Transforming Elder Care Through UX Design

Overhauling a fragmented monitoring ecosystem into a unified, mobile-first healthcare platform to eliminate nurse fatigue and enhance patient safety.

Overview

Conducted deep user research and shadowing with nursing staff to identify critical workflow gaps, transforming a simple dashboard request into a holistic ecosystem redesign.

- Delivered a comprehensive, role-based design system featuring a mobile suite for caregivers, a web dashboard for managers, and a multi-facility admin portal.

- Achieved a 67% improvement in alert response times (from 45 to 15 seconds) and reduced critical alert misses from 12% to 1.8%.

Client

A prominent Japanese healthcare technology provider dedicated to revolutionizing elderly care. They focus on IoT-driven monitoring to improve safety and operational efficiency within Japanese care facilities and nursing homes.

Challenges: Fragmented Systems and Alert Fatigue

- **Cognitive Overload:** Nurses experienced severe alert fatigue, with 78% reporting workflow disruptions that increased response times by 34%.

- **System Fragmentation:** Caregivers were forced to switch between 4–6 different interfaces daily to manage monitoring, communication, and logging.

- **Mobility Gaps:** 89% of nurses required mobile access to check alerts while on the move, but the legacy system lacked optimized mobile accessibility.

- **Low UX Maturity:** The lack of a unified design language led to inconsistent interactions and a baseline task success rate of only 61%.

Solution: Unified, UX-Driven Healthcare Ecosystem

QBurst adopted a strategic design approach to build UX maturity from the ground up. We moved beyond a simple UI refresh to create an integrated ecosystem that bridges the gap between caregivers, facility managers, and administrators.

- **Role-Based Interfaces:** Developed context-specific tools including a mobile suite for real-time room monitoring, a management dashboard for staff allocation, and an admin portal for inventory tracking.

- **Scalable Design System:** Created a robust component library and color-coded alert priority system that reduced recognition time by 82% and accelerated future feature development by 70%.

- **Smart Alert Management:** Implemented predictive filtering and alert clustering based on room proximity to minimize noise and interaction time.

- **Integrated Training & DX:** Expanded the solution to include an internal DX tool for automating office workflows and a learning platform that reduced caregiver onboarding time by 50%.

Design Approach: Human-Centered Design

- **Shadowing & Interviews:** Conducted deep-dive sessions with nurses (ages 35–50) to uncover pain points that standard stakeholder interviews missed.

- **Iterative User Testing:** Facilitated testing with 25 nurses across 5 facilities, leading to 3 refinement cycles that boosted task success rates to 94%.

- **Accessibility Compliance:** Ensured the entire platform met WCAG 2.1 AA standards to accommodate a diverse workforce.

- **Templatized Scaling:** The system was built so efficiently that it allowed for white-labeling and rapid rebranding (reducing 4 months of work to 3 weeks).

Outcome

- **67% Faster Response:** Alert response times dropped from 45 seconds to just 15 seconds.

- **Enhanced Safety:** Critical alert misses were slashed from 12% to 1.8%, directly improving patient outcomes.

- **Operational Efficiency:** Saved 4.5 hours per facility per day and automated office tasks to save 12 hours weekly per employee.

- **Business Growth:** Achieved a 200% increase in new facility acquisitions and secured a major white-label partnership with a premium client.

- **High Satisfaction:** User satisfaction scores leaped from 3.2 to 8.7 out of 10.