CTM Digital and Data Committee

Paul Howells – Programme Lead (NDR)

Liam Morrisey – CTM Senior Product Specialist (NDR)
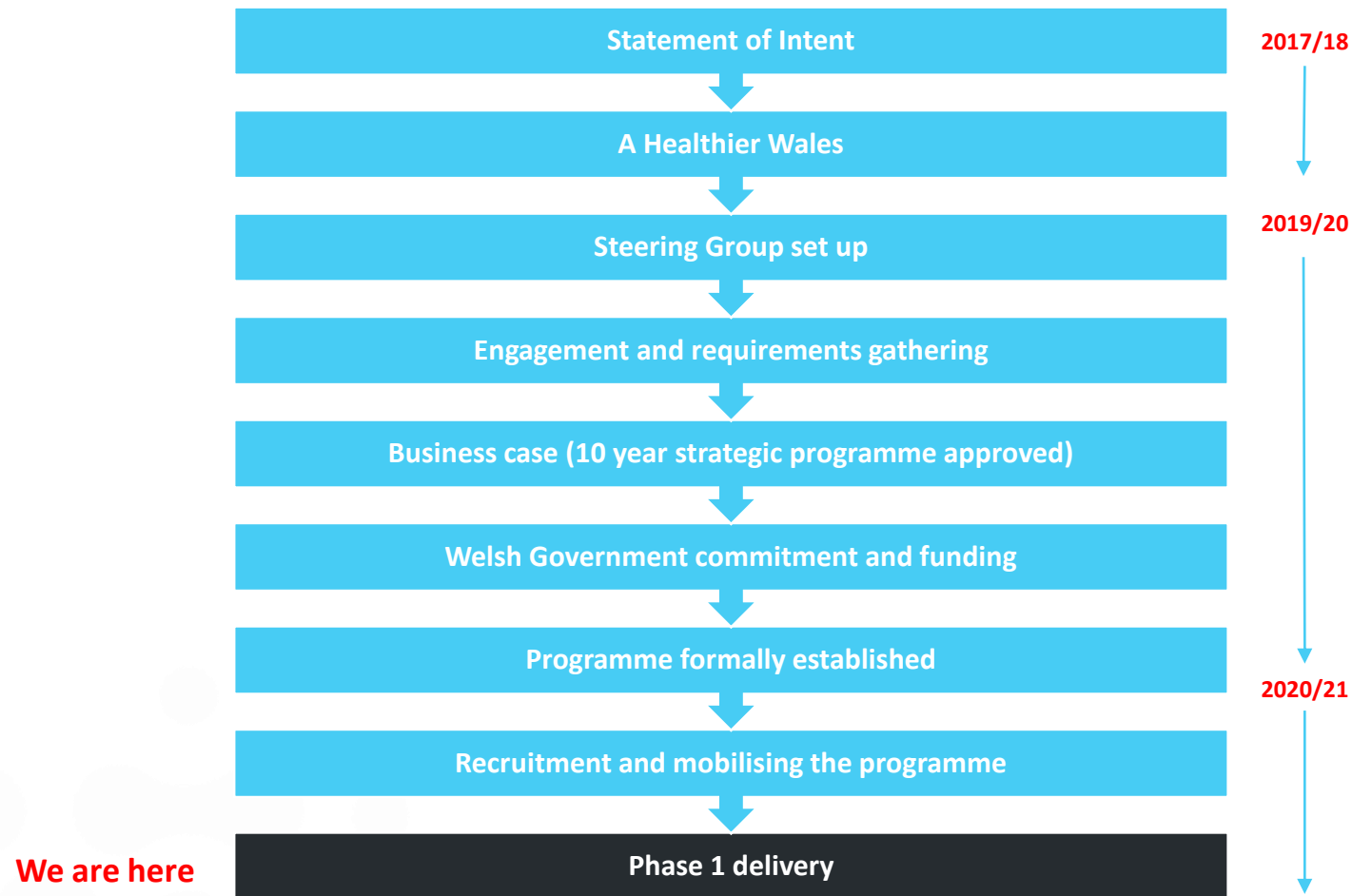
15 December 2020

Journey to an approved programme in 2020/21

"The NDR is an essential investment - it will deliver long term benefits of at least £195m with expected full life costs of £57m"
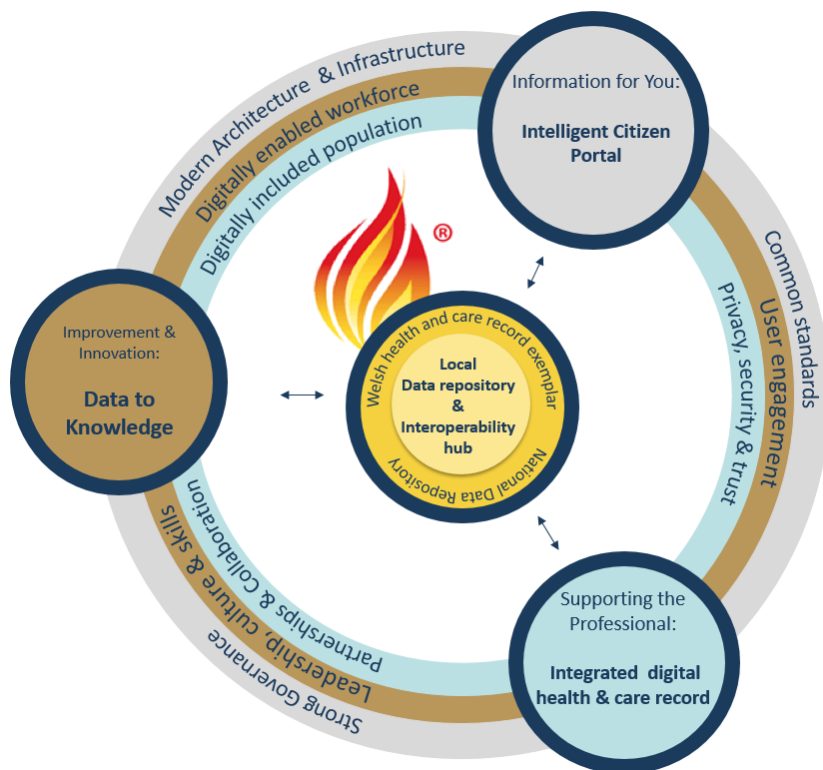
Benefits have been assured by external experts

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"…Welsh Government are supporting this and investing in the National Data Resource."
Vaughan Gething, Minister, April 2019

Statement of Intent

2017/18

A Healthier Wales

Steering Group set up

2019/20

Engagement and requirements gathering

Business case (10 year strategic programme approved)

Welsh Government commitment and funding

Programme formally established

2020/21

Recruitment and mobilising the programme

We are here

Phase 1 delivery

2

PROGRAMME OVERVIEW

- ❖ **Data driven decision making**
- ❖ **Business-aligned intelligence**
- ❖ **Turn insight into ACTION**

Why we exist

A strategic imperative for Wales
Underpins commitments in A Healthier Wales
Essential to the Digital Architecture Review
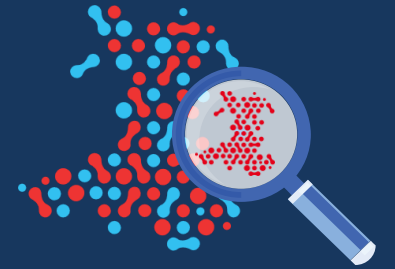A joined up approach to health and care data

Benefits

Improving management of chronic disease jointly between GPs and hospitals
Linking clinical and Quality of Life outcome data to determine best treatment
Developing routine review of costs and outcomes to support Value-Based Healthcare
Enabling future service planning by analysis of regional health and care needs
Providing data to drive more efficient, innovative and productive health and care

Delivery approach

Open digital architecture
Standards-based interoperability
Federated data exchange and storage
Access to data for insights, analytics and apps

Risks and dependencies

COVID-19 and other priorities
Information governance
Capacity and capability
Data quality

KEY OUTPUTS OF THIS YEAR SO FAR

Achievements

- Test, Track and Protect system
- Single Cancer Pathway data platform
- National Terminology Service (SNOMED CT)
- Social care data strategy for Wales
- Roadmap: national architecture / interoperability
- NDR team (35 staff across all organisations)
- E-research and Data Collaboration Platform
- Value-based Healthcare and PLICS products
- Wales Networked Data Lab
- National Analytics Learning Programme
- NHS Wales Developer Portal

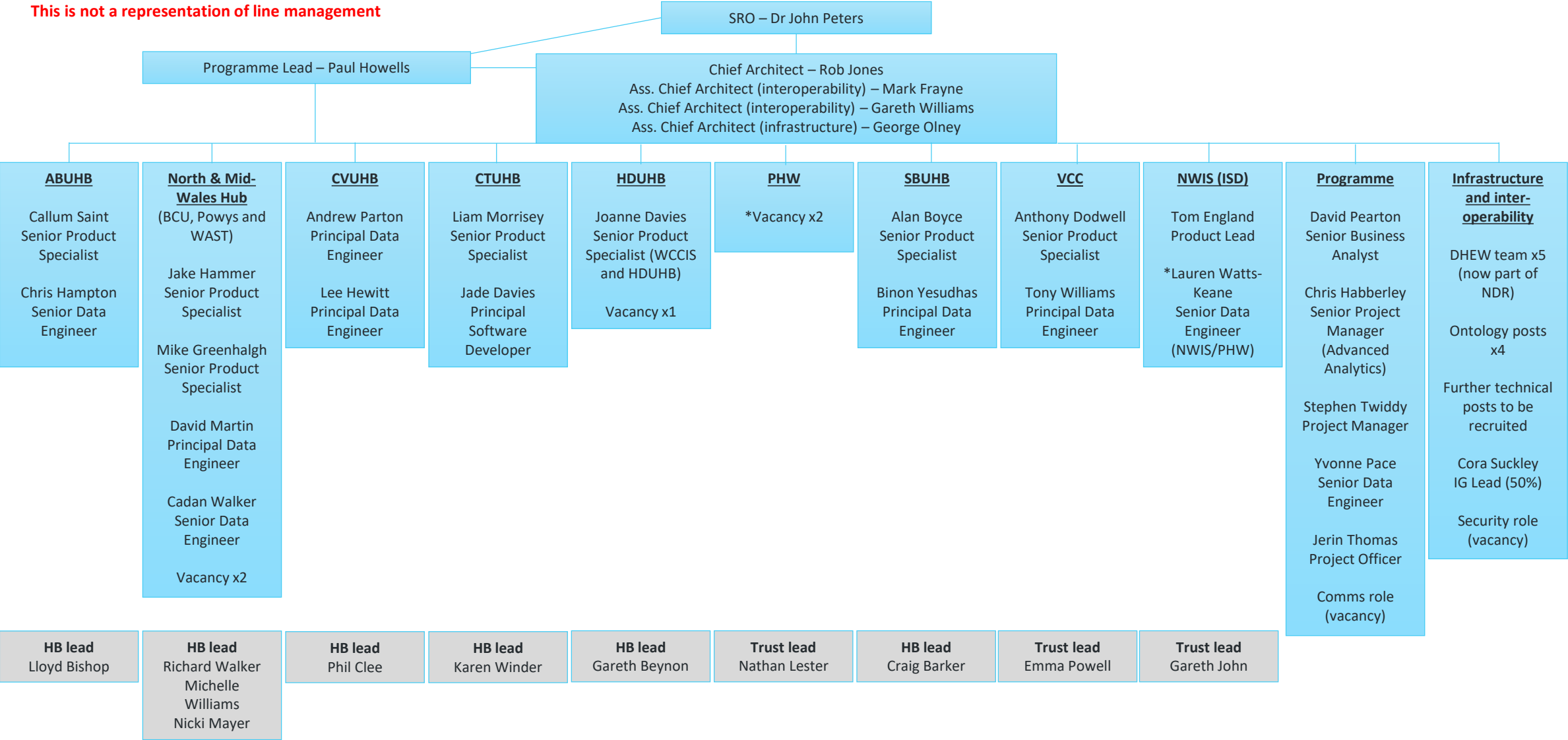# KEY ONWARD OUTPUTS

High-level overview of the rest of this and year and into next year

◎ **National data store**

◎ **Secure access to linked patient data**

◎ **API management**

◎ **Interoperability standards**

◎ **Migration to open architecture**

◎ **Semi-automating audit / registries**

◎ **Big data and advanced analytics maturity**

◎ **Research and innovation**

◎ **Phase 2 business case**

NDR team

This is not a representation of line management

SRO – Dr John Peters

Programme Lead – Paul Howells

Chief Architect – Rob Jones
Ass. Chief Architect (interoperability) – Mark Frayne
Ass. Chief Architect (interoperability) – Gareth Williams
Ass. Chief Architect (infrastructure) – George Olney

ABUHB	**North & Mid-Wales Hub**	**CVUHB**	**CTUHB**	**HDUHB**	**PHW**	**SBUHB**	**VCC**	**NWIS (ISD)**	**Programme**	**Infrastructure and inter-operability**
Callum Saint Senior Product Specialist

Chris Hampton Senior Data Engineer | (BCU, Powys and WAST)

Jake Hammer Senior Product Specialist

Mike Greenhalgh Senior Product Specialist

David Martin Principal Data Engineer

Cadan Walker Senior Data Engineer

Vacancy x2 | Andrew Parton Principal Data Engineer

Lee Hewitt Principal Data Engineer | Liam Morrisey Senior Product Specialist

Jade Davies Principal Software Developer | Joanne Davies Senior Product Specialist (WCCIS and HDUHB)

Vacancy x1 | *Vacancy x2 | Alan Boyce Senior Product Specialist

Binon Yesudhas Principal Data Engineer | Anthony Dodwell Senior Product Specialist

Tony Williams Principal Data Engineer | Tom England Product Lead

*Lauren Watts-Keane Senior Data Engineer (NWIS/PHW) | David Pearton Senior Business Analyst

Chris Habberley Senior Project Manager (Advanced Analytics)

Stephen Twiddy Project Manager

Yvonne Pace Senior Data Engineer

Jerin Thomas Project Officer

Comms role (vacancy) | DHEW team x5 (now part of NDR)

Ontology posts x4

Further technical posts to be recruited

Cora Suckley IG Lead (50%)

Security role (vacancy) |

HB lead Lloyd Bishop	**HB lead** Richard Walker Michelle Williams Nicki Mayer	**HB lead** Phil Clee	**HB lead** Karen Winder	**HB lead** Gareth Beynon	**Trust lead** Nathan Lester	**HB lead** Craig Barker	**Trust lead** Emma Powell	**Trust lead** Gareth John

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Cwm Taf Morgannwg NDR

CTM NDR work started earlier this year, 2 staff members in post

- NDR runs in parallel with all existing work, not instead of it
- Performance & Information and ICT committed to deliver on their IMTP's

CTM local priorities include:

- **Building a Local Data Repository (LDR) on new robust, scalable Infrastructure (databases, FHIR Server and a stream-processing platform)**
- **Access to Primary Care data for use cases such as**
  - Population Health Management using Population Segmentation and Risk Stratification
  - Demand and Capacity modelling
  - Shift Programme (enhancing health and wellbeing)
  - Phase 1
    - Use existing API's to GP Systems to extract data to be ingested into the LDR
    - Combine this data with Secondary Care data to enable us to satisfy use cases
    - Information Governance already in place for work at a local level
    - We would hope to have Phase 1 completed by the end of the financial year.
  - Phase 2
    - Introduce the use of FHIR (Fast Healthcare Interoperability Resources)
    - Create and consume bi-directional API's to allow this LDR data to be used

- **Cancer Pathway Management**
  - Combine data from various data sources to track cancer referrals/milestones
  - Single Cancer Pathway (automated data submissions) delivered already for CTM

Cwm Taf Morgannwg NDR

Benefits

- **Promoting closer working relationships between Health Boards, Trusts, NWIS, Social Care and the recently formed NDR central team.**

- **Federated working between all parties**
  - Access to national data rather than CTM Health Board only
  - Share ideas, datasets, code. Re-using what works well rather than doing things from scratch
  - Learn from one another based on past experiences
  - Save Time, Save Money, Deliver Faster and More Efficiently! Put simply, be more AGILE

- **NDR is a key dependency in our strategic vison of moving towards**
  - Clinical NLP and coding of unstructured data
  - Digital Transcription
  - Use of structured, semi-structured and unstructured data
  - Advanced Analytics

Wider NDR work of particular interest to CTM:

- UK data and technical standards
- Integrating PROMS data in to the NDR
- Setting up a modern big data capability for Welsh health and care
- Advanced Analytics Group for Wales (and Artificial Intelligence)

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Summary and key messages

- The NDR is a key strategic objective for NWIS and Welsh Health and Care

- It covers the development of a new modern data ecosystem for Wales, and the delivery of key findings from the Digital Architecture Review

- The NDR will enable a whole system transformation and a stepped change towards a more data-driven system

- Our collaborative approach will support all organisations to improve their data and information capabilities

- **We would value your support to deliver this exciting programme, which has significant buy-in across Welsh Health and Care**

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Thank you

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Internal use only - please contact Paul Howells if you want to share these slides

NDR partners: