

There is No 'I' in PERLSS

UNITING STAKEHOLDERS TO TRANSFORM LTSS IN TENNESSEE

2023 NASCIO Award Category: Cross-Boundary Collaboration & Partnerships

Submitting State and Agency: State of Tennessee, TennCare

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The Beginning

The population of Tennessee is approximately 6.91 million people. Among that population, nearly 1.74 million are covered by Medicaid which attributes to around 25%. 40,000 recipients out of the 1.74 million are responsible for over 20% of the total Medicaid expenses within the state, the care for whom is managed by the Long-Term Services & Supports (LTSS) division within Tennessee's TennCare agency. For recipients who are enrolled in this division's programs, they are offered medical and/or personal care and supportive services due to the loss of capacity to perform activities of daily living, such as bathing, dressing, eating, transfers, and toileting, and/or activities that are essential to daily living, such as housework, preparing meals, taking medications, shopping, as well as managing money.

One of the LTSS programs helps JT Davis live in his community. JT is a TennCare member enrolled in Employment and Community First CHOICES (ECF CHOICES) and has a team of support behind him including his employer, Managed Care Organization, Direct Support Professional, friends, and family. Please see [JT's Success Story \(tn.gov\)](#)

Members like JT start their journey by being evaluated for eligibility in the Preadmission Evaluation and Referrals for Long-Term Services and Supports system (PERLSS). A team of professionals work together from application to enrollment. One applicant may require collaboration within PERLSS from an Area Agency on Aging, Managed Care Organization, Case Manager, LTSS nurse, enrollment manager, support provider, employment providers, physician and the Department of Intellectual and Development Disabilities.

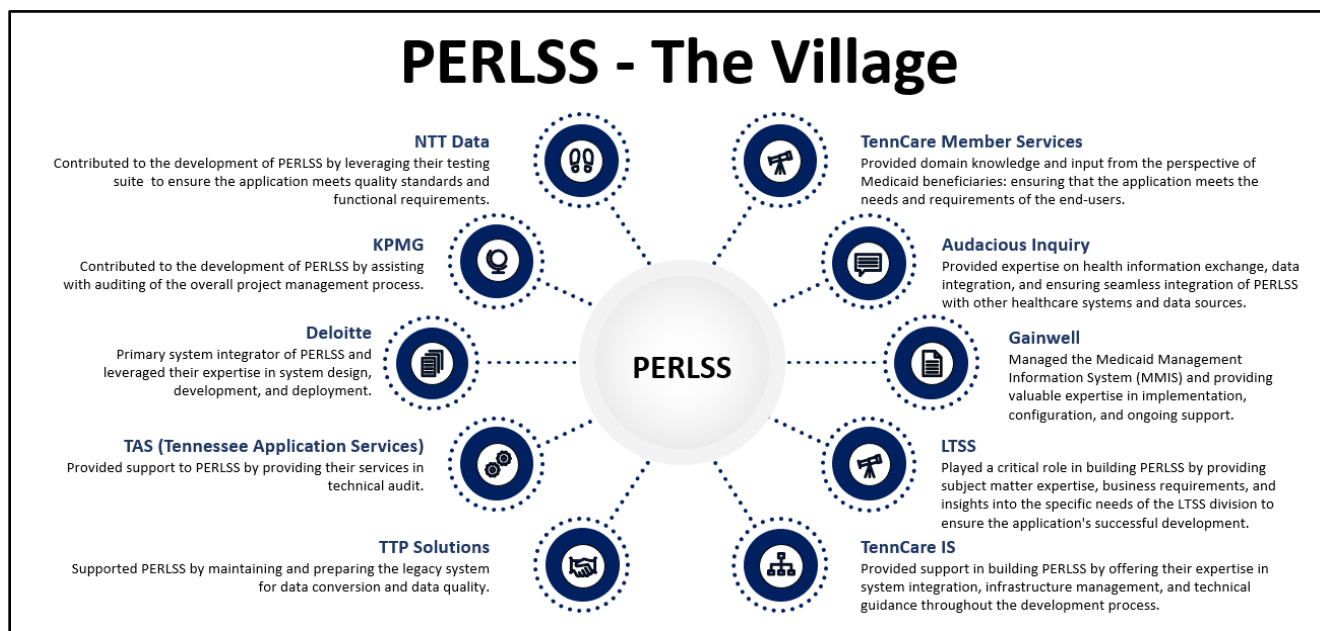
To serve the population of 40,000 Tennessee Long-Term Services & Supports recipients, TennCare was previously using five legacy systems including SharePoint and several other offline tracking mechanisms such as spreadsheets in Microsoft Excel to serve their highly diverse and vulnerable population. This resulted in hours of manual data entry between the different systems which inevitably led to discrepancies and inefficiencies. Processes such as medical eligibility, financial eligibility, and program enrollment are highly dependent on each other, but there was no integration between the related systems, which made compliance tracking difficult. The net result of this was considerable time spent by highly specialized LTSS staff on rudimentary tasks such as Excel upkeep, usage of paper forms, mailing notices, data entry and managing processes through email.

As TennCare extended the use of its legacy system, TennCare recognized the need for a novel approach to combine LTSS services into a modern, centralized, and integrated system. This system would need to support Nursing Facilities, Home & Community Based Services (HCBS), Intermediate Care Facilities (ICF), Elder Care Programs, as well as children with behavioral needs while simultaneously increasing transparency for policy compliance tracking and enrollment outcomes. Finally, this new system would need to significantly increase automated processing between its other divisions and agencies within the State of Tennessee umbrella.

As a result, the Pre-admission Evaluation and Referrals for Long-Term Services and Supports (PERLSS) was created to modernize the existing infrastructure, technical capabilities, and operations of LTSS by providing an application that enhances the overall user and worker experience. By empowering the LTSS staff to make key decisions, building provider trust through reliable tracking, maximizing engagement between LTSS and their partners, and creating a one-stop-shop assessment process that supports the everyday needs of members, PERLSS stands alone as a one-of-a-kind system. PERLSS was also designed to alleviate the burden of complex data entry and demanding workflows by streamlining multiple systems into one easy-to-use platform with “no wrong door.” From vision to reality PERLSS would not be where it is today without the cross-collaboration efforts of its people, partners, vendors, divisions, and departments.

Collaboration Towards a Common Goal:

PERLSS was designed, developed, tested, and delivered in collaboration with several contracted vendors, partners, and a multitude of stakeholders such as Deloitte, NTT Data, KPMG, Tennessee Application Services (TAS), TTP Solutions as well as TennCare Divisions & Departments; including Member Services, TennCare IS, and LTSS. Additionally, the roll out was successfully supported by several highly qualified strategic third-party Information Technology vendors such as Gainwell and Audacious Inquiry. Thanks to the collaboration of this village, Tennessee was able to create a state-of-the-art solution for LTSS and her residents.

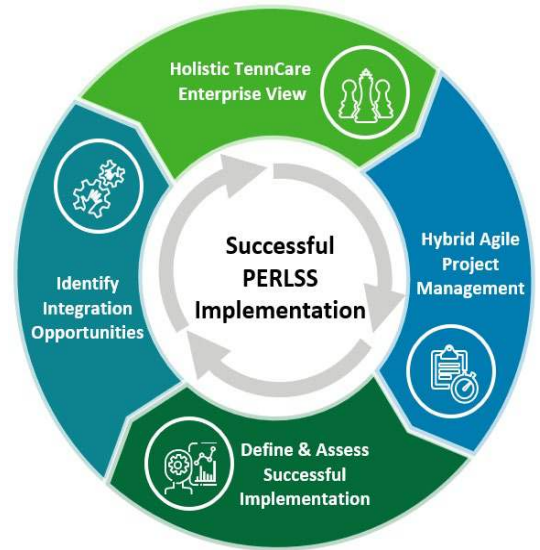


Once the ultimate vision for PERLSS was established, TennCare worked closely with its vast network of partners and vendors to define a phased delivery approach so that the new LTSS application could be built incrementally and incorporate inputs from all stakeholders. This approach allowed for ongoing collaboration by enabling LTSS to observe progress and provide valuable insight along the way. Deloitte worked with LTSS to develop a comprehensive fit-gap

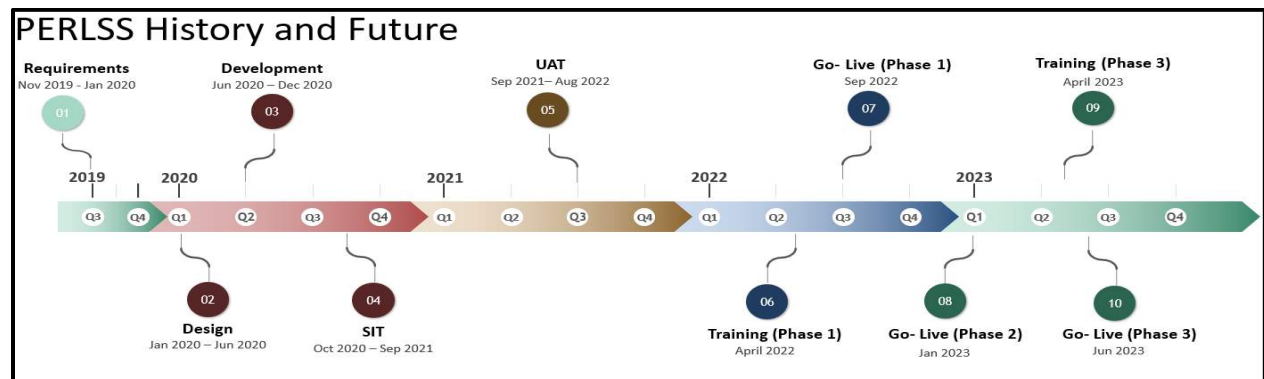
analysis that was completed in collaboration with LTSS to identify the typical pain points our staff and contractors experienced. Throughout this analysis, TennCare agency leadership has had to make key decisions regarding system design requirements and approach while navigating dynamically changing policy requirements like the Katie Beckett Waiver. Eventually, we decided that a new, innovative solution would be necessary to achieve the desired results.

Come on, Vamanos!

By taking a holistic, enterprise-wide project management approach and employing policy-driven metrics, PERLSS was developed to meet the long-term goals of TennCare. The entire village of PERLSS-focused professionals, from LTSS, Deloitte, sister agencies, and critical vendors remained agile enough to adapt to changing requirements. Due to the number of vendors, partners and stakeholders involved; strong project management was needed to succeed. To attain this, we utilized a hybrid agile project management approach that focused on maximizing delivery while establishing key milestones to ensure readiness. The project team utilized this methodology to enable flexibility and adaptability throughout the development and testing phases, and this allowed for continuous collaboration among all stakeholders to ensure that the project remained on track and aligned with agency goals.



During PERLSS’s drive to implementation, an enterprise view was crucial to allowing the application to align with the overall IT strategy and goals of the agency. To accomplish this, the project holistically integrated with TennCare's existing enterprise systems and technologies. We leveraged a variety of commercial off-the-shelf (COTS) products, including Oracle Policy Automation (OPA) for rules management, OpenText for PDF generation and notices, and FileNet for document storage and retrieval. These tools were carefully selected to align with TennCare's existing technology stack, ensuring that PERLSS could be easily integrated into the larger enterprise ecosystem.



Trusting the Process

During the 2 years and 9 months between the start of requirements and system launch, the implementation of PERLSS was a collaborative effort that involved dozens of resources across different vendors and stakeholders, each playing a unique role. This village mentality was crucial to our implementation as the duration of the project required persistence, consistency, patience, and collaboration. While the list of actors that played a key role in PERLSS implementation cannot all be captured here, we want to highlight that this village was as expansive as it was high performing. KPMG's key audit role centered around conducting independent evaluations of the project and ensuring goals and milestones were met, NTT Data was responsible for testing, and Deloitte served as the main implementation, program management, and development vendor. Gainwell manages the Medicaid Management Information System, and subject matter experts from Member Services and LTSS provided valuable insights into Medicaid policy and system design. Additionally, Audacious Inquiry played a crucial role with their Master Data Management solution by automating certain processes and improving the accuracy and consistency of demographic information housed in the system. State Technology Services (STS) was responsible for on-prem infrastructure, and Amazon Web Services (AWS) provided cloud infrastructure. TTP solutions also ensured the smooth ongoing operations of the legacy system while supporting all data conversion needs.

We Weathered the Storm Together:

As momentum finally began to build, the COVID-19 pandemic struck. This posed new challenges to all parties involved, particularly the agency and vendors like Deloitte, but also underscored the importance of this application as the pandemic hugely affected the State's institutional population. Although the pandemic prevented the face-to-face collaboration that comprised the project's earlier stages, it facilitated new co-creation methods. Vendors began to use clickable demos to replace the face-to-face storyboarding that had become a standard practice, and design sessions quickly moved from the on-site office building to Zoom. This allowed LTSS to virtually engage and provide feedback on the proposed solutions without losing already limited time. Vendors, Member Services, DIDD, TennCare IS and LTSS met for over 150 design sessions to ensure that all the input received from stakeholders was considered in the final design.

Once we finalized the design for the new system, development and testing ensued. To prepare for Go-Live, extensive testing, quality assurance, and change management activities were performed to ensure that PERLSS would never need to be taken down during working hours to address an issue. Deloitte pushed to have PERLSS tested using a "sprint" approach that maximized visibility for LTSS, KPMG, and NTT Data while providing predictable delivery timelines for Deloitte to meet. NTT Data's thorough User Acceptance Testing and KPMG's dedication to auditing quality measurements ensured that all stakeholders felt confident that PERLSS was ready for its Go-Live. Meanwhile, Gainwell supported PERLSS in preparing for the management of transactions with MMIS while Audacious Inquiry was an essential collaborator in preparing for the MDM to track and store demographic information. All their efforts were tracked by a

combined Deloitte and TennCare program management team as well to improve transparency in each phase of the project. These partners were key to PERLSS's success, as this was uncharted territory for LTSS since the legacy systems such a wide array of functionality.

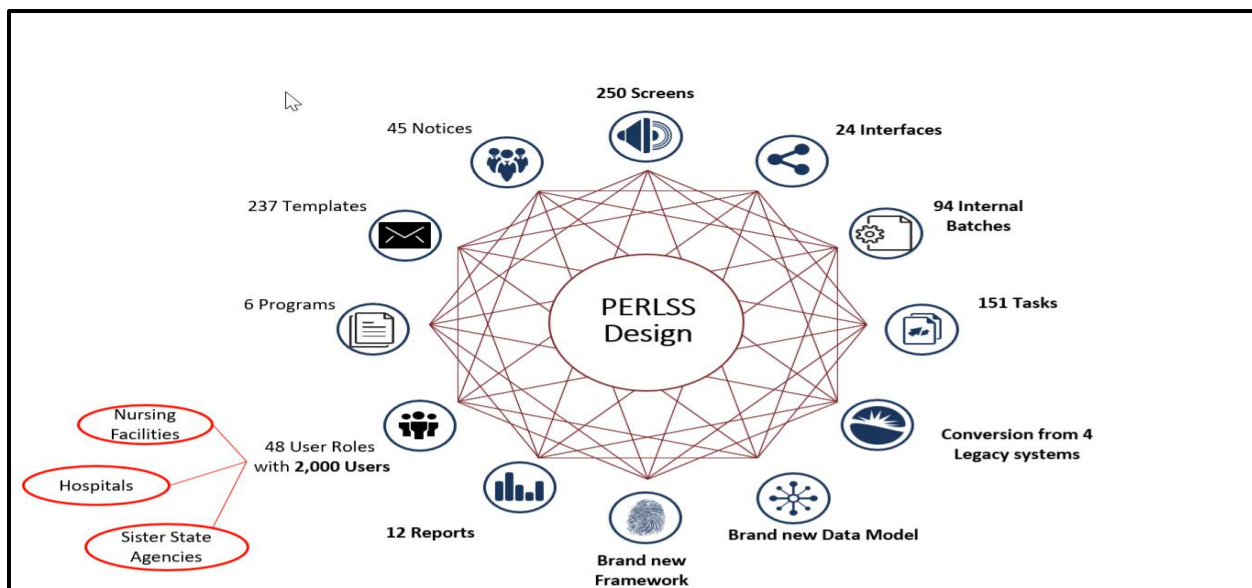
Beyond design, the system was architected and built by Deloitte's development staff that were spread across all time zones in the continental US, and end-user training was adapted to consider the "new normal" of virtual work we had found ourselves in. Courses previously planned for in-person instruction had to shift to a "virtual, instructor-led" model, and TennCare adopted the agency's first Learning Management System as a result that allowed end users to train at their own pace. Deloitte's Training Team proved to be immensely flexible and committed to providing the best materials across 28 total hours of instruction that were developed.

Partner agencies also played a pivotal role in preparing for Go-Live by providing essential feedback on training materials, ensuring their workforce was well-equipped to utilize PERLSS effectively. Their inputs into operational readiness testing also significantly contributed to the application's preparedness for Go-Live. Additionally, the engagement of TennCare divisions and agencies were instrumental in defining processes and ensuring a smooth transition for all stakeholders. Partner organization continue to provide PERLSS with valuable feedback today that allows the system to continue improving and identify further enhancements.

Setting Us Apart

Since LTSS supports a diverse array of populations, the PERLSS application needed to be a one-stop-shop for assessments of LTSS populations. This has all led to a trailblazing solution with over 250 screens, 45 notices, 40 interfaces, 94 internal batch processes, 48 user roles, and dozens of reports. PERLSS is directly integrated with the State of Tennessee's Master Data Management (MDM) solution, Medicaid Management Information System (MMIS), and Financial Eligibility determination system TEDS (Tennessee Eligibility Determination System) to drive transparency and cooperation between the Medicaid-related applications in the State. The system is cloud-hosted, modular, and leverages a sleek user experience that automates flows while minimizing user intervention, where appropriate, and is on par with high-end commercial systems in the marketplace. This allows the system to be highly scalable and unique for this space to raise the bar for what user experience should look like for state government systems.

LTSS services are not exclusive to Tennessee and address a much larger national demographic. With an aging population, many Americans may need some form of LTSS in their lifetime to ensure quality of life and independence. A modular system like PERLSS can be tailored to meet the needs of a specific state by providing a wide range of workflows that are designed to streamline referral and assessment processing, as well as track enrollment and capacity targets, thereby reducing costs and promoting efficiency between state agencies and their partners.



Coming Out Ahead with our Partners

Since going live, PERLSS has lived up to its promise. Through over 1500 interface calls per day (on average), financial eligibility, MCO assignments, existing enrollments, address verification, and more can all be accomplished and viewed within the PERLSS application. Referral lists that were being manually tracked have been converted into PERLSS allowing for enrollment capacities that were not fully utilized prior to launch to be tapped into. Over 650 average weekly users across 360 partner organizations have been able to log into PERLSS to complete key evaluation activities like level of care submissions, updates to Enrollments, Pre-Admission Evaluations, skilled services requests, and more. Through constant collaboration with these partner organizations, PERLSS has deployed 20 releases to improve user experiences. These releases were made possible by feedback and suggestions from partner organizations, support in testing from collaborators like NTT Data, and ongoing advice on integration with our partner systems like MMIS and MDM.

In Addition, Deloitte conducted a comprehensive evaluation to determine its impact. Quantitative data revealed significant adoption and in-flow of referrals and assessments 8 months in. Since September 2022 we have received 2,277 referrals, maintained over 12,500 restricted capacity slots, and over 12,000 PAEs have undergone review by the State's nurses. Almost 7,000 enrollments have been authorized in the system along with over 1500 transitions between programs and over 200 appeals have been fully processed. A net benefit can already be observed in the monthly enrollment numbers since PERLSS Go- Live: In 2020 the average monthly net new enrollments authorized across all programs was 868, while in 2023, LTSS, through the PERLSS system, has an average of 938 authorized enrollments per month. Additionally, customer feedback was overwhelmingly positive, with members praising the system for its ease of use and ability to streamline processes.

Qualitative data further supports the success of the PERLSS application, as Hugh Hale, CIO of TennCare, said, *“PERLSS [was] a 3+ year collaborative development between LTSS, TennCare IS and Deloitte with the goal of modernizing the agency workflow with technology that can change our members experience with TennCare... our members can now get the services they need faster, our MCO partners can better support our members with improved workflows and our LTSS staff will have a much better user experience with a system designed with their needs in mind.”* With this support and others like it, the system has been applauded for its help in allowing stakeholders to more efficiently manage LTSS cases, resulting in improved outcomes for their clients and increased productivity for their staff.

Moving Forward

PERLSS as it exists now is only the beginning. TennCare plans to expand the functionality of PERLSS to include new and modern features while also expanding the programs that it currently supports to serve an even larger breadth of populations. Less than a year after Go-Live, with full integration to all partner agencies through over 40 real-time Rest API web services, PERLSS’s cutting-edge automation has been used to receive over 1.4 million interface calls and send over 66,000 automated notices. These metrics only represent a few of the ways that PERLSS has improved worker and user experience while reducing state costs and inefficiencies.

As the LTSS division of TennCare continues to grow, PERLSS will continue to evolve to meet the changing needs of its partners, workforce, and end-users. Twenty production deployments, including three major releases, have already been delivered to enhance and upgrade PERLSS based on the feedback received from its users, and more features to support even more benefit recipients are on the way in the upcoming fourth major release. In addition to supporting new populations, PERLSS is gearing up to be at the forefront of artificial intelligence integrations and support while focusing on other strategic modular expansions that will improve access to care for Tennesseans. Outside of PERLSS’s future in serving the State, the TennCare team anticipates that sister states may also adopt this solution and use PERLSS’s roadmap to forge a path of their own in this space. As PERLSS has always set out to be a unique and innovative solution, TennCare is proud to witness the interest being shown in the system by other states, as it is a huge testament to the State of Tennessee’s commitment to supporting its citizens in getting the care, they need to be successful in their communities. PERLSS is the result of years of cross-boundary collaboration and partnerships that exemplify the power of collective effort from a diverse set of stakeholders. By combining TennCare leadership’s forward-thinking perspective, LTSS’s deep subject-matter knowledge, and unwavering support from vendors and partner agencies, PERLSS has been able to fill a massive gap and serve Tennessee’s most at risk population while also serving as a pioneer in the LTSS space nationwide.