

CHIMES-EA FOLLOW-UP REPORT

A Report Prepared for the
Legislative Finance Committee

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INTRODUCTION

This report reviews the work to date on the Combined Healthcare Information and Montana Eligibility System – Enterprise Architecture (CHIMES-EA) used by the Department of Public Health and Human Services (DPHHS). It follows-up on the work done by DPHHS after the Joint Appropriations Subcommittee on Health and Human Services during the 2013 Legislature. The paper includes a background on CHIMES-EA, issues explored by the Legislative Fiscal Division (LFD), conclusions drawn from the investigation, and possible future courses of action for the Legislative Finance Committee (LFC). In summary, the LFD found that:

- 1) While DPHHS has continued to improve the CHIMES-EA system, significant work remains. Because DPHHS designed the system to be a unified eligibility system, the CHIMES-EA issues can have impacts to multiple programs;
- 2) DPHHS is working incrementally on fixes to the system including CHIMES-EA processing speed and how it links with other computer systems. The work has been delayed because DPHHS has prioritized implementing mandated Affordable Care Act (ACA) changes to CHIMES-EA;
- 3) DPHHS has developed a general internal schedule to resolve all outstanding issues with the original system; and
- 4) While adjustments are made to CHIMES-EA, it continues as a pressure point for DPHHS staff.

SCOPE

The scope of the report is limited to the operational, organizational, and programmatic aspects of the CHIMES-EA system implementation; it does not look at the technical feasibility, propriety, or details of the system design. This scope choice was intentional. Technical details serve to support organizational goals and outcomes.

METHODS

In preparing this report, LFD staff conducted independent research using qualitative research methods in order to define organizational topics related to CHIMES-EA. Qualitative methods were used because both DPHHS management and field workers acknowledged that issues remained with the system. LFD staff reviewed documents, conducted interviews, and surveyed system users.¹ The resulting data illuminates how and why issues arose, but cannot pinpoint the percentage of stakeholders who feel one way or another. In other words, the data is silent on the pervasiveness of any one problem; it only states that an issue exists and what its features are. All conclusions were verified by using multiple methods and approaches. DPHHS management and staff helped in the process, highlighting issues of major importance for further LFD follow-up.

BACKGROUND

CHIMES-EA manages the eligibility for Supplemental Nutrition Assistance Program (SNAP), Temporary Assistance for Needy Families (TANF), Medicaid, and Healthy Montana Kids. It acts as a unified eligibility determination system that governs if a citizen qualifies for assistance. This design is intended to streamline eligibility determination and issue benefits more quickly than older eligibility systems.

CHIMES-EA was principally funded by HB 4 in the 2007 May Special Session. The appropriation was made in two parts – a TANF eligibility system at \$16.2 million and a food stamps² system at \$13.1 million. As the concept of a single eligibility system evolved, these two systems were united into a single system under the term “enterprise architecture”.³ Thus, while the legislature appropriated funds for different systems, DPHHS

¹ The survey was voluntary and resulted in 168 responses. Voluntary surveys often capture the viewpoints of those who feel strongly about a subject.

² Food stamps are now known as SNAP.

³. Enterprise architecture or “EA” looks holistically across all parts of the organization including the operational, technological, and information areas to create a unified way of approaching issues. It is not solely a technological or IT method. See: MIT Center for Information Systems Research, Peter Weill, Director, presented at the Sixth e-Business

developed the two systems as one. Because of this history, the LFC IT portfolio reports list CHIMES-SNAP and CHIMES-TANF individually rather than as “CHIMES-EA”.

In Montana, DPHHS and Deloitte developed the CHIMES-EA system starting in 2010 with an initial target implementation date of July 2012.⁴ After the contract was signed, the implementation date became October 2012 and shifted a month later as development proceeded. In November 2012, DPHHS deployed the system, replacing the older TEAMS eligibility system. As is common in deployment of major new applications, users of the system started to note issues with the CHIMES-EA system. These criticisms resulted in a special hearing of the Joint Appropriations Subcommittee on Health and Human Services of the 2013 Legislature on February 7, 2013. This hearing highlighted 12 major deficiencies related to the CHIMES-EA implementation. DPHHS committed itself to investigating and fixing these problems. Further updates on these issues were provided to the LFD in March, April, June, August, and September of 2013.

AREAS OF LEGSLIATIVE INTEREST REGARDING CHIMES-EA

In response to legislative interest, the LFD undertook an investigation into the impacts of the CHIMES-EA system. A major focus of the work was examining how DPHHS addressed the issues raised during the February 2013 legislative hearing. The analysis found three different areas of interest relating to the CHIMES-EA system:

- 1) System quality;
- 2) Training and communication efforts; and
- 3) Human resource impacts.

Each of these areas is discussed in the following sections.

QUALITY OF THE SYSTEM

CHIMES-EA has garnered many complements regarding its ability to assist with tasks. Advantages identified by the workers include:

- Less dual entry of information
- Easier scheduling of recertification
- Easier accessibility and navigation
- Less knowledge needed of specific codes or acronyms
- Less eye strain
- Availability of prompting and alerting for needed information

There are also a number of performance issues with the system. DPHHS management has stated the system is not where they would like it to be. Workers have also continued to identify issues related to system performance and system impact on operations.

System Errors

In interviews and the survey, people highlighted the errors that the system produces. Among these was the “Error 100” when CHIMES-EA cannot connect with another system.⁵ While this occurrence can be a minor technological error, it operationally halts workers by kicking them out of CHIMES-EA. Thus, a small issue for the IT technicians can become a major problem for workers in the field. DPHHS and Deloitte are attempting to fix these by contacting workers who have encountered the errors.⁶ However, that such problems continue to occur frustrates system users.

Conference, Barcelona Spain, 27 March 2007; U.S.C. Title 44, Chap. 36, § 3601; and Gartner, <http://www.gartner.com/it-glossary/enterprise-architecture-ea/>, retrieved on September 9, 2013.

⁴ 2010 DPHHS Agency IT Plan – Agency IT Initiative Supplement, April 27, 2010.

⁵ Ron Baldwin, DPHHS Technology Services Division Administrator Legislative Fiscal Committee Meeting, November 13, 2012.

⁶ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013.

These problems are mirrored by worker comments that the system does not seem to keep information accurately or work as expected. One user commented “It is rare to get through a case without at least one error.”⁷ To cope with the errors, users have used workarounds which temporarily fix errors but can cause longer-term problems. As workers adopt the workaround as normal procedure, they are less likely to report errors. This situation can result in faults existing for a long time without DPHHS or Deloitte being aware of the situation.⁸

Because of the integrated nature of the system, information accuracy issues touch multiple programs of the department. “If there is an error with information for one program it messes up all the programs.”⁹ Additionally, an error in information can cause apparent miscalculation of benefits.¹⁰ For recipients, overpayments can cause problems in the future. If a recipient needs public assistance again but CHIMES-EA errors show the use of eligibility, recipients could be denied benefits through no fault of their own. Additionally, both the errors in the system and errors using the system cause delays in issuance of benefits, leaving eligible citizens without timely assistance. States are also monitored at the federal level for timeliness in processing applications and may be assessed a financial penalty if applications are not processed in a timely fashion.

In summary, CHIMES-EA is functional but has faults. That new systems have errors or “bugs” is not noteworthy in contemporary IT. Indeed, it is common place for “bug fixes” to be released soon after a new system is released. However, all sides also acknowledge that large amounts of work still need to be done. DPHHS continues to work on issues as they arise and has fixed errors in reporting and querying. Other issues – most notably the “100 errors” which kick users out of the system – are still outstanding.¹¹ DPHHS has stated that it expects to correct all these issues before December. Currently, DPHHS has prioritized ACA implementation, 100 errors, and improving system speed.¹²

System Speed

System processing speed is an area of concern. A consistent comment by system users is the need for CHIMES to move faster. The longer the system takes to react to commands, the longer it takes for users to process cases. At first, DPHHS thought the slowdowns were an issue of network speed.¹³ However, DPHHS and Deloitte isolated the problem down to how the system was put together.¹⁴ DPHHS has plans to correct these problems.

TRAINING AND COMMUNICATION

All people associated with the system have acknowledged the need for better and more comprehensive communication and training. DPHHS highlighted this need as part of its initial responses to legislative concerns.¹⁵ Similarly, system users and staff highlighted the need for greater training with the system as a primary issue with the CHIMES-EA implementation.¹⁶

Initial Training

Users learned CHIMES-EA on a specialized training version of the system in July of 2012. The training system used hypothetical examples rather than real world cases. Users commented that the training occurred too long before the release of the system. Additionally, they noted that it would have been more useful if they had been trained on real cases, that the training system was “rife with errors”, and that trainers had less expertise than the

⁷ OPA Worker #2784163392.

⁸ DPHHS communication with the LFD, August 27, 2013.

⁹ OPA Worker #2788730386.

¹⁰ OPA Worker # 2784454114.

¹¹ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013.

¹² DPHHS meeting with LFD staff, September 23, 2013.

¹³ DPHHS Report to the LFD on CHIMES-EA, August 19, 2013.

¹⁴ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013.

¹⁵ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013, p 18.

¹⁶ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013, p 21.

workers who were being trained.¹⁷ One user commented: “Training was good to a point...they need to teach you on more realistic scenarios and how to work them in the system. They need to teach you what the errors mean and what to do to change the case so the errors will not be there.”¹⁸

Ongoing Training

Since the initial training, the department has rolled out a number of training options mostly centered around periodic email “tidbits” and, on a larger scale, web-based training using both online conferencing and online educational platforms. Some users stated that they found the updates useful. However, some users commented that the new training scenarios still do not contain real-life situation.

One of the stronger points of the CHIMES-EA implementation has been the use of office expertise. Worker to worker education was a goal of the implementation and has become a reality of the work to date.¹⁹ As one user noted, “My office was really good about working together and sharing knowledge, so everyone knew how to do things in Chimes.”²⁰ This type of training is a real bonus when it occurs because it is both extremely effective and very inexpensive.

Another area where training issues have come to the fore is the CHIMES help desk. Users do not have a consistent understanding of in what situations the help desk should be used. DPHHS noted that the confusion has caused problems by overloading the help desk and is making plans to attempt to rectify the situation.²¹

Communication

The overall issues with training point to a larger issue of communication within DPHHS and with DPHHS stakeholders. As the largest department and one that spans the entire state, DPHHS faces enormous logistical and communication issues. The CHIMES-EA implementation brought these to the foreground. A variety of perceptions exist regarding DPHHS actions, but stakeholders do not always understand why changes are being made. DPHHS has recognized this problem and is hiring a communications officer to handle such issues.²² Additionally, DPHHS has taken steps to update its training especially in light of the quantity of new workers entering the Offices of Public Assistance.²³

HUMAN RESOURCE IMPACT

Additionally, CHIMES-EA has impacted DPHHS human resources. Any time a new system is implemented, it can cause stress. As the pressure from changing to CHIMES-EA and dealing with CHIMES-EA issues has increased, workers have faced continuing demands from clients to continue a high quality service. DPHHS management is aware of this situation and has attempted to take steps to rectify the situation by authorizing overtime and initiating direct conversations with workers.²⁴

The Toll on Workers

Because CHIMES-EA is a part of the fabric of DPHHS work it is not possible to gauge the direct impact of system issues on staff. Anecdotally, users of the system talk of the system offering a “good incentive to retire” and the “brain drain” caused by the system implementation.²⁵ DPHHS management talks openly of their frustration at seeing good workers turnover and not being able to meet the needs of citizens.²⁶

¹⁸ OPA Worker # 2782261856.

¹⁹ DPHHS communication with the LFD, August 27, 2013; WoRC Provider #2772519622.

²⁰ WoRC Provider # 2772376375.

²¹ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013.

²² DPHHS Report to the LFD on CHIMES-EA, September 6, 2013.

²³ DPHHS communication with the LFD, August 27, 2013.

²⁴ DPHHS communication with the LFD, August 27, 2013.

²⁵ Central office staff, #2783094763; OPA Worker #2777771904.

²⁶ DPHHS communication with the LFD, August 27, 2013.

Likewise, it is not possible to calculate the direct financial impact the CHIMES-EA system has had on human resource costs. For example, in the Yellowstone County Office of Public Assistance, turnover in the last nine months has been 27 out of 50 workers, compared with 15 during the nine month period prior to implementation. Without targeted exit interviews, it is impossible to determine how much of the turnover is due to CHIMES-EA. Increased workload over the past four years, pay rates, and pension considerations for retiring workers all contributed to underlying issues relating to the turnover rate. In this context, it is very difficult to pinpoint the impact of CHIMES-EA alone.

Impact on Clients

During the LFD study, staff in all areas associated with DPHHS spoke of a passion for the work of assisting people. From the director of the department to the workers doing data entry, all individuals expressed both a pride in Montana and desire to help the citizens of the state. DPHHS management, employees, and contractors expressed concern that their ability to serve the people is hampered by CHIMES-EA.²⁷ System users find that they are sometimes unable to serve the people who are in front of them, while DPHHS management is similarly frustrated as the CHIMES-EA system has ongoing issues, while system changes need to be implemented in response to new, mandated, regulatory changes.²⁸

CONCLUSIONS

Though operational for nine months, users of CHIMES-EA still experience issues relating to the original system build. During this time period, DPHHS management and system users have been working to resolve these issues.

Adding to the CHIMES-EA level of operation are a number of other conclusions:

- A department-wide system may impact multiple programs
- The search for underlying problems is ongoing
- The cost of fixing the system is unknown

PROGRAMMATIC IMPACTS

The problems with CHIMES-EA have had impacts throughout DPHHS. For many DPHHS workers, the CHIMES-EA system is the heart of their work. Without the functionality that it provides, employees would not be able to do basic tasks such as the determination of eligibility for programs including Medicaid, SNAP, HMK, and TANF. As a part of this, CHIMES-EA issues benefits for SNAP and TANF. Additionally, the system helps link public assistance with other human services such as child support enforcement and child protective services. CHIMES-EA is a vital tool for the department that directly impacts the ability of DPHHS to conduct legally-mandated work department-wide.

SEARCHING FOR UNDERLYING PROBLEMS

DPHHS has developed, but not published, a complete issue resolution schedule for the CHIMES-EA system. Direct costs related to fixing the system will be covered under the original contract. DPHHS has taken a gradual approach to fixing the problems, with needed changes being identified and prioritized for action among other departmental needs. DPHHS has issued contracts for major improvements and enhancements to CHIMES over the next two years”.²⁹

²⁷ DPHHS communication with the LFD, August 27, 2013.

²⁸ Several users noted that they feel as if there would be retaliation for bringing up issues to management. While the feelings are valid, there is no concrete data to support a correlation of complaints equaling retaliation.

²⁹ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013, p 24

A major portion of the work on CHIMES-EA has been incorporated into the efforts of Deloitte and DPHHS to make the system ACA-compatible.³⁰ ACA is currently the primary focus of DPHHS IT efforts and fixes to the original CHIMES-EA run second. Despite the lower priority, DPHHS continues to fix problems with CHIMES-EA as they are identified.

DPHHS has already started on the process of finding what could be done better in a future implementation. As a part of this process, DPHHS management stated that it has “learned valuable lessons in managing large system developments and deployments” from a technical perspective.³¹

FUTURE COURSES OF ACTION

The LFC has several courses of action available to it:

- 1) The LFC could request that LFD staff continue analysis of CHIMES-EA and prepare a follow up report for the December LFC meeting to:
 - a. Verify resolution of outstanding issues with original system
 - b. Explain actions taken by DPHHS to address other operational issues
 - c. Identify outstanding needs and how DPHHS plans to resolve them
 - d. Develop performance metrics on subjects of interest to the LFC regarding operational issues relating to CHIMES-EA and DPHHS progress in meeting those metrics
- 2) The LFC could form a workgroup or subcommittee to review DPHHS budget authority to fund needed changes without an increase in appropriations
- 3) The LFC could continue to monitor CHIMES-EA operations as other DPHHS activities through the normal budget analysis process.

³⁰ DPHHS communication with the LFD, August 7, 2013.

³¹ DPHHS Report to the LFD on CHIMES-EA, September 6, 2013, p 24.