
National Data Resource

Business Justification Case (BJC) for NDR Phase 1 Summary

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1 Summary

1.1 NDR Phase 1

There is a need to secure funding for NDR Phase 1 to ensure we are able deliver an NDR that meets stakeholder expectations by the December 2020 deadline, as set out in A Healthier Wales. NDR Phase 1 will be key to laying the foundations for the ten-year programme by undertaking:

- Detailed design work and building the infrastructure
- Establishing the NDR team
- Delivering immediate opportunities, such as enabling the prioritised data requirements of the value-based healthcare, national efficiency and regional transformation programmes – thus starting to realise the benefits of the NDR.

The NDR will accelerate the essential requirements of the National Architectural Review and digital transformation agenda for Wales. This Business Justification Case requests £4 million in 2019/20 and £6.4 million in 2020/21 (up to December 2020) to fund this phase of the NDR.

There are 18 tactical objectives in NDR Phase 1 and these are summarised below (further detail about each one is in the Strategic Case):

1. **Establish the NDR** – ensure it is being used to deliver value and insights, allowing authorised users efficient and governed access to linked data
2. Create the **infrastructure** and security for the NDR layers, including the Welsh Clinical Data Repository (WCDR)
3. Integrate and begin to utilise **community and social care data**, within agreed governance
4. Integrate and begin to utilise **GP and pharmacy data**, within agreed governance
5. Support the data and information requirements of the **single cancer pathway** and other condition based and **public health** initiatives
6. Support the data and information requirements of **national registries / audits**, where available and within agreed governance
7. Integrate and begin to utilise **diagnostics data**
8. Integrate and begin to utilise **ambulance data**
9. Prepare for **patient data** requirements with patient-facing applications
10. Establish the national terminology / **ontology service**
11. Use the NDR to drive forward and continuously improve the **interoperability** of health and care systems and databases
12. Enable the data requirements of **Value-based healthcare**
13. Enable the flow of **genomics** data for research purposes, where available
14. Understand and prioritise **wider system data** requirements (strategic, operational and clinical) and establish initial standardised reports and dashboards to meet user needs
15. Design the NDR to support **AI, NLP and advanced analytics**
16. Establish the **NDR team**, with the required mix of skills
17. Establish NDR relationships with **Universities**
18. Establish the functionality for **safe and secure data sharing**

During the NDR Phase 1, the NDR programme needs to complete an extensive architecture design exercise, including detailed consultation of the various contributing stakeholders (e.g.

Health Boards IT teams, potential partners and the marketplace). It is imperative this work is undertaken ASAP and this will require dedicated expert resource.

Two news groups: Architecture and Infrastructure Group and Interoperability Group will be quickly established to progress the architecture design phase, working with the new NDR team as it's established.

1.2 Critical dependencies

The three main critical dependencies to the NDR are:

1. A national information governance framework
2. Building the capacity and capability of staff
3. Improving data quality

These three critical dependencies are being taken forward through Workstream 3 and are each sub-groups of this workstream in their own right. Addressing these dependencies is vital to the NDR, if they are not addressed then we will not be able to realise the full benefits of the NDR.

The work on the Information Governance framework is of particular importance and priority. This will require the development of a new policy framework to support appropriate sharing and use of information and a national conversation with the Welsh population on the benefits of using health data.

1.3 The preferred option to be taken forward for NDR Phase 1

The PBC demonstrates the options appraisal undertaken to determine the preferred option for the NDR. The preferred option is a hybrid model which is fundamentally a Welsh health and care owned and managed option. The option will build upon existing infrastructure, mainly Welsh health and care owned on premise. This option will also explore taking advantage of the potential benefits of cloud infrastructure and partnership support in discrete areas.

The commercial case outlines the market testing conducted to date. There is strong interest in the development of an NDR from providers of both on premise and cloud infrastructure who see the deliverables outlined earlier as an attractive commercial opportunity. We confident that services can be procured in a way that represents value for money.

We have also engaged Welsh academia on the NDR. We are keen to work with academic organisations across Wales to support value for money in terms of implementing the NDR, and to also support building a future sustainable workforce.

1.4 Capital and revenue requirements

The preferred option in NDR Phase 1 will require capital and revenue spending as specified in the below table (including inflation).

Table 1: Funding requirements for NDR Phase 1

Type of expenditure	NDR Phase 1		For info	
	2019/20	2020/21 (Apr 20 to Dec 20)	2020/21 (Jan 21 to Mar 21)	Total 2020/21
Capital expenditure	(2.6)	(3.9)	(1.3)	(5.2)
Operating expenditure	(1.4)	(2.5)	(0.8)	(3.3)
Total	(4.0)	(6.4)	(2.1)	(8.5)

1.5 Projects and Scrums

The management case sets out the detailed plan for NDR Phase 1, the projects that will be formally established and how they will be managed, using an agile approach. It also explains how the NDR programme will manage the key technical relationships with other inter-dependant programmes and projects.

1.6 Recruiting the NDR team

The NDR programme will be a mechanism for refocusing the existing informatics workforce, as well as expanding and upskilling it. The NDR Steering Group has discussed undertaking a national recruitment campaign and some planning is already underway for this. This would use the exciting and ambitious NDR programme to promote Wales as a great place to work, to be at the forefront of health and care digital and data innovation.

In practice recruitment in NDR Phase 1 may include managed services and outsourcing. At this early stage, exact staff contracting and in-house hiring arrangements are not intended to be set in stone and will be approached in an agile manner.

1.7 Conclusion

The NDR Phase 1 deliverables are challenging but achievable. Solid engagement and foundations are already being put in place to be able to move at pace through NDR Phase 1. NDR Phase 1 will lay the bedrock to significantly advance digital and data transformation across Wales and in doing so will fulfil a range of high priority user needs. Successful delivery of NDR Phase 1 will play a major role in delivering the key strategic objectives set out by Welsh Government and Welsh health and care and will accelerate the delivery of significant outcomes that are anticipated from the National Architecture Review.