SUPERSPREE

Theory of Change

RouteLoop: Digital Wayfinding in Hospital Settings

Purpose: Give patients and visitors clear, step-by-step directions from “where I am now” to “where I need to be”, reducing nosodromosia, (including disorientation and stress) and staff time spent giving directions, while improving patient experience and operational efficiency.

Problem

Hospitals are complex, with confusing layouts, multiple entrances and changing routes.

Patients and visitors get lost, arrive late or flustered, and interrupt staff for directions.

This increases symptoms of Nosodromosia and uses staff time across the estate.

Target population & context

Patients attending outpatient appointments, especially first-time or infrequent visitors.

Visitors seeking wards, diagnostics or facilities.

Staff who give directions or escort people.

Large NHS or equivalent hospitals where static signage and paper maps are insufficient for diverse needs.

Inputs

Digital: indoor map data; RouteLoop activation points; browser-based web app with step-by-step guidance; configurable real-time routes.

Organisational: hospital partnership and governance approval; staff/volunteer time to validate routes and naming; communications materials.

Data and feedback: analytics on route requests, completion, dwell points and hotspots; patient and staff feedback loops.

Activities

Co-design and map the hospital into an indoor routing graph using familiar destination names; select activation-point locations; test key journeys with real users.

Build and deploy a responsive web app with simple search, turn-by-turn directions, accessible routes and multilingual support; integrate links into appointment communications and the hospital website.

Train frontline staff, reception and volunteers to use and promote the app; collect staff feedback on navigation problems.

Continuously monitor usage analytics and feedback; iterate map, UI and routing logic; update routes rapidly for estates changes or closures.

Outputs

Live, hospital-specific wayfinding web app accessible via RouteLoop activation points.

Validated indoor map and route database covering entrances, clinics, wards, diagnostics and amenities.

Communication touchpoints via appointment letters, SMS/email, website and activation points.

Trained staff aware of the tool and able to promote or use it.

Short-term outcomes (0–12 months)	Medium-term outcomes (1–3 years)	Long-term impacts (3+ years)
Reduced confusion and stress finding appointments or wards. Improved punctuality; fewer missed or delayed appointments due to getting lost. Greater confidence and control, especially for people with additional needs. Fewer staff interruptions and less time escorting lost visitors. Better analytics on navigation breakdowns. Positive perceptions of a modern, patient-centred hospital.	Reduced late arrivals related to wayfinding; smoother appointment flow and fewer reschedules. Higher satisfaction with ease of finding services, especially for older adults, disabled people and non-native speakers. Fewer complaints about signage, confusing layouts or getting lost. Navigation data informs signage, clinic placement and refurbishment decisions. Evidence supports investment in digital wayfinding.	More patients arrive on time and calmer, improving clinical encounter quality and efficiency. Potential reduction in DNA rates where location confusion contributed to missed appointments. More inclusive hospital environment for people with cognitive, sensory or mobility impairments. Stronger trust in an organised, caring hospital that respects patient time. Reusable mapping/routing layer supports logistics, staff wayfinding, emergency routing and asset tracking. Data-informed estate and patient-flow design culture.

Key assumptions	Risks and mitigation
Patients/visitors have smartphones or can be supported via shared staff/volunteer devices. The interface is simple, accessible, multilingual where needed, and routes are accurate and trustworthy. The hospital actively promotes the app at letters, website, signage and other touchpoints. Estates and digital teams keep maps and routes up to date. Navigation meaningfully contributes to reductions in nosodromosia, lateness, staff experiencing incivility and cost of provision of wayfinding.	Low uptake → strong communications; activation points at entrances/car parks; links in appointment texts/emails and homepage. Poor data quality → clear estates/digital ownership; simple CMS; regular reviews; in-app feedback button. Digital exclusion → staff/volunteer-supported tablets/desk devices; complementary signage; very simple interactions. Staff change fatigue → demonstrate time saved; involve staff in co-design; position the RouteLoop solution as reducing interruptions and walks.