Scotland’s Digital Nation: People-Powered Health and Care

DigitalNation.scot

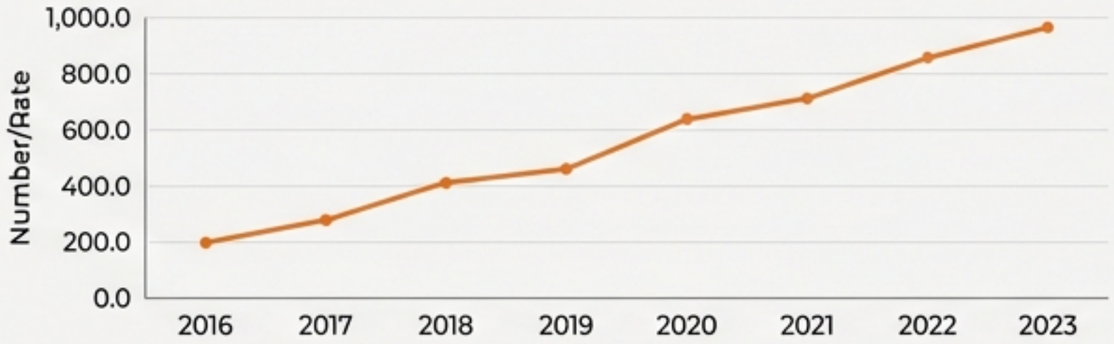
NotebookLM

The Mandate for Transformation

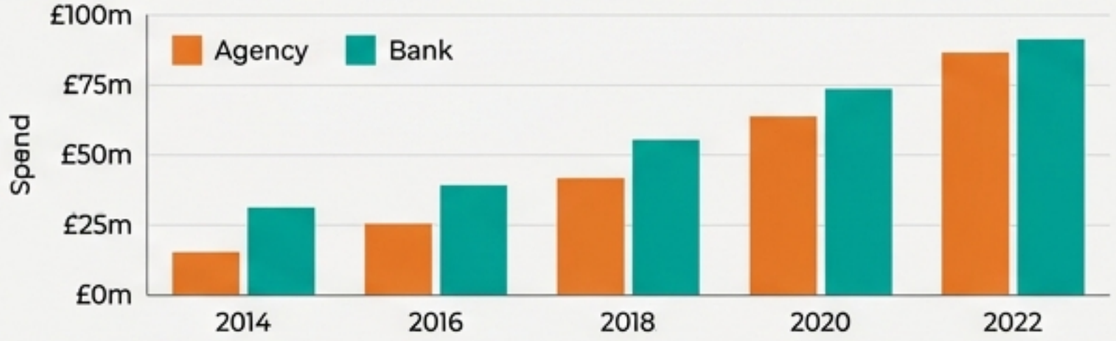
Our health and care system faces mounting workforce pressures while citizen expectations for seamless, digital-first services are growing.

System Pressures

Nursing and Midwifery vacancies in the north of Scotland 2016-2023



Spend on agency and bank nursing and midwifery staff in the north of Scotland



Demands on staff continue to increase and vacancy rates have rarely been higher.

Citizen Expectations

> People are frustrated, confused and disappointed and we need to do better. They are enthused and excited about how the sector could embrace the opportunity to make people's experience and use of services more straightforward and interactive, in the same way as banking, shopping and travel.

2/3

Roughly two-thirds of patients 'google' their symptoms before seeing a clinician, indicating a default digital-first behaviour.

NotebookLM

Our Vision: Enabling, Connecting, and Empowering Every Citizen

To improve the care and wellbeing of people in Scotland by making best use of digital technologies in the design and delivery of services.

Citizen Access & Control

Citizens have access to their own data and the digital tools they need to manage their health and wellbeing.

People-Centred Foundations

Health and care services are built on safe, secure, and ethical digital foundations that allow staff to access and share information seamlessly.

Data-Driven Innovation

Planners, researchers, and innovators have secure access to the data needed to improve services and develop new ways of working.

> *"This strategy is bold, ambitious and enterprising and presents a once in a life time opportunity to create a digital and intoroperable health and social care system."*

Shona Robison & Cllr Peter Johnston

NotebookLM

A Transformation Grounded in Human Rights

Our digital future is built on a rights-based foundation, ensuring every decision and service design is fair, inclusive, and accountable. We use the PANEL principles as our framework.

The PANEL Principles

Our approach is guided by the Scottish Human Rights Commission's PANEL framework: **P**articipation, **A**ccountability, **N**on-discrimination, **E**mpowerment, and **L**egality.

NotebookLM

Progress in Action: Empowering Citizens with Digital Tools

We are delivering on our promise to give people greater control and convenience, moving from strategy to live services that are already making a difference.

The Digital Front Door

A major public-facing programme that will significantly change how people interact with services. The service will develop iteratively, launching with a cohort in Lanarkshire in December 2025.

Connect Me

The award-winning remote monitoring service supports people at home. To date, it has supported over **113,000 people**, mostly with hypertension, saving an estimated **400,000 unnecessary appointments**.

Digital Mental Health Therapies

Providing additional support options when and where people need them. Now **35 digital therapeutic treatments** are available across all NHS Health Board areas, with **74,000 referrals** in the past year.

NHS inform

Positioned as the trusted source for health information, the foundation of the Digital Front Door.

NotebookLM

Progress in Action: Augmenting Our Workforce and Spending Time Where it Counts

We are deploying advanced technologies to automate routine tasks, streamline complex processes, and free up our skilled professionals to focus on patient care.

Digital Theatre Scheduling

A pilot in three NHS Health Boards showed an increase in operating theatre productivity by **up to 20%** for some specialties. Now being rolled out nationally.

Digital Dermatology

A new service for sharing dermatology images between Primary and Secondary Care, allowing more efficient triage. Became available across all NHS Health Boards in April 2025.

AI in Medical Imaging

We are actively piloting AI to support clinicians and improve diagnostic accuracy.
Recognize unaapacited ʊʁ at accuracy to interestraseɑsolal i devnedging and upioatings and career digital apartnments.

Using our mareawa economic examples:

- The **RADICAL** project in NHS Greater Glasgow & Clyde is trialling AI-powered X-rays to fight lung cancer.
- The **Gemini** project in NHS Grampian is using AI to assist in breast cancer screening, aiming to spot tiny cancers missed by doctors.

NotebookLM

Learning from Global Innovation: The Proven Value of AI in Healthcare

Our adoption of AI is informed by a global evidence base showing that these tools can safely and effectively triage symptoms, support mental health, and manage chronic conditions at scale.

Symptom Triage & Safety

Large-scale evaluations indicate that leading AI triage systems approach human clinician performance in safety. One study found Babylon's AI triage was **97.0% safe** versus 93.1% for human doctors.

Mental Health Support

A randomized controlled trial found that two weeks of using the **Woebot** mental-health chatbot significantly reduced anxiety and depression symptoms compared to standard self-help materials.

Public Health at Scale

During the COVID-19 pandemic, the WHO launched a chatbot that informed **billions of people**, demonstrating the massive scalability of AI for public health.

High Patient Acceptance

Surveys show a **majority** of people agree 'a health chatbot is a good idea' and are comfortable sharing symptoms with one.

NotebookLM

Building a Digital Nation for Everyone

A true Digital Nation leaves no one behind. We are actively addressing the barriers to digital inclusion to ensure equity of access for all.

1. Key Barriers Identified

Cost

A third of low income households (<£15k) had no internet access.

**The main barrier we hear about is financial... Clients in these circumstances simply do not have the funds available."*

Skills & Confidence

41% of older users reported they cannot use, or would need help to use, the internet.

Disability

In 2017, 56% of adult internet non-users were disabled, despite being only 22% of the UK population.

2. Our Actions

The £2m Digital Inclusion Programme

Delivered in partnership with SCVO, this programme has developed models of digital inclusion, benefiting over **3,500 people** and supporting 616 staff and volunteers.

Commitment to Choice

Reiterate Principle 2: *'People can make an informed choice between using digital and non-digital services... without compromising the quality of care.'*

DigitalNation.scot

NotebookLM

Earning Trust Through Ethical Data Stewardship

The secure and ethical use of data is the bedrock of our digital nation. We are governed by clear principles and are committed to transparency in how data is used to improve care and drive research.

Safe People
Researchers are trained and authorised.

Safe Projects
Projects are approved for public good.

Safe Settings
Secure environments prevent unauthorised use.

Safe Data
Data is treated to protect confidentiality.

Safe Outputs
Screened outputs that are non-disclosive.

Public Engagement

Key Finding

Public dialogue shows that while people have concerns, there is support for data sharing for public benefit, provided there is transparency, strong governance, and clear communication.

Commitment

We will be as transparent and open as possible about data-led projects through newsletters, blogs, etc.

Key Infrastructure

Data Safe Havens and **Trusted Research Environments:** The secure platforms where this work happens.

DigitalNation.scot, 14pt, **Primary Blue (#002D56)**

NotebookLM

Ensuring Fairness by Design: Our Approach to Algorithmic Bias

We recognise that algorithms can **entrench or amplify historic** biases. We are committed to a rigorous and proactive approach to identify and mitigate bias in all our data-driven systems.

Core Concepts

Beyond 'Fairness through Unawareness'

Simply removing protected characteristics is not enough to prevent bias. We must actively monitor outcomes.

Human Accountability is Key

"Organisational leaders need to be clear that they retain accountability for decisions made by their organisations, regardless of whether an algorithm or a team of humans is making those decisions."

The Public Sector Equality Duty

We have a duty to take reasonable steps to consider any potential impact on equality upfront and to detect algorithmic bias on an ongoing basis.

Our Strategy

Anticipatory Governance

Using Equality Impact Assessments and Data Protection Impact Assessments to identify risks ***before*** deployment.

Transparency

Committing to proactively publish information on how algorithms are used in significant public sector decisions.

Augmented Intelligence

Emphasising a model where AI ***assists*** human professionals, who retain supervisory roles and can apply context and empathy.

NotebookLM

Our Strategic Blueprint for Delivery

Our vision is being delivered through a coordinated national effort across six interdependent domains.

National Direction & Leadership

Establishing a national decision-making Board to drive the agenda.

Transition Process

Managing the move from legacy systems to the new platform while ensuring service continuity.

Information Governance, Assurance & Cyber Security

Creating a simplified, consistent national approach to IG.

National Digital Platform

Developing a modern, interoperable platform to enable secure data flow.

Service Transformation

Scaling up proven technologies like remote monitoring and video consultations.

Workforce Capability

Building digital skills and leadership across the entire health and care workforce.

NotebookLM

The National Digital Platform: Your Complete Health Story, Secure in One Place

We are moving away from closed, disparate systems to an open, flexible platform. This is the foundational technology that will connect our services and enable truly integrated care.

For Citizens

Access and update your information, interact with services, and manage your care from a single point of access—the Digital Front Door.

For Professionals

Safely and securely access, update, and share relevant information about the individual you are caring for, wherever you are.

For Innovators

An open environment with agreed standards (APIs) that allows researchers and companies to develop and integrate new tools and services, fostering a vibrant digital ecosystem.

Key Enabler

Expanding the use of the **Community Health Index (CHI)** to link health and social care information at a national level.

NotebookLM

Our Commitment: Fostering a ‘Digital First’ Mindset

“‘Digital First’ is our guiding principle for service design and delivery. It means actively considering how technology can reshape and improve services to meet the expectations of a digital society.”

For Service Planners

Considering from the outset how services and support could be better delivered through digital technology.

For Citizens

Having the expectation that a convenient, accessible digital option will be readily available.

For the System

Embedding and mainstreaming innovations that have proven successful, like Connect Me, Near Me, and Digital Mental Health therapies.

“This means all of us working in the sector considering how services and support could be better delivered through digital technology; and recognising that many people will, over time, have increased expectations and feel empowered to ask why a digital option is not readily available or accessible.”

NotebookLM

The Road Ahead: Our Priorities for 2026 and Beyond

We are maintaining momentum by focusing on embedding successful services, delivering the next wave of transformational projects, and preparing for future innovations.

Embed & Mainstream

- Expand **Connect Me** to additional pathways.
- Further roll-out of **Digital Mental Health** therapies into new settings like prisons and higher education.
- Continue transition to the **Digital Telecare** shared Alarm Receiving Centre (ARC).

Deliver & Scale

- National roll-out of the **Digital Front Door**, iterating based on user feedback.
- Full implementation of national **Digital Theatre Scheduling**.
- Expand the use of the **Digital Dermatology Service**.

Explore & Prepare

- Publish a national **AI Policy Framework** to guide the ethical use of emerging technologies.
- Continue to explore the potential of **Generative AI** and machine learning in controlled pilot projects.
- Further collaborative work with Local Government to expand the Records Management Code of Practice to cover social work and social care.

NotebookLM

Building a Healthier Scotland, Together

Care that is Personalised, Proactive, and Participatory.

Through DigitalNation.scot, we are creating a future where technology serves people. Where every citizen is empowered to manage their own wellbeing, every professional is equipped with the best tools, and our health and care system is built for the challenges and opportunities of tomorrow.

DigitalNation.scot, 14pt, Primary Blue (#002D56)

NotebookLM