

InterSystems UK+I Data Summit

NOHA

Smart Multigenerational Neighbourhoods™

Harnessing interoperable data, trustworthy AI
and digital infrastructure to enable
Healthy and Agile Ageing

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Smart Multigenerational Neighbourhoods™ and NOHA © Agile Ageing Alliance 2026.

From health data to whole-person data



Health data



Wellness



Whole-person



Neighborhood

Expanding the data foundation for confidence in AI

To solve the challenges that matter most

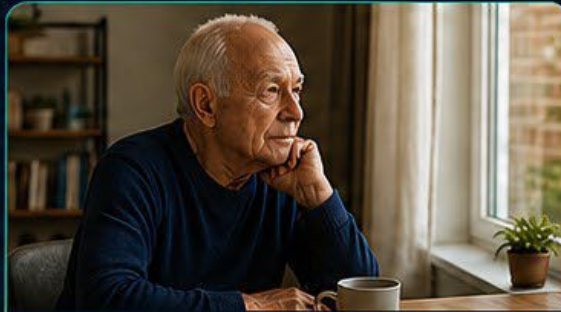
The challenge is multi-faceted

Rapidly ageing populations, more complex needs and mounting pressure on health and care systems are **increasing demand for prevention, coordinated support and healthier living at home.**



Demographic

More people are living longer, often with multiple and changing support needs.



Social

Isolation and reduced day-to-day engagement can undermine wellbeing and resilience.



Care

Unmet care needs are placing increasing pressure on families, providers and public services.



Financial

Rising health and care costs are making earlier intervention and better coordination more urgent.



1.6 million

Older adults in the UK have unmet care needs



+1 million

Older adults in the UK go a month without speaking to a friend or family member



13% to 29%

Rise in expenditure of public service healthcare spending



This is a global challenge requiring adaptable and transferable solutions.

The neighbourhood as a **connected system**

ISO 25553 brings together people, places, technology and services to deliver better lives at neighbourhood scale.

An integrated neighbourhood operating model
Human-centred • Data-informed • Place-based • Outcomes-focused



Working together to deliver:



Better lives

Independence, dignity and quality of life for all ages



Better outcomes

Earlier insight, prevention and coordinated support



Better value

Efficient use of resources and long-term sustainability



Resilient places

Climate resilience, sustainability and community strength



Stronger connections

Between people, services, data and places

Enablers built in by ISO 25553



Trust, safety & safeguarding
Privacy, consent, security and ethics



Interoperability & standards
Open, connected and future-ready



Evidence & insight
Data for decision-making, learning and continuous improvement



Equity & inclusion
Accessibility, affordability and addressing digital and health inequalities



Sustainability & resilience
People-planet value at the core



One neighbourhood. Connected. Intelligent. Human.

ISO 25553

The framework for Smart Multigenerational Neighbourhoods.

NOHA

Neighbourhood Open Health Architecture

NOHA is an AI-enabled operating system that brings **ISO 25553** to life—supporting prevention, participation and continuity of living.



NOHA

AI-ENABLED OPERATING SYSTEM

1



Home Hub

Connecting in-home technologies, daily living data and personalised support.

2



Community / Health Hub

Coordinating neighbourhood services, care pathways, community assets and local support.

3



Neighbourhood intelligence layer

Using trusted data and AI to identify patterns, support earlier action and improve decisions.

4



Secure operating layer

Interoperability, consent, governance, assurance and human oversight built in from the start.

5



Open innovation ecosystem

Enabling partners and researchers to test, integrate and scale solutions within a shared framework.

Supporting healthy and agile ageing within neighbourhoods designed for all generations.

NOHA demo

Meet Frank

InterSystems®
Creative data technology



AgileAgeing Alliance



How NOHA works in practice

A connected system for shared, secure, neighbourhood-based intelligence



• From connected homes to coordinated neighbourhood action. •



A NEW STANDARD OF LIVING FOR THE AT AGE

The home becomes the first node in a wider living system

Resilience grows when homes can connect with shared capacity across the neighbourhood.

Heat · Light · Communication
Energy · Water · Care · Community

Adaptive **agentic** assistance

NOHA enables trustworthy AI agents to facilitate more adaptive, anticipatory and coordinated living at scale.



Personal support

Dynamic reminders, reassurance, navigation and everyday decision guidance.



Care and coordination

Connect services, identify unmet needs and facilitate more timely intervention.



Neighbourhood orchestration

Match local assets to need and coordinate anticipatory action according to need and circumstances.



From individual support to coordinated action at neighbourhood scale.

Governed for trust

As AI and connected technologies move into homes, care settings and neighbourhoods, trust, safeguarding and accountability are fundamental requirements of **ISO 25553**.



1. People first

Treat people as active participants, not passive recipients of services.



2. Safeguarding and consent

Protect dignity, privacy, choice and human oversight.



3. Ethical AI and data use

Ensure transparency, accountability and responsible decision-making.



4. Interoperability and assurance

Make systems safe, secure, resilient and capable of working together.



5. Inclusive access

Ensure digital innovation works for people of all ages and abilities.



6. Evidence and accountability

Measure outcomes, learning from implementation and improve over time.



Responsible innovation, with a duty of care.

Challenges with current tech solutions



Silo'd Data

- Not standards-based
- Not easy to combine or leverage in other apps

Unfriendly UX (especially for elders)

- Proliferation of individual apps
- Not adapted to different personas and demographics

Privacy and Security

- Hard to trace and trust
- Sensitive information accessible to others

Disconnected from:

- Medical and Social Services
- Community and Neighborhood
- Family

How **NOHA** addresses these problems



Easy to use

- Personalized conversational AI
- Use on device, smartphone, or via a simple phone call
- Unified experience across all agents and devices
- Human service when any difficulty detected

Standardized

- Connections to wearables, smart home, med-device
- Data format and data access
- Agent API and tools

Secure and Private

- Data stored locally
- Secure auth and access for specific data by specific roles

Connected

- Many devices: medical, smart-home, wearable, ...
- Medical and social service and care team
- Neighborhood and family

A coordinated response

Led by the **Agile Ageing Alliance (AAA)** a new global standard, **ISO 25553**, aims to lay the foundations for change, helping people live safer, healthier and more independent lives.



The challenge

A complex, cross-sector problem affecting health, care, housing, technology and research.



The response

A common standard to guide how better solutions are designed, delivered and repeated.



The outcome

A stronger basis for safer, healthier and more independent later living.



Turning a common standard into a practical path for delivery.

Why InterSystems

InterSystems brings the trusted health data, interoperability and public-purpose capability needed to help NOHA move from architecture to real-world delivery.



Trusted health infrastructure

45+ years building mission-critical data systems, with over 1 billion health records managed in large-scale healthcare environments worldwide.



Open interoperability

Deep support for HL7 and FHIR, proven cross-vendor integration, and the ability to connect data securely across diverse systems and settings.



Long-term public-purpose fit

Founder-led, privately held and shaped by a long-term public-purpose ethos aligned with the ambition of NOHA.



Trusted infrastructure for connected, scalable delivery.

Built to learn, prove and scale

NOHA and ISO 25553 enable assured delivery, generate evidence, shared learning and repeatable pathways to scale.



Cross-sector ecosystem

Public, private, academic and community partners shape better solutions together.



Demonstrators and evidence

Real-world use cases generate learning, validation and confidence for wider adoption.



Scale and sustainability

What works can be refined, repeated and supported through ISO Parts 2 and 3 (2026 -2030).



From demonstrators to evidence, adoption and scale.

Where **NOHA** is heading

From personalised support to a robust, resilient and trustworthy system of systems for AI-enabled neighbourhood-scale intelligence.



Conversational companion

Customisable, explainable AI support for guidance, reminders, reassurance and decision support.



Connected devices and services

Wearables, sensors, apps and assistive technologies integrated through one trusted operating layer.



Adaptive neighbourhood intelligence

Personal signals linked to community, care and service systems for more timely, joined-up action.



Towards more personal, predictive and human-centred support at neighbourhood scale.

Next steps

We are now seeking strategic partners to help specify real-world use cases, inform the next phase of the standard and participate in early demonstrators.



Specify priority use cases

Work with us to co-create high-value applications across health, care, housing, digital infrastructure, learning and play.



Shape standards and evidence

Help inform ISO 25553 Parts 2 and 3 through practical requirements, evaluation, shared learning and best practice.



Access preferred partnership support

Early collaborators can benefit from preferred terms and support from InterSystems and AAA delivery partners.



To explore demonstrators, strategic partnership or use case opportunities:

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NOHA

THANK YOU

Enabling Healthy Aging



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