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# Time Data Collection

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**James A. Honchar, SPHR**

Deputy Secretary for Human Resource Management

Office of Administration

517 Finance Building

Harrisburg, PA 17120

717.787.8191

717.783.4429 (fax)

[jhonchar@state.pa.us](mailto:jhonchar@state.pa.us)

**Summary:** The Commonwealth of Pennsylvania's automated time/data collection solution is helping the Department of Military and Veterans Affairs maximize operational efficiency at multiple nursing homes for veterans. The solution, first implemented in late 2009, combines TimeLink biometric time clocks and Web-based approval portal with overtime calculation rules configured in the SAP enterprise resource planning (ERP) system. It replaces manual processes common in many of the state's 24/7 facilities where additional work hours are documented on paper sign-in sheets, manually routed to supervisors for signature, and then finally routed to timekeepers who manually calculate overtime and enter it into the SAP ERP.

While the pilot phase of this implementation targeted facilities in both the Departments of Public Welfare (DPW) and Military and Veterans Affairs (DMVA), the focus of this nomination is on DMVA. The agency quickly adapted to the new technology, saw a quick return on investment (ROI) through a significant reduction in payroll errors, as well as an opportunity to leverage the solution to turn more accurate cost accounting into increased federal Medicaid revenue for the agency. This initial success led to a system enhancement and two additional site implementations within a year of the pilot. The long-term goal is full deployment at six DMVA nursing homes within 18 months of the first pilot.

Project success at DMVA can be attributed to the following strategies:

- Involvement of key commonwealth staff from project inception through completion to ensure the ability to deploy additional sites with minimal contractor involvement and costs.
- Participation of key agency staff in the execution of the change management planning and training at each facility.
- Recognition of opportunities for higher ROI with the addition of enhanced labor tracking. This enhancement is expected to pay for itself within 12 months when offset by increased Medicaid revenue.

**Narrative:** *Provide a narrative answer for each of the following questions.*

**1. Please provide a brief description of this program.**

In November 2009, the Commonwealth of Pennsylvania piloted an automated time collection and overtime calculation solution in two agencies. The system impacts business processes affecting employees at all levels of an organization. Employees use their finger to punch in and out on biometric time clocks located throughout the facilities. TimeLink software applies business rules that look for scenarios where time worked may result in additional compensation and flags them for supervisor review. Supervisors are responsible for periodic management of “exception time” and are required to approve all employee time at the end of each bi-weekly pay period. Employee punch data is then interfaced to the SAP ERP where automated overtime rules are applied prior to payroll processing. The goals of the program were as follows:

- Create one enterprise standard
- Use technology to streamline the collection, routing and approval of time
- Automate overtime calculations
- Reduce pay errors
- Increase accountability

**2. How long has this program been operational (month and year)?**

The program has been operational since November 2009.

**3. Why was this program created?**

Time consuming, manual attendance recording processes and complex, collective-bargaining-driven overtime rules make it difficult to achieve efficient and accurate overtime payments in the commonwealth’s 24/7 facilities. Recognition of these challenges led to the design and implementation of a solution that could become the framework and enterprise standard for automated time capture and evaluation in all commonwealth agencies.

#### **4. Why is this program a new and creative method?**

The DMVA creatively recognized that the solution could deliver significant additional ROI by capturing actual time spent providing nursing care to Medicaid-eligible patients and using that data to increase Medicaid revenue from the federal government. In the past, the number of hours was estimated and the state was not fully benefiting from the federal program. Additionally, the solution was designed in such a way that it could be easily implemented in additional facilities and other agencies. The overall solution was designed to be the enterprise standard for automated time collection and evaluation. The implementation strategy involved partnering with agencies in multiple business areas that would benefit most from the solution and positioning the commonwealth for long-term adoption by designing it to accommodate up to 30,000 employees. The overtime rules configured for the pilot cover at least 80% of the bargaining units in the top six overtime-paying agencies.

#### **5. What was the program's start up costs?**

Direct project costs of approximately \$1.8 million were funded by the Office of Administration (OA). This covered the purchase of hardware required to host the TimeLink application and all phases of the project through the completion of the first pilot facilities. Each agency participating in the pilot was required to sign an agreement to repay OA a portion of the overall project costs. DMVA pilot costs were \$400,000. Each facility is required to purchase its own clocks from the enterprise contract at a pre-determined rate. In addition, DMVA purchased a \$50,000 enhancement to the baseline functionality of the TimeLink software to enhance its Medicaid cost reporting. These costs are expected to be recouped in the first year of deployment through increased Medicaid revenue. The agency costs for this solution were front-loaded into the initial pilot implementation. Because the solution can be deployed to additional facilities and agencies with minimal external costs, the return on investment will grow.

**6. What are the program's operational costs?**

No additional staff were hired to support this program. The salary and benefits costs for three OA staff providing central support are approximately \$150,000 annually.

- Each facility pays annual hardware maintenance fees to TimeLink for its biometric time clocks. A DMVA nursing home with approximately 600 employees paid \$5,500 in device maintenance last year.
- Software license costs are bundled into existing annual billings paid by agencies using the HR/payroll functionality of the commonwealth's ERP.

**7. How is this program funded?**

Project costs were front-loaded as the intent was to design and build an enterprise standard, while positioning internal staff to manage phased deployments over the next several years. Initial costs were paid by the Office of Administration, with partnering agencies signing agreements to reimburse a percentage of the costs upon the solution's successful implementation at pilot facilities. Post-pilot implementations will be managed internally and deployed with minimal external costs.

**8. Did this program originate in your state?**

The commonwealth did not find any other state with this model when the project was initially researched in 2006. The vision for the solution is modeled on similar private industry projects.

**9. Are you aware of similar programs in other states? How does this program differ?**

When the project was initiated in 2006, the commonwealth was not aware of any other state with a similar operating model.

**10. How do you measure the success of this program?**

DMVA is seeing three major areas of ROI as outlined below. Other public sector organizations could benefit by implementing a similar model.

- Goal #1: Allow timekeeping staff to focus on quality assurance and post-audit by eliminating manual attendance-entry.
  - *Realized ROI: Elimination of 20 hours/pay period for a facility of 600 employees.*
- Goal #2: Reduce payroll error rate due to miscalculation or inaccurate interpretation of overtime calculation rules.
  - *Realized ROI: DMVA's agency average payroll error rate for FY09/10 based on random sampling was 22%. Of these errors, 78% were due to manual calculation errors. Following the implementation of this solution, the error rate for Hollidaysburg Veterans home dropped to 2%.*
- Goal #3: Prior to the implementation of this solution, DMVA facilities estimated the number of hours spent providing nursing care to Medicaid-eligible residents. The tracking of actual care hours should increase federal Medicaid reimbursement revenue.
  - *Realized ROI: Increased Medicaid revenue is expected to cover the cost of the labor-tracking enhancement in the first 12 months of deployment based on current trends. The amount of actual increase will not be available until the end of the fiscal year. Short-term results are strong enough to warrant rollout to additional facilities.*
- Goal #4: Increase employee and supervisor accountability and reduce fraud.
  - *DMVA has reported a general increase in the observance of established time and attendance policies that were more difficult to enforce before automated time collection.*

## **11. How has the program grown and/or changed since its inception?**

DMVA has assumed over 80% ownership of the solution at their additional facilities. This includes ownership of change management processes, training content development and training delivery.