Report on Joint Working Project with Novartis

Author: Mark Dickinson, Director, Business Unit, NHS Wales Health Collaborative

Date: 26 January 2017

Sponsoring Executive Director:

Who will present:

Date of Board meeting: 26 January 2017
Committee/Groups that have received or considered this paper: Executive Team

The Board are asked to: (please select one only)

- Approve the recommendation(s) proposed in the paper.
- Discuss and scrutinise the paper and provide feedback and comments.
- Receive the paper for information only. **X**

Link to Public Health Wales commitment and priorities for action:
(please tick which commitment(s) is/are relevant)

- [ ] Heart
- [ ] Cross
- [x] Shield
- [ ] Basket

Priorities for action include relevant priority for action(s)
1 Background

The NHS Wales Health Collaborative has acted on behalf of NHS Wales in hosting an outcomes focused joint working project with the pharmaceutical company Novartis. This was conducted under a formal Joint Working Agreement (JWA) that ran from summer 2015 to the end of September 2016. As the host body for the Collaborative, Public Health Wales acted as the formal signatory to the JWA. For this reason, it is appropriate for the Board of Public Health Wales to receive a report on the project, following its recent completion. This Executive Team paper has been prepared as a precursor to the intended Board Paper.

2 Timing

No specific timing issues.

3 Description

The paper summarises:

- The background and context to the project
- The governance of the project
- The nature of the project
- Each of the two project work streams
- Next steps
- Key conclusions

4 Financial Implications

No financial implications for Public Health Wales.

5 Recommendation(s)

The Executive Team is invited to receive this report and to endorse it for use as a report to the Public Health Wales Board.
Report on Joint Working Project with Novartis

1 Background and context

In April 2014, the then Minister for Health and Social Services, Mark Drakeford, met with the Novartis Global CEO Joe Jimenez at the EU Chronic Health summit in Brussels. Senior representatives from Novartis visited Wales in July 2014 to see first-hand NHS Wales’ tight coordination between service delivery, outcome and performance data, as well as to discuss Wales’ openness to partnership working.

This visit confirmed an alignment of philosophy between the Prudent Healthcare movement in Wales and Novartis’ strategic shift towards more outcome focused healthcare delivery, based on partnerships with integrated healthcare providers such as NHS Wales. Agreement was reached to explore an outcome focused partnership between Wales and Novartis around a set of mutual areas of interest.

The Minister and the Chief Executive of NHS Wales endorsed this approach, announcing at the BioWales Life Sciences conference in March 2015 a determination to explore new ways of working with industry through the development of a framework for industry engagement, based around outcome-focused partnerships between NHS Wales and industry, as part of making Prudent Healthcare happen.

Following the BioWales announcement, and preparatory work between the Welsh Government and Novartis, a formal outcomes-focused joint working project between NHS Wales and Novartis was commenced in June 2015.
2 Governance of the project

By agreement with NHS Wales chief executives, and the Public Health Wales Board, the project was conducted under a Joint Working Agreement (JWA) between Public Health Wales (as host of the NHS Wales Health Collaborative) and Novartis. The JWA was developed within the joint working framework previously jointly endorsed by the Department of Health in England and the Association of the British Pharmaceutical Industry (ABPI).

The Collaborative acted on behalf of NHS Wales in providing input to the joint NHS/Novartis project team. The project team reported to steering group co-chaired by the NHS Wales Chief Executive and Hugh O’Dowd, then UK General Manager of Novartis. The steering group included representatives of Welsh Government, NHS Wales, Novartis and SAIL. The steering board met three times after the formal commencement of the project to review progress and give authorisation for further work and, in November 2016, to formally close the project.

3 Overview of the project

The basic premise of the project was to link Welsh areas of clinical need with areas of commercial interest and expertise from Novartis, based on a risk/reward share basis.

The aim was to leverage Novartis expertise and the skills and experience within NHS Wales to develop service designs aimed at delivering defined improved outcomes for patients and NHS Wales. The intention was that, in the first instance, such designs would be piloted in Cardiff and Vale, for potential subsequent adaptation and roll out to the rest of Wales.

From an initial shortlist, two clinical areas were selected by the steering group to be progressed within the project, and each was the focus of a separate work stream:

- Lung cancer – NHS Wales clinical lead: Jason Lester, Consultant Oncologist
- Heart Failure – NHS Wales clinical lead: Zaheer Yousef, Consultant Cardiologist

Both clinical areas were selected on the basis that Wales has relatively poor health outcomes, by international standards, with scope for significant improvement. Lung cancer was specifically prioritised by NHS Wales/Welsh Government as an area where improvement is required, whilst Novartis were particularly keen to work on heart failure as it was an area where they felt they could make distinctive contributions, ultimately on a commercial basis.
Each work stream followed a similar process, devised and supported by Novartis:

- Widespread stakeholder engagement
- Collection and analysis of hard and soft data from Wales and elsewhere
- Establishment of clinically led, multi-disciplinary Disease Area Working Groups, which worked to identify:
  - areas of sub optimal performance
  - root causes of sub optimal performance
  - opportunities for improvement
  - potential interventions to address those opportunities
- Consideration of suggested interventions by steering group
- Design of interventions selected by the steering group

4 Lung cancer work stream

4.1 Lung cancer work stream objectives

Following the diagnostic phase of the project, it was decided to focus on the section of the lung cancer pathway from receipt of referrals in secondary care to the conclusion of diagnostic testing and the point at which a treatment plan is agreed. The reason for this was three-fold. This is part of the pathway where:

1. there is poor, and highly variable, performance in Wales
2. there is evidence to support the fact that shortening the pathway will lead to better outcomes
3. there was no other major project in Wales then focusing (unlike, for example symptom awareness and early referral)

The work focused on the pathway in Cardiff and Vale, with the intention of applying lessons and specific improvements across Wales, if successful.

The following project objectives were set:

- To redesign the Lung Cancer diagnostic pathway in order to achieve diagnosis within 10 working days and treatment plan agreed with patient within 15 working days from receipt of referral in secondary care
- To incorporate routine molecular genetic testing for eligible patients using next generation sequencing

4.2 Lung cancer work stream achievements

Based on the input from the Disease Area Working Group, the pathway was analysed and a new model pathway developed, with a number of areas targeted for improvement. With the approval of the steering group and health board, the implementation of an improvement plan was commenced.
As at the end of the formal partnership with Novartis (end September 2016), the following improvements had been made to the pathway, most of which were either ‘no cost’ or ‘low cost’ (i.e. within delegated budgetary responsibility of the relevant department) changes:

1. Routine genetic testing for all eligible patients using Next Generation Sequencing, funded on a ‘pump priming’ basis by Welsh Government, allowing:
   - more patients to get the most appropriate treatment
   - more patients to be identified for clinical trials
   - Wales to lead the way in using this state of the art technology

4. Histopathology sample processing is now more efficient. Not only is it faster, but it also maximises the limited tissue, allowing genetic testing results to be available faster

5. A facility for virtual MDTs has been made available, using Skype for Business, including the facility to share images remotely

6. Improved flagging of x-rays in A&E to facilitate the tracing of patients for further investigations

7. Rapid access clinics can now be provided up to three times per week

8. Introduction of the optional use of circulating tumour DNA for genetic testing in cases where a physical biopsy is not possible

9. CT appointments are being scheduled faster, resulting in quicker out-patients appointments

10. Reporting of CT scans is now also quicker

11. CT guided biopsies are being conducted earlier
12 CT head scans and PET scans can be conducted on the same day, speeding up the pathway and removing the need for an additional patient attendance
13 Early evidence indicates that patients are moving through the pathway more quickly

It is clear that the project has enabled significant individual improvements to be made within the pathway, facilitated by expert project and change management from Novartis. Further improvements are continuing to be made. The overall impact on the pathway will be assessed early in 2017.

In addition to the above specific changes, the following achievements should also be noted:
- Successful joint working with industry with high levels of trust and collaboration
- Links forged across teams, departments and NHS organisations
- Better utilisation of existing IT systems (with further improvements planned)
- Data retrieved and analysed from different sources to establish current performance
- High level of commitment and pace facilitated by Novartis/Collaborative involvement

1.1 Post-project next steps – Lung cancer

Following the end of the joint working project, the Collaborative, through its hosting of the Wales Cancer Network is seeking to ‘mainstream’ the work as part of the wider Lung Cancer Initiative (LCI). A project manager is being appointed within the LCI and their responsibilities will include ensuring that:
- outstanding actions from the project plan are completed in Cardiff and Vale
- the impact on the overall performance of the pathway is audited
- the improvements and lessons from the project are integrated with the experience from similar projects in other parts of Wales and used to improve all lung cancer diagnostic pathways
- lessons are also transferred to other cancer pathways

2 Heart failure work stream

2.1 Heart failure work stream objectives

The diagnostic phase of the project identified three main areas of potential focus within the project:
1 Management of patients being treated for heart failure, including through the use of telemonitoring
2 Improvements to the hospital inpatients service
3 Community diagnostics

Of these, the first was the only area where Novartis felt they had a unique contribution to make and so this was progressed within the project, whilst the other two areas are being progressed by Cardiff and Vale outside the project.

The following project objective was set:
• To closely monitor and manage patients with the greatest need in the community with a goal of preventing unnecessary hospitalizations and improving quality of life

To meet this objective, Novartis, working with external subcontractors, developed a product and service based commercial service combining an outcomes based pricing structure for their newly NICE approved heart failure drug Entresto (the product) with a telemonitoring service allowing the status of patients to be remotely monitored at home (the service). The rationale being that the service would leverage improved outcomes not only from the product, but also from other drug treatments.

Ultimately, following discussions, the health board decided not to take up this offer. Novartis may develop further outcomes based proposals involving Entresto for future consideration by NHS Wales.

3.1 Heart failure work stream achievements

Although the project has not currently led to the implementation of any specific service changes or outcomes focused commercial relationships, it has generated innovative thinking.

The following subsidiary achievements have been identified:
• A systematic analysis of the current status of heart failure services across Wales was produced, in context and with comparators
• Awareness was raised of key gaps in heart failure services to all levels within and beyond the health board
• A basis was developed for future outcome-based agreements with industry
• An innovative service model for high-risk hear failure patients was developed
• A high-level of multi-stakeholder collaboration was achieved

4 Next Steps

Throughout the project, the project team has sought to identify and document lessons learned in order to inform future joint working with industry by NHS Wales. In addition, Novartis facilitated formal discussion
with representatives from Welsh Government, Cardiff and Vale and Project Team, for heart failure work stream, and a ‘debrief’ session with the Lung Cancer Disease Area Working Group. The lessons are being used to inform the development of an NHS Wales framework for future joint working with industry.

5 Key conclusions

- The work on lung cancer appears to have been successful (although a post intervention measurement of pathway timings for patients has not yet taken place). The implementation of next generation sequencing is particularly noteworthy. This work was never likely to lead to any form of commercial relationship with Novartis.
- The work on heart failure led to the development of an innovative product/service offering. However, the offer was not taken up by Cardiff and Vale UHB. The potential still exists for further discussions with Novartis over outcomes focused contracts for Entresto.
- Significant lessons have been learned and have been summarised to inform future partnership working with industry.