



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

Coventry and Warwickshire LMNS Digital Strategy 2022 2022- 2025 Final v01



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COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

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Contents



Executive Summary



Our System



National context



Coventry and
Warwickshire Digital
Strategy



What Good Looks
Like Framework
Mapping



Strategic Priorities
and Roadmap



Case Study



References



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

Executive Summary

Executive Summary



This Digital Maternity Roadmap 'A Strategy for Digital Transformation in Maternity' sets out the vision for the next four years.

The strategy is developed against the What Good Looks Like Framework (August 2021) 7 success measures.

It has been developed in line with the system-wide Coventry and Warwickshire ICB digital strategy and supports George Eliot Hospital and South Warwickshire University Foundation Trust and University Hospitals Coventry and Warwickshire organisational digital strategies.





COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

Our Local System

Coventry and Warwickshire Local Maternity and Neonatal System (CWLMNS)



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

The Coventry and Warwickshire Local Maternity System was set up 2017, to specifically to develop and implement a plan to transform and sustain improvements in maternity and neonatal services.

LMNS works with organisations across the communities to address the needs of the local population. In total there are 7 partner organisations within our ICS:

- Coventry City Council
- Coventry and Warwickshire Integrated Care Board
- Coventry and Warwickshire Partnership NHS Trust
- George Eliot Hospital NHS Trust
- South Warwickshire University NHS Foundation Trust
- Warwickshire County Council
- University Hospitals Coventry and Warwickshire NHS Trust

The Coventry and Warwickshire Maternity System is a complex one, comprising three acute hospital trusts, all of which currently provide maternity and neonatal services to the local populations of Coventry and Warwickshire. University Hospitals Coventry and Warwickshire Trust (UHCW) have a level 3 obstetric unit, as well as a midwife led unit. South Warwickshire University Foundation Trust (SWUFT) and George Eliot Hospital Trust (GEH) have obstetric units with level 1 neonatal cots; and SWUFT opened their midwifery led unit July 2018. Community midwifery is provided by each of the three units supporting antenatal and postnatal care and a small volume of home births.



Integrated Care System



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Local **Maternity & Neonatal** System

As an Integrated Care System we have agreed a common vision as well as the principles of how partners will work together. This is underpinned by the Health and Wellbeing Concordat for Coventry and Warwickshire.

This Concordat was agreed by our two Health and Wellbeing Boards and sets out our goal to enable people across Coventry and Warwickshire to pursue happy, healthy lives and put people and communities at the heart of everything we do.

Providing good health care is only one way to improve people's health and wellbeing. Working together in an Integrated Care System enables us to address the other factors that might affect people's health such as housing, education and access to jobs.

Better, joined up, health and care systems mean improved, more easily accessible services for our local population and better outcomes for everyone.

Our vision is more than just an aspiration, it is the driver for real change across Coventry and Warwickshire.

The ICS has four aims which are:

- Improving outcomes in population health and healthcare:
- Tackling unequal outcomes, experience and access:
- Enhancing Productivity and value for money:
- Supporting the broader social and economic development of C&W:



Coventry and Warwickshire
Integrated Care System

Coventry



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Local **Maternity & Neonatal** System

As an area Coventry and Warwickshire are significantly different. Coventry's population is growing, changing and increasingly diverse. In the past ten years, Coventry's population has grown by a fifth, making it the second-fastest growing local authority outside of London. In 2016-17, its growth rate was the seventh highest. In 2021 Coventry's population was estimated at 432,386.

The city's growth is particularly high amongst 18-29 year olds. Just under half the population are female with 13% of the population aged 20-24. The biggest rate of growth is amongst 25- 29 year olds across the city. This is followed by 18-24 year olds who are concentrated in the city centre and surrounding neighbourhoods. This includes an increase in the student population.

A third of the city's population growth is concentrated in one-tenth of the city, concentrated in and around the city centre and a number of new housing. As the city grows, it is also becoming increasingly diverse. Over 66% of the city's population is White British and of the remaining residents, 7.2% are White (non-British), 5.5% are black, and over 16% are Asian. It means that Coventry has a notably higher percentage of black and minor ethnic population (BME) compared to the national average.

Life expectancy and healthy life expectancy are extremely important summary measures of overall population health. The Marmot Review, Fair Society, Healthy Lives, demonstrates clear and significant links between avoidable differences in health outcomes and deprivation, where people experiencing multiple deprivation not only living shorter lives, but spend a greater portion of their shorter lives with a disability or in poor health. As a Marmot city, Coventry has adopted and embedded the principles of Marmot, tackling the social conditions that can lead to health inequalities, and working to improve the areas in which people are born, grow, live, work and age.

Warwickshire



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

Warwickshire has a population of 583,786, 50.6% of which are female. The county has a slightly older population on average. Despite the focus of population within the main towns of the county, a significant part of Warwickshire is rural in nature. Warwickshire is a two-tier local authority and comprises five district/borough areas: Warwick, Rugby, Stratford Upon Avon, North Warwickshire and Nuneaton and Bedworth.

There is an increasing ethnic diversity within Warwickshire compared to Warwickshire's population at the time of the last Census in 2011. level. It has a lower rate of non-UK residents than nationally (13.1% vs 15.0%). Of the population 88.5% are classed as white British with the next highest ethnic group being Asian/Asian British (4.6%) and 'other' white 3.2%. There are some slight variances throughout the districts with Nuneaton and Bedworth and Warwick having both a younger population on average and a higher proportion of Asian/Asian British: Indian population compared to the other three areas. Rugby conversely has a higher population percentage classified as 'other' white than the rest of the county.

The evidence suggests that there are differences in long term health outcomes by ethnicity, with most groups having worse outcomes than 'White British'. Given the importance of the first 1,001 days to long term health, it is vital ethnicity is recorded to support with measuring outcomes by ethnicity at a local level.

Deprivation is often a marker for where more resource is needed to be targeted to achieve the same outcomes as more affluent areas. Relative levels of deprivation are increasing in Warwickshire, and there are higher levels of need in Nuneaton and Bedworth, Rugby town centre and Leamington. This is backed up by evidence that the largest numbers of children in low-income families from 2015/16 to 2018/19 has been in Nuneaton and Bedworth and Rugby.

All areas of Warwickshire have a low birth weight rate lower than the England average, however there are inequalities with Nuneaton and Warwick having the highest rates. This fits with the ethnicity profile of the population showing high proportions of mixed ethnic heritages in these areas, and the audit results showing that these groups are more likely to have low birth weight and premature births.



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

National Context

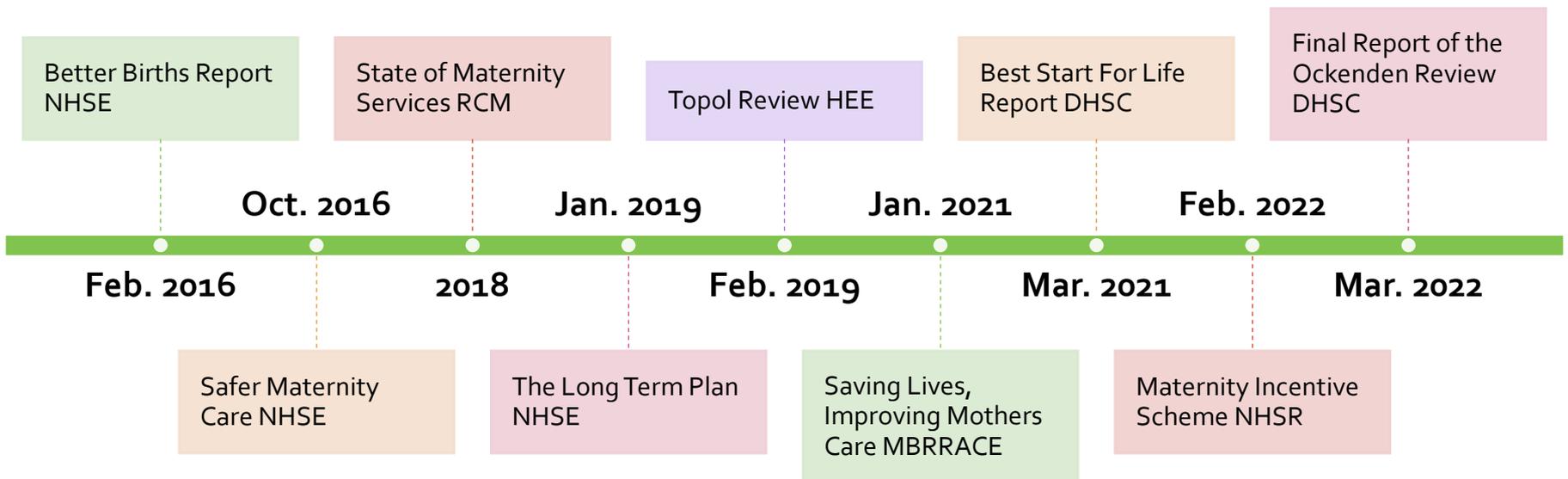
National Digital Drivers



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Local **Maternity & Neonatal** System

Digital technology and advancements are changing how maternity care is delivered and this is further driven by consumer expectations to have greater visibility of their clinical maternity record and care plans, results and pregnancy and birth information to enable them to make informed choices about the care they wish to receive. The evolution of technology in healthcare requires a specialised workforce where midwives and maternity multi-professional teams have the skills to use data, information, digital knowledge and technology to deliver person-centred quality care. Ultimately driving safety, providing a better maternity experience for women and their families and improving outcomes.

The previous Health Secretary, Sajid Javid, furthermore identified the power of digital to drive a new era of recovery and reform following the Covid-19 pandemic and focusses on 4 priorities. These are: firstly, making sure the NHS is set up properly for success; secondly, levelling up across the NHS and social care; thirdly, pursuing personalisation; and fourthly, making big breakthroughs on emerging technologies and data.



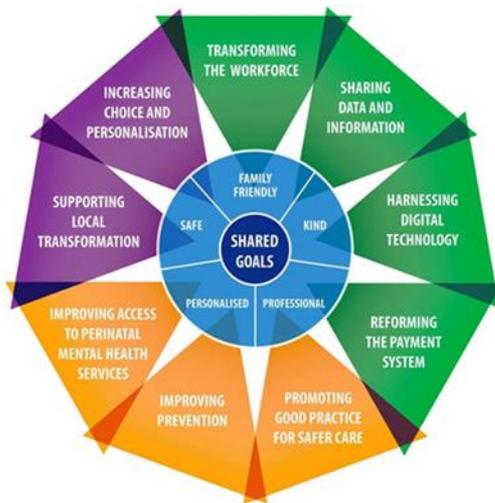
Behind the National Digital Drivers



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

Better Births

Better Births seeks to offer choice to women in all aspects of their maternity journey, from antenatal, birth and the postnatal period. It recommends if we are to improve the quality of care, learning and productivity, the NHS needs to make it much easier for health professionals to collect and share data with each other and with their patients. This new way of working requires significant change to many and impacts all areas of the pregnancy pathways including ante-natal, labour and birth and all the post-natal period, across all health care.



The Maternity Transformation programme

The Maternity Transformation Programme seeks to achieve the vision set out in Better Births by bringing organisations together to lead and implement the change. The programme aims to make wide ranging improvements to maternity services following the National Maternity Review, and is an important part of the NHS Long Term plan (LTP). The LTP recommends that, "by 2023/2024, all women will be able to access their maternity notes and information through their smart phones or other devices."

The maternity transformation programme was set up following the National Maternity Review with the Digital transformation being key to a number of the workstreams. NHS Digital are leading the 'Harnessing Digital Technology' workstream, that seeks to empower individuals to care for themselves, improve outcomes and experience and support clinicians to be enabled to deliver care and reduce costs.

National Digital projects



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

There is no doubt that digital technology is fundamental to the way women receive maternity care. Digital technology is evolving quickly, and so are the expectations of pregnant women and their families. The application of digital technology has a real impact on the experiences for pregnant women accessing maternity services. As well as providing benefits directly to the women using the maternity services, digital technology offers huge opportunities to enhance the working practices of maternity staff. Behind the scenes, technology when applied well should enable clinicians, enhancing their practice and freeing up their time to care.

The several projects including digital maternity interoperability, women's digital care records, digital toolset and assessing the digital maturity of maternity services across England.

- The Digital Maternity Interoperability project will enable maternity records to be exchanged between healthcare professionals and women, irrespective of their location or clinical system.
- The Digital Maternity Record standard was published to improve the way information is shared between women, midwives, doctors, health care services and IT systems.
- The Women's Digital Care Record (WDCR) project aims to continue to support maternity services within a pilot area and offers women digital versions of their care record by replacing traditional paper records and offering additional functionality.
- The Digital Toolset aims to improve personalisation and choice for women by offering access to unbiased, evidence based and locally specific information.
- The Digital Maturity Assessment (DMA) ran from April to June 2018, and was completed by all 136 maternity services providers in England.

Clinical Negligence Scheme for Trusts (CNST)



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

The scheme supports the delivery of safer maternity care through an incentive element to trust contributions to the CNST. The scheme, developed in partnership with the national maternity safety champions, Dr Matthew Jolly and Professor Jacqueline Dunkley-Bent OBE, rewards trusts that meet 10 safety actions designed to improve the delivery of best practice in maternity and neonatal services. The maternity incentive scheme applies to all acute Trusts that deliver maternity services and are members of the CNST.

The first two years of the maternity incentive scheme saw, via Action 2, a substantial improvement in the MSDSv1.5 data submitted to NHS Digital. The data, which are published monthly and shared at record level with a range of organisations could therefore be used for a wide range of local and national purposes. It also ensured that all Trusts were engaged with NHS Digital on the move to MSDSv2.0. The latest scheme plans to ensure that the key elements of the data, such as births, bookings, estimated date of delivery and presentation at delivery are submitted. It also focusses on key priority areas such as Continuity of Carer, Personalised Care Plans and inequalities, via both ethnic category and postcode.

The fourth year, the scheme further incentivises the 10 maternity safety actions from the previous year with some further refinement. CNST Safety Action 2 clearly outlines the expectations on the development of a maternity digital strategy which states:

By October 2022, Trusts have an up to date digital strategy for their maternity services which aligns with the wider Trust Digital Strategy and reflects the 7 success measures within the What Good Looks Like Framework. The strategy must be shared with Local Maternity Systems and be signed off by the Integrated Care Board. As part of this, dedicated Digital Leadership should be in place in the Trust and have engaged with the NHSEI Digital Child Health and Maternity Programme.

Ockenden



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

The Emerging Findings and Recommendations from the Independent Review of Maternity Services at the Shrewsbury and Telford Hospitals NHS Trust was published in December 2020, and identifies seven Immediate and Essential Actions (IEAs), which Trusts have been asked to implement. While digital isn't mentioned directly within the findings there are actions that are reliant on digital maturity with recommendations requiring to be auditable in order to reduce risks. This includes the auditing of maternity multidisciplinary team and must ensure attendance and active participation in relevant team meetings and serious incidents.

Recommendation 5, Risk Assessment throughout pregnancy stated: A risk assessment must be completed and recorded at every contact. This must also include ongoing review and discussion of intended place of birth. This is a key element of the Personalised Care and Support Plan (PCSP). Regular audit mechanisms are in place to assess PCSP compliance. The digital impact of this is:

- Providers will be required to report via the MSDS v2.0
- The woman will hold her own plan or has easy access to a shared digital plan which she can review at any point.
- The hospital care record should also record any information shared and any decisions agreed; until e-patient held records are in place to allow sharing of plans.

The Ockenden – Final report from the independent review of maternity services at the Shrewsbury and Telford Hospital NHS Trust was published on 30 March. NHS England are working with the Department of Health and Social Care to implement the further 15 Immediate & Essential Actions (IEAs) with every trust, ICS and LMNS Board in the process of understanding the expected new service improvements needed.

What Good Looks Like (WGLL) Framework



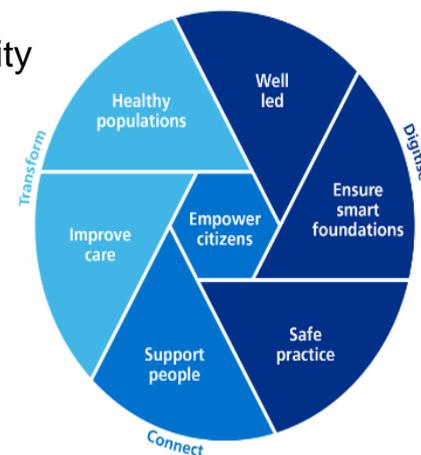
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Local **Maternity & Neonatal** System

WGLL aims to draw on local learning from the pandemic and build on good practice to provide guidance for health and care leaders undertaking digital transformation. The framework looks at how to ensure success across an Integrated Care System (ICS), providing a new assessment framework to measure digital maturity and identify where improvement is needed, as well as funding and access to digital expertise.

The framework is included in both the ICS design framework and the NHS Operational Planning and Contracting Guidance, reflecting the expectation that the standards in the WGLL framework will be used to accelerate digital and data transformation.

The WGLL framework has 7 success measures:

1. Well led - clear strategy for digital transformation, ICS governance, build digital and data expertise
2. Ensure smart foundations - Digital, data and infrastructure operating environments are reliable, modern, secure, sustainable and resilient with well-resourced teams to deliver modern digital and data services.
3. Safe practice - system-wide plan for maintaining robust cyber security, sustainability and resilience.
4. Support people – a workforce that is digitally literate and can work optimally with data and technology.
5. Empower citizens - people are at the centre of service design and have access to a standard set of digital services that suit all literacy and digital inclusion needs.
6. Improve care - embeds digital and data within their improvement capability to transform care pathways, reduce unwarranted variation and improve health and Wellbeing.
7. Healthy populations - uses data to design and deliver improvements to population health and wellbeing, making best use of collective resources. Insights from data are used to improve outcomes and address health inequalities.



The 7 success measures of What Good Looks Like



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Local **Maternity & Neonatal** System

Coventry & Warwickshire Digital Transformation

Coventry & Warwickshire Digital Transformation



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Local **Maternity & Neonatal** System

The purpose of the Coventry and Warwickshire Digital Transformation Strategy is to establish the framework and direction for delivering digital and data solutions across the Integrated Care System (ICS). To realise the ambitious vision of the NHS Long Term Plan, organisations must transform the support and care available to our citizens and patients: digital and data capabilities have a critical role in achieving this vision.

The strategy sets out how the system will transform and support people to live well, enabled by digital and data. Covid-19 demonstrated our ability to accelerate digital change. The Digital Transformation Strategy reflects the perspectives of our citizens, patients, frontline clinical teams and staff from across Coventry and Warwickshire, drawing on national policy and guidance to deliver the priorities set by the ICS.

Our strategy sets out;

- how we will transform and support people to live well,
- enabled by digital and data
- how we will transform as an integrated system, shaped by a set of key guiding principles that shape and anchor our strategy and will guide future decision-making to transform as a system, shown below in figure 1.



Figure 1 Guiding principles overview

Coventry & Warwickshire Digital Transformation continued



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

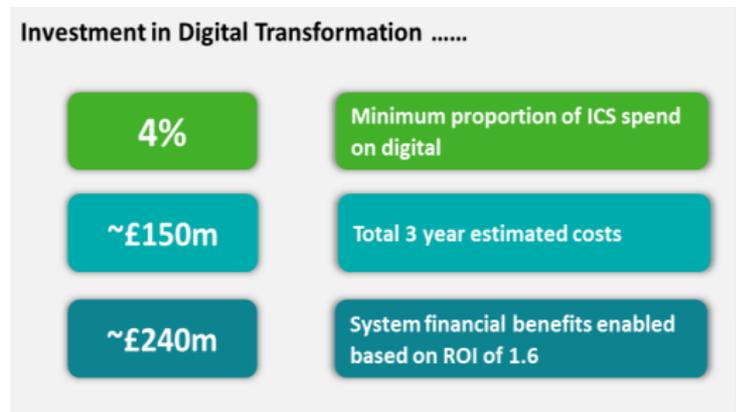
In alignment with the ICS guiding principles and ICS strategic priorities, a set of digital and data strategic priorities have been developed.

COVENTRY AND WARWICKSHIRE ICS STRATEGIC PRIORITIES



Our strategy is grounded in an initial three year roadmap to outline how we build, embed, and consolidate our capabilities. In the first year of our strategy, we will implement foundational digital and data capabilities and define our enabling structures. By the end of our 3 year strategy period (FY24/25), we will have built and embedded advanced digital and data capabilities across our ICS. Our long-term aspirations are to continuously improve our digital and data capabilities, achieving fundamental transformation in health and care.

The Digital Transformation Strategy will require significant investment over the next three years. In order to transform and truly integrate, investment in capabilities beyond our current funding commitments is required.



The role of Digital and Data in redesigning health and care



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Local **Maternity & Neonatal** System

To realise the ambitious vision of the NHS Long Term Plan and meet the needs of our population we must transform the support and care provided to our citizens and patients. We cannot transform and achieve our vision without digital and data capabilities.

OUR DIGITAL TRANSFORMATION VISION

Our Digital Transformation Strategy will enable people across Coventry and Warwickshire to start well, live well and age well, promote independence, and put people at the heart of everything we do.

National policy and strategic guidance, including the NHSX 'What Good Looks Like' framework, the NHSX 'Data Saves Lives' report, the TOPOL review on 'Preparing the healthcare workforce to deliver the digital future', and the King's Fund emphasise the importance of digital and data in driving transformation. The Coventry and Warwickshire Digital Transformation Strategy aligns to the future goals and priorities of the ICS, and the national direction of travel:

- ICS Strategic Priority 1. Enabling everyone to keep well by making healthy choices and providing services that helps prevent illness, promote wellbeing, and reduce health inequalities.
- ICS Strategic Priority 2. Working together to tackle the underlying causes of illness, build community resilience, and ensure everyone has access to jobs, secure housing and feels connected to people around them.
- ICS Strategic Priority 3. Providing the best possible care within available resources as close to home as possible and joined up around the people and communities we serve.
- ICS Strategic Priority 4: Using technology to improve health and care including a single electronic care record and providing people with digital access to advice and support.
- ICS Strategic Priority 5. Valuing our staff by enabling them to work flexibly, investing in their development, and working to increase diversity in leadership teams.

Reducing Inequalities



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Local **Maternity & Neonatal** System

Concurrent with work on the digital transformation strategy is the Coventry and Warwickshire Health Inequalities strategic plan. The system believes that the digital transformation strategy is a key mechanism for delivering against digital exclusion, and to that end we have taken an active role in strengthening the linkages to tackling health inequalities.

Alignment of the digital transformation strategy group with health inequalities are summarised:

- Digital and Data Enablers – the inclusion of digital skills and the resourcing of an ICS digital inclusion programme as a key enabler
- Population Health Management and data - to enhance and embed PHM capabilities in order to achieve reduced inequalities in outcomes and experiences
- Virtual health and care - the priority to enhance and scale our capabilities to monitor and interact with more citizens and patients virtually
- Outcomes delivered for our citizens - to engage with communities
- Personalised care - will improve informed choice-making on health and wellbeing
- Health and Wellbeing - target wider wellbeing issues
- System and Place - strengthen the connection with the emerging Care Collaboratives
- Terminology - alignment with language
- HEAT Tool - health equality impacts using the Health Equity Assessment Tool (HEAT)

Detailed information on health inequalities can be found in the Coventry and Warwickshire Joint Strategic Needs Assessments, and the Coventry and Warwickshire Director of Public Health annual reports.

NHS Operating Plan Priority Actions on Health Inequalities





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Local **Maternity & Neonatal** System

What Good Looks Like

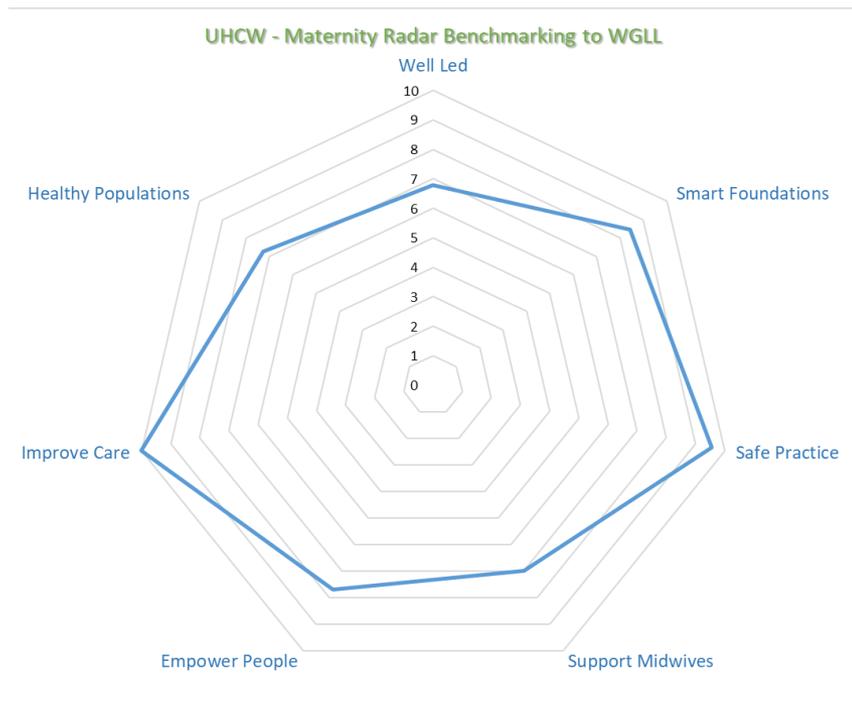
Maternity Mapping to the What Good Looks Like



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We have developed our Digital Roadmap for Midwifery aligned to the seven What Good Looks Like success measures and the wider strategic goals of the Coventry and Warwickshire Strategic Plan. We have enclosed the maternity radar benchmarking tools for our three Trusts.

1. Well led
2. Ensure smart foundations
3. Safe practice
4. Support people
5. Empower citizens
6. Improve care
7. Healthy populations

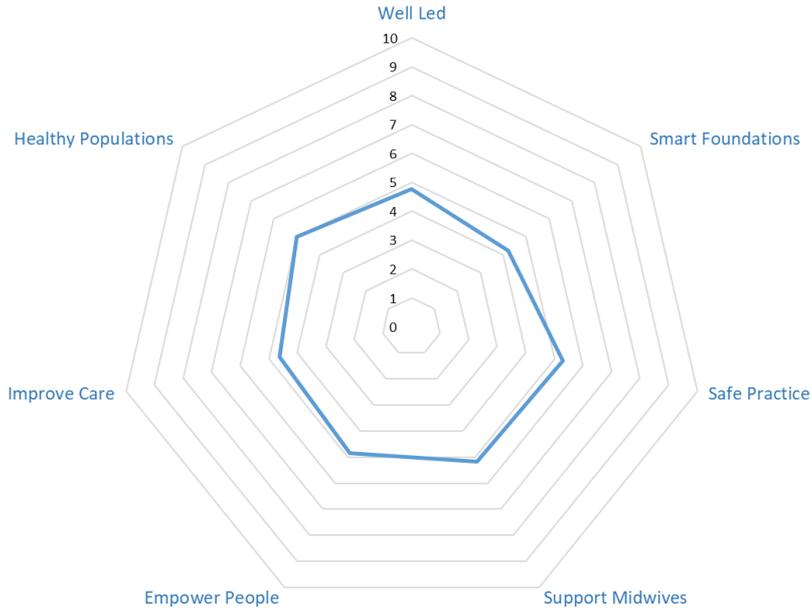


Maternity Mapping to the What Good Looks Like – Con't

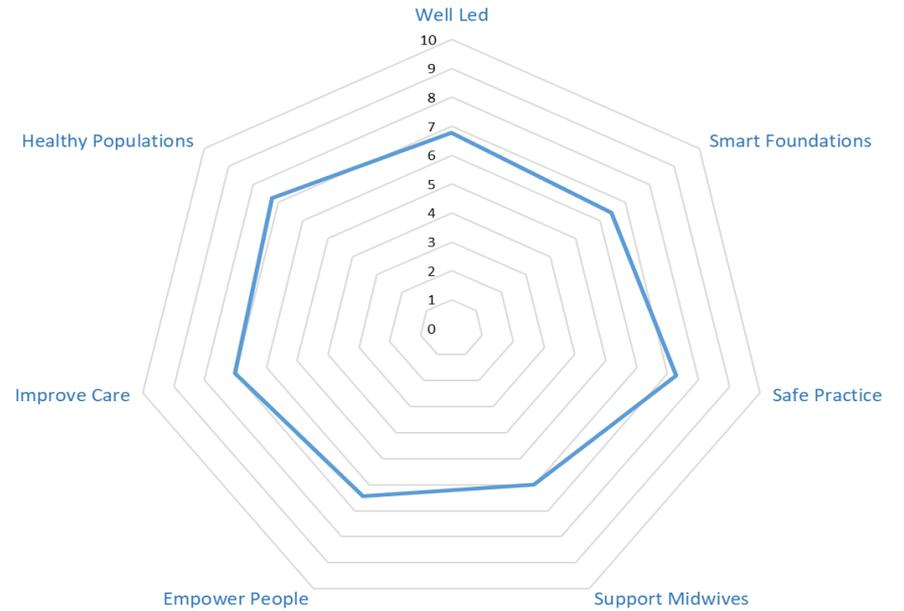


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Local **Maternity & Neonatal** System

George Eliot Hospital - Maternity Radar Benchmarking to WGLL



SWFT - Maternity Radar Benchmarking to WGLL



1. Well Led



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Local **Maternity & Neonatal** System

What does good look like for your ICS: Has a clear strategy for digital transformation and collaboration. Leaders across the ICS collectively own and drive the digital transformation journey, placing citizens and frontline perspectives at the centre. All leaders promote digitally enabled transformation to efficiently deliver safe, high-quality care. Integrated Care Boards (ICBs) build digital and data expertise and accountability into their leadership and governance arrangements and ensure delivery of the system-wide digital and data strategy.

What does good look like for your organisation: Boards are equipped to lead digital transformation and collaboration. They own and drive the digitally enabled transformation journey, placing citizens and frontline perspectives at the centre.

What we will do

- Ensure a clear digital strategy has been outlined in preparation for submission to CNST, by each of the Trusts by the end of October 2022.
- These digital strategies are aligned to the overarching Coventry and Warwickshire digital strategy, which is overseen by the Digital Transformation Board.
- Each organisation have digital midwives in place with dedicated time to support
- The LMNS will demonstrate collective ownership of the digital strategy with robust governance to assure and drive forward progress
- The LMNS will foster an open culture by actively investing in learning and development needs to support the digital strategy
- Identify digital and data solutions to improve care by regularly engaging with frontline users and service users via the Maternity Voices Partnership

2. Ensure smart foundations



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Local **Maternity & Neonatal** System

What does good look like for your ICS: Digital, data and infrastructure operating environments are reliable, modern, secure, sustainable and resilient. Across your ICS, all organisations have well-resourced teams who are competent to deliver modern digital and data services.

What does good look like for your organisation: Digital, data and infrastructure operating environments are reliable, modern, secure, sustainable and resilient. Organisations have well-resourced teams who are competent to deliver modern digital and data services.

What we will do

- Organisations will be represented at regional meetings, participating in the sharing good practice
- Each organisation has implemented a maternity specific digital system: Badgernet within George Eliot Hospital and South Warwickshire University Foundation Trust and K2 within University Hospitals Coventry and Warwickshire
- There are active plans to align digital platforms across the system – Cerner. This is to support frictionless movement of service users across the system and ensure the safe delivery of patient care accessing multiple health disciplines during pregnancy. All risks and issues will be thoroughly outlined and assurance will be gained to ensure future systems will meet any national requirements for example CNST, Ockenden
- Support the system to ensure maternity and neonatal data can be shared with and form part of the patient's life record which can be accessed by primary, secondary and community health professionals.
- Ongoing audit of key documentation items required by Ockenden report / Clinical Negligence Scheme for Trusts (CNST) / Saving Babies' Lives report, including risk assessments and management plans.



3. Safe practice

What does good look like for your ICS: Organisations across the ICS maintain standards for safe care, as set out by the Digital Technology Assessment Criteria for health and social care (DTAC). They routinely review system-wide security, sustainability and resilience.

What does good look like for your organisation: Organisations maintain standards for safe care. They routinely review digital and data systems to ensure they are safe, robust, secure, sustainable and resilient. Digitally-enabled outcome-driven transformation is at the heart of safe care.

What we will do

- Ensure digital errors are recorded and reported with a programme for audit to review trends and themes. This will include reporting to the LMNS digital workstream and LMNS Quality and Safety workstream.
- Any themes or trends identified will be shared across the LMNS, regional and nationally, as appropriate
- Ensure that maternity teams are trained to be knowledgeable and proactive about information security and digital clinical safety. Information Governance training is both annual and mandatory, enabling all staff understand digital and data risks, how to operate digital and data systems safely and escalate concerns or incidents.
- Ensure that Maternity Digital leaders are familiar with and understand clinical safety standards such as [DCB0129](#) and [DCB0160](#), as well as frameworks such as the [Digital Technology Assessment Criteria](#) (DTAC).
- Ensure compliance with NHSE with Maternity Services Data Set v2.0 Information Standard

4. Support people



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Local **Maternity & Neonatal** System

ICS/organisation: Your workforce is digitally literate and able to work optimally with data and technology. Digital and data tools and systems are fit for purpose and support staff to do their jobs well.

What we will do

- Digital Midwives to ensure that new starters to the maternity team have necessary knowledge and skills and to provide training including Digital literacy skills.
- The LMNS through the Digital workstream will develop a programme/action plan to ensure best practice and learning is shared across the system
- The LMNS to ensure there is maternity representation on the ICS Digital Transformation Board to ensure maternity issues can be raised.
- To ensure digital midwives have access to additional relevant training to lead digital transformation and enable safe and effective practice.
- Trusts will ensure staff members complete mandatory training enabling them to understand and follow organisational guidelines and policies such as login information and choosing secure passwords or social media policies and knowing and following procedures to report suspicious emails and other activity to IT staff in your organisation.

5. Empower citizens



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Local **Maternity & Neonatal** System

What does good look like for your ICS/organisation: Citizens are at the centre of service design and have access to a standard set of digital services that suit all literacy and digital inclusion needs. Citizens can access and contribute to their healthcare information, taking an active role in their health and well-being.

What we will do

- The LMNS will embedded coproduction through the creation of specific cross system workstreams to target specific themes. Addressing particular health inequalities informs the action plan for each workstream and allows for a targeted approach.
- We will ensure MVP representation on each workstream to ensure the voices of service users are heard and can be supported during there maternity journey including the raising of awareness and promotion of national tools and services, NHS.uk, NHS login and the NHS App.
- We will ensure the LMNS is actively involved in projects that support the reduction of digital exclusion including loaning out of iPads (UHCW), portable work stations within communal areas (GEH)
- We will ensure that all non-digital information and paper/hard copy information to support women with limited access to digital tools are reviewed to ensure these are in accessible formats including easy read.
- Ensure digital tools or information on digital systems supporting choice are in accessible languages appropriate to our communities as well as adheres to NHS Accessible Information Standard, for example the availability of digital parent education information to be made accessible in seven languages (SWUFT)

6. Improve care



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Local **Maternity & Neonatal** System

What does good look like for your ICS: Your ICS embeds digital and data within their improvement capability to transform care pathways, reduce unwarranted variation and improve health and wellbeing. Digital solutions enhance services for patients and ensure that they get the right care when they need it and in the right place across the whole ICS.

What does good look like for your organisation: Health and care practitioners embed digital and data within their improvement capability to transform care pathways, reduce unwarranted variation and improve health and wellbeing. Digital solutions enhance services for patients and ensure that they get the right care when they need it and in the right place.

What we will do

- The LMNS will embed digital and data strategies within transformation plans to transform maternity pathways, reduce unwarranted variation and improve health and wellbeing.
- The LMNS will work with other organisations/teams including Primary Care, our Perinatal Mental provider, Health Visiting to ensure continuity of care as service users move into and out of our services enabling effective communication between services and ensuring professionals surrounding women, babies and their families have all the pertinent and relevant information to provide safe and quality care.
- The LMNS to work with other organisations/teams including Primary Care, our Perinatal Mental provider, Health Visiting to ensure professionals have digital access to maternity records both during and after a maternity episode.
- The LMNS will ensure within each maternity organisation there are mechanism to feedback to staff and service users on safety matters and improvement plans
- Support continuous improvement of care through the use of digital technology by gaining service user and staff engagement and feedback.

7. Healthy populations



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

What does good look like for your ICS: Your ICS uses data to design and deliver improvements to population health and wellbeing, making best use of collective resources. Insights from data are used to improve outcomes and address health inequalities.

What does good look like for your organisation: Organisations use data to inform their own care planning and support the development and adoption of innovative ICS-led, population-based, digitally-driven models of care.

What we will do

- The LMNS will use Digital and data solutions to support care planning and decision making including the implementation of Personalise Care and Support Plans (PSCP) and tools including iDecide to improve and enhance the clinical and patient experience across the entire care pathway
- Standardised data principles such as SNOMED CT and PRSB standards are implemented across the ICB to ensure maternity data that accurately represents people and supports population health is collected consistently
- The LMNS will develop dashboards in conjunction with population health management and the health inequalities workstreams to ensure that data can accurately be recorded, audited and reported to enable targeted projects of support.
- The LMNS will work Trusts to review data being reported to MSDS and develop action plan to improve quality and accuracy of data reporting
- Digital Midwives will continue to work with the Trust's information team and maternity team to ensure robust data collection and analysis.



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Local **Maternity & Neonatal** System

Strategic Priorities

Programmes of work for Maternity

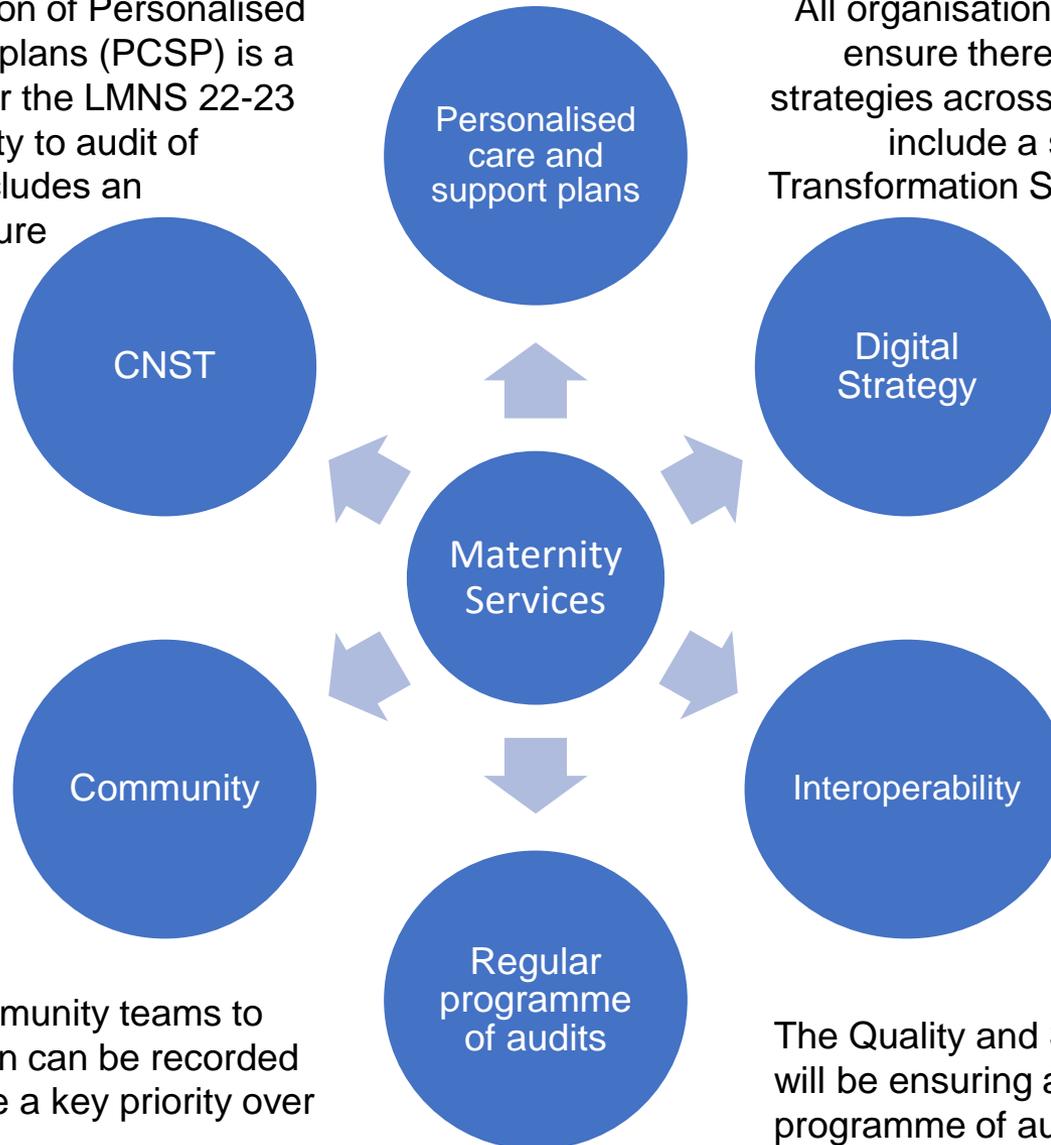


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The implementation of Personalised care and support plans (PCSP) is a key deliverable for the LMNS 22-23 including the ability to audit of PCSP's which includes an experience measure

By October 2022, Trusts have an up to date digital strategy to comply with CNST Year 4

Enabling our community teams to ensure information can be recorded and shared will be a key priority over the next 4 years



All organisations are working together to ensure there is alignment of digital strategies across the system – this will also include a system wide Digital Transformation Strategy as well as a LMNS strategy

Through the implementation of Cerner across the system, providers will be able to communicate and share information more easily

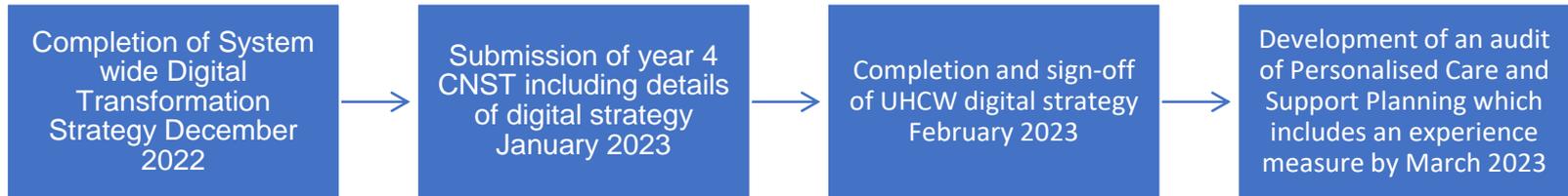
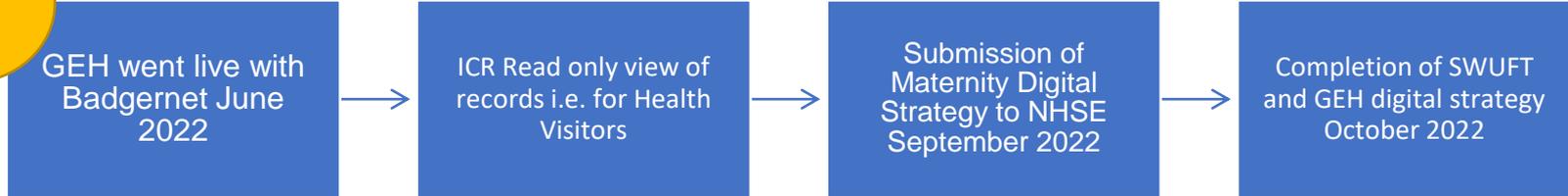
The Quality and Safety Workstream will be ensuring and monitoring the programme of audits

Roadmap

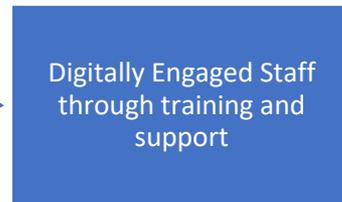
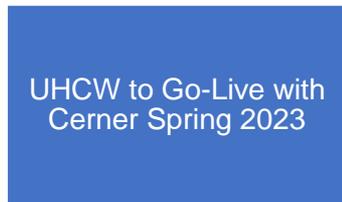


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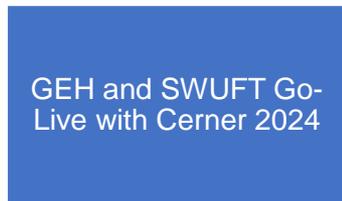
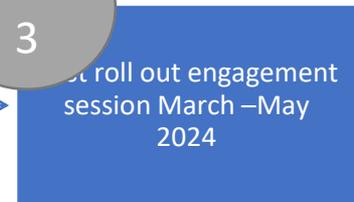
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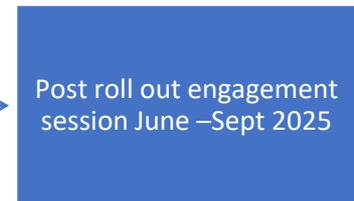
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Year
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Year
4





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Case Study

Case Study



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Local **Maternity & Neonatal** System

A.2.1 Maria, 28 years old



MARIA'S BACKGROUND



Female | 28 years old



Nuneaton



Mixed heritage



History of pre-eclampsia, smoker,
domestic abuse

Maria is an **expectant mother** who resides in Nuneaton. She has a challenging relationship with the father of her children, and has suffered domestic abuse in the past. Her previous two children are in foster care and she is unable to visit them.

After finding out that she is pregnant she makes an appointment with a midwife. She chooses to deliver her baby at **Warwick Hospital** to avoid safeguarding challenges.

Maria encounters several **social and medical complications** throughout her pregnancy and requires support in various locations across and outside of the ICS.



2025 Journey

Maria discovers she is several weeks pregnant...



- Female | 28 years old
- History of pre-eclampsia
- Smoker 10 years
- Domestic Abuse

MARIA

Maria books a midwifery appointment

After a positive home pregnancy test, *Maria books a midwifery appointment via her portal*. She selects Warwick as her birthing location due to safeguarding challenges.

Maria's midwife is alerted to her complex history and needs

Maria's midwife easily and securely accesses a summary of Maria's history and risks, including her history of pre-eclampsia, and complex social factors which required a safeguarding case to be raised. With the appropriate system access rights, Maria's GP and social worker are auto-notified of her pregnancy and updated on her progress.

Maria is alerted and an appointment is scheduled

An appointment with the Warwick Hospital team is automatically booked. *Maria is able to conveniently amend the booking on her portal.*

Maria is flagged as high risk

Maria is referred to specialist high-risk pregnancy care of a consultant in the Warwick Hospital Antenatal Clinic. The *Warwick team seamlessly access Maria's record* in the shared EPR.

Maria is digitally nudged to stop smoking

Maria's midwife discusses smoking cessation options with her. Based on her history, Maria's portal suggests *effective apps*, with frequent visual reminders, material and videos. Maria is *also linked to local support groups for domestic abuse survivors.*

Maria receives antenatal care

Maria *accesses her maternity record, personalised educational content, and tracks her pregnancy and baby's development digitally*. Appropriate referrals are automatically recommended based on her needs.



Process Automation



Digital Smoking Cessation Support



Integrated Booking System



Integrated Electronic Patient Record



2025 Journey



Maria has an emergency visit ...

Maria visits her family in Leicester

During her second trimester, Maria visits her parents in Leicester.

Maria experiences heavy bleeding at 26 weeks

During lunch with her mother, she experiences some bleeding and pain. *Maria goes to the nearest local ED, which is, as advised by Warwick Hospital who she is booked with.*

Maria is flagged with pre-eclampsia symptoms

The *doctors at Leicester General Hospital digitally request and access her notes via a health information exchange*, which flags that she has a history of pre-eclampsia contributing to her high blood pressure. Maria is treated and given medication to lower her blood pressure.

Maria is sent home with remote monitoring equipment

Maria is sent home with *remote monitoring equipment* to check her blood pressure and other observations on a daily basis.

Maria's son is cared for in the neo-natal unit

Maria is discharged several days later. She able to *monitor Noah via video when she is home*. Maria's GP, social worker, and midwife are notified of the delivery. *Noah's record is auto-generated and linked to Maria's*. Maria is also connected with various digital and in-person support options to *help her cope with the stress* of her situation.

Maria undergoes emergency c-section

Maria delivers her son Noah prematurely. Noah is transferred to the UHCW level 3 Neonatal Unit for close monitoring and persistent symptoms.

Maria has a virtual visit

As advised by her Warwick Obstetric Consultant, *Maria consents to transferring her care to UHCW for shared care* due to her obstetric history, presenting symptoms, and risk of premature birth.

Maria's progress is tracked by system intelligence

Maria's blood pressure has not improved, which is *flagged to Maria, her midwife and specialist obstetric team*.



Integrated Care Record



Digital Social Prescribing



Hospital video monitoring



Remote monitoring



2025 Journey



Maria develops a pelvic infection and must return to hospital...

Maria is provided postnatal care materials

While she is home, Maria reviews the material and videos automatically uploaded to her patient portal.

Maria feels unwell

Two weeks after giving birth, Maria develops a temperature and abdominal discomfort. Maria has an emergency virtual consultation with her midwife.

Maria goes to the GEH ED

Maria's midwife recommends she immediately go to the closest hospital for further investigation. The ED team seamlessly access clinical information from her pregnancy and delivery from UHCW. The team suspect a pelvic infection based on this information and presentation.

Maria's sepsis is promptly treated

She is admitted for treatment and monitoring. Maria develops sepsis, which is detected promptly with e-observations, integrated devices and auto-calculation of NEWS scores. Appropriate antibiotics are auto-ordered and administered.

Maria's teams are updated

The GP, Health Visitor, Midwives and Smoking cessation teams are notified of Maria's inpatient stay and home community visits are auto-cancelled.

Maria is empowered to manage her son's care

Maria is provided with resources, including reminders and auto-booking of vaccines and immunisations to manage her son's early years.

Maria is able to bring her son home

Maria is successfully cooperating with her social worker. A meeting is arranged to discuss her progress and possible reunion with her two other children.

Maria's holistic needs are supported

Maria monitors her symptoms on a daily basis, has stopped smoking with the help of the apps and daily reminders, and has had no contact with her abusive ex-partner.

Maria is discharged with support

Virtual follow-up appointments are automatically booked. Maria is also digitally provided with a check list of symptoms she should be aware of in case further complications arise.



Clinical Decision Support



Advanced Analytics



Emergency Virtual Consultation



Holistic Digital Support

References



COVENTRY AND WARWICKSHIRE
Local **Maternity & Neonatal** System

1. [Coventry Joint Strategic Needs Assessment \(JSNA\) – Coventry City Council](#)
2. [Joint Strategic Needs Assessment – Warwickshire County Council](#)
3. [national-maternity-review-report.pdf \(england.nhs.uk\)](#)
4. [NHS England » Maternity Transformation Programme](#)
5. [What Good Looks Like framework - What Good Looks Like - NHS Transformation Directorate \(england.nhs.uk\)](#)
6. [Maternity incentive scheme - NHS Resolution](#)
7. [OCKENDEN REPORT - MATERNITY SERVICES AT THE SHREWSBURY AND TELFORD HOSPITAL NHS TRUST \(ockendenmaternityreview.org.uk\)](#)