

**2008 Innovations Awards Program
APPLICATION**

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State: Massachusetts

Program Category: Health and Human Services

Submitted by:

Massachusetts Executive Office of Health and Human Services
Virtual Gateway Team
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1. Program Name: Enterprise Invoice and Service Management (EIM/ESM Service)

2. Administering Agency: Executive Office of Health and Human Services

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9. Two Sentence Program Description:

The EIM/ESM Service streamlines \$2.6 billion in contact management and invoicing processes between over 1,100 community human service providers and 13 state agencies. By replacing manual, paper based processes with a standard web-based system, EIM/ESM improves internal controls, simplifies reporting for community providers, and generates a single system of record across all human service programs in the Commonwealth.

10. How long has the program been operational? EIM/ESM was launched in October 2006.

11. Why was the program created? What problems or issues was it designed to address?

Agencies within the Executive Office of Health and Human Services spend over \$2.6 billion each year on human services purchased from over 1,100 community based organizations. These are all non-Medicaid services, including group homes for disabled adults, home and family visiting services, substance abuse treatment programs, homeless services, employment support programs, juvenile justice and family support programs. Most community organizations deliver services to more than one EOHHS agency and must contend with unique and sometimes duplicative contract management, billing, and service reporting requirements.

Prior to EIM/ESM, most reporting and billing activity was done on paper and was extremely labor intensive for both state and contract management staff. Prior to EIM/ESM it took an average of 31 days for a provider to receive payment after sending an invoice for service delivery to an agency. The paper-based process also lacked automated internal controls, systematic payment authorization, and audit tracking. Finally, with each agency conducting business separately, there was no single system of record to track which providers were receiving payments for what clients – affording no systematic means for coordinating service delivery, provider performance assessment, or expenditure analysis across agencies.

EIM/ESM has replaced manual billing and service reporting with a standard web-based system. It has reduced payment cycle time by 70% - from 31 days to 9 days. It has two-step approval processes, automated client enrollment checking, and internal payment rules that improve internal controls and audit capability. It has streamlined billing requirements for providers, providing a single front door for all billing activity and has reduced workload for state agency staff.

12. Describe the specific activities and operations of the program in chronological order.

a) Agency Contract Set Up. At the beginning of each fiscal year agency staff set up service contracts in EIM/ESM. Some contract information is sent through an interface directly from the Commonwealth's statewide accounting system and other specific service information is entered directly by agency contract management staff.

b) Client enrollment. The EIM/ESM service starts with client information. Client demographic and enrollment information is gathered into the system by one of two mechanisms.

- i) For EOHHS agencies that have their own client enrollment or case management systems, client information is sent to the EIM/ESM service via a daily interface. This interface sends to the central system basic client demographic information as well as relevant information on authorized program enrollment.
- ii) For EOHHS agencies that do NOT have their own client enrollment or case management system, client information is entered and managed directly in EIM/ESM. In these cases, EIM/ESM is both a client case management tool as well as a billing and contracts management tool.

c) Service Reporting and Billing. Once contracts are set up and client information is in EIM/ESM, staff in community provider organizations can log into the system to view their clients. Complex security and data access rules ensure that users can only view clients for which they have authorization to view. Providers use the system on a daily basis to report service delivery information, and submit monthly bills to the contracting agency based on services they deliver. The EIM/ESM service supports contracts that are reimbursed on a unit rate basis and contracts that are paid based on a line item budget.

d) Payment Authorization. Like provider staff, agency contract management staff logs into the system each day to view invoices that have been submitted by providers. Invoices are sent first to staff in an agency that can approve the services delivered. Prior to EIM/ESM, the program level reviewer had to log into different systems to check enrollment information, and mistakes were common because there was no automatic check on the basic integrity of an invoice (Is the contract valid? Is there sufficient funding in the contract? Was the service authorized? Do the numbers add up correctly?). Program level approvals are set on for accounting level approval. Once approved again, invoices are transmitted for payment via an interface to the statewide accounting system.

e) Reporting. The EIM/ESM service offers a variety of reports that both providers and agencies can access to track contract activity over the course of a year or group of

clients, to view invoice status, and to view historical information on a number of parameters.

f) Central Support. The EIM/ESM service is supported by a central operations team that runs a help desk, provides training, assists community organizations in enrolling to use the system, and runs daily tests to monitor the function and accuracy of the system.

13. Why is the program a new and creative approach or method?

To our knowledge, no state has integrated billing and service reporting across such a wide variety of human service systems. Unlike Medicaid services, which can be paid for via claims management systems that are just like health payment systems, there is no clear method for payment based on human service contracts across child welfare, public health, juvenile justice, mental health, and other systems. This approach not only makes it much easier for providers to work with the state, but the information sent over the system generates a rich set of data that state agencies use for spending analysis, service utilization, and, in the future provider performance assessments.

14. What were the program’s start-up costs?

The EIM/ESM service was a major investment by the Commonwealth to improve its management of \$2.6 billion in annual spending – nearly 10% of the entire Commonwealth budget. The Executive Office of Health and Human Service competed with other state agencies to receive funding available from the sale of revenue bonds which support information technology investment in the Commonwealth. Over three fiscal years, the Commonwealth invested approximately \$25M in the EIM/ESM service – however, this investment is projected to have a significant positive return, as outlined below.

Spending Area	Cost
Information Technology Development	\$18M
Training and Communications	\$2M
Business Process Re-Design	\$5M
	\$25.0M
Return on Investment – over 5 years	Benefit
Efficiencies for contract management staff – re-deploy to other positions	\$8.3M
Improved federal revenue billing due to better invoice management and service coding	\$18M
Error reduction and improved internal controls	\$21.7M
Retirement of old IT systems	\$6.5M
Efficiencies and reduced costs for provider agencies	\$3.9M
	\$58.4M
Net Benefit <i>(Future Value Discounted)</i>	\$28.4M

The EIM/ESM service is launched as part of the EOHHS Virtual Gateway, which is a single online portal that hosts all EOHHS web based services. The existing operations staff and technology infrastructures (services, security service, routing systems, etc) were leveraged to support EIM/ESM.

15. What are the program’s annual operating costs?

EOHHS secured additional operating funding for the Virtual Gateway to support increased support needed for the EIM/ESM service. Additional new funding for

operations is required to support central staff to run the service and provide support to users. The operating budget for the program is approximately \$3.5M annually.

16. How is the program funded?

Start up costs were supported partially by information technology bond revenue and federal financial participation. Because certain components are related to Medicaid operations (e.g. revenue billing and some aspects of client case management) some federal revenue could be claimed to support start up costs.

Operating costs are now part of the EOHHS annual budget and are sourced through the Commonwealth general fund.

17. Did the program require passage of legislation? No

18. What equipment, technology, and software are used to operate the program?

EIM/ESM is a technology program designed to address a complex business challenge that faces all state governments in managing human services. Detailed information about the technical infrastructure, software, and technical components is available upon request.

19. Did this program originate in your state? Yes.

20. Are you aware of similar programs in other states?

Some segments of human service programs in other states likely have web-based billing. However to our knowledge no state has developed an approach to integrate all billing across so many different segments of the human service system.

21. Has the program been fully implemented?

EOHHS is launching the EIM/ESM service in segments in order to mitigate risk and ensure adequate training for users. As of March 2008, the system has over 3,000 users; has processed payments in excess of \$200M, and is managing contracts whose total value is nearly \$500M.

Significant numbers of new contracts will be added at the beginning of fiscal year 2008 (July 1 2008). By the end of the first quarter of 2008, the system will hold 2/3 of the entire human service system. When fully launched by the end of fiscal year 2008, the system will have over 6,500 users and over \$2.6 billion in contracts.

22. Briefly evaluate the program's effectiveness.

Pros

- **Improved Internal Controls.** Invoices that historically would likely have been paid are rejected and sent back to providers for re-submission. These rejections are due to common errors such as incorrect enrollments, unauthorized delivery of services, or simple math errors on invoices.
- **Improved Revenue Billing.** Approximately \$1B of the spending managed through the EIM/ESM service services as federal "match" for Federal Financial Participation – whether under Medicaid or Temporary Aide to Needy Families (TANF) maintenance of effort. EIM/ESM contains automated revenue management features that make it easier for agency staff to process federal billing.

- **Streamlined Business Process.** The EIM/ESM service has either combined or eliminated numerous forms that were previously required by providers to complete their billing. Additionally, unnecessarily different rules that were in place to support idiosyncratic contract management practices have been eliminated or standardized. This makes it easier for providers to do business with EOHHS agencies and makes it easier for oversight agencies to monitor EOHHS practices.

Cons

- **Difficult Business Process Change.** Moving from a manual to an online process has been difficult both for providers and agencies. Although faster payment cycle time and easier, more accurate invoice approval is proving beneficial, the amount and magnitude of change at a single time has been difficult to manage.

23. How has the program grown or changed since its inception?

One of the major innovations since the inception of the program has been more robust interaction with provider stakeholders. Early efforts to design the system and its software did not have sufficient input from providers. Today, a community provider advisory council meets monthly and has numerous sub-committees which work on specific issues or challenges. This has been a significant addition to the overall program and has had major benefits to both EOHHS and its agencies.

24. What limitations or obstacles might other states expect to encounter...?

Governance. EOHHS has budget and policy authority over most of the agencies in the Commonwealth that deliver human services. This authority was critical to the implementation of the program, which presented significant business change challenges to agencies. Implementing the program in states where authority is not consolidated may prove difficult.

Funding. The EIM/ESM software is free to other states and is part of the public domain. However, the magnitude of the system, number of users and organizations, and complexity of the business process put “on line” required significant funding. Other states should be able to leverage Federal Financial Participation in the same way that Massachusetts did. However, information technology systems of this complexity are costly, even given the significant benefits to be obtained from launching them.