National Data Resource (NDR)

Final Internal Audit Report

2024/25

Digital Health & Care Wales (DHCW)

Reasonable Assurance

Contents

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Audit Committee	8th April 2025
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Executive Summary

Purpose

To provide assurance over the National Data Resource (NDR) Programme, including progress towards implementing local datastores, and reference, demographics and medicines data.

Overview

We have concluded reasonable assurance on this area. We note that the matters requiring management attention identified below are outside of the ability of the NDR Programme to resolve, however they impact on the ability of the NDR Programme to successfully deliver the identified benefits:

- The nature of the funding process for the NDR Programme adversely impacts on the ability for full financial planning and delivery of benefits.
- Currently there are restrictions on the ingestion and use of some NHS Wales data due to perceived conflicts with Welsh Government Policy and the GDPR.

Full details of matters arising are detailed within the Findings & Agreed Action Plan. The following opportunity for enhancement has been identified that does not impact the overall opinion and is highlighted for management information:

- The position of the Programme Chair should be assigned to an individual outside of Welsh Government.

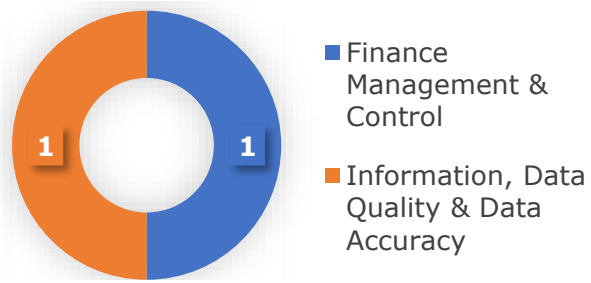
Scope & Assurance Summary

Objectives		Related Findings	Assurance
1	Appropriate programme governance and process is in place that ensures control is maintained over the programme, risks are managed and formal reporting and monitoring is undertaken.	-	**Substantial**
2	Appropriate plans for delivery are in place, which are realistic, identifies the required resources, ensures effective integration and appropriate progress is being made against these.	1	**Reasonable**
3	There is appropriate stakeholder involvement to ensure consistency and uptake across Wales.	-	**Substantial**
4	The NDR is of a secure, resilient design and information governance measures are in place which provide an appropriate balance between protecting the information from inappropriate access, use or loss and enabling appropriate sharing of data to derive insights and intelligence supporting service improvement in NHS Wales and benefit to the public and patients.	2	**Reasonable**

Management Actions

2	-
High Priority	Medium Priority

Themes



Risk Types

Financial Loss

Legal & Regulatory Non-Compliance

Findings & Agreed Action Plan

Objective 1: Appropriate programme governance and process is in place that ensures control is maintained over the programme, risks are managed and formal reporting and monitoring is undertaken.	**Substantial**

Overview / Summary of Observations

There is a clearly defined governance structure for the NDR Programme (the 'Programme') together with project / programme manager support. The key groups in place are the Programme Board, the NDR Delivery Group and specific project groups, we also note a reporting line to the Portfolio Oversight Board.

Some items within the NDR Programme have started to deliver functional products, and in order to establish a service management framework within the NDR Programme, product management groups have been set up to fulfil the joint roles of the Service Management Board, Project Board and Change Board.

We reviewed the operation of the Programme Board and Delivery Group and note that the business of the groups included all the items noted as responsibilities within the terms of reference, including regular reporting on the position of the Programme. As such the governance structure is operating appropriately.

The scope and aims of the NDR Programme are clearly stated within the business cases for each phase, with phase 3 currently in progress and the phase 4 case being developed.

There is clarity over responsibility for the Programme with a Senior Responsible Officer, Programme Lead and Programme Chair in place. We note that following the departure of the previous Programme Chair, Welsh Government (WG) was asked to appoint a replacement, and the Director of Digital and Innovation assumed the role for a stated six month period. This resulted in a potential conflict of interest as business cases and funding requests from the Programme, approved by the Programme Board, are received by the Director of Digital and Innovation. However, we note that this potential conflict was declared, both within the Programme and within Welsh Government. As such, whilst not ideal, and potentially leaving scope for allegations of inappropriate influence the arrangement was within stated rules.

There is a formal risk management process as part of the governance structure for the Programme. Alongside a risk log that clearly scores and defines the risks, with appropriate delegated monitoring of the risks through the Programme along with an escalation process.

There is a risk group which meets regularly to review and triage risks and risk reports, providing summaries and updates on active risks are included at Programme Board and Delivery Group agendas.

We reviewed a sample of risks and confirmed that scoring and mitigations are appropriate, that related reporting is accurate and that there is appropriate progress in managing the risks.

Objective 2: Appropriate plans for delivery are in place, which are realistic, identifies the required resources, ensures effective integration and appropriate progress is being made against these.	**Reasonable**

Overview / Summary of Observations

The original NDR business case set out a 10 year plan, however the pandemic impacted on the delivery timescales for that plan. Plans are reviewed and updated on a biannual basis, with the creation of two year business plans which are provided to WG for funding, with the phase 4 business plan currently under review.

The business plan set out high level plans and milestones and within the Programme there are a number of projects, each of which is supported by a detailed plan, which breaks down into scheduled activities and notes resource requirements. Our testing confirmed that detailed plans were in place for delivery of stated milestones within the phase 3 business case.

In general we note that the Programme is meeting the timescales for milestone delivery, and that highlight reporting within the Programme accurately reflects the position.

However, there is structural instability in the funding for the Programme. Funding letters defining the agreed values are not received until a significant part of the year has passed, which makes effective financial planning difficult. In addition there is a lack of clarity over exchange rate translation for the spend on the Google Cloud Platform (GCP), and a reduction in agreed funding during the year.

The financial resource required to deliver the NDR is identified within the business plans. For phase 3, this funding was reduced in year by 27%, from £8.2m to £6m. This reduction has had an impact on the ability of the programme to deliver all milestones, and so an exercise was undertaken to assess the impact on each milestone and to agree priorities for milestones to deliver and for those to delay. Reporting on this process was appropriate and noted the delay in the realisation of benefits, with some items moving into the Phase 4 business plan. Consequently, the phase 4 business plan includes actions and funding that would have originally been delivered within Phase 3.

There is a finance monitoring process in place, with the budget set as per the approved business plan and weekly meetings between the Programme Lead and the Finance team, to review expenditure and variances. We also note active monitoring within the Programme which tracks finances for individual projects, allocations to partners and forecasting for the GCP commit.

Although there is a record of the value of allocations to partners, we note that there is no full validation of the expenditure within these to ensure that it meets the NDR/LDR requirements. We note that activity within partners is monitored by reporting against milestones.

The ability to enable integrated financial monitoring is impacted by the nature of the funding for the Programme as noted above.

	Key Findings	Risk & Impact	Agreed Management Action
1	**Funding Instability** The nature of the funding for the NDR Programme leads to a reduction in the ability to financially plan, the ability to fully validate partner activity and a delay in realisation of programme benefits.	Benefits from the NDR Programme may be delayed.	**Agreed Action:** Management will continue to engage with Welsh Government seeking more predictable and stable funding allocations. Management will develop and seek to agree with partners a plan for validating their funded activity against NDR/LDR requirements.

			Expected Evidence of Implementation: Evidence of having engaged with Welsh Government and partners on the agreed actions.
		High Priority	**Officer:** NDR Programme Lead **Date:** May 2025
	Theme: Finance Management & Control	Control Design	

Objective 3: There is appropriate stakeholder involvement to ensure consistency and uptake across Wales.	Substantial

Overview / Summary of Observations

The Programme includes the key stakeholders (health boards and trusts) as federated partners. The Programme is delivering the NDR platform and national analytics platform, which also provides partitioned space for LDRs should that partners want to use that, otherwise partners are developing their own LDR platform and feeding data to the NDR.

The programme structure includes an engagement manager and there is an Engagement and Communication Strategy in place which is being delivered via a range of engagement activities including regular meetings with partners, awareness sessions, focus groups and regular communication regarding activity. There is regular reporting on the delivery of the strategy and the success of the engagement activities is tracked with a check in/out process at sessions. We note recent reflection work which has fed an action plan to improve engagement and the operation of the programme.

There is stakeholder representation throughout the programme, including at programme board and delivery group, with attendance generally good, and partners providing updates which feed into the programme highlight reports. We note a recent review by the engagement manager to assess attendance which identified some specific issues. These have fed into the action plan noted above in order to address the issues.

The level of involvement and engagement from partners naturally varies according to the varying positions within partners in terms of the LDRs and readiness for use of data.

The risk register for the programme includes some risks in relation to engagement and uptake of solutions and these are also factored into the engagement work in order to mitigate these.

Objective 4: The NDR is of a secure, resilient design and information governance measures are in place which provide an appropriate balance between protecting the information from inappropriate access, use or loss and enabling appropriate sharing of data to derive insights and intelligence supporting service improvement in NHS Wales and benefit to the public and patients.	**Reasonable**

Overview / Summary of Observations

The NDR is built within the Google Cloud Platform (GCP) and is supported by architects within DHCW. The design of the NDR was developed in partnership with the provider and Google to ensure that the design follows best practice, and an assurance review confirmed this, with the NDR design also having been through the DHCW assurance process (WIAG)

The design for the NDR enables partitions for each partner to use for their local data resource (LDR). As this is not mandatory, the Delivery Group has agreed a set of architecture principles which will apply to any work on developing the NDR / LDR.

The Programme funds security posts and there is a lead within the Cyber Security team who works with the Programme. There are regular meetings between security and the Programme teams to discuss activity and developments, with the Security team having an early review process for designs. There is ongoing monitoring of the security status of the GCP using the Security Command Centre, and our review of this confirmed that there is a good security posture. We also note that the GCP is covered by the Security Information Event Management (SIEM).

There is an appropriate governance document in place that clearly sets out the roles, responsibilities and processes for monitoring use and costs (the Finops process). We reviewed these processes and note that the finops process is appropriately monitoring and managing the costs associated with the use of the GCP, with reporting, alerts and dashboards in place, and the review of the current cost position is part of the daily check routine. We also note that guidance documentation has been produced for optimising queries within the GCP to minimise resource use and associated costs, with this having been provided to all partners.

The Programme funds information governance (IG) posts and there is an IG Framework in place covering key items, including the roles of the organisations involved as data controllers and processes, the NDR IG principles and the processes to follow for new data flows. This is currently being revised to reflect the current position of the NDR, with all partners being asked to provide feedback on the updated framework.

Key IG protections are in place, with a joint controller agreement in place, an acceptable use policy and Data Protection Impact Assessments (DPIAs) for various aspects of the NDR. The IG Framework is subject to monitoring via the NDR IG Steering Group.

The balance between the use of the data and privacy is under review. There is appropriate consideration provided to the protection of personal data, however this can place restrictions on the use of data. There are risks included within the risk register in relation to the legal basis for processing primary care data and compliance with the WG data promise, both of which will prevent the NDR from effectively delivering Wales and system wide intelligence. These issues are being addressed in discussion with Welsh Government, however these discussions have been ongoing for a considerable time without resolution. Without the ability to ingest and analyse all NHS Wales data, the Programme will not be able to fully deliver its benefits and provide intelligence for service improvement across Wales.

Key Findings		Risk & Impact	Agreed Management Action
2	**Information Use** Currently there are restrictions on the ingestion and use of some NHS Wales data due to perceived conflicts with WG Policy and the GDPR. Without the ability to ingest and analyse all NHS Data the NDR Programme will not be able to fully deliver its benefits and provide intelligence for service improvement across Wales.	Inability to deliver anticipated benefits of the Programme.	**Agreed Action:** Management will continue to engage with Welsh Government seeking to resolve perceived conflicts with WG policy and the GDPR. Management will develop and seek to agree with partners a plan for data sharing, access and use which enables the NDR Programme to fully deliver its benefits and provide intelligence for service improvement across Wales.
			Expected Evidence of Implementation: Evidence of having engaged with Welsh Government and partners on the agreed actions.
		High Priority	**Officer:** DHCW Chief Data Officer **Date:** May 2025
	Theme: Information, Data Quality & Data Accuracy	Control Operation	

Appendix A

Assurance Opinion

 **Substantial**	Few matters require attention and are compliance or advisory in nature. **Low impact** on residual risk exposure.
 **Reasonable**	Some matters require management attention in control design or compliance. **Low to moderate impact** on residual risk exposure until resolved.
 **Limited**	More significant matters require management attention. **Moderate impact** on residual risk exposure until resolved.
 **Unsatisfactory**	Action is required to address the whole control framework in this area. **High impact** on residual risk exposure until resolved.
 **Advisory**	Given to reviews and support provided to management which form part of the internal audit plan, to which the assurance definitions are not appropriate. These reviews are still relevant to the evidence base upon which the overall opinion is formed.

Prioritisation of Findings

Priority	Explanation
High	Significant risk to achievement of a system objective OR evidence present of material loss, error, or misstatement. Poor system design OR widespread non-compliance.
Medium	Some risk to achievement of a system objective. Minor weakness in system design OR limited non-compliance.

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Website: [Audit & Assurance Services - NHS Wales Shared Services Partnership]

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