

NHS Scotland Data Quality Strategy Roadmap for Climate and Sustainability



Priority	No.	Our Recommendations	Milestone	Horizon 1 (first 6 months)	Horizon 2 (6 months - 2 years)	Horizon 3 (3 years and beyond)
1. Governance and Accountability	1.1	Develop a sustainability data maturity assessment template and coordinate completion by all health boards. Develop proportionate action plans reflecting local starting points across health boards using existing tools and expertise where available. Repeat data maturity assessment at intervals (to be agreed).	M1	✓		
	1.2	Establish a nationally coordinated governance model for sustainability data that provides strategic oversight, clear authority to set priorities, approve standards and methodologies and resolve cross board issues. Where possible this should coordinate and build on existing governance structures rather than create new ones by default.	M1	✓		
	1.3	Create or formalise targeted national expert working group(s), reporting through the agreed governance structure, to provide technical advice on specific topics such as data standards, methodologies and emission factors.	M1	✓		
	1.4	Define and standardise key sustainability data roles (for example data owner, data steward and sustainability lead), with clear accountability for collecting, checking, approving and reporting data. Ensure these roles are formally embedded within governance and assurance processes.	M1	✓		
	1.5	Develop a clear communication and engagement approach explaining governance roles, statutory responsibilities and the value of good sustainability data.	M7		✓	
	1.6	Put in place policy for clear executive-level sponsorship for sustainability data governance, with accountability at chief executive and chair level. This should be supported by active engagement with the Scottish Government to ensure sponsorship sits at the right level and is aligned with legal reporting requirements and national sustainability priorities.	M7		✓	
	1.7	Evaluate the need for, and where justified establish, a permanent national sustainability data function to provide ongoing national oversight of data quality activity, including maturity assessment, monitoring and national analysis to inform national priorities. This could be delivered through existing national capability subject to agreed remit and sustainable funding.	M7		✓	

Priority	No.	Our Recommendations	Milestone	Horizon 1 (first 6 months)	Horizon 2 (6 months - 2 years)	Horizon 3 (3 years and beyond)
2. National Data Standards	2.1	Identify, agree and where necessary develop national sustainability data standards ensuring alignment with international sustainability reporting standards (such as GHG protocol) and formally adopt and publish them across NHS Scotland. Standards should align with recognised national and international reporting frameworks and legislative definitions where applicable, making expectations explicit, reducing variation in interpretation and enabling consistent, comparable and trusted national reporting.	M8		✓	
	2.2	Take a nationally coordinated, iterative approach to sustainability emission sources that are currently unreportable or inconsistently reported, recognising their complexity and engaging with evolving external guidance to develop, test and refine formal, nationally consistent methods over time.	M8		✓	
	2.3	Develop and publish authoritative, machine readable national reference datasets (for example sites, locations, classifications, units and emission factors), consolidating existing sources where possible.	M8		✓	
	2.4	Produce clear, accessible guidance and examples to support consistent application of national data standards and methodologies by health boards, suppliers and national teams.	M8		✓	
	2.5	Agree and publish data quality metrics linked to national data standards, enabling transparency about data quality and proportionate assessment of whether data is fit for purpose.	M8		✓	
	2.6	Use agreed data quality metrics to assess sustainability data in a staged, maturity based way, targeting support and improvement where it will have the greatest impact.	M8		✓	
	2.7	Use data quality metrics to prioritise and take action on sustainability data improvement, targeting effort where it will have the greatest impact.	M15			✓

Priority	No.	Our Recommendations	Milestone	Horizon 1 (first 6 months)	Horizon 2 (6 months - 2 years)	Horizon 3 (3 years and beyond)
3. National Sustainability Data Platform	3.1	Collaborate with users, health boards and national stakeholders to define clear requirements, expected benefits and priority needs and uses for the national sustainability data platform, building on the platform already in development.	M2	✓		
	3.2	Design and develop the technical infrastructure required to support a scalable, interoperable national platform that integrates with existing health board systems, automating data flows where feasible and avoiding the introduction of additional manual effort or duplication of local processes.	M9		✓	
	3.3	Develop tools and interfaces that work alongside the national platform to support analysis, reporting and transparency of sustainability data, including visibility of data quality and end to end data flows.	M9		✓	✓
	3.4	Create a delivery plan and operating model for the national platform, including a prioritisation framework for introducing new data flows, retiring existing ones and sustaining the platform over time. This should recognise differing levels of data maturity across domains and manage expectations around phased delivery.	M2	✓		
4. Automation	4.1	Assess where manual sustainability data collection, validation and reporting tasks create the greatest burden or risk and identify opportunities for automation.	M10		✓	
	4.2	Prioritise procurement or development of automation initiatives to capture data automatically where possible, recognising variation in health board capability and that some complex datasets will require phased or longer term approaches.	M3			✓
	4.3	Assess opportunities for automated validation steps to be introduced into data collection processes.	M10		✓	
	4.4	Implement automated validation steps where gaps exist, ensuring checks are proportionate and do not duplicate robust existing assurance.	M10		✓	
	4.5	Prioritise integration of high impact data sources and automate data feeds into the national sustainability data platform, reducing reliance on manual submissions.	M10		✓	
	4.6	Embed clear data and automation requirements into procurement contracts and supplier arrangements, ensuring sustainability data is provided in consistent, usable formats that support automated processing.	M3	✓	✓	✓

Priority	No.	Our Recommendations	Milestone	Horizon 1 (first 6 months)	Horizon 2 (6 months - 2 years)	Horizon 3 (3 years and beyond)
5. Data Quality Monitoring	5.1	National Data Quality Monitoring Framework				
	5.1.1	Develop and implement a nationally agreed data quality monitoring approach that defines how sustainability data quality will be reviewed consistently over time, aligned to national standards and the Data Quality Framework. This does not introduce new checks where robust assurance already exists.	M11		✓	
	5.1.2	Introduce routine reporting of clear data quality measures alongside sustainability data, enabling health boards and national teams to understand and communicate how reliable reported figures are. These measures should highlight emerging issues, support transparency and help prioritise improvement activity.	M11		✓	✓
	5.2	Contract and Supplier Data Quality Support				
	5.2.1	Strengthen the monitoring of supplier provided data by embedding clear data quality expectations, reporting requirements and escalation routes within procurement and contract management processes, recognising that many sustainability data quality issues originate in contract performance.	M11		✓	✓
	5.2.2	Provide practical support to health boards and contract managers to manage supplier data quality consistently and effectively, using guidance and tools rather than new systems. Support should reflect the fact that contract management responsibilities sit across operational, managerial and senior leadership levels.	M11			✓
6. Working Together	6.1	Structures and networks				
	6.1.1	Build on existing national, regional and informal sustainability networks to support ongoing collaboration on sustainability data, avoiding unnecessary duplication of groups or forums.	M4	✓		
	6.1.2	Establish a Sustainability Data Community of Practice (initially as an online and facilitative resource), to support knowledge sharing, peer support and informal problem-solving.	M4	✓		
	6.1.3	Create a Senior Sponsorship or Sustainability Data Champion role to drive active participation, maintain focus and help link collaborative activity to national priorities.	M4	✓		

Priority	No.	Our Recommendations	Milestone	Horizon 1 (first 6 months)	Horizon 2 (6 months - 2 years)	Horizon 3 (3 years and beyond)
6. Working Together	6.2	Support & shared resources				
	6.2.1	Develop shared, collaborative tools (such as templates, guidance hubs, shared whiteboards) to support consistent ways of working.	M12		✓	
	6.2.2	Provide accessible spaces to share sustainability reference material and training resources, clarifying definitions, methodologies and data expectations.	M12		✓	
	6.2.3	Develop clear, accessible routes for health boards to raise issues, share challenges and coordinate responses to common sustainability data problems.	M12		✓	
	6.3	Insight and practice sharing				
	6.3.1	Document and share practical case studies, process models and examples of good practice, focusing on real world problem solving rather than abstract guidance.	M12		✓	
	6.3.2	Encourage participation and learning through the development of informal formats such as short webinars, show and tell sessions and shared demonstrations of work in progress.	M12		✓	
	6.4	Reducing duplication and supporting alignment				
	6.4.1	Work with health boards to jointly identify where sustainability data activities are duplicated, particularly in relation to national tools, systems and reporting processes, and map opportunities to reduce unnecessary duplication.	M12		✓	
	6.4.2	Use shared insight to inform future national approaches, including alignment opportunities arising through procurements and shared services models where appropriate.	M12		✓	
	6.5	Communications & engagement				
	6.5.1	Focus communication on practical impact and shared challenges, using accessible language rather than technical terminology.	M5	✓	✓	✓
	6.5.2	Use success stories and shared achievements to build confidence, support adoption of the strategy and reinforce the value of collaborative working.	M5	✓	✓	✓

Priority	No.	Our Recommendations	Milestone	Horizon 1 (first 6 months)	Horizon 2 (6 months - 2 years)	Horizon 3 (3 years and beyond)
7. Building Capability and Resilience	7.1	Training and learning				
	7.1.1	Develop existing or create nationally coordinated sustainability data learning pathways covering data literacy, systems, caveats and interpretation for reporting and decision making.	M13		✓	✓
	7.1.2	Deliver learning in practical, accessible formats (such as short webinars, recorded walkthroughs, checklists and examples) to support day to day application.	M13		✓	
	7.2	Resilience, mentoring and shared capability				
	7.2.1	Encourage mentoring, peer support and informal resource sharing arrangements between health boards to reduce reliance on single individuals and strengthen resilience.	M6		✓	
	7.2.2	Improve visibility of sustainability and data expertise across NHS Scotland through clear, proportionate signposting (such as, named contacts or 'who to ask' guidance), ensuring this remains proportionate to avoid expectations of ongoing individual support where capacity is limited.	M6	✓	✓	
	7.2.3	Explore opportunities for shared or regional approaches to sustainability data activity where appropriate, recognising that some tasks may benefit from pooled capability or shared service models.	M14			✓
	7.3	Capacity & specialist support				
	7.3.1	Support health boards to evidence resourcing gaps and pressures in sustainability data activity, helping to inform local business cases and national discussions about capacity and priorities.	M14		✓	
	7.3.2	Explore the feasibility of a small, flexible national function to provide specialist analytical support and a clear escalation route, helping to ensure expertise is available where needed and reducing the risk of both overstretched support and isolated teams where local capacity or expertise is limited. This should complement, rather than replace, health board level capability.	M14		✓	✓

Milestones	Title
M1	Governance and Accountability
M2	National Platform Requirements and Plan
M3	Automation Procurement Requirements
M4	Develop Networks
M5	Communication and Engagement
M6	Sharing Expertise
M7	Senior Support, Communication and Evaluation
M8	National Data Standards
M9	Data Platform Development and Toolkit
M10	Automation Development
M11	Data Quality Monitoring
M12	Support and Share
M13	Training and Learning
M14	Build Capacity, Regional and Specialist Support
M15	Data Driven Improvement