

Dental Scheduling at California Correctional Health Care Services

A Case Study in Successful Legacy Modernization



Problem to be Solved



The California Correctional Health Care Services (CCHCS) Dental Program consists of 35 institutions with on-site dental care along with 150 dental clinics and multiple offsite contractor dental services. There are approximately 130,000 inmate-patients at these institutions and inmate-patient transfers between these institutions occur frequently. CCHCS is responsible for managing approximately 400,000 annual appointments, 240 dentists, and 750 dental team members.

The legacy dental system was built using 35 unique MS Access databases which caused data, systems, and management to be disjointed. Patient data could only be updated overnight via batch processing and there was no automated reporting functionality. The legacy system was difficult to maintain because it required custom coding, the database frequently became corrupted and data was lost, and it was difficult to train users.

Our Solution



CALIFORNIA CORRECTIONAL
HEALTH CARE SERVICES

Trinity Technology Group (TrinityTG) partnered with CCHCS to create an enterprise-wide dental system, along with a new operational data store. The project also used Organizational Change Management (OCM) to standardize the local operating procedures and training among the institutions. The new enterprise-wide system tracks inmate-patient scheduling, records inmate-patient procedure history, allows records to transfer with the inmate-patient, and creates a central reporting model.

The Challenges

The legacy system was beloved by users and IT staff and many users were actively resistant to change. There were two other significant projects occurring at the same time, along with a shared inmate appointment calendar. A fourth project was the development of a new operation data store for inmate-patient demographics, and all four projects shared the same project schedule.

Our Approach to Legacy Modernization

The project utilized a blended Hybrid Agile/Waterfall approach that began with a typical Waterfall requirements gathering phase and was followed by an Agile development and testing cycle. This approach successfully enabled the team to gain a firm understanding of the to-be system, stay



in sync with other projects being completed in parallel, and validate and track requirements. By assembling a development team whose skills met the specific project needs, the team was able to fully understand, validate, and track the requirements. Clearly defining the objectives before starting the development phase lowered risk and decreased the potential for re-work later. Obtaining feedback from project stakeholders early in the development cycle enabled the team to quickly react to missed requirements or new functionality, and adapt to changes in the overall project schedule.

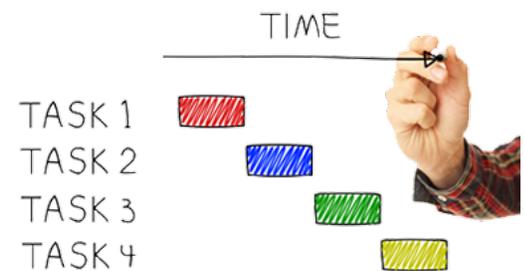
To achieve user buy-in, developers mirrored key User Interface (UI) elements from the legacy system and created screens that allowed for direct keyboard input. OCM principles, along with ongoing open and consistent communication, were combined with a phased rollout and staged data migration strategy. Each institution had a project champion and pilot institutions provided feedback and reviews to the development team. Institutions did not go live with the new system until they upgraded their data store.

Phased Rollout

The system was rolled out in phases across four regions. Each phase was assessed with a go/no-go decision process and three to five institutions went live during each phase. The pilot phase was extended to address issues and the project was able to stay in sync with the medical and mental health system rollouts.

Training teams prepared users for a phased rollout and training materials were updated as the rollouts progressed. A joint

Command Center and an Infrastructure Support team were established to coordinate and triage issues quickly. Each institution's legacy system was archived and data migration was completed just in time.



Key Takeaways



Simply developing a new and improved system is not enough. It is important to focus on business change and transformation activities to achieve client buy-in. Our flexible Hybrid implementation approach combined with OCM principles, including ongoing communication, phased rollout, and staged data migration, contributed to this successful system modernization.

Comprehensive requirements definition and management early in the modernization process gives you more flexibility to adjust the course of the project when issues arise. This occurs because new needs can be inserted into their proper place without affecting underlying requirements. OCM is also a key to a successful modernization project – you need to plan for the users and help them adjust to the new system. By giving users access to the system early in the project, they can validate the requirements and verify the product, thus increasing the adoption rate and user satisfaction.

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