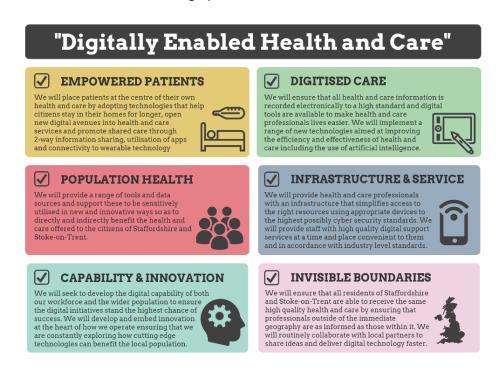# STP Digital Programme Update and Key Learnings from COVID

Purpose

This paper is presented to the Health Select Committee to update on the progress of the STP Digital Programme, highlight the priority areas for 2021/22 and describe the impact of Digital Technology and ways of working during the COVID-19 pandemic.

Background

In October 2019, a Digital Strategy was agreed for the STP which focussed activities around 6 key priority areas as summarised in the infographic below.

This Digital Strategy was given an interim re-prioritisation following the COVID Pandemic in May 2020 where the Programme Board agreed to focus on the following priority areas for the remaining parts of 2020/21 and into 2021/22:

- Consolidated and expanded **use of virtual consultations** in all sectors of health and care
- Implementation of a **total digital triage** solution to put digital triage access gateways into health services ensuring that patients receive the most appropriate advice, guidance, and treatment.
- Revision of existing **infrastructure** and **end user devices** to ensure they are **fit for purpose** and able to support holistic remote working.
- Implementation of ICR reporting and intelligence (PHM) tools to support COVID.

- Implementation of personal health records app (patient access to the integrated care record and other digital services)
- Care home digitisation

Furthermore, the Phase 3 System letter of 31st July outlined the requirement for all systems to plan to deliver full shared care records with aggregated data to support population health. This resulted in a further priority being added to the above list:

- Local Health and Care Record (LHCR) connectivity for sharing data regionally and nationally.

Current Progress

Significant progress has been made in most of the above areas in a short space of time and in particular the flagship project of Integrated Care Records where Staffordshire is seen as a leading light within the region.

Achievements include:

- **Launch of integrated care records** providing access to a near-complete view of the pertinent elements of an individual's health and care history to clinical and care staff throughout Staffordshire and Stoke-on-Trent.
- Deployment of **remote working capabilities to over 25,000 users** across an incredibly short space of time including hardware, secure connectivity and access to Microsoft Teams which is now used as the default mechanism of communication within the area. Statistics[i] show in a recent 90-day period that there have been over 6,500 hours of video calls, over 8,000 hours of audio calls, 4M+ chat messages and over 160,000 attendances at virtual meetings.
- Rapid procurement and **deployment of virtual consultation** technology allowing patients to be initially seen from the comfort and relative safety of their own homes using a combination of telephone and video consultations (with in-consultation transition) supported by file sharing (eg photographs). Statistics show there have been over 47,000 virtual consultations undertaken just within UHNM and MPFT and given a general move to an initial virtual consultation within Primary care the true number is expected to be far higher.
- **Remote monitoring and care** for a range of patients including COVID virtual wards, higher risk patients with long term conditions and care home residents. Through issuing patients or carers with simple health monitoring devices information can be routinely shared with carers who can monitor their conditions from afar and take appropriate action from simple health advice through to hospital admission. This not only keeps people safe in their own homes but has also created capacity within the local hospitals for higher severity patients. Stoke City Council are working closely with UHNM to deploy low-cost sensor-based technologies into patients homes to better inform the wider care community about a patients current and trending condition to allow pro-active notification an earlier interventions. Locally activity has been focussed in 3 primary areas:
  - Step-up and Step-down pulse oximetry and COVID virtual wards to either avoid unnecessary hospital admissions or enable an earlier discharge from hospital whilst still being under the care of a consultant.

- - Care homes through a range of devices such as pulse oximeters and digital stethoscopes but also through the TekiHealth product to allow closer and more details remote monitoring and sharing of vital signs.
    - In-home sensor monitoring through MySense using artificial intelligence to spot changes in regular behaviour and provider carers and professionals with early warning of a potential problem.
- Donated **Facebook Portals** have been deployed early within the COVID to connect care home residents both to clinical services as well as their friends and relatives.
- Digital enablement of **COVID vaccination services** from a range of sites within the region supporting the correct identification of people to be vaccinated, allowing people to easily electronically book their vaccinations, ensuring medical records are appropriately updated and providing vaccinators with the most up to date information. Staffordshire are working alongside other regions to contribute data into a larger big-data study to help identify the effectiveness of the vaccine and in particular the impact this has on all parts of our health and care system.

It is too early to formally assess the benefits realised from utilisation of the Integrated Care Records although there are a wide range of user examples where the care records have been used to better inform care or improve the efficiency of the services delivered. These examples range across all different health and care settings from identification of social care key worker involvement through to tracking vulnerable people who are at risk of not getting the appropriate care needed.

Whilst it is difficult and more detailed piece of work to attribute exact numbers to the impact remote working has had and in particular the use of Microsoft Teams it is clearer to see the areas of impact:
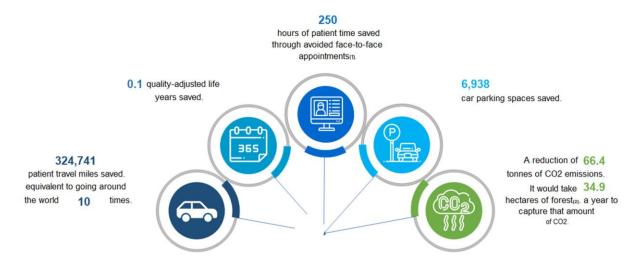
- Reduced travel both commuting to/from places of work as well as travel within the region for meeting attendance etc. This reduction in travel has an impact in many areas including:
    - Cost savings both to organisations within the system and individual staff members who are no longer spending as much money on travel
    - Productivity gains from less time spent travelling
    - Environmental gains for fewer CO2 emissions as a result of travel
- Productivity gains from more efficient use of time spent on-line – anecdotally online meetings tend to be chaired to a stricter framework and scheduled for a shorter period of time resulting in more time created within a working day
- Increased attendance at meetings due to the ease of connectivity and better use of time

There are some drawbacks of such a technology driven approach deployed so rapidly emerging which must be investigated in more detail and processes put in place to manage any risks that arise. Such areas include:

- Reduced social interaction between colleagues and increased risk of isolation for some staff members
- On-line fatigue by using every portion of the day to participate in a different on-line session
- Elongated working days due to the convenience of home working and ease of connectivity
- Meeting multi-tasking where attendance at meetings is coupled with "doing the work" resulting in a lack of meaningful participation

Most organisations in the region have indicated that remote working activities will form a key part of their future ways of working and will eventually result in opportunities to either save money in areas

such as estates and travel or will allow re-purposing of existing estate to create valuable clinical space.

250
hours of patient time saved through avoided face-to-face appointments[1]

0.1 quality-adjusted life years saved.

6,938
car parking spaces saved.

324,741
patient travel miles saved. equivalent to going around the world 10 times.

A reduction of 66.4 tonnes of CO_2 emissions. It would take 34.9 hectares of forest[2]. a year to capture that amount of CO_2.

365

A recent exercise undertaken using the NHS England VC benefits tracker tool has indicated that by moving 300 appointments per week to virtual appointments that there are also a series of hidden benefits as described in the info-graphic above.

Although it is evident that the introduction of virtual consultations has had a huge impact in terms of keeping people safe, ensuring service continuity during the pandemic and wider benefits such as less travel, further evaluation work needs to be undertaken to ensure we achieve the correct application of virtual consultations such that they are used in the most appropriate cases and don't create inefficiency for patients or drive people down a route they are not comfortable with. UHNM have undertaken a survey of over 1,300 patients with 94% reporting a "positive" or "very positive" experience and 98% indicating they would be happy to use the technology in the future. This indicates that the technology is overall successful but requires fine-tuning in its application.

Future Priorities

To continue to support the Digital Strategy delivery and recognising the need to continue to respond to the impact of the Covid pandemic, the Digital Programme Board recently agreed that its work programme for 2021-22 would focus on four priorities:

1. **Patient Facing Digital Services:** Pioneering the use of NHSApp as the primary gateway to local health and care services and commence integration between NHSApp and a range of other locally approved apps/information to create seamless access to digital services for local citizens
2. **Local Health and Care Records Connectivity:** Focusing on the technical and Information Governance connectivity of neighbouring organisations either through directly sharing the technology or by interoperability between different integrated solutions
3. **Population Health Management:** Establishing the information held within One Health and Care (OH&C) as a primary source of linked data to support population health management and implementing tools to support population health analytics

4. **Integrated Care Planning:** Developing and implementing a series of integrated care plans and assessments using OH&C as a basis for multi-organisation and multi-disciplinary care planning and assessments.

Furthermore, the Digital Programme Board agreed an additional 3 areas in which partnerships should be developed and funding sought to support Digitally enabled transformation. These areas are:

- **Care Homes:** Development of a Digital Blueprint for care homes defining how benefits can be derived from greater access to a common set of digital services in care homes and establish how these can be funded
- **Remote Monitoring:** Whilst some progress has been made into the use of technology to remotely monitor patients and citizens it is a priority to consolidate the approach in this area and expand capability such that people may safely stay in their homes longer either by avoiding inappropriate admissions to hospital or being able to be safely discharged sooner
- **Digital Inclusion:** Making sure that stakeholders including the staff and public have both access to appropriate technology and capability to engage with the digital services being developed

Health and Care services have adopted digital solutions at an extraordinary rate during the pandemic which has resulted in a series of risks from the implementation at such which have been previously discussed. A residual risk to this is losing the benefits from what we have done by not baking these solutions into a part of our future and slipping back into "old ways". As stated above, work is required to fine-tune the technologies that are already deployed but given the lessons we learned in our collective ability to adopt this technology in a crisis and what we know about the benefits of using technology is it vital that all parties collaborate to ensure the sustainability of these new ways of working.

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[i] Statistics compiled from SSHIS therefore excluding partners such as UHNM, UHDB, Local Authorities and WMAS