

Optimizing Healthcare:

Altru Health System's Journey to Enhanced Patient Workflow



3,500

Health Professionals
and Support Staff

230K+

Residents served

CHALLENGE:

Altru Health System, a trusted community of over 3,500 health professionals and support staff, has been committed to serving the over 230,000 residents of Northeast North Dakota and Northwest Minnesota region for more than 130 years. As the first affiliate member of the Mayo Clinic Care Network since 2011, Altru provides its patients access to the expertise and research of Mayo Clinic specialists.

Altru faced common industry challenges in optimizing patient workflow, staff efficiency, and service quality across its outpatient clinics. Leadership wanted to drive integrations and workflow through their Epic electronic health record (EHR) system, ensure staff safety through effective duress solutions, and harness analytics to drive operational insights. The deployment has set the foundation for further applications in Altru's new hospital, scheduled to open the beginning of 2025.

SOLUTION:

To address these challenges, Altru partnered with ZulaFly, a leading AI-powered software company specializing in enterprise location and sensory solutions for healthcare.

The collaboration has focused on deploying location tracking technology across several outpatient clinics, to manage several priority use cases including Patient Locating and Workflow, Epic Integration, Staff Locating and Duress, Analytics, and Self-Rooming.

The solution's scope is expanding to include Asset Management and Staff Duress in Altru's New Hospital.

The new hospital features include:

- ✔ Over 552,000 sq. ft.
- ✔ Seven above ground floors
- ✔ Space for 226 licensed patient beds
- ✔ 14 Operating Rooms

ZulaFly's platform offers real-time visibility into patient and staff movements, enabling healthcare providers to optimize patient flow, reduce wait times, and enhance staff safety. The integration with Epic ensures seamless data sharing between RTLS and Altru's existing EHR system, further streamlining operations.

IMPLEMENTATION:

The implementation phase involved deploying ZulaFly's enterprise software technology along with RTLS hardware in selected outpatient clinics, focusing on key areas of patient and staff workflow. The system was integrated with Altru's Epic EHR, allowing for real-time data synchronization and improved operational efficiency.

Key features implemented include:

- ✔ **Patient Locating and Workflow:** Real-time tracking of patient locations and movements to optimize appointment scheduling and reduce cycle times.
- ✔ **Staff Locating and Duress:** Enhanced staff safety through duress buttons and real-time location tracking.
- ✔ **Self-Rooming:** Enabling patients to move directly to assigned rooms without the need for staff intervention, reducing wait times and improving patient experience.
- ✔ **Analytics:** Providing actionable insights into operational efficiency, patient flow, and staff utilization.

IMPACT:

The RTLS deployment is expected to significantly impact Altru's outpatient clinics, particularly in terms of productivity, service quality, and innovation.

Efficiency gains are expected as follows to be consistent with industry metrics such as:

- **Productivity:** By reducing patient cycle times, the solution has enabled Altru to see more patients and reduce staff requirements. This improvement translates to 6-8 minutes of time saved per patient, which can add up to one extra appointment per day for each provider.
- **Service Quality:** With real-time data from RTLS, Altru's teams can better understand provider time and patient value-added time. The system also enables in-room scheduling, ensuring that over 85% of patients book their next appointment before leaving the clinic. This contributes to higher patient quality scores and improved ongoing patient-provider relationships.
- **Innovation:** ZulaFly's RTLS system has introduced new operational data to Altru, creating opportunities for innovative discussions and improvements in patient care.

RESULTS:

- Specific metrics for Altru's RTLS deployment continue to be gathered, the general results observed in similar deployments indicate **substantial improvements in productivity, resource utilization, and service quality.**
- ZulaFly's partnership with Altru Health System **demonstrates the transformative potential of RTLS in healthcare**, paving the way for more efficient, safe, and patient-centric environments.



"ZulaFly's solution has helped us identify bottlenecks in patient throughput. We've been able to address those bottlenecks to improve productivity, which means we can care for more patients every day."

Matt Schumacher | Director of Technology & Information Services