

Briefing Note

Title: Maximising Digital Opportunities for Health and Wellbeing in Wolverhampton **Date:** 13 January 2021

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Intended Audience: Internal Partner organisation Public Confidential

Purpose or recommendation

Health and Wellbeing Together is recommended to note progress against delivering the Wolverhampton Digital Infrastructure Strategy and activities underway to support the health and wellbeing agenda utilising technology.

Overview

This briefing note provides an update on progress in supporting the rollout of futureproofed digital infrastructure from full fibre broadband to 5G and the role it can play in the delivery of services and wider benefits it can bring to residents and businesses.

Background and context

The City of Wolverhampton recognises the value of futureproofed digital infrastructure, including full fibre broadband and 5G, not just in delivering services during lockdown but enabling service delivery for the future, better meeting the needs of residents and resulting in efficiency savings. Wolverhampton's Digital Infrastructure Strategy outlined the key steps to supporting the rollout of full fibre and wireless connectivity. The Strategy is being refreshed to capture wider opportunities around innovation, digital inclusion and skills, the digital economy and data.

Our proactive approach to supporting the rollout of futureproofed digital infrastructure, including maximising use of our assets and removing barriers by simplifying processes and agreements, is proving successful.

- The City secured funding for a local full fibre network connecting public sector premises across the city, including Council and Wolverhampton Homes offices and schools, although the health system were unable to participate in the procurement at the time.
- The wider commercial rollout of full fibre broadband has begun bringing gigabit connectivity to other public sector premises, residents and businesses across the city.

- All four Mobile Network Operators (MNOs) have announced the rollout of 5G in the city in 2020. Two MNOs already have live 5G connectivity across the city. Our proactive approach has accelerated the rollout by at least 6 months.

A Digital Wolverhampton Partnership Board has been set up, initially including the Council, Royal Wolverhampton NHS Trust, University of Wolverhampton and Voluntary Community Sector to provide strategic leadership for digital across the city and oversee revision of the Digital Wolverhampton Strategy.

Maximising digital opportunities for Health and Wellbeing in Wolverhampton

The current COVID-19 crisis has highlighted the importance of digital connectivity during lock down ranging from working from home, virtual GP appointments to reducing isolation through maintaining contact with friends and families. In extreme cases, digital connectivity offered people the only chance to say goodbye to loved ones.

Health and reducing isolation is a key driver of digital with digital technology having the potential to play a role in increasing an individual's independence by enabling them to stay at home for longer and access health services. The ability to access health advice online has been crucial during lockdown with a 41% reduction in GP appointments with appointments moving from face-to-face to virtual.

However for some, the lack of digital connectivity has compounded exclusion resulting in isolation, increased stress and impacting negatively on mental health. In Wolverhampton, prior to lockdown an estimated 35,000 residents have not been online in the last three months (Digital Exclusion Dashboard), however this issue increased during lockdown due to lack of devices, connectivity, confidence or basic skills. Although age is the biggest barrier, 44% of those that have not been online are under 60 impacting particularly on disadvantaged and vulnerable people.

Work is underway to develop an approach to getting Wolverhampton a 100% digitally included city. This includes exploring further opportunities around the role that technology can play in reducing isolation and supporting resident's health and wellbeing. The Council are currently running a pilot device and connectivity lending scheme Wolves Online through a number of trusted partners including Wolverhampton Voluntary Sector Council's Social Prescribing service, vulnerable adults and carers team with ambitions to scale up the scheme to reach more residents and involve more trusted partners.

This builds on **Support to Connect** <http://supporttoconnect.net/>, part of social prescribing service, a 6-month pilot around getting online to support health and reducing isolation. Wolverhampton Voluntary Sector Council's Social Prescribing Service supports people who are lonely and isolated, with low level mental health issues like anxiety and depression and/or long-term life restricting health conditions. Pre COVID-19 the focus was on supporting people to physically engage with their communities, through groups and activities, known as "social prescriptions". However, the focus has shifted to keeping in touch with customers, linking them together, or with befrienders or other remote support, helping them maintain their wellbeing and offering some practical support. Its aim is to respond to current need by working with people referred, initially on a remote basis; in order to help them make the best use of the technology, including computers, tablets, iPad and telephones, to keep in touch with others.

Discussions are underway with Adult Social Care to get vulnerable people online including utilising personal budgets to purchase devices and exploring links with telecare to enable connectivity. Vulnerable adults are included in the Wolves Online device and connectivity lending scheme. Digital technology offers huge potential to transform health and social care. The pace at which this field is advancing creates many opportunities, including greater choice on how to access services and the management of both acute and chronic conditions with a focus on personalised care. In 2021, a revised vision for assisted technology will be developed in the Housing Assistance Policy, which informs the allocation of the Disabled Facilities Grant including grants for Technology Enabled Care to facilitate disabled people to remain living at home where a bespoke package is needed over and above existing assistive technology provision.

The **Sustainable Transformation Partnership (STP)**, bringing together Black Country Councils, CCGs, Hospital Trusts and Voluntary Community Sector, developed a Digital strategy focusing on increased use of technology in health and social care including the development of an Integrated Care System. Its remit has expanded to consider the wider digital divide and solutions. The STP Digital vision was focused on the following digital themes:

1. **Empowerment:** Through the use of technology patient and citizens can access and contribute to their health and care in both interactions and transactions such as online booking, virtual appointments, accessing records;
2. **Infrastructure:** A resilient infrastructure across the BCWB health and social care economy enabling access to required information to support decisions from anywhere supporting place-based working;
3. **Integration:** With the enabling economy wide infrastructure, system standards and principles are a fundamental requirement for the interlinking of systems. Standards adopted nationally with the appropriate information governance framework and agreements eliminate organisational and regional boundaries to wider digital interoperability;
4. **Intelligence:** Development of robust business intelligence across the BCWB to support decision making and identification of best practice models leading to improved patient care.

Through COVID, a lot of the strategy has been delivered such as online and telephone triage, direct booking from 111, video conferencing for primary care and outpatients in secondary care. Therefore, it is proposed to refresh the strategy and stretch the ambition by establishing a digital innovation group reviewing what is available and testing to see whether they can implement new initiatives including the use of 5G to support these.

5G is mobile internet as fast as fibre with speeds up to 1GB, five-ten times faster than current home broadband connectivity currently. 5G benefits include huge capacity with the ability to connect thousands of users and devices at the same time at consistently ultrafast speeds and ultra-reliable, secure and low latency which will be transformational for industry. 5G offers huge potential to improve quality of life and the delivery of services as outlined in <https://www.wm5g.org.uk/news/why-5g-will-prove-fundamental-to-improving-healthcare/>.

Prior to lockdown, a 5G task and finish group of the HWT was established to explore potential use cases for 5G in the following areas:

- **System flow** – how do we stop people going into A&E. Real time tele tracking across whole system flow – primary, secondary, community
- **Care and nursing homes** – early warning systems – baseline diagnostics so if parameters outside the norm, monitored by central team who pick up early signs and alert care home.
- **Smart beds** currently measure heart, oxygen etc but no connection to clinicians therefore scope to work with company to enhance.
- **Social isolation** and older people impacting on health/ emergency admissions - inactivity monitoring.
- **Keeping people active** – live streaming exercises including 5G armchair aerobics, falls clinic, WV Active, older people in their own homes
- **Screening** is low in the city – how could we improve this

The work of the group was put on hold during the Pandemic, however a number of a number of initiatives have been bought forward both sub-regionally and via WM5G. The newly established Digital Wolverhampton Partnership aims to develop 5G plan for the City including potential use cases.

The West Midlands successfully bid for the **Urban Connected Communities 5G** programme to facilitate the rollout of 5G and exploring potential use cases to demonstrate the benefits of 5G in both industry and public service delivery. WM5G are exploring three use cases:

- **5G Care Home Project:** connectivity GP's and care homes to offer both video consultation, diagnostic tools and capturing vital sign information to allow for early identification of issues such as strokes. Demonstrate that 5G fundamentally enhances patient care in care homes while delivering significant financial benefits to the healthcare system and economic opportunities for technology providers. Ensure the mechanisms are in place for rapid regional scaling and national opportunity. This is currently being piloted between a GP and care home in Bilston.
- **Capsule endoscopy** to identify bowel cancer allowing patients to swallow a camera in a capsule in their own home as an alternative to endoscopy. The use case uses 5G-enabled patient self-administration to community-based managed service delivery of capsule endoscopy putting the West Midlands at the forefront of post-COVID endoscopy services. Royal Wolverhampton NHS Trust are a partner on this scheme.
- **Connected Ambulance:** Engage with the 'Living Lab' bid being submitted to 5G Create. Work with West Midlands Ambulance Service to reduce avoidable conveyance and improve quality of care. Contribute to the pathway innovation agendas in conjunction with regional Acute Trusts

Wolverhampton is hosting one of three **Application Accelerators 5spring** which aims to help organisations of all sizes harness the power of 5G to deliver growth and innovation throughout the West Midlands and beyond. The Accelerator will offer cutting-edge facilities and expertise can help public and private companies to understand 5G, its applications and support to unlock its potential.

- **Engage:** Build a core understanding of 5G and how it can benefit businesses and customers, looking at its possible use cases, its benefits vs other network technologies, and what applicable features are available (and when), as well as actionable next steps for organisations.

- **Explore:** Learn more about how 5G can address specific challenges by helping to understand the different roles 5G can play and providing support to build a business case and technical plan for organisations that want to adopt or supply 5G enabled products and services.
- **Exploit:** Develop innovative and ambitious 5G solutions in real (or close to real) environments providing expert technical and business support to deliver use cases, proof of concept and prototypes to help you develop new products and services that utilise 5G.

Citizen Wellbeing is one of the industrial vertical focus including supporting connected healthcare via remote real-time patient monitoring, using AI for diagnoses and innovative treatment including AR, VR and spatial computing. 5spring are inviting public sector organisations to indicate problems they would like to be solved.

This adds value to the University of Wolverhampton's ambitious plans around a Centre of Excellence for Digital Innovation for Smart Cities (DISC). The University has submitted research and development proposal aimed at providing digital equality in society to accelerate digital economy. They are looking to pilot digital equality for our future digital society in social-care sectors (care providers and receivers, elderly and non-elderly).