

National Data Resource

Programme Business Case (PBC) Summary

Version No: 9.0
Submitted to Welsh Government
Date: June 2019

1	SUMMARY	3
1.1	WHY WALES NEEDS THE NDR PROGRAMME: THE STRATEGIC CASE	3
1.1.1	<i>It is a policy imperative with significant stakeholder support</i>	3
1.1.2	<i>The case for change</i>	3
1.1.3	<i>The NDR programme scope</i>	4
1.2	COST BENEFIT ANALYSIS: THE ECONOMIC CASE	4
1.2.1	<i>Longlisting and shortlisting options</i>	4
1.2.2	<i>Options appraisal</i>	5
1.2.3	<i>Preferred option</i>	5
1.3	THE PROCUREMENT APPROACH: THE COMMERCIAL CASE	5
1.3.1	<i>Market engagement</i>	5
1.3.2	<i>Procurement strategy</i>	5
1.3.3	<i>Risk transfer</i>	5
1.4	THE MONETARY REQUIREMENTS: THE FINANCIAL CASE	6
1.5	HOW THE NDR WILL BE DELIVERED: THE MANAGEMENT CASE	6
1.5.1	<i>Programme governance and management</i>	6
1.5.2	<i>Staffing requirement</i>	6
1.5.3	<i>Critical dependencies</i>	7
1.5.4	<i>Evaluation and assurance</i>	7
1.6	CONCLUSION	7

1 Summary

The NDR programme is a strategic imperative for health and care in Wales and an essential component of the National Architecture Review. It underpins delivery of the commitments made in A Healthier Wales. It has widespread support from key stakeholders due to the transformative impact it will have on health outcomes, equity, patient and staff experience, and value for money.

The programme is an essential investment for Wales because it will move health and care from a data rich but knowledge poor position, to providing timely high value analysis and insights for decision support to users at every level from clinical, operational to strategic. This will create benefits of at least £195m in the ten years of the programme, far exceeding the expected lifetime costs of £57m (including inflation).

The NDR will deliver a more joined up approach to health and care data across Wales and will enable:

- Improved teamwork and communication
- Information when and where it is required
- Quicker and more robust decision making
- Reduced waste, cutting out duplicative effort
- Improved safety with fewer errors
- End-to-end patient pathways

1.1 Why Wales needs the NDR programme: The Strategic Case

1.1.1 *It is a policy imperative with significant stakeholder support*

There is a strong organisational demand for an NDR. It is designed to deliver on the four priorities of the Health Minister's health and social care strategy, A Healthier Wales. Clinicians and operational staff across the country support its development due to their needs for improved data and analytical insights.

1.1.2 *The case for change*

Wales aims to be at the forefront of digital innovation in health and care. Current digital capability and capacity is not sufficient to deal with existing demands on the service and this results in inefficient processes and analysis impacting operational practice and clinical care. Data is not consistently collected or comparable, preventing staff on the ground, and researchers, from learning and improving.

The convergence of interoperable technologies, wireless sensors, imaging and genomics will transform the way health and social care is practiced and ensure health and care becomes more efficient and effective. Patients are demanding digital change and have expectations on the public sector to improve care through better use of technology and data. The NDR programme will play an essential role in addressing these issues.

1.1.3 The NDR programme scope

A scope for the NDR has been developed and refined through iterative engagement with a wide range of stakeholders and experts. Broadly this covers:

- A national and local data platform – collecting, storing, linking and enriching Welsh health and care data.
- A national terminology service – to improve data quality and consistency of health and care data, which includes the application of an ontology service to implement SNOMED CT and the prevailing data standards.
- Interoperability – continuous improvement of data transfer between nodes in the health and care systems, supporting systems, clinical, and citizen portals
- Data analytics capability (local and national) – the ability to use tools and software necessary to derive insights from the NDR.

1.2 Cost benefit analysis: the economic case

1.2.1 Longlisting and shortlisting options

There are numerous options available to deliver the NDR. A longlist of options was developed in consultation with experts. Through engagement with key stakeholders, this was reduced to a shortlist of five broad and high-level options:

1. Authority¹ owned, on premise.
2. Authority owned, cloud.
3. Partnership with a specialist.
4. Outsourced entirely.
5. Authority owned, hybrid, enlisting the support of an academic partner(s) to advance research and improve analytics capability.

¹ For the purposes of the PBC, 'Authority' refers to the 'Welsh health and care' organisations who are part of the NDR programme – the Authority (the organisations) will own their respective components of the NDR solution, as opposed to the NDR being owned by or outsourced to an external organisation(s).

1.2.2 Options appraisal

In order to decide on a preferred option, Critical Success Factors (CSFs) were developed with weightings corresponding to their relative importance. Significant discussion led to the following validated list:

- Strategic fit and meeting business need
- Value for money
- Operational achievability (technical fit, internal capacity and capability)
- External supply side capacity and capability
- Affordability (upfront and ongoing cost)
- Technical and commercial approach

Each option was evaluated against these CSFs.

1.2.3 Preferred option

On a weighted score, option 5 scored 3.5 (vs a range of 2 to 3.1 for the other options), making it our preferred option.

1.3 The procurement approach: the commercial case

1.3.1 Market engagement

Soft market engagement has already been undertaken to support the development of the PBC. There is strong interest from market providers in helping to develop an NDR. Detailed specifications and assumptions will be developed in the Business Justification Cases for each of the programme phases.

1.3.2 Procurement strategy

The overall procurement strategy is to analyse the various phases and components that need to be purchased and then consider the most optimal approach to secure value for money for taxpayers. For services with a cost of less than £118,000, a non-OJEU tender will be required. For those above that limit, an OJEU tender will be required. The most appropriate form will be the Restricted Procedure and Framework Agreement.

1.3.3 Risk transfer

Where clinically appropriate, cost effective and there is strategic benefit, elements of risk will be transferred to the private sector. The commercial case provides a worked breakdown of where this is likely to happen, and which risk will remain with the authority.

1.4 The monetary requirements: the financial case

As well as the economic costs and benefits, the PBC involves detailing the funding requirements of the preferred option for NDR programme over ten years. These includes infrastructure, staffing, training, licenses and all other costs and are summarised in the following table:

Table 1: Capital and revenue funding requirements for the NDR (including inflation and contingency)

	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	£'m	Total
	FY 19/20	FY 20/21	FY 21/22	FY 22/23	FY 23/24	FY 24/25	FY 25/26	FY 26/27	FY 27/28	FY 28/29		
Capital	(2.6)	(5.2)	(5.3)	-	-	(3.5)	-	-	-	-		(16.7)
Revenue (ex depreciation)	(1.4)	(3.3)	(4.4)	(4.2)	(4.3)	(4.6)	(4.5)	(4.6)	(4.6)	(4.7)		(40.5)
Total	(4.0)	(8.5)	(9.7)	(4.2)	(4.3)	(8.1)	(4.5)	(4.6)	(4.6)	(4.7)		(57.2)

1.5 How the NDR will be delivered: the management case

1.5.1 Programme governance and management

The majority of the necessary programme governance arrangements have already been established. The NDR Steering Group will evolve into a Programme Board, including a review of its membership, to oversee the programme. There will be a dedicated NDR Programme Management team, as well as an expert team working across all health boards and trusts, whose time will be shared between local/regional and national working.

1.5.2 Staffing requirement

The NDR will require a significant skill and staffing increase across all organisations involved in the NDR. In practice this may include managed services and outsourcing, particularly in the early stages. The management case includes an illustration of the overall expected team; at this early stage, the breakdown into contractors and in-house is not fully developed and will be approached in an agile manner. The team will be gradually built over the first two years and once fully operational is expected to include 50 WTE as below:

- 6 WTE in Programme Management and Target Operating Model team (including the current Programme Lead).
- 25 WTE in the Data Engineering team.
- 14 WTE in the Architecture, Interoperability and Infrastructure team.
- 5 WTE in the Advanced Analytics team.

1.5.3 Critical dependencies

Information Governance is the most important critical dependency to the NDR. 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. Addressing this is vital to the NDR, if it is not addressed then we will not be able to realise the full benefits of the NDR.

1.5.4 Evaluation and assurance

The NDR programme plan has regular checkpoints and business case refreshes built in. The first checkpoint will be January 2020, mid-way through NDR phase one. The NDR Programme Board will report to Welsh Government during checkpoints and refreshes on deliverables, benefits, costs, programme management, commercials, and ongoing requirements. The NDR Programme Board will develop a product assurance plan and keep in close contact with the relevant assurance and standards groups to ensure it is meeting requirements and compliance.

1.6 Conclusion

The NDR programme will be a transformative project for health and care in Wales. It will enable the delivery of benefits that far outweigh its costs, making it good value for money. In so doing, it will fulfil user needs identified across Welsh health and care and deliver on the key strategic objectives set out by Welsh Government and Welsh health and care. There are detailed and realistic plans for procurement, financing and management to make sure it delivers on the benefits. With this all in place, it can deliver on its benefits and be a flagship health and care investment for the Welsh Government and an example across the UK and beyond – making Wales a global leader.