

Innovation, Integration and Research, Director's Report 4 February 2020

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Agenda Item No: 10.1

Trust Board Report

Meeting Date:	4 th February 2020
Title:	Integration, Innovation and Research Director's Report
Action Requested:	The Trust Board is requested to receive and note the contents of this report.
For the attention of the Board	
Assure	<p>Appropriate contractual / risk share discussions are underway to ensure that the partnership with Babylon is fully scoped and all parties are accountable.</p> <p>The patient centric Structured Clinical Dataset Unit projects are progressing well and collaboration with all Primary Care Networks (PCNs) is positive.</p> <p>Work to develop and establish the future of the Integrated Care Alliance is progressing at a steady pace and should demonstrate initial tangible adjustments over the coming months.</p>
Advise	None in this report
Alert	None in this report
Author + Contact Details:	<p>Sultan Mahmud Director of Innovation, Integration and Research</p> <p>Tel 01902 695963 s.mahmud@nhs.net</p>
Links to Trust Strategic Objectives	<ol style="list-style-type: none"> 1. Create a culture of compassion, safety and quality 2. Proactively seek opportunities to develop our services 3. To have an effective and well integrated local health and care system that operates efficiently 4. Attract, retain and develop our staff, and improve employee engagement 5. Maintain financial health – Appropriate investment to patient services 6. Be in the top 25% of all key performance indicators
Resource Implications:	<p>Revenue: None</p> <p>Capital: None</p> <p>Workforce: TBC as part of the project oversight process</p> <p>Funding Source: Central funding</p>
CQC Domains:	Safe: Effective: Caring: Responsive: Well-led:
Equality and Diversity Impact	None Identified
Risks:	None identified at present
Other formal bodies involved:	Non-Executive Directors
References	Next steps on the NHS Five Year Forward View 2018/19 Planning Guidance

	NHS Long Term Plan (published 7th January 2019)
NHS Constitution:	<p>In determining this matter, the Board should have regard to the Core principles contained in the Constitution of:</p> <ul style="list-style-type: none"> • Equality of treatment and access to services • High standards of excellence and professionalism • Service user preferences • Cross community working • Best Value • Accountability through local influence and scrutiny

Brief/Executive Report Details

Brief/Executive Summary	Integration, Innovation and Research Director's Report
Brief/Executive Summary Title:	<p>The report focuses on the current significant programmes of work being undertaken to support the Trusts Innovation and Integration agenda.</p> <p>The main programmes of work relate to:</p> <ul style="list-style-type: none"> • The re scoping of the Integrated Care Alliance including working toward an Alliance contract to be in shadow form from April 2020. • The Trusts partnership with Babylon to create the World's First Integrated Digital Health System to Serve the City's Population • The progress of the projects relating to the Structures Clinical Dataset Unit (SCDU). • EMIS – potential partnership to build an interoperable system to support the delivery of the SCDU • Medopad – progress to date and next steps • Digital Dragons – launched in November 2019 – 14 applications received and positive feedback from staff across the Trust. <p>A reference pack is attached which gives greater detail pertaining to the areas outlined.</p>

Reference Pack:

Brief/Executive Report Details	
Brief/Executive Summary Title:	Integration, Innovation and Research Director's Report
Item/ paragraph 1.0	<p><u>Integrated Care Alliance</u></p> <p>The ICA in its current form has been in existence for approx. 2 years and comprises, Wolverhampton CCG, Wolverhampton City Council, The Black Country Partnership, Royal Wolverhampton NHS Trust, Primary Care Networks and Healthwatch Wolverhampton.</p> <p>Recent dialogue amongst all parties has led to an agreement to review progress to date, the current work streams and if they remain fit for purpose and the general direction of travel of the ICA.</p> <p>In parallel discussions have begun in relation to the development of an Alliance Contract which is envisaged will be in shadow form from April 2020. January – March will be utilised to develop and agree the process and governance structures to support the implementation of the Alliance Contract.</p> <p>A recent workshop in December 2019 highlighted the need to ensure that all priorities are aligned to the population health / SCDU dataset to ensure that the most effective areas are being addressed based on the evidence that is available.</p> <p>It was also agreed that that the Community Transformation work being undertaken by Division 3 is paramount and central to being able to deliver an infrastructure to being able to monopolise on the ability to deliver.</p> <p>A follow up workshop is being scheduled for February 2020.</p> <p><u>Structured Clinical Dataset Unit (SCDU) & Clinico Informatics</u></p> <p>Evidence based approaches that have succeeded in high performing systems have relied heavily on clinical informatics, strong evidence base and a departure from standard approaches in managing patients with long term conditions. The clinico informatics group convened by Prof Dev Singh is central to evidence based service redesign internally and across the Wolverhampton place.</p> <p>The ongoing development and testing of the proof of concept in relation to the SCDU is progressing well and the key partners have provided a comprehensive data set. There is a Data Sharing Agreement in place with all GP Practices.</p> <p>A sub data sharing agreement with two non RWT PCN practices has been completed which will permit sharing the same primary care data set and the further evaluation of the “GP complex care” system.</p> <p>The full data set will become more complete and indeed grow over time. There will be sufficient data to provide significant intelligence and drive new systems pathways and transformation on behalf of the ICA.</p>

The trust is testing new evidenced based approaches based on its integrated care dataset in the following areas:

Project	Expected Outcomes	Progress to Date
<p>Huddle:</p> <p>Developing a system and process to identify 'Red' and 'Green' days in hospital wards for every patient every day. Capturing this data will result in rich data intelligence informing the Trust of where the bottlenecks are in the Trust in terms of patient flow. A dashboard will be created displaying the status of delays across the Trust</p>	<ul style="list-style-type: none"> • Identification of 'Red' delays in hospital • Proactive discharging of patients • length of Stay • Ward Live View of patient status • Capturing Actions list for Delays • Integration with EOL Pathway 	<p>System rolled out to all medical wards. Wards are currently dual running manual system</p> <p>Manual system to cease by end of month. Focus is now on finalising the reporting so that data can be utilised.</p> <p>Further tweaks following roll out identified and to be implemented.</p> <p>A video will be recorded which highlights the use of the Huddle system and what benefits can be realised.</p>
<p>GP Cohort:</p> <p>Developing a data driven care system and process to risk stratify patients for each VI GP Practice which will capture assessments and patient actions more formally. Patients escalated further will be discussed in a virtual MDT</p>	<ul style="list-style-type: none"> • Better screening of health needs of population base • Formalised MDT Pathway • Structured patient Actions • Monitoring of Actions • Reduction of A&E Attendances • Reduction in Emergency admissions • Integration with EOL Pathway • Integration with Frailty Pathway 	<p>Testing of the system has been undertaken by Dr Koodaruth at Warstones.</p> <p>A demo of the system took place in December 19 with all PCN leads. Feedback was positive and they would like to pilot the system.</p> <p>An SLA and DPIA and DPA documents have been drafted and awaiting sign off from IG for NON VI practices.</p>
<p>Community MDT:</p> <p>Developing a care</p>	<ul style="list-style-type: none"> • Better identification of Community patient needs 	<p>First cut of system created. Process mapping of data flows /</p>

system which connects to all other systems being developed and acting as an 'Exit' for RWT patients at various touch points. Patients identified in other systems as needing community care will be put on worklists for the community team as opposed to written referrals

- Better utilisation of Community teams
- Easier access to Community services in the health economy
- Reduction of A&E Attendances
- Reduction in Emergency Admissions

tasks undertaken.

Re-developed system and process mapping to be finalised with community services.

Other areas being explored are:

- End of Life Care.
- Learning from Death
- Frailty
- Coding

Babylon:

RWT and Babylon Health have been in advanced discussions regarding a possible agreement pursuant to which Babylon will provide its services to RWT relating to Babylon's artificial intelligence software.

The artificial intelligence services will comprise the following features:

- Symptom Checker, which allows a user to input symptoms into a chat-bot and receive medical information relating to the symptoms input;
- Health Assessment, which generates a health report based on information input by the user, including the generation of
- a user's 'digital twin';
- Personal Clinical Records;

The shared aim is to transform the services provided by the Trust by moving to a Digital-first platform in which artificial intelligence and remote technologies support patient self-management, free up time for frontline staff, and allow earlier intervention by the right clinician when a patient's condition exacerbates.

Following lengthy discussions and key stakeholder engagement an MOU has been signed by RWT and Babylon, the next phase, which is the planning phase will take place over the next few months and will involve holding key stakeholder events, contractual meetings, scope and agree the risk share with a view to leading to an April launch.

The project structure is being drawn up and will include a Steering Group to maintain oversight and governance and also a Programme Group who will maintain oversight of delivery.

A recent press announcement which detailed the partnership between the Trust and

Babylon has garnered extremely positive responses and attention.

In addition Babylon has approached the Trust with a suggestion of partnering to improving clinical outcomes for people living with type 2 diabetes.

Babylon has created a team where they believe that utilising their expertise in digital technology and AI, can improve outcomes at a reduced cost, alleviating the burden that this chronic disease poses for healthcare providers and patients.

Babylon has approached the trust as experts in caring for and managing over 7000 people living with this condition, the trust is perfectly positioned to bring vast knowledge surrounding the complexities in managing this life-long condition. Also as a provider across primary, secondary and tertiary care, piloting a new care strategy with the trust will allow Babylon to measure improvements throughout the care continuum.

Combining our joint expertise there is the potential to improve processes, reduce costs and most importantly improve health outcomes for patients. The success of this pilot could serve as a benchmark before rolling out across other NHS trust's with RWT providing the gold standard for diabetes care across the NHS.

This is in the early stages of discussions and progress will be communicated as the progress is made.

EMIS:

EMIS pride themselves on being pioneers in healthcare software and services and are always looking at future technologies and new ways of working to make sure they develop ground breaking services which benefit patients and healthcare professionals.

The Trust has the expertise and has as identified through the SCDU and Clinco-Informatics to develop the patient centric dataset which can be utilised to deliver end to end care.

There are discussions underway with EMIS to create system where the RWT service model is underpinned by the right technology, which can be used as an exemplar that other ACOs can adapt.

In order to ensure that the Trust can maximise the use of the data it requires a vehicle to mobilise SCDU, provide system wide interoperability, has the ability to scale and is resilient and secure.

An initial meeting with EMIS and RWT has set the scene for further dialogue and EMIS are confident that they are able to deliver this system for the Trust.

A workshop to explore this further and agree the scope and expectations took place in January, and an MOU is being drawn up, following which specific work streams with key stakeholders will be established as well as a Project Oversight Group.

Sensyne

The partnership with Sensyne provides the opportunity to enter into a strategic research partnership with a clinical artificial intelligence company.

The Trust is currently awaiting SoS approval to enable RWT as a non FT to hold shares.

A visit took place in November to the Sensyne head office other Trusts that are in partnership with Sensyne showcased the work they have been undertaking.

There were a number of examples demonstrated which utilising linking of datasets for example to ITU machines to a AI algorithm which supports clinicians method of intervention. The examples showcased highlighted that similar algorithms can be set up in other specialties / settings, which RWT can capitalise on.

Sensyne have extended an invitation for RWT to visit their machine learning team at and understand in more detail their AI and machine learning techniques and the latest projects they are working on. This is being arranged at present and will provide important intel on the opportunities that the partnership will afford for RWT.

Medopad:

In February 2019, Medopad and RWT signed a strategic partnership agreement as part of an innovative digital health initiative using Medopad's remote patient monitoring platform to drive patient outcomes, adherence and long term operational gains for the Trust.

The partnership is set to run over the course of 3 years with year 1 as a feasibility study to assess the measurable outcomes associated with remote patient monitoring.

A one year contract was signed, for up to 4 remote patient monitoring projects on a free basis to RWT as a beacon site.

There are a range of expected Clinical Outcomes including:

- Improved patient self-management of condition. Symptom detection, medication compliance, early intervention.
- Increased patient activity levels etc. Insight and analysis from data received informing better care pathways.
- Potential reduced acute admissions, reduced clinic times, reduced readmissions etc.
- Improved patient satisfaction and confidence, improved patient adherence to treatment plans etc.

The main focus for year 1 has been Aortic Stenosis. An app has been created and is in the final stages of development to be piloted with the targeted patient group.

Focus groups are currently being set up with patients; the aim is to launch the pilot in April 2020.

Digital Dragons:

The Digital Dragons was launched in December 2019.

It is a scheme whereby staff come up with 'digital innovations' and 'pitch' for support / endorsement to turn those ideas into reality.

The role of the Digital Dragons is to review, and be responsible for, innovation project

endorsement and recommendation.

The Digital Dragons will also provide guidance and advice on linked / interdependent strategic projects which may impact on the viability and operation of the innovation proposed.

The panel will adopt a 'Dragons' Den' style of approach which will be low on bureaucracy and high on supportive and enabling suggestions.

The application process is simplistic and the assessment process is robust.

Staff interest and feedback has been very positive and staff are engaged and supportive of the scheme.

To date there have been 13 applications which is extremely encouraging. The applications are currently being assessed and will be invited to the February Digital Innovation Forum to present.

Innovation and Research Adoption Committee:

The Innovation and Adoption Committee is a committee of the Trust Board with oversight for Innovation. The Committee was established due to importance of the Innovation agenda within the Trust and held its first meeting in December 2019.

It responsible for the governance and governance oversight of the work of the groups and forums reporting to it, namely the Digital Innovation Forum (DIF) and Patient and Service User Innovation Group (PSUIG).

The Innovation and Adoption Committee (IRAC) promotes and encourages innovation and innovation adoption across all areas of services (from primary to tertiary care).

The group provides strategic oversight and report progress regularly to the Board on matters relating to innovation and the adoption of innovation.

The IRAC will provide the Trust Board with a bi-monthly briefing paper outlining ongoing activities and recommendations in relation to business cases.