0
	NGF	59,011,892	0	60,021,727	58,776	0

Letternote Text Revision Required? Yes: No: If yes, describe the Letternote Text Revision:
 Cash or Federal Fund Name and COFRS Fund Number: N/A
 Reappropriated Funds Source, by Department and Line Item Name: N/A
 Approval by OIT? Yes: No: Not Required:
 Schedule 13s from Affected Departments: N/A
 Other Information: N/A

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DEPARTMENT OF HUMAN SERVICES

John W. Hickenlooper
Governor

FY 2012-13 Funding Request, November 1, 2011

Reggie Bicha
Executive Director

Department Priority: R-2

Electronic Health Record and Pharmacy System Feasibility Study at the Mental Health Institutes

Summary of Incremental Funding Change for FY 2012-13	Total Funds	General Fund
Electronic Health Record and Pharmacy System Feasibility Study at the Mental Health Institutes	\$75,000	\$75,000

Request Summary:

This request is for additional funding to conduct a feasibility study of an electronic health record and new pharmacy system for the Colorado Mental Health Institutes (CMHIs) at Pueblo and Fort Logan. The request totals \$75,000 General Fund in FY 2012-13.

A May 2011 performance audit of Institute medication practices, conducted by the Office of the State Auditor, recommended that the Institutes implement an electronic health record and replace a legacy pharmacy system to address problems identified in prescribing and monitoring medications, as well as to improve clinical decision-making, reduce medical errors, and increase efficiencies. An electronic health record system, for example, could prompt physicians to enter progress notes when medication orders are changed, provide alerts as to potential drug interactions, remind physicians to order lab work for certain medications, and automatically recognize and flag abnormal lab results for follow-up.

Currently, Institute staff use paper documents to record and reference virtually all patient information and to address questions regarding individual patient psychiatric and medical treatment needs. Patient history and progress reports are only accessible by using paper charts or medical records. Doctor's orders, clinician's progress notes, and medication administration

records are hand written; important medical documents are photocopied, hand-routed and finally queued for filing into the chart before they can be used; patient charts are often difficult to locate as clinicians borrow them to write their updates; and analyses of the effectiveness of medications and therapies are done only as ad-hoc, labor-intensive, special projects.

The Institutes currently use a computerized health information system called Avatar to manage census, record patient diagnoses and services for billing purposes, and track some patient legal information. The Institutes also operate legacy pharmacy and lab systems. These systems enable the Institutes to bill medical insurers (including Medicare and Medicaid) and provide basic lab and pharmacy information, but provide no clinical support.

The average medication error rates at the Mental Health Institutes were higher than a peer group of approximately 116 psychiatric hospitals in calendar year 2010. Specifically, Fort Logan averaged 4.50 medication errors for every 100 episodes of care and Pueblo averaged 4.93 medication errors for every 100 episodes of care. By comparison, the peer group averaged 2.71 medication errors for every 100 episodes of care.

Electronic health records are generally believed to increase efficiencies by reducing the time

clinicians spend documenting patient care and solve the problem of illegible handwritten physician orders and notes. Similarly, a new automated pharmacy system that includes patient profiles, the automated generation of reports and the ability to interface with medication administration records would improve the tracking and reporting of patient medications and free up pharmacy staff time to provide additional clinical and consultative services.

The Institutes will continue to struggle in monitoring the quality, quantity and effectiveness of their medication and treatment practices without an organized, automated collection of clinical data. While an electronic health record and pharmacy system alone are not enough to fully solve the compliance problems stated above, there can be no permanent, reliable solution without systems to monitor and manage the clinical operations of the Institutes.

An electronic system would enable the Institutes to improve the safe and effective delivery of quality health care to patients. With these systems, patient data is maintained in one place, continuously updated, and immediately accessible to the patient's treatment team, offering an integrated view of patient care that is very difficult to obtain via paper-based records. While improved systems can never take the place of clinical judgment and experience, they can actively provide options and explanations that improve the clinician's efficiency and compliance with accepted practice guidelines.

As outlined in the May 2011 Office of the State Auditor CMHI Medication Practices Performance Audit, the Department needs to engage in planning efforts to "better position the State to prepare for the day when the Institutes' use of electronic health records will be a minimum expectation to meet hospital accreditation, Medicare and Medicaid certification, and other quality of care standards." Clearly, the current trend spurred in part by passage of the federal American Recovery and Reinvestment Act of 2009 and the federal Affordable Care Act of

2010, is toward adopting electronic health record systems. Failure to move in this direction is inconsistent with federal guidelines targeted at improving the safe and effective delivery of quality health care.

A feasibility study is needed to determine the best products, platform and approach to consider in a future request.

The Department estimates that the initial one-time cost to design and implement an electronic health record and pharmacy system would total \$3.0 million General Fund based on a projection by the current vendor. An additional \$1.2 million General Fund would be required for ongoing annual costs and maintenance.

Anticipated Outcomes:

A feasibility study would address the benefits of a new electronic health record and pharmacy system by using quantitative and qualitative data to determine the efficacy of modules that would significantly enhance patient care; estimate the costs of full versus partial (phased-in) implementation; explore options for vendor-hosted versus OIT-maintained platforms; and survey other state psychiatric hospitals regarding electronic health record and pharmacy systems. The feasibility study would enable the Department to move forward with a comprehensive request based on professional and independent analyses and recommendations.

Assumptions for Calculations:

The \$75,000 request is based on the costs for recent similar feasibility studies conducted for large-scale automated systems provided by the Office of Information Technology. The \$75,000 amount requested equals 500 hours of work at an assumed billing rate of \$150 per hour.

Legislation is currently pending in Congress to include psychiatric hospitals as being eligible for Medicare and Medicaid incentive funds related to implementing the "meaningful use" of an electronic health record. Hospitals meeting the meaningful use requirements could receive

financial assistance in purchasing and operating an electronic health record through higher reimbursement rates for Medicare and Medicaid clients. This request will enable the Department to take a proactive position to qualify for federal money in the future should Congress enact this legislation.

Consequences if not Funded:

The Department will not be in a position to move forward with the purchase and implementation of a new electronic health record and pharmacy system if this request is not funded. It is possible that medication errors could continue as a function of the Institutes’ reliance on paper-based records in spite of improved oversight processes. In addition, the Institutes would not be able to leverage the benefits derived from a new electronic health record and pharmacy system to increase access to and integration of patient information, improve pharmacy practices and clinical interface in order to reduce medication errors. The Department would also not be able to fully address the audit recommendations in the performance audit completed by the Office of the State Auditor.

Relation to Performance Measures:

The implementation of a new electronic health record and pharmacy system at the Institutes will help to improve the safe and effective delivery of quality health care to patients even though the initial investment and ongoing operating costs are significant. In addition, an electronic health record would enable the Institutes to exchange patient mental and physical health data with community mental health centers and other

community providers of medical and mental health services to individuals that are admitted to the Institutes. An electronic health record will aid in providing clinical care coordination between mental health providers, primary care physicians and specialty medical personnel; thereby, helping prevent adverse drug-to-drug interactions and averting emergency room visits and hospital admissions. The anticipated end result of a coordinated service delivery is reduced lengths of stay and lower readmittance rates for Institute consumers.

Performance Measure	Request Effect
Reduce the number of consumers readmitted to Institute inpatient psychiatric units within 180 days by one percent (based on admission to the campus) from the prior year.	The number of consumers readmitted is expected to decrease if a new electronic health record and pharmacy system is funded and implemented.

Current Statutory Authority or Needed Statutory Change:

26-1-201, C.R.S. (2011) authorizes the operation and administration of the Mental Health Institutes. The request will not require a statutory change.