



Research in the Wessex region in relation to women and girls' health and care needs

Wessex Health Partners
June 2024

Authors: Jan Westbury^{1,2}, Desislava Baramova¹, Katrina Cathie², Ying Cheong^{2,3}, Keith Godfrey^{2,3}, Vanora Hundley⁴, Peter Phiri⁵, Christine McGrath¹

Published: October 2024

DOI: <https://doi.org/10.5258/SOTON/P1192>

Author affiliations:

¹ Wessex Health Partners, Southampton Science Park, 2 Venture Road, Chilworth, Southampton, SO16 7NP

² University Hospital Southampton, Tremona Road, Southampton, SO16 6YD

³ University of Southampton, University Road, Southampton, SO17 1BJ

⁴ Bournemouth University, Fern Barrow, Poole, Dorset, BH12 5BB

⁵ Hampshire and Isle of Wight Healthcare NHS Foundation Trust, Tatchbury Mount, Calmore, Southampton, SO40 2RZ



Organisations who contributed to the report:

Bournemouth University
Health Sciences University
University of Portsmouth
University of Southampton
Hampshire and Isle of Wight Integrated Care Board
NHS Dorset
Health Innovation Wessex
Dorset County Hospital NHS Foundation Trust
Dorset HealthCare University NHS Foundation Trust
Hampshire and Isle of Wight Healthcare NHS Foundation Trust
Hampshire Hospitals NHS Foundation Trust
Portsmouth Hospitals University NHS Trust
University Hospitals Dorset NHS Foundation Trust
University Hospital Southampton NHS Foundation Trust

Acknowledgements

The Wessex Health Partners core team would like to extend our appreciation to everyone who contributed to the successful completion of this report. Our sincere thanks to:

- The Wessex Health Partners Women’s Health Research Advisory Group who advised on the preparation and completion of the report.
- The researchers who willingly gave their time to speak to us and share their insights and stories.
- The research departments of the Wessex Health Partner organisations and CRN Wessex who provided the research data.
- Members of the Women’s Health Advisory Group representing: Dorset and the Hampshire and Isle of Wight Integrated Care Boards, Health Innovation Wessex, Wessex Health Partners core team, for supporting the development of the project.

Executive summary

This report was commissioned by the Women's Health Programme Boards of the respective Dorset and Hampshire and Isle of Wight Integrated Care Boards. The request was to provide an insight into research recently and currently undertaken in the Wessex region in relation to women and girls, following the national and regional priority setting to meet women's health needs.

The project - to investigate historical and current research in Wessex - involved extracting data from research databases over the past five years and speaking to researchers to hear their stories, the challenges they faced and implementation of their work.

The electronic data covered a large number of research studies in the region. However, it is recognised the data will be incomplete due to differing terminology, study titles and varying classification across different database systems. In addition, much research is not gender specific. Further research continues to emerge, and more researchers in the region are being identified.

A selection of stories from the researchers interviewed are presented in the report, noting that not all potential researchers in the region participated and not every story could be told. The researchers provided a richness to the data collected and expressed enthusiasm to develop the research agenda for women further and work collaboratively. The work undertaken for the report has initiated connectivity which has set the foundations for further development to benefit women's research in the region. Numerous challenges were identified by the researchers, with culture and resources cited as key issues.

It was not possible to ascertain, in most cases, the evidence of implementation of the research, due to the time scales of the project plan and requirement for further in-depth investigation.

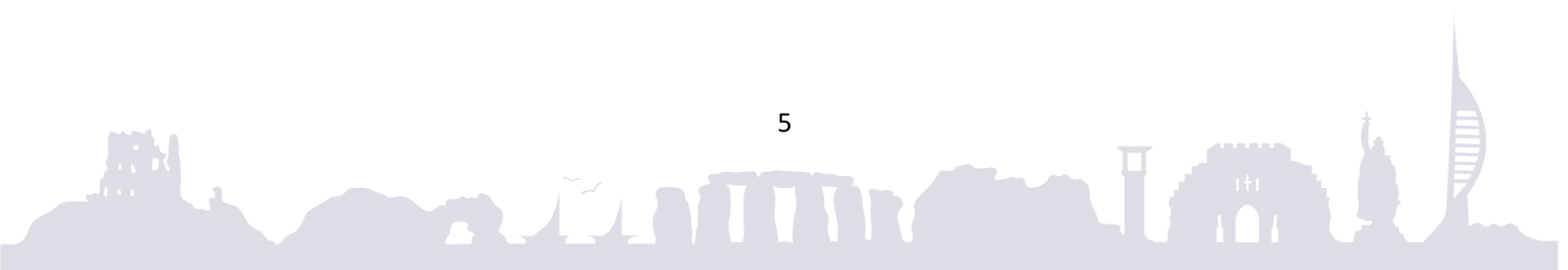
Recommendations have not been offered within the report, as this is considered the basis for further discussion and decision making. The findings in the report are designed to inform and support the Women's Health Programme Boards of the ICBs for these future discussions and develop recommendations to ultimately influence the prioritisation of women's research in Wessex going forward

INDEX

Acknowledgements	1
Executive summary.....	3
INDEX	4
1. Introduction.....	6
2. Background.....	6
2.1 Women’s Health Strategy for England	6
2.2 National Strategic Research Initiatives	9
2.3 Regional Priorities	11
2.4 Why is research important?	13
3. Project Approach	13
4. Key Findings	14
4.1 Human Papilloma Virus (HPV) vaccination.....	15
4.2 Menstrual health.....	16
4.3 Gynaecological conditions.....	16
4.4 Cervical screening.....	17
4.5 Gynaecological cancers.....	17
4.6 Sexual health and wellbeing.....	18
4.7 Contraception, pregnancy, fertility, pregnancy loss, abortion care, postnatal support, pelvic floor health	18
4.7.1 Contraception.....	19
4.7.2 Preconception	19
4.7.3 Pregnancy	20
4.7.4 Fertility.....	21
4.7.5 Pregnancy loss.....	21
4.7.6 Postnatal support.....	22
4.7.7 Pelvic health	23
4.8 Perimenopause and menopause	23
4.9 Breast cancer screening.....	24
4.9.1 Breast Cancer	24
4.10 Wellbeing and lifestyle.....	24
4.10.1 Breast Health.....	25



4.10.2 Women in prison	25
4.11 Mental Health	26
4.12 Long term conditions	26
4.13 Health impacts of violence against women and girls	27
4.14 Osteoporosis and bone health.....	28
4.15 Dementia and Alzheimer’s	29
4.16 Minoritised groups and underserved communities	29
4.17 Health of the workforce	30
4.18 Global Women’s Health	31
4.19 Adolescent research	31
4.20 Wessex research groups on Women’s Health	32
4.21 Events.....	34
5. Challenges and opportunities for researchers	34
5.1 Challenges	34
5.2 Opportunities.....	36
6. Summary of Findings	37
7. Conclusion.....	40
References.....	41



1. Introduction

The Dorset and the Hampshire and Isle of Wight (HIOW) Integrated Care Boards (ICBs) are founding partners of the Wessex Health Partners (WHP) strategic alliance, the region's academic health and care partnership, established to accelerate improvements in health and care through research, innovation and training (1). With the publication of the Women's Health Strategy for England (2), all ICBs are required to take action to improve the health outcomes for women and girls. Health care research is a key driver for improving outcomes and the ICBs have a statutory obligation to 'maximise the benefits of research'.

At the request of Dorset and HIOW ICBs, this report has been compiled by the WHP core team with, and on behalf of the partners in the strategic alliance, to identify the research being undertaken in the Wessex region.

The aims of the report are to:

1. Provide an overview of the research in women's health currently being undertaken and the previous five years within the Wessex region.
2. Increase the collective knowledge of partners of the research and expertise in women's health within Wessex.
3. Support the identification of opportunities for the ICBs and stakeholders to improve women's health outcomes through research and innovation.
4. Support the ICBs to meet their statutory obligation to 'maximise the benefits of research and innovation'.

2. Background

2.1 Women's Health Strategy for England

While women in the UK tend to live longer than men, there's a stark disparity when it comes to quality of life. Women spend a disproportionate amount of their lives dealing with ill health and disability compared to men (3). This discrepancy raises critical questions about healthcare access, support, and gender-specific needs. Moreover, the fact that women constitute 51% of the population highlights

their significant role in society. However, the historical design of the health and care system has predominantly reflected male perspectives and priorities. This gender bias can lead to gaps in addressing women's unique health challenges. To create a more equitable and effective system, the disparities must be recognised and addressed. Inclusivity, research, and tailored healthcare services for women are essential steps toward a healthier and more balanced future.

In March 2021, the government launched a call for evidence to inform the development of England's first Women's Health Strategy (2). Women in the UK face health disparities related to access of care, experiences, and outcomes, and the aim of this call was to investigate the impact of the healthcare system on women's wellbeing. Following on from this, in August 2022 the government launched their first Women's Health Strategy for England (4). The 10-year strategy sets out a range of commitments to improve the health of women (and girls) across the life course by prioritising women's wellbeing throughout their lives, understanding women's changing health needs across different life stages and identifying critical moments for health promotion, prevention, and restoration. The main benefit of this approach is that it allows healthcare professionals to intervene earlier to prevent negative outcomes and to improve intergenerational health outcomes and overall quality of life. Figure one represents the reproductive health and general health needs of women across the life course (2).

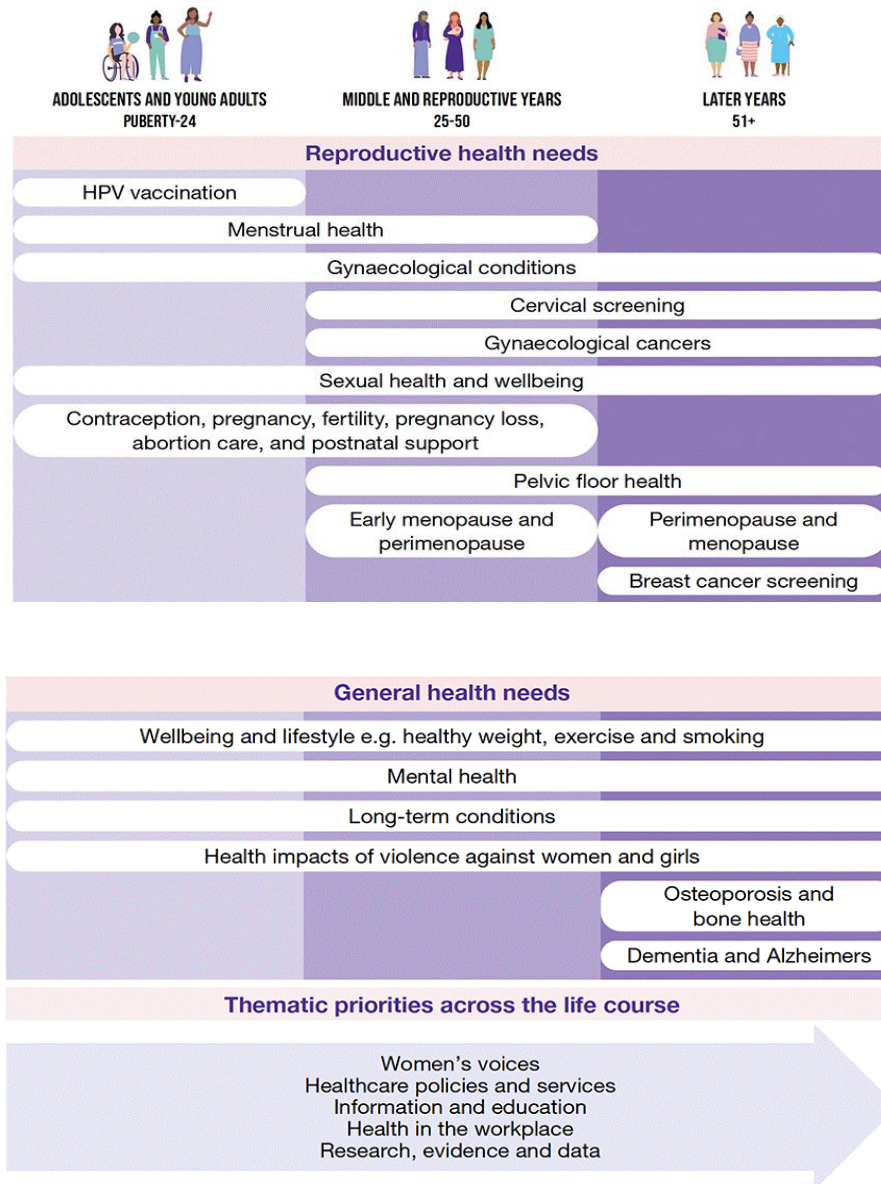
In January 2024 the Health Secretary announced new women's health priorities for 2024 (5):

- better care for menstrual and gynaecological conditions - by rolling out women's health hubs, producing new guidance for healthcare professionals, continuing to improve information and support for women suffering from painful heavy periods and endometriosis, and promoting easier access to contraception - which often plays a vital role in managing menstrual problems.
- expanding women's health hubs - by delivering through £25 million investment, the hubs will improve women's access to care, improve health outcomes and reduce health inequalities.
- tackling disparities and improving support for vulnerable women including victims of sexual abuse and violence by ensuring training and support systems are working collaboratively and efficiently.
- bolstering maternity care, before, during and after pregnancy - by continuing to deliver on NHS England's 3-year delivery plan for maternity and neonatal services and ensuring women understand the care they can expect from the NHS during pregnancy and after giving birth. Additional support will be provided to women who suffer with birth trauma and ensuring both mental and physical health are prioritised. A greater focus will be placed on preconception and postnatal care for women, raising awareness of pregnancy sickness and actioning the recommendations set out in the Pregnancy Loss Review. Through the first ever National Institute

for Health and Care Research (NIHR) ‘challenge’, backed by £50 million, researchers, policymakers and women will be tasked with finding new ways to tackle maternity disparities.

- more research - a vital component to levelling up the playing field for women’s health.

Figure one: Women’s Health Needs – Diagram of Life Course



The national strategy sets out the specific health conditions or areas which require targeted action such as addressing women’s reproductive health, including menstrual health and gynaecological conditions; focusing on fertility, pregnancy care and support during and after childbirth; recognising

the unique health needs during menopause; prioritising mental health and wellbeing support for women; targeting cancer prevention, early detection and treatment; promoting healthy ageing and managing long-term health conditions (4). The focus of these priorities is likely to be influenced as new evidence emerges, such as the recently published report on Birth Trauma, which became a top priority for the second year of the Women's Health Strategy (6).

The call for evidence highlighted the importance of ensuring women, and in particular a diverse range of women, are represented in research. Therefore, part of the 10-year ambitions set out in the Women's Health Strategy is to ensure publicly funded research should consider sex-based differences and encourage data collection on sex breakdown of participants. There has been debate that women's health has not been given sufficient priority, particularly by funders (7). Additionally, research should be representing society by including under-represented groups such as ethnic minorities, pregnant women, lesbian and bisexual women and address barriers preventing participation. Furthermore, the Core20PLUS5 NHS England approach to support the reduction of health inequalities at both national and system level for both adults and children needs to be taken into consideration (8). To further develop the national Women's Health Strategy, the call for evidence also highlighted the need for an increased research focus on gynaecological conditions, menstrual health, fertility, pregnancy, menopause, and post-reproductive health.

2.2 National Strategic Research Initiatives

The NIHR has also made large investments across NIHR infrastructure, including Biomedical Research Centres and NIHR Applied Research Collaborations, with dedicated themes to women's health, including reproductive health, perinatal women's health, and metabolism and endocrinology. Additionally, the NIHR recently launched their first Challenge funding call on Maternity Inequalities, focused on finding new ways to tackle maternity disparities with the aim to facilitate a multidisciplinary whole systems approach to address uncertainties across research, innovation and implementation (9). NHS England is also committed to increasing participation of women and other under-represented groups in research by launching the Find, Recruit and Follow-up activity (10). The Medical Research Council (MRC) is exploring the development of policy to promote the consideration of sex and other diversity characteristics in the design, conduct and analysis of all human participant studies (11). This is welcome as there has been debate over insufficient priority given to women's research.

The strategy recognises it is crucial that national policy and clinical practice is informed and updated by robust research, and that women's health research is effectively disseminated to women, practitioners, and the public (4).

The Department of Health and Social Care announced a £25 million investment in March 2023 over a two-year period, to accelerate the development of new Women's Health Hubs across England (12). The aim of these hubs is to bring together healthcare professionals and existing services to provide integrated women's health services in the community, centred on meeting women's needs across the life course. Hub models aim to improve access to and experiences of care, improve health outcomes for women, and reduce health inequalities (13).

The national aims of Women's Health Hubs will help to deliver the ambitions set out in the Women's Health Strategy (13). These are divided into 3 categories:

1. *Aims for women and girls*: Ensuring women and girls have better access to preventative healthcare and early intervention; Improving patient experience, by delivering care in a streamlined manner, ideally in a single appointment; Achieving better health outcomes while addressing existing health disparities; Providing health information in various formats and supporting patient self-management when appropriate.
2. *Aims for the workforce*: Optimising the skills of Multi-Disciplinary Teams (MDTs) through joint working and training opportunities; Improving workforce experience and retention; Strengthening collaboration between primary, community and secondary care.
3. *Aims for health and care system*: Greater efficiency at delivering care at the right time, in the right place and by the right person; More integration and partnership working between health system partners; Improving data collection and utilization by commissioners and providers to understand and improve women's health needs.

In addition to the shared goals above, Women's Health Hubs are encouraged to tailor their specific goals and targets to meet the needs of their local population. Over the last 12 months, both Dorset and HIOW ICBs have created their Women's Health Strategy Programme Boards, and each board has identified the local priorities they would like to address within their populations.

2.3 Regional Priorities

The current priorities for the HIOW Women’s Health Strategy Programme Board are summarised below in Table 1:

ALL WOMEN	1. Menstrual care
	2. Menopause care
	3. Contraceptive conversations
People experiencing health inequalities (particularly in focus areas)	1. Women who live in deprived areas
	2. Looked after girls/care leavings
	3. Women with learning disabilities
	4. Ethnic minority groups
	5. Homeless women
	6. Women with mental illness
	7. Women who use substances
	8. Migrant women and girls

Table 1: HIOW Women’s Health Hub Programme Group priorities

See Appendix 2 for HIOW Women’s Health Hub Programme Group logic model.

The current priorities for NHS Dorset Women’s Health Strategy Programme Board are summarised below in Table 2:



<p>1. Dorset Women's Health Online Resource</p>	<ul style="list-style-type: none"> ● Website repository of information, education, awareness, self-help and service provision ● Programme branding and logo ● Education for professionals
<p>2. Long-Acting Reversible Contraception (LARC)</p>	<ul style="list-style-type: none"> ● Service improvement ● Provision in primary and secondary care where appropriate ● LARC for contraceptive and non-contraceptive reasons
<p>3. Young Women's Physical and Mental Health</p>	<ul style="list-style-type: none"> ● Physical health including HPV vaccinations: education, engagement and uptake ● Mental health including perinatal mental health
<p>4. Menopause</p>	<ul style="list-style-type: none"> ● Current provision and required improvement ● Supporting women in the workplace, and their colleagues to support them ● Supporting Dorset women to access awareness of and management of symptoms, support groups and treatment where required ● Education for professionals on symptoms
<p>5. Minoritised Groups and Mobile Support</p>	<ul style="list-style-type: none"> ● Examining DiiS data ● PPI engagement to identify need ● Bournemouth University, Health Innovation Wessex and Wessex Health Partners working together ● Support that can visit rural areas and build on existing Dorset provision ● Taking a service to under-represented groups: information, education and provision
<p>6. Gynaecology</p>	<ul style="list-style-type: none"> ● Waiting lists ● Pathways to secondary care ● Provision in primary care for certain conditions ● Links with pelvic health
<p>7. Pelvic Floor Disorders</p>	<ul style="list-style-type: none"> ● Current pathways including for immediate referral to pelvic health physio ● Campaigns and awareness for early help ● Innovation

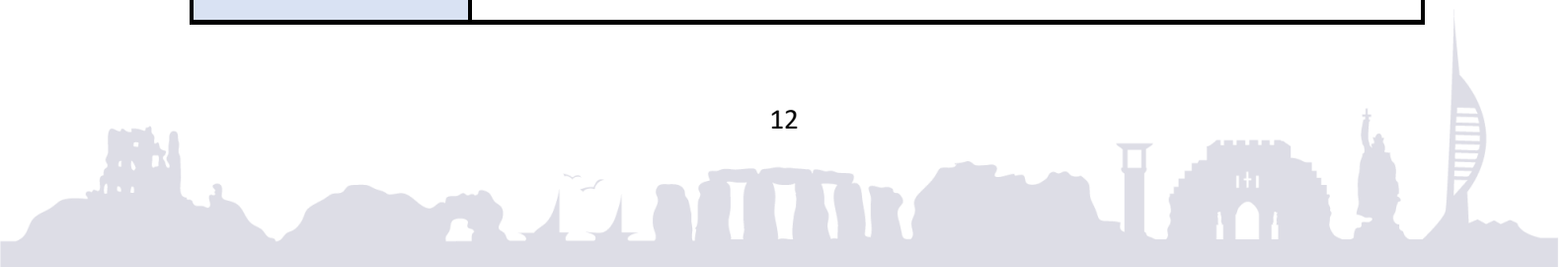


Table 2: NHS Dorset Women’s Health Hub Programme Group priorities

See Appendix 3 for NHS Dorset Women’s Health Hub Programme Group logic model.

Both Women’s Health Programme Groups share a vision to improve the health and care of women across Wessex. Their priorities and goals align on providing a better care for all women on menstrual care and gynaecology, contraception, and menopause. They are committed to addressing the needs of women and tackling the health inequalities across our region with an additional focus on minoritised groups. The current priorities for both ICBs are subject to change based on future needs.

2.4 Why is research important?

NHS England provided guidance to integrated care systems on maximising the benefits of research. It was highlighted that the UK is a world leader for research and invention in healthcare and its importance in underpinning advances in health and care which is the basis for evidence-based practice (14). Furthermore, it cited evidence that:

- staff involved in research have greater job satisfaction and staff turnover is lower in research active trusts
- research active hospitals have lower mortality rates, and not just among research participants
- 83% of people believe that health research is very important
- healthcare performance improvements have been seen from the creation of academic research placements
- clinical academic research, and in particular the practice changes resulting from it, is associated with improved patient and carer experiences.

3. Project Approach

The methodology for the project approach was based on intelligence gathering to search research study databases and to also hold informal discussions with researchers across the Wessex region. The time frame for research inclusion was the previous five years and current research being undertaken. It had been planned to collate future research, but due to confidentiality constraints the findings would be severely limited. A decision was made to focus on the terms used within the Women’s Health Strategy, specifically those used in Figure 1, as this clearly set out the government’s terminology for both women and girls’ health needs. This proved to be helpful to those organisations undertaking

database searches and for discussions with researchers. However, it did limit studies that may have proved valuable when considering other conditions, such as cardiovascular disease, where it is increasingly recognised that being a woman may have different outcomes to men. Generally, these studies are not gender specific.

There is no single body that holds a complete list of all health and care research, including women's health research. In compiling this report, it has therefore been necessary to gather intelligence from multiple sources. These include:

- The NIHR Clinical Research Network (CRN) portfolio database for Wessex
- Research databases of the WHP partners

Informal discussions were undertaken with 50 researchers across the region. This ranged from leaders in their field to PhD students, many keen to participate. The approach to researchers was through a mix of recommendations and identifying leads from the research studies extracted, ensuring all WHP partner organisations were included. The aim was to capture rich data which would not be apparent from the research study database searches. In addition, it afforded the opportunity to connect researchers. The topics explored were designed to hear stories about their research, what challenges the researcher faced and if their findings had been deployed.

The limitations of the data are that the database search may be incomplete due to the complexities of extracting the data and that discussions did not take place with all Wessex researchers involved in women's and girls' studies, either because they are unknown or did not respond to requests.

4. Key Findings

The findings of this report are presented below, grouped to reflect women's health needs across the life course together with health inequalities, and addressing one of the thematic priorities, 'research evidence and data'. Global women's health research is highlighted, due to the contribution of lead researchers internationally and their contribution to the economic growth and benefit to the region. Each women's health need provides an overview of the research studies identified, with further detail of each study and location provided in the appendices. A selection of compelling stories from researchers are also included to provide rich insights into the research. Following this, is a section on the challenges and opportunities for researchers in conducting research. A selection of findings

identified within the report is presented as a SWOT analysis of the research in the Wessex region on women and girls' health.

4.1 Human Papilloma Virus (HPV) vaccination

There were no studies identified relating to HPV vaccination. This may be due to the success of the HPV vaccination programme, which was reported to have cut cervical cancer rates in England by 87% (15). However, in 2022 a systematic review and meta-analysis recommended that 'large scale, high quality randomised controlled trials are required to establish the level of effectiveness and cost of HPV vaccination in women undergoing treatment for diseases related to HPV infection' (16). A study published in May 2024, reported that the HPV vaccination was associated with a substantially reduced incidence of cervical cancer and grade 3 cervical intraepithelial neoplasia across deprivation groups in England (17). The lead author of this research said:

"Our research highlights the power of HPV vaccination to benefit people across all social groups. Historically, cervical cancer has had greater health inequalities than almost any other cancer and there was concern that HPV vaccination may not reach those at the greatest risk. Instead, this study captures the huge success of the school-based vaccination programme in helping to close these gaps and reach people from even the most deprived communities. In the UK, the elimination of cervical cancer as a public health problem in our lifetime is possible with continued action to improve access to vaccination and screening for all."

Cancer Research UK welcomed the results of this study. However they also highlighted the percentage of eligible people receiving an HPV vaccine and attending cervical screenings have both fallen in the wake of the COVID-19 pandemic. The charity called for more government support to ensure as many young people as possible are vaccinated especially as rates are reportedly still higher in people from deprived backgrounds (18).

The University of Southampton (UoS) and University Hospital Southampton (UHS) recently conducted a trial using an HPV vaccination, but used in a novel way, whereby an antibody is attached to the vaccine to determine if this can be used to treat squamous cell cancer associated with HPV infection (19).

4.2 Menstrual health

Four studies were identified on menstrual health with two currently open for recruitment and listed at Appendix 4. Historically, a long-term follow-up study of women recruited across primary care centres, has provided useful information on what happens to women who seek help and are treated for heavy menstrual bleeding in general practice. This study showed that medical treatments for women with heavy menstrual bleeding can be initiated in primary care with improvement in quality of life and high likelihood of avoiding surgery 10 years later (20).

Women's experience of menstruation whilst being homeless:

A research group at UoS has recently published a qualitative review on women who are homeless and menstruate. This is the first review exploring this topic with the aim to begin closing the gap by reviewing the literature examining women's experiences of menstruation whilst being homeless (23). The study found that women living with homelessness often abandon other basic needs in favour of managing menstruation (i.e. using unsuitable materials, stealing, etc.), which furthers their risk. The findings highlight the need for future research to investigate the experiences of women who are menstruating while being homeless and what support they would find helpful. Researchers reiterate the significance for commissioners and policy makers to address the provision of menstrual resources as a basic human right.

There were no studies identified exploring premenstrual syndrome (PMS) or adenomyosis.

4.3 Gynaecological conditions

Ten studies were identified on gynaecological conditions with 6 currently open for recruitment and listed at Appendix 5. There are currently 3 open studies on endometriosis, two of which are exploring treatment options for reducing and improving pain by adding small doses of hormone replacement therapy (HRT) to standard drug treatment and exploring if surgical removal is of benefit to patients or if it potentially causes more harm. The third study is exploring the use of 3D imaging to characterise endometrial cell populations and their spatial relationships.

Endometriosis diagnosis possible because of research:

A Specialist Gynaecology Research Nurse at Portsmouth Hospital University (PHU) shared her passion for research and making a difference. In particular, she told how one woman's life was changed after 15 years of symptoms by taking part in research she was finally able to receive a diagnosis of endometriosis.

4.4 Cervical screening

We did not identify any studies on cervical screening. In 2022, the Department of Health and Social Care (DHSC), with the support of the NHS, launched a major new national campaign to increase the number of those eligible attending their cervical screening in England. The new Help Us Help You – Cervical Screening Saves Lives campaign urged women and those who may be eligible not to ignore their cervical screening invite, and if they missed their last one, to book an appointment with their GP practice or sexual health clinic. This was following figures in March 2021 that showed that nearly 1/3 of eligible individuals were not screened (21).

A Cancer Research UK funded study showed that 51.4% of women eligible for cervical screening would prefer self-sampling over being tested by a clinician if they were offered a choice (22). There is the potential for a new research study in the Wessex region related to cervical screening, that uses self-inserted tampons to screen for HPV, with several researchers collaborating to explore this opportunity (23).

4.5 Gynaecological cancers

Fifteen studies were identified on gynaecological cancers with 6 currently open for recruitment and listed in Appendix 6. Of the open studies, there are 3 studies on ovarian cancer, one of which is comparing old and new strategies for ovarian cancer prevention, with the hope that alternative new 2-stage treatments can offer protection against ovarian cancer in younger women whilst avoiding the negative consequence of early menopause.

Further studies include:

- A study that aims to determine the quality-of-life following hysterectomy to prevent endometrial cancer, build a model to determine the level of lifetime risk at which preventative

surgery is cost-effective, and assess the acceptability of offering preventative hysterectomy at determined thresholds.

- Ongoing treatment studies that include various drug therapies and radiotherapy in cervical cancer.
- A study aiming to produce a personalised risk estimate of hereditary ovarian and breast cancers by combining information about genetics, lifestyle and hormonal risk factors.

Psychological interventions for women affected by gynaecological cancers:

A PhD student at the University of Portsmouth (UoP) is working with a multi-disciplinary team and PPI group to tailor educational resources and psychological interventions to support women affected by gynaecological cancers. The researchers are also conducting a meta-analysis of existing psychological interventions for quality of life, psychological wellbeing and distress in gynaecological cancers with the hope that this will help inform the development of a future literature-based intervention and psychoeducational package that will improve health literacy in women affected by gynaecological cancers.

4.6 Sexual health and wellbeing

Our database search did not identify any studies on sexual health in the region. However, it might be expected there is more work ongoing in this area which has not yet been completed and categorised. For example, it was found that a PhD student at BU is investigating if medicine's neglect of female sexual pleasure is impacting the uptake of hormonal contraceptives.

The NIHR website lists just 9 studies currently recruiting people to sexual health studies with 8 not gender specific and one for males (24). Therefore, there may be an opportunity for collaboration in the region to make these studies accessible to women in Wessex.

4.7 Contraception, pregnancy, fertility, pregnancy loss, abortion care, postnatal support, pelvic floor health

Overall, we identified 88 studies on pregnancy, fertility, pregnancy loss, postnatal support, and pelvic floor health and these are listed in Appendix 7. We did not identify any studies on contraception and abortion care.

4.7.1 Contraception

One in six pregnancies among women in Britain are unplanned, and one in 60 women experience an unplanned pregnancy in a year, according to results from the third National Survey of Sexual Attitudes and Lifestyles (Natsal), published in The Lancet (25). Despite this, there were no regional studies on contraception use. One of the researchers made a comment that although there is global research undertaken on contraception in women and young girls, in England contraception is seen as readily available and therefore research is considered not required.

4.7.2 Preconception

Specifically stated as part of the Women's Health priorities for 2024, preconception health is considered the foundation for a successful pregnancy and the subsequent lifelong health of the baby.

We identified research on preconception at UoS and UHS. One study currently in follow up is exploring the influence of parental nutrition, lifestyle and metabolism before and during pregnancy on maternal outcomes and child growth, development and well-being. The data collected will allow identification of the contributions of parental and offspring characteristics, nutritional, lifestyle and medical factors, social and economic status, ethnicity, genetics, metabolism and microbes to promote healthy growth, body composition and wellbeing in the children. This research is following on from an earlier phase of a randomised trial conducted at UHS, studying maternal B-vitamin and vitamin D status before, during, and after pregnancy and the influence of supplementation preconception and during pregnancy. The study found that before pregnancy, 9 in 10 of the women had low blood levels of many important vitamins, including folic acid, riboflavin, vitamin B12 and vitamin D. These vitamins are needed to support the mother's health during pregnancy and are important for the unborn baby's development. They also found that preconception/pregnancy supplementation in amounts available in over-the-counter supplements substantially reduces the prevalence of vitamin deficiency and depletion markers before and during pregnancy (26). Supplementation preconception and during pregnancy halved the risks of preterm delivery and of major post-partum haemorrhage (27), while also halving the risk of the offspring being obese at age 2 years (28). Researchers at UoS Co-Lead the [UK Preconception Partnership](#) taking forward an action plan to improve preconception care across all four nations of the UK, and to normalize the concept of preparing for pregnancy and parenthood.

Expectant mums may reduce the chances of obesity in their children by ensuring good nutrition before and during pregnancy:

A study involving 500 mothers investigated the use of an enriched nutritional supplement to examine if it would make a difference to a child's weight in the first years of life (29). It found that the children of mums who took the supplement before birth, which included vitamins B2, B6, B12, D, with probiotics and myoinositol, were half as likely to be obese by the age of two.

The study Chief investigator from the UoS and NIHR Southampton Biomedical Research Centre (SBRC), said rates of childhood obesity are continuing to rise in many countries, particularly in less advantaged groups. He added: *"Preventing obesity is one of the most important things we can do, as treating obesity is much more difficult. These findings suggest the period before and during pregnancy may provide a special opportunity – a time when supporting better nutritional status for mothers could have lasting benefits for her child."*

4.7.3 Pregnancy

We identified 55 studies on pregnancy including 9 on labour (see Appendix 7 for full list). One study currently open for recruitment is determining the prevalence of pain catastrophising in a population of nulliparous women who were experiencing an uncomplicated pregnancy, and to determine whether pain catastrophising had an impact on their timing of admission to hospital when they were in labour. This study also fits under early pregnancy research with some of the work already published (30).

Another study is investigating the influence of the Maternal Environment in Pregnancy (MEP) on the unborn child and the development of lung disease such as asthma in early life. Research is also ongoing to assess the clinical and cost-effectiveness of oral calcium supplementation in reducing the risk of pre-eclampsia and its complications in women at high risk.

Early labour research:

Women who enter hospital in early labour are more likely to experience unnecessary intervention. Service changes to address this challenge have not demonstrated a reduction in clinical intervention rates and have resulted in women feeling unsupported. Research at the Centre for Midwifery and Women's Health at Bournemouth University (BU) (31) has focused on developing women-centred approaches, which are acceptable to women and have reduced latent phase admission (32). Using Pump Priming funding, the research group combined three BU interventions (the BALL trial infomercial

(32), L-Tel: early labour website (33), Brythm (34) and a screening tool (35) into an interactive App to support women and prepare them for latent phase labour.

A small amount of funding, through the NIHR Undergraduate Internship Project, has been awarded to take this study to the next stage at BU.

4.7.4 Fertility

We identified 8 studies on fertility with 3 currently open to recruitment (see full list in Appendix 7). One study is undertaking analysis of the effects of cancer treatments on reproductive function in teenagers and young adults and the long-term fertility and reproductive health of survivors. Another study is recruiting women with polycystic ovary syndrome seeking fertility treatment to receive Letrozole or Clomifene with or without Metformin.

Collaborative research at UoS and UHS has resulted in a number of studies with plans for further research. For example, a study is exploring mapping of healthy pregnancies with the hope to better understand the differences which cause abnormal pregnancies and miscarriage. This group is also studying fetal structure and placental differences in species with the aim of providing insight into why they are so different and what this tells us about evolution. The collaboration resulted in a device, developed with an SME, to sense the physical chemical factors within the uterine environment which influence implantation. This device is now offered to women to measure their own oxygen and temperature levels of the uterus to decide on their fertility plans and treatment path.

4.7.5 Pregnancy loss

We identified 3 studies on pregnancy loss (see full list in Appendix 7), with Hampshire Hospitals NHS Foundation Trust (HHFT) and Portsmouth Hospitals University (PHU) contributing to the Tommy's National Rainbow Clinic study currently evaluating the care provided in the Rainbow clinics across the UK, to look at women's experiences of care, their levels of anxiety and depression, and to identify where care can be improved before establishing new Rainbow clinics across more maternity units in the UK.

Saving Babies at risk of preterm birth:

“As a direct result of recruiting women to the INSIGHT study (Investigation into Biomarkers to Predict Spontaneous Preterm Birth), we have been able to prolong pregnancies on women at highest risk of preterm birth through identifying a shortened cervix and intervening. Many women participating were able to enjoy their pregnancies in the knowledge that they were having additional scans and we were able to support them if changes were identified. A result of the impact the study was having was that we started to run a preterm birth clinic ahead of the requirement for those provisions within the Saving Babies Lives Care Bundle. This enabled many more women to access the higher level of care and surveillance with a team specialising in preterm birth.” - Senior Research Midwife at University Hospitals Dorset (UHD)

4.7.6 Postnatal support

Fifteen studies looked at postnatal support with 7 currently open to recruitment and listed in Appendix 7. A research study at UHD aims to investigate how women’s blood pressure (BP) responds after birth and assess the time it takes to return to normal ranges. Women who experience BP problems in pregnancy are at higher risk of developing heart disease, ongoing high BP or having a stroke in later life than women who did not have BP problems. Although identifying and monitoring pregnant women with BP disorders is very efficient, there are minimal efforts to monitor women at risk of health problems after pregnancy.

Another study aims to explore the views of women with a history of gestational diabetes, around the perception of risk of future development of type 2 diabetes. Additionally, a study is assessing the clinical and cost effectiveness of a maternity quality improvement programme to reduce excess bleeding and need for transfusion after childbirth.

Postnatal health of mother:

Research on the mental health of mothers in the perinatal period and the cognitive and behavioural development of infants at AECC, has led to the development of mother-to-infant bonding scale (MIBS) to help health professionals swiftly identify women who may need referral (36). Since 2005, the MIBS has been used in the UK and in other countries in both research and clinical settings (37). Additionally, in 2016 MIBS was added to the International Consortium for Health Outcomes Measurement (ICHOM) bank of health questionnaires, which has led to many translations, applications, and validation of the MIBS in different populations around the world (38).

4.7.7 Pelvic health

We identified a historic study assessing if self-management of prolapse using a vaginal pessary is more effective at improving women's quality of life than standard follow-up care to treat pelvic organ prolapse (see Appendix 7 for full list). Pelvic floor research is important for many reasons, including continence, and there is expertise in this field across the region.

Perinatal and pelvic floor muscle:

A PhD project at BU is exploring perinatal and pelvic floor muscle research and women's acceptability of doing pelvic floor exercises on an app at home. A feasibility study is ongoing to determine whether the methodology and the intervention are acceptable amongst perinatal women in preparation for a future Randomised Controlled Trial (RCT). Researchers are also exploring women's experience of humorous digital pelvic floor muscle training reminders on social media as well as trying to find out how women's bodies are represented and how this representation influences women's experiences of taboo health.

4.8 Perimenopause and menopause

Seven studies were identified on perimenopause and menopause with 3 currently open to recruitment and listed in Appendix 8. The MARIE project was developed to explore the mental health impact among menopausal people through evidence synthesis of current clinical and research gaps, using validated questionnaires and conducting a feasibility study to test a new tool developed.

A PhD project at BU is evaluating responses to different exercise intensities throughout the female life cycle. Responses to exercise in menopause are widely unexplored, hence this project aims to study these responses across different intensities focusing mainly on the fuels the body selects and how much energy is expended.

Menopause and autism:

Researchers at BU published the first ever study on autistic experiences of menopausal transition (39). Key findings from this work were that women with autism appear to be at risk of severe difficulties during menopause: for some, menopause is a time of mental health crisis which precipitates self-injury and suicide attempts. Their current research aims to compare the thoughts and feelings about

menopause of autistic and non-autistic people and explore whether this difference affects their menopause-related experiences, including the severity of symptoms, quality of life and physical/mental health. Since beginning their work on autism and menopause, the team have received a large amount of feedback from participants:

“I have in the past few days become aware of your research and papers on peri-menopausal and menopausal women who have Autism, and I am emailing you to say a huge thank you for identifying this serious gap in support, for this very vulnerable group of people and doing something about it. It brings tears to my eyes as I write this to you, feeling so moved that you did this. Thank you all so much. You are angels.”

4.9 Breast cancer screening

No studies were identified on breast screening for cancer from the database search. However, a researcher at BU was identified who is looking into barriers to screening uptake by black women in Dorset.

4.9.1 Breast Cancer

It was deemed important to include the 45 studies identified on breast cancer, with 17 currently open for recruitment and listed in Appendix 9. The OPTIMA trial seeks to advance the development of personalised treatment of early breast cancer by the prospective evaluation of multi-parameter analysis as a means of identifying those patients who are likely to benefit from chemotherapy whilst sparing those who are unlikely to do so from an unnecessary and unpleasant treatment, and to establish the cost-effectiveness of this approach. A further study aims to produce a narrower, more personalised risk estimate of breast cancer by combining information about genetic, lifestyle and hormonal risk factors.

4.10 Wellbeing and lifestyle

Sixteen studies were identified on wellbeing and lifestyle (listed in Appendix 10), with 1 currently open to recruitment which is exploring conversations about harmful gambling with ethnic minority women. We did not identify any studies on healthy weight, exercise and smoking outside of pregnancy. Included in this section are studies in relation to breast health and the health of women in prison.

4.10.1 Breast Health

The wider health impacts related to breast conditions were not included in the Women's Health strategy. For example, researchers explained that 50% of women suffer breast pain, there can be mental health issues in young girls and health issues related to the musculoskeletal system. There is research underway with females that wear protective clothing, such as the armed forces, police and fire service. The University of Portsmouth (UoP) is world leading in this research area with four top sports companies using their research for the development of sports apparel for women. Furthermore, their innovations have been deployed in setting standards for bras and breast products and developing educational materials for women and girls. A groundbreaking initiative, Treasure your Chest (40), provides evidence based downloadable materials for teachers to educate young girls on breast health. The university is currently developing close collaborations with their local breast surgeon, exploring opportunities for research in relation to women undergoing breast cancer treatments who require breast related products. We identified 14 studies on breast health which are listed in Appendix 10.

Championing breast health and education for workers:

"My research focuses on biomechanics, health and education related to the female breast. I am one of the few world experts in this area, and an integral part of the Research Group in Breast Health (RGBH) within the School of Sport, Health & Exercise Science at the University of Portsmouth. Breast health research has predominantly been focused on sports bra use for athletic populations, yet bras are an essential item of personal protective equipment for females, providing breast support and protection during occupational performance. I am passionate about ensuring functional breast support and comfort for workers, especially when additional equipment needs to be worn (e.g., body armour), and increasing breast health education. I therefore lead the strand of the RGBH associated with research and education on breasts and bras for occupational groups."

4.10.2 Women in prison

Research on the health and wellbeing of women in Wessex who come into contact with the criminal justice system is currently ongoing and being led by UoS. Six health related studies are currently in progress. Often women in prison come from deprived and disadvantaged socio-economic backgrounds and have a history of alcohol and drug abuse. Women in prison have disproportionately

higher levels of health and social care needs than their male counterparts in prison and women in the general population. High numbers of women in prison experience poor physical and mental health and many are living with trauma (41). Additionally with no prisons for women within Wessex, they are often sent to other parts of the country, which leads to separation and lack of family visits. Integration back into family life and communities after release is seen as difficult. One area of current research is aimed at following up women in communities after they have been released and have returned to Wessex with a focus on health and wellbeing.

4.11 Mental Health

We only identified two open studies on women's mental health on the databases (see Appendix 11), one exploring the mental health impact among menopausal women (The MARiE study, see section 4.8) and a randomised controlled trial exploring the clinical and cost effectiveness of a group intervention for mothers in perinatal mental health services (The COSI study). Given that 1 in 5 women have a common mental health problem such as depression and anxiety (42), it is an area of research that is growing with more opportunities for researchers to tease apart the various biological and psychological factors that may impact mental health, especially in disorders unique to women (43) and the relationship to hormonal changes. In addition, there is a small study at BU investigating risk profiles and co-morbidities of women subject to care proceedings or whose babies were removed at birth.

The NIHR Wessex Applied Research Collaboration (ARC) role is to build research capability and capacity across Wessex. With an aim to enable research-led mental health services across the lifespan in pressing areas of mental health linked to substantial health inequalities in the region (44). This provides many opportunities not least in bringing researchers together to collaborate.

4.12 Long term conditions

We did not identify any studies on long term conditions specifically in women. Although sections 4.14 and 4.15 describe studies which predominantly affect women in bone health and dementia and Alzheimer diseases respectively, these were selected in the women's health needs over the life course.

We did, however, speak to a researcher who described a master's student's qualitative feminist study in exploring the experiences of adolescent girls with congenital heart disease. This study is currently being prepared for publication and will provide insights into the psychological support that is needed. It highlighted that master's research may not appear on research databases.

It was stated there is a dearth of research related to women with asthma and the importance of understanding the impact of hormonal changes and fluctuations across different life periods. Older women are often labelled as "frequent flyers" and "needy" during exacerbations. There is a question as to what is driving the disease of asthma in women.

4.13 Health impacts of violence against women and girls

Our search identified two historic studies on the health impacts of violence against women and girls and these are listed in Appendix 12. Our conversations with researchers also led us to a group of researchers at BU working with the Soroptimists, Women's Dorset Community Interest Company (CIC), ICB Head of Safeguarding and the Bournemouth Christchurch and Poole (BCP) Council Community partnership to understand the challenges faced around supporting women who have experienced violence. This group held a 'Violence Against Women and Girls: Social Justice in Action' conference in June 2023 and have since produced a report drawing together the information gathered. The aim of the research was to explore current good practice and perceived potential barriers and facilitators to implementing change through qualitative data gathering activities at the event (45). In March 2024, this group held a Summit Meeting with local leaders and decision makers to discuss how they can work together to change the culture of gender-based violence in Dorset. Dorset is reportedly the 6th safest place to live in the UK but 82% of sexual assault crime in Dorset is against women and trans-women, and people who are non-binary or gender fluid are experiencing rising hate crime (46). BU researchers are also currently working on projects exploring the experiences of frontline professionals who support those experiencing abuse to understand how this might impact on them, and their work. There is also research to determine women's drinking motives and knowledge of nutritional consequences of consuming high levels of alcohol. In addition, they run the Phoenix Programme support group for women experiencing domestic violence and abuse with a focus on women's mental health and wellbeing.

Domestic Abuse & Life Limiting Illness Study (DALLI):

In England and Wales an estimated 2.4 million adults experience domestic abuse (DA). People living with a life-limiting illness (LLI) are at increased risk of DA because they are vulnerable, frail, isolated and dependent on others. They may spend long periods of time in the home, near the abuser, who is often their carer, and have difficulty accessing help and support. The DALLI study was conducted between 2021-2024 and an initial scoping review highlighted the impact that DA had on mental health and wellbeing (47). Interviews with health and social care professionals highlighted a lack of confidence to ask about abuse, and challenges with recognising signs of abuse amongst the complexities of DA in the LLI context. This led to the development of a Toolkit to increase practitioners' confidence and understanding offering resources to support health and social care professionals. Following piloting and evaluation the Toolkit has been adopted in a small number of hospice and palliative care settings in Wessex, and following discussions with Marie Curie's Head of Safeguarding, is to be implemented in Marie Curie Hospices nationwide and included on their website as a resource for healthcare professionals. The Toolkit is also being used by domestic abuse services in local authorities and as an educational resource for social workers at a local university (48).

4.14 Osteoporosis and bone health

Two open and three historic studies were identified on osteoporosis and are listed in Appendix 13. One study is inviting people who have been diagnosed with pregnancy associated osteoporosis to complete an online questionnaire to gather details of potential risk factors of osteoporosis.

The other study is exploring the use of an artificial intelligence (AI) program that reviews CT scans undertaken for other conditions to identify undetected osteoporotic spinal fracture. While body scans can detect an osteoporotic spine fracture, most fractures are either not detected or acted upon if they are found. NHS services are deploying the results of this study as they emerge to diagnose fractures and assess patients for osteoporosis and manage their condition. If this pathway is found to be beneficial to the NHS, it will identify 100,000s patients with undiagnosed osteoporosis who would benefit from treatment and reduce their risk of a potentially life-changing fracture. Although this study is recruiting both men and women, osteoporosis is more common in women with about 1 in 2 women and 1 in 9 men over 50 said to fracture a bone because of osteoporosis (49).

The MRC Lifecourse Epidemiology Centre (50) is conducting research to optimise musculoskeletal health with the purpose of elucidating important, preventable causes of common non-communicable

musculoskeletal disorders and their complications. Through an understanding of the causes of these disorders, and the development and evaluation of interventions at appropriate stages in the life course, they aim to provide robust and timely evidence which informs policies to improve population and individual health. Researchers are leading work on osteoporosis and menopause as well as work on change of bone composition and inflammatory markers in older adults.

4.15 Dementia and Alzheimer's

Five open and 3 historic studies were identified on dementia and Alzheimer's and are listed in Appendix 14. Although these studies are not gender specific, it is known that more women suffer with these conditions, but the reason for this is unknown. Three open studies are assessing the efficacy and safety of new treatments. Another study aims to demonstrate the use of Cortical Disarray Measurement (CDM) for identification of individuals who progress to dementia. The project also aims to understand how the technology can best help doctors and patients, and to complete a health economics analysis to see whether it could provide savings for patient care in diagnosis and prognosis.

Within the Wessex region three key centres for research were identified. The NIHR Wessex ARC has a key research theme for ageing and dementia and are the leads in the UK (51). BU have an ageing and dementia research centre which brings together cross-faculty research expertise to develop person-centred research (52). The centre's research significantly impacts on theory, education and professional practice. UHS are a new site as part of the NIHR Dementia Translational Research Collaboration Trials Network, a coordinated network of dementia trials sites across the UK (53). New funding from the Government in 2024 aims to build capacity and expertise, so that more people with dementia can take part in research.

4.16 Minoritised groups and underserved communities

Although we found minimal research on minoritised groups and underserved communities, our conversations with researchers brought to life the vast amount of Patient Public Involvement and Engagement (PPIE) work ongoing in the Wessex region. For example, a PPIE group in Dorset is working with the Nepali community, other PPI groups in Portsmouth are working with Nigerian, Bengali, Sikh and Afghan communities, with another group in Dorset exploring black women's health and their priority needs. These groups aim to improve research access and empower underserved

communities. BU have set up the Public Involvement in Education and Research (PIER) partnership to advise on research priorities and approaches in conducting research (54).

One example of research we were made aware of at BU was in relation to disability. This explored the experiences of women with disabilities during pregnancy, which reported poorer experiences of childbirth than other respondents (55). A further example is a funding application which has been submitted for a study understanding how women with visual impairment experience maternity support for infant feeding.

The Centre for Seldom Heard Voices at BU (56) aims to apply research to real-world challenges to maximise societal impact. Their research includes collaborations with looked after children, youth in the developing world or conflict areas, rough sleepers, substance users, transgender youth and LGBT+ communities, stigmatised and threatened minorities, immigrants and trafficking victims, disabled children and adults, older people, carers, and many more. Impact has contributed to child and adult social care practice, influencing policy, theoretical contributions to conflict resolution and community engagement and empowerment in the UK and globally. Researchers at the centre are focused to support and develop community led and participatory research.

Researchers at UoS have developed a variety of PPIE activities focused on engaging with young people arising from the LifeLab. Most recently, their Young Researcher Training Programme arose out of the recognition that if we are going to produce meaningful research for the benefit of young people, we need young people to tell us what is important to them, and work with us to decide what the research should be, how it should be carried out and how it should be communicated. Research by young people can challenge existing approaches and point to ways of doing things differently in order to improve the form, location and uptake of provision. The YRTP is a 12-week training programme by young people for young people which covers the whole research cycle. Reaching out to minoritised groups, the programme empowers young people to develop questions, collect meaningful data in an ethical way, and to use it to advocate for their needs.

4.17 Health of the workforce

Two studies were identified from the databases on the health of the workforce and are listed in Appendix 15.

The first study is related to midwifery. In 2019 The Nursing and Midwifery Council reported that 99.7% of midwives identified as female (57). This is an open project on workforce development, aiming to improve the emotional wellbeing of midwives. This PhD project at BU is looking at improving emotion regulation factors in midwives through the evidence-based universal application of DBT Skills Training (58). The research aims to introduce a proof of concept to address the foundational problems apparent in the literature of midwifery. This training approach is designed to develop emotional skills in early career midwives with the scope to equip them to better deal with emotional challenges arising within the role. Developing emotion regulation abilities in turn can improve midwives' abilities to manage workplace adversity, therefore increasing their resilience.

The second study aims to identify current menopause guidance, policies and support offered by UK ambulance services staff to patients; understand work and personal impacts of the menopause on female ambulance staff and their managers; and identify service developments that may best support female ambulance staff during this life phase.

4.18 Global Women's Health

We have come across several researchers working globally in women's health and wellbeing in low-income countries. Researchers from BU, UoP and UoS are conducting studies on maternity care and midwifery, trafficking, exploitation and FGM, contraception and adolescent reproductive health, HIV prevention and STI transmission. Additionally, researchers from the MRC Lifecourse Epidemiology Centre are working across Africa on projects including supplements during pregnancy and their effect on children's trajectory in life, as well as work with menopausal women and development of information packs on menopause. A number of researchers serve on national and international bodies, for example The World Health Organisation.

Our search on Women's Health has also led us to discover the Wessex Global Health Network, established in 2014 as part of the Centre for Global Health at University of Winchester, with the goal of bringing together and joining up the work being carried out in Low- and Middle-Income Countries by various researchers across Wessex (59).

4.19 Adolescent research

We identified 3 studies on adolescent health, although they are not specific studies on adolescent girls, as research in this field does not tend to separate girls and boys (see Appendix 16 for list). A previous research study (EACH-B) developed and tested a complex intervention designed to engage, motivate and support adolescents aged 13-14 years in improving their diets and physical activity levels. An ongoing study is testing the safety and immunogenicity of a new cytomegalovirus vaccine in female and male participants 9 to 15 years of age and female participants 16 to 25 years of age.

A partnership between UoS, NIHR SBRC and UHS, part-funded by Southampton City Council, led to the creation of LifeLab, a unique, state-of-the-art teaching laboratory dedicated to improving adolescent health by giving school students opportunities to learn first-hand the science behind the health messages (60).

Research from UoS revealed the dangers in assuming vaping is a healthier habit than cigarette smoking. A team at the LifeLab have worked with teenagers in Hampshire to design educational resources which warn of the dangers of vaping. They have produced teaching materials and lesson plans for use in the classroom, along with a virtual reality (VR) experience which emphasises the peer pressure teens feel regarding vaping – and the health dangers of the habit (61).

When puberty meets menopause:

Research at UoS has been deployed through a collaboration between the Life Lab (60) and Theatre for Life (62) which led to the development of creative workshops on hormonal life stages with women, non-binary and male participants with the aim to share stories and experiences from puberty to menopause and create an informative performance for young people in Hampshire. The project used health science, physiology, and psychology focused research to inform discussions, empower groups to openly discuss health inequalities and stigmas surrounding women's health, using art, creative writing, podcasts, case studies, talks and videos to stimulate interest, excitement, and debate. The team found that one of the main contributors to health inequality was societal expectation and this was seen across the motherhood, menopause, infertility and puberty groups.

4.20 Wessex research groups on Women's Health

Figure two demonstrates the research groups on Women's health identified across the Wessex region. This showcases the commitment to the women's research agenda in Wessex.



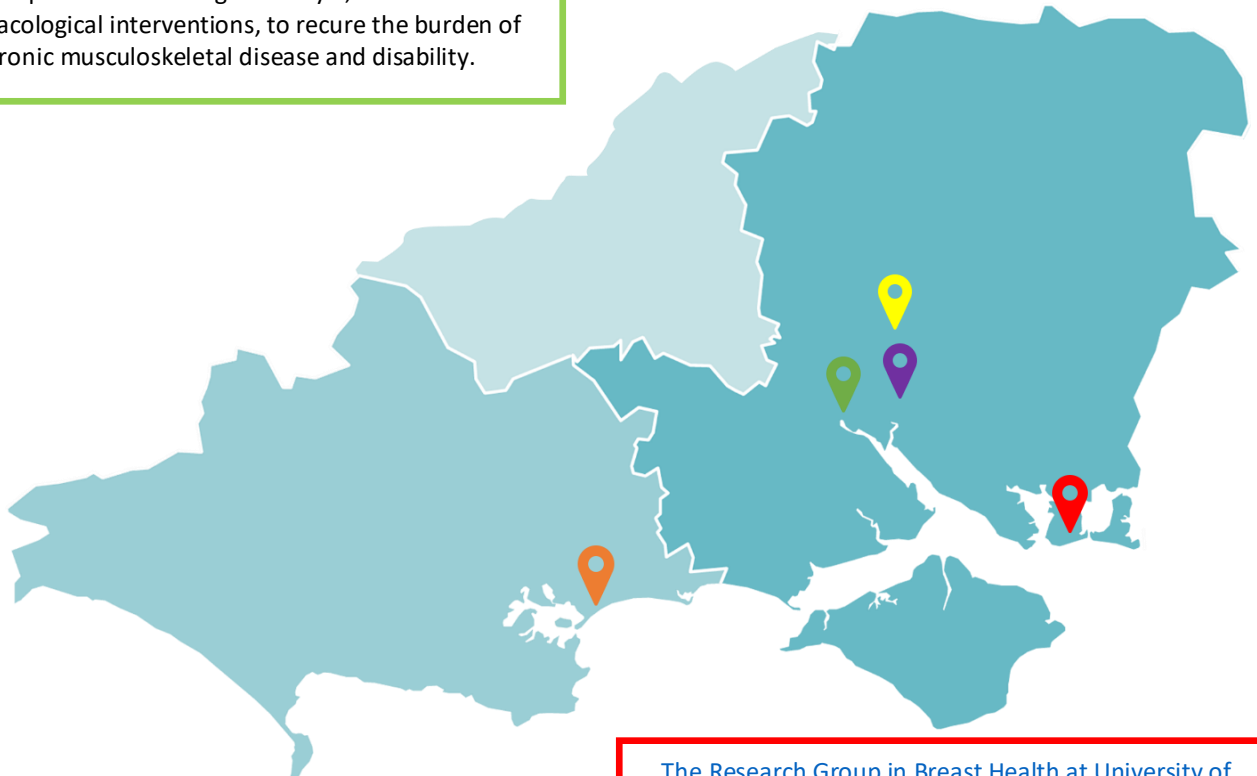
Figure two: Map of Women's Health research groups across Wessex

[The Centre for Midwifery and Women's Health at Bournemouth University](#), focuses on research in midwifery, maternal and perinatal care, and women's health. Research focuses on the following areas: Changing the narrative and care in early labour; Infant feeding and postnatal care; Improving care for mothers and babies in low and middle income countries; Women's health and other research;

[The UK Preconception Partnership](#) is a coalition of organisations and individuals with an interest and expertise in different aspects of preconception health in women and their partners. Since 2022 it has been co-chaired by Professor Keith Godfrey.

[The MRC Lifecourse Epidemiology Centre](#) optimise musculoskeletal health (bone, muscle and joint) through the development and testing of lifestyle, behavioural and pharmacological interventions, to reduce the burden of chronic musculoskeletal disease and disability.

[Wessex Global Health Network](#) seeks to help interested people know who in Wessex is working in global health, with a research focus also on Global Women's Health.

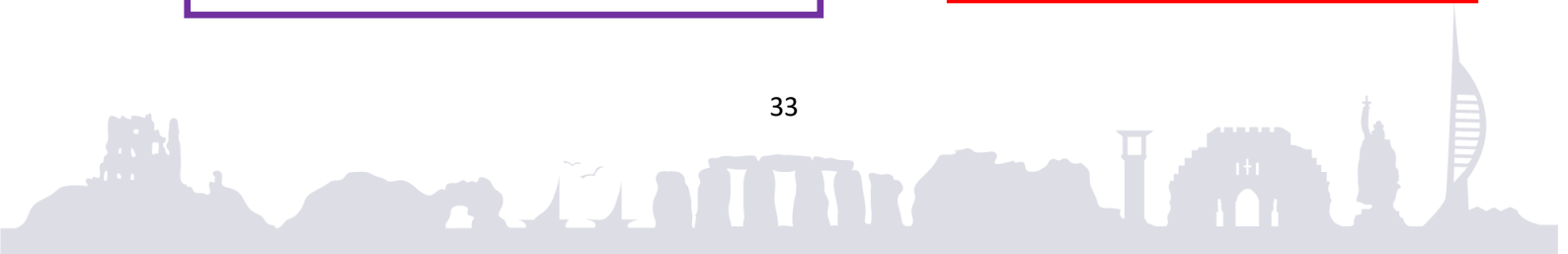


The Bournemouth University Research [Centre for Seldom Heard Voices](#) brings together academics from across different disciplines including social sciences and social work to engage with marginalised communities and to amplify often excluded or silenced voices.

[The Research Group in Breast Health at University of Portsmouth](#), use their expertise in breast biomechanics to improve scientific knowledge of breast health, inform the development of breast related products and raise awareness of this important aspect of women's health.

[LifeLab](#) is a unique, state-of-the-art teaching laboratory dedicated to improving adolescent health by giving school students opportunities to learn first-hand the science behind the health messages.

[The Women's and Gender Studies Research Group at University of Portsmouth](#) are researching violence against women and girls, access to justice, peace-building and conflict resolution.



4.21 Events

Through conversations with researchers, we became aware of the following events on Women's Health taking place in Wessex in June 2024:

- Wessex Global Health Network are hosting the Women's Global Health Symposium on 5th June at the University of Winchester. This event is organised by Wessex Specialty Trainees in Obstetrics and Gynaecology in partnership with the Network and will bring together speakers from the Universities in Wessex to cover a range of topics affecting women's health across the globe.
- BU's Centre for Midwifery and Women's Health are hosting their second Women's Health Research Symposium on Tuesday 25th June. This event will showcase new collaborative women's health research across the local area and will be an opportunity for academics, clinicians, researchers, and those from the charity sector to network, discuss ideas, and outline key priorities in women's healthcare.
- UoP are hosting the Women in Sport and Exercise Academic Network (WiSEAN) Conference on 26th and 27th June. This conference aims to explore the theme "Moving Women: Shaping Victories", focusing on empowering women in the realms of sport and exercise. The WiSEAN is a research-orientated interdisciplinary group that aims to grow, strengthen, and promote research with women in sport and exercise.

5. Challenges and opportunities for researchers

5.1 Challenges

Conversations with researchers across Wessex have highlighted the challenges summarised below:

- Culture: There was a lack of recognition for researcher activity and the importance of research within some organisations. There also appears to be a lack of understanding of the challenges associated with research delivery.

- Researcher time: Many clinicians did not have allocated time for research and therefore this was undertaken on top of their usual workload. It was also felt that there is a lack of national recognition of the need to allocate research time as well as consistency, as time allocated can vary between institutions and hospitals.
- Funding: Time constraints of completing a grant application at short notice and failure to secure grant funding after investing time and resources were seen as challenging. Failure to secure further funding to expand work beyond the initial site (large scale research across UK) was also seen as difficult. Furthermore, researchers felt that there is lack of funding to widely disseminate research findings. One example is the cost of publication quotes as £2,500 - £3,000
- COVID-19: Women's studies were stopped due to departments having to reprioritise resources and funding in other health research areas was seen as more important. Impact of backfill caused by pandemic and pressures in the NHS is still ongoing. Staff shortages exacerbated by the pandemic were felt to have impacted recruitment as well as engagement and retention of research participants. Research team redeployment during pandemic led to staff not returning to original posts.
- Commercial research: Sites historically having to compete for commercial studies and researchers felt that there is still an element of this, therefore impacts on developing collaboration.
- Participant recruitment: Researchers felt that lack of incentives is making it harder to recruit. There can be limited funding for recruitment and challenges of access for participants. It was also recognised that a lack of diversity in research participation is making research findings more difficult to generalise.
- Implementation and deployment: Time pressure on staff to implement research findings into clinical practice was echoed by several researchers. It was also noted that there are many difficulties with implementing and deploying research into the NHS. Researchers also felt there is a lack of support from other settings to translate findings and change existing policies.

- Collaborative research: Knowing who to reach out to for collaborative research, in particular researchers with specific skills, was considered a challenge.
- Career development: Researchers felt there was a lack of infrastructure/career development for those who have achieved a PhD. They felt that this then leads to attrition and waste of knowledge from healthcare as graduates eventually find employment in other fields.
- Study set up: Enormity of steps in setting up research (ethics, hospital systems and approvals, HRA etc) were seen as challenging and off-putting to clinical staff wanting to get involved in research and developing research studies. Researchers also felt they would often invest time to set up new studies and open them to recruitment to have them withdrawn.

The challenges identified were not surprising as these were reflected in a report by Wessex Health Partners, which undertook a strategic review of Wessex REACH (an NIHR funded project to support healthcare professionals to take research ideas from concept to reality) (63). The report made recommendations for the support required to develop the capacity and capability of the research workforce across Wessex.

5.2 Opportunities

The opportunities below were quotes provided by researchers:

- *“The prospect of joining forces with like-minded professionals across Wessex to tackle pressing challenges in healthcare is indeed exciting. By pooling our expertise, resources, and perspectives, we can forge innovative solutions that have a meaningful impact on the wellbeing of women, families, and communities throughout the region.” (PhD student at UoP and Trainee BPS Health Psychologist).*
- *“We would welcome opportunities to work with healthcare providers in Wessex (and beyond) with regards to disseminating findings to clinicians; developing resources to aid translation of these findings into clinical settings; and/or achieving policy change.” (Department of Psychology Researchers, BU)*
- *“I had been qualified for ten years when the opportunity arose for a six-month part-time role looking at maternity research – we did not have any studies recruiting at that time. I applied*

and started soon after working two days in research and three days clinically in the low-risk birthing unit. My brief was simply to go and research! I started by reviewing the portfolio, presenting my findings to a meeting I arranged with consultants, registrars, the head of R&D and head of midwifery. I discussed the potential studies, and by the end of the meeting, we had decided which to approach and possible PIs. And so it began, with one study ten years ago and I now am the senior research midwife managing research teams with studies within maternity, paediatrics, gynaecology and NICU. Across these disciplines we now have over 30 studies open with a further 5 in set-up so an active division with a wide portfolio of studies!”
Senior Research Midwife at UHD.

6. Summary of Findings

The findings demonstrated that the Wessex region is serviced with local, national and international researchers. Although we identified historical and current research activity related to women’s health, it also highlighted the opportunity to develop collaboration and connections.

National priorities for research

In the call for evidence, and to develop the Women’s Health Strategy, it was clearly stated there is a need for an increased research focus on gynaecological conditions, menstrual health, fertility, pregnancy, menopause, and post-reproductive health. In relation to gynaecological conditions, 6 open studies were identified, but these do not cover the wide spectrum of conditions. There were 2 open studies on menstrual health, 3 on fertility, 3 on menopause and 20 related to pregnancy. In reviewing post reproductive health, the studies, other than menopause, were not specifically related to women and this requires further exploration. However, studies on osteoporosis, Alzheimer’s and dementia were included as they appear in women’s health needs during the life course and are predominantly a female condition. Although there were no studies identified for menstrual bleeding, PMS, adenomyosis, as examples, to identify the gaps would require intelligence on the specific priorities of every condition.

ICB priorities for Women’s Health Hubs

The respective ICBs have identified their priorities for Women’s Health Hubs in terms of improving access to and experiences of care, improving health outcomes for women and reducing health inequalities. Although it is acknowledged that research is an integral part, research priorities have not

yet been determined. As with the national priorities, the research in Wessex contributes to the region's work streams for services as outlined below:

- HIOW – menstrual care, menopause care, contraceptive conversations, people experiencing health inequalities.
- Dorset – setting up a virtual hub for repository, long-acting reversible contraception, young women's health, menopause, minoritized groups, gynaecology, pelvic health.

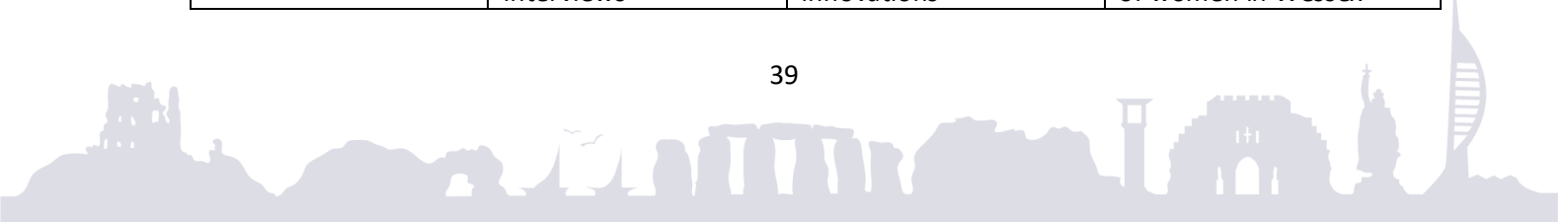
Challenges and opportunities for researchers

The challenges of undertaking research are well recognised in the research community and Wessex researchers confirmed this. The local challenges included organisational culture, securing financial resources and the dedicated time to undertake the research, together with the lack of career opportunities to develop post-doctoral research. The process in research approvals is a source of frustration, seen as bureaucratic and burdensome, compounded by the disappointment of studies being withdrawn after much effort. Recruitment of participants is difficult and requires incentives. Furthermore, research continues to recover from the impact of COVID 19, where studies were halted but also the research teams were re-deployed. Support is needed to disseminate and deploy findings. Finally, commercial studies are competitive and although there is a desire for collaboration and help to connect, it may not be straightforward. Most of these challenges were also identified in the WHP Wessex Reach report. However, there was much enthusiasm from researchers not only in relation to the work undertaken, but they could clearly see opportunities for the future through connecting and establishing collaborations.

A SWOT analysis of the research in the Wessex region on women and girls' health was undertaken from the findings identified within the report and is presented in the table below (Table 3).



Strengths	Weaknesses	Opportunities	Threats
Nationally and internationally renowned researchers	Lack of connectivity and collaborations across the region	WHP to generate greater collaborative and impactful research through providing opportunities for researchers to connect	Researchers continuing to focus on collaborations only outside of the region
Skilled research workforce at writing grant applications	Individual and non-collaborative funding applications are less appealing to funders and less likely to be successful Underrepresented disciplines may not have the skills for writing grant applications or the connections for support	Regional collaborative funding applications will attract new inward investment to Wessex that will benefit women and girls in the region Collation of a list of funding opportunities for women's research Support for underrepresented disciplines- particularly for applying for NIHR AHP researcher funding	Not securing grant funding to contribute to inward investment Research funding allocated to other regions in England Impact on region's research reputation Not considered research active in relation to women's health, thereby reducing opportunities Funders not recognising women's research as a priority
Researcher interests and enthusiasm for women's health research	Not capturing this enthusiasm collectively and working with Women's Health Hubs in Wessex to understanding the priorities of the local population	Working with researchers to understand the national women's priorities for evidence together with local population needs and addressing health inequalities	Not seizing the moment of interest and enthusiasm could place the region behind others, impacting on research reputation and inward investment. Lost opportunity to meet the needs of the local population.
Eminent researchers who publish and find ways to disseminate	Researchers identified disseminating research findings to women, practitioners and the public as a challenge.	Enabling researchers to share and disseminate research findings more widely to stimulate early adoption of transformative research that changes clinical practice	Not meeting the national strategy which recognises the importance of disseminating research findings to women, practitioners and the public
Expertise in innovation adoption support across Wessex	Lack of deployment and adoption evident from researcher interviews	Achieve greater systematic adoption and deployment of innovations	Missed opportunities to deploy groundbreaking research for the benefit of women in Wessex



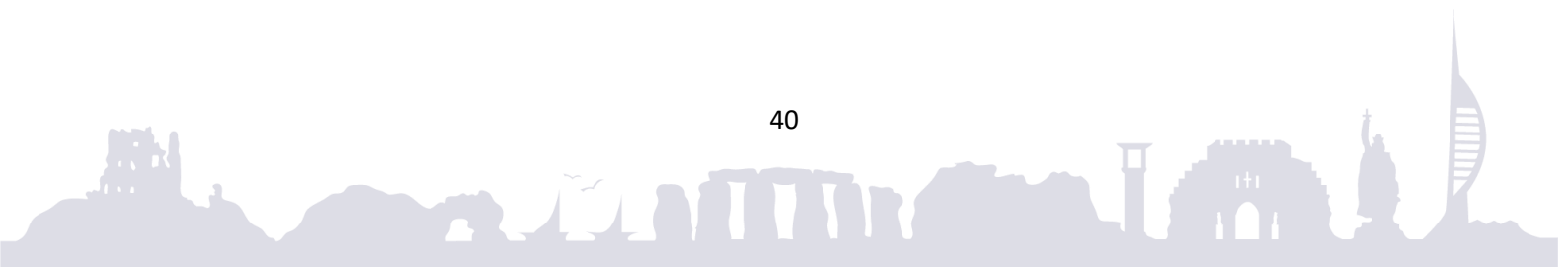


		Closer work with ICBs to implement faster and less costly adoption of innovation	A financial waste of research and workforce resources A lack of culture that values innovation
--	--	--	---

Table 3: SWOT analysis of the research in the Wessex region on Women and girls' health

7. Conclusion

The aim of this report was to appraise the Women's Health Programme Boards of the Dorset and HIOW ICBs of the research being conducted in the Wessex region in relation to women's health. Although it is recognised there were constraints in obtaining the full data set, the report has provided insights into recent and current research studies, and personal testimony from currently active researchers. The findings provide an important foundation for the ICBs, as the development or the introduction of services in the women's health hubs requires a strong link to the evidence base generated by research or needs consideration as a research priority. The report provides a basis for future discussion for the priorities for research aligning to the national steer together with local needs, taking into consideration the public voice. Furthermore, as there is a priority to address health inequalities this needs to be integral to all further discussions for the future of women's research in Wessex.



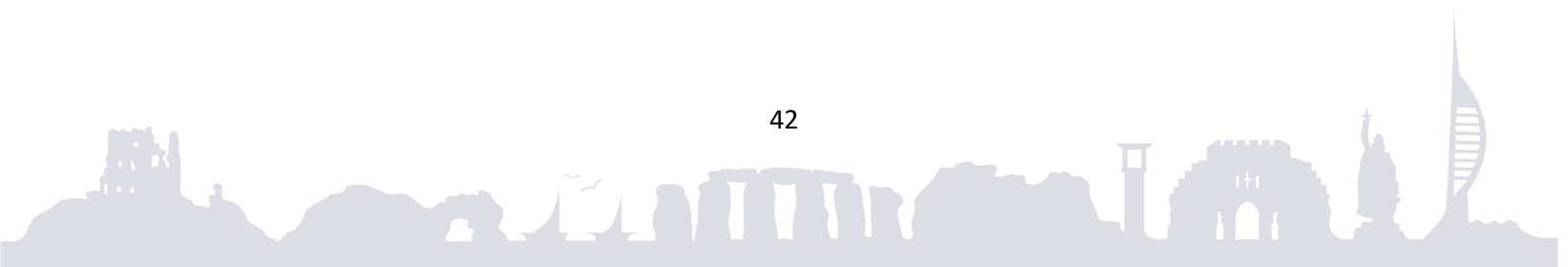
References

1. Welcome to Wessex Health Partners [Internet]. wessexhealthpartners.org.uk. [cited 2024 May 22]. Available from: <https://wessexhealthpartners.org.uk/>
2. Our Vision for the Women’s Health Strategy for England [Internet]. GOV.UK. Available from: <https://www.gov.uk/government/publications/our-vision-for-the-womens-health-strategy-for-england/our-vision-for-the-womens-health-strategy-for-england>
3. White C. Health state life expectancies, UK - Office for National Statistics [Internet]. www.ons.gov.uk. 2022. Available from: <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifexpectancies/bulletins/healthstatelifeexpectanciesuk/2018to2020>
4. Department of Health and Social Care. Women’s Health Strategy for England [Internet]. GOV.UK. 2022. Available from: <https://www.gov.uk/government/publications/womens-health-strategy-for-england/womens-health-strategy-for-england>
5. Health Secretary announces new women's health priorities for 2024. Available from: <https://www.gov.uk/government/news/health-secretary-announces-new-womens-health-priorities-for-2024>
6. Birth trauma APPG: Health and Social Care Secretary speech [Internet]. GOV.UK. 2024. Available from: <https://www.gov.uk/government/speeches/health-and-social-care-secretary-speech-at-birth-trauma-appg>
7. Women’s health ‘not priority area’ researchers admit – and it’s impacting medical and legal outcomes 2023. Available from: <https://www.boltburdonkemp.co.uk/our-insights/posts/womens-health-not-priority-area-researchers-admit-and-its-impacting-medical-and-legal-outcomes/>
8. NHS England. Core20PLUS5 – an Approach to Reducing Health Inequalities [Internet]. www.england.nhs.uk. NHS England; 2021. Available from: <https://www.england.nhs.uk/about/equality/equality-hub/national-healthcare-inequalities-improvement-programme/core20plus5/>
9. NIHR Challenge: Maternity Inequalities funding call [Internet]. www.nihr.ac.uk. [cited 2024 May 14]. Available from: <https://www.nihr.ac.uk/documents/nihr-challenge-maternity-inequalities-funding-call/35654>
10. The Future of UK Clinical Research Delivery: 2021 to 2022 implementation plan [Internet]. GOV.UK. Available from: <https://www.gov.uk/government/publications/the-future-of-uk>



[clinical-research-delivery-2021-to-2022-implementation-plan/the-future-of-uk-clinical-research-delivery-2021-to-2022-implementation-plan](#)

11. Embedding diversity in research design – MRC [Internet]. www.ukri.org. Available from: <https://www.ukri.org/who-we-are/mrc/our-policies-and-standards/embedding-diversity-in-research-design/>
12. £25 million for women’s health hub expansion [Internet]. GOV.UK. Available from: <https://www.gov.uk/government/news/25-million-for-womens-health-hub-expansion>
13. Women’s health hubs: core specification [Internet]. GOV.UK. Available from: <https://www.gov.uk/government/publications/womens-health-hubs-information-and-guidance/womens-health-hubs-core-specification>
14. NHS England. NHS England» Maximising the benefits of research: Guidance for integrated care systems [Internet]. www.england.nhs.uk. 2023. Available from: <https://www.england.nhs.uk/long-read/maximising-the-benefits-of-research/>
15. Torjesen I. HPV vaccine cut cervical cancer rates in England by 87%. BMJ [Internet]. 2021 Nov 5;375:n2689. Available from: <https://www.bmj.com/content/375/bmj.n2689>
16. Kechagias KS, Kalliala I, Bowden SJ, Athanasiou A, Paraskevaïdi M, Paraskevaïdis E, et al. Role of human papillomavirus (HPV) vaccination on HPV infection and recurrence of HPV related disease after local surgical treatment: systematic review and meta-analysis. BMJ [Internet]. 2022 Aug 3;378:e070135. Available from: <https://www.bmj.com/content/378/bmj-2022-070135>
17. Falcaro M, Soldan K, Ndlela B, Sasieni P. Effect of the HPV vaccination programme on incidence of cervical cancer and grade 3 cervical intraepithelial neoplasia by socioeconomic deprivation in England: population based observational study. BMJ [Internet]. 2024 May 15;385:e077341. Available from: <https://www.bmj.com/content/385/bmj-2023-077341>
18. Gunn T. HPV vaccine slashes cervical cancer rates across society [Internet]. Cancer Research UK - Cancer News. 2024. Available from: <https://news.cancerresearchuk.org/2024/05/16/hpv-vaccine-slashes-cervical-cancer-rates-across-society-health-inequalities/>
19. HARE-40 | Southampton Clinical Trials Unit | University of Southampton [Internet]. www.southampton.ac.uk. [cited 2024 May 24]. Available from: <https://www.southampton.ac.uk/ctu/trialportfolio/listoftrials/hare-40.page>





20. Kai J, Dutton B, Vinogradova Y, Hilken N, Gupta J, Daniels J. Medical treatment for heavy menstrual bleeding in primary care: 10-year data from the ECLIPSE trial. *British Journal of General Practice*. 2022 Nov 14;72(725):e857–64.
21. Department of Health and Social Care. New National Cervical Screening Campaign Launches – as Nearly 1 in 3 Don't Take up Screening Offer [Internet]. GOV.UK. 2022. Available from: <https://www.gov.uk/government/news/new-national-cervical-screening-campaign-launches-as-nearly-1-in-3-dont-take-up-screening-offer>
22. Drysdale H, Marlow LA, Lim A, Sasieni P, Waller J. Self-sampling for cervical screening offered at the point of invitation: A cross-sectional study of preferences in England. *Journal of Medical Screening*. 2022 Apr 7;29(3):096914132210922.
23. Hignett K. U.K. Startup Launches HPV Testing Tampons To Fight Cervical Cancer [Internet]. *Forbes*. [cited 2024 May 21]. Available from: <https://www.forbes.com/sites/katherinehignett/2024/05/21/uk-startup-launches-hpv-testing-tampons-to-fight-cervical-cancer/?sh=6b0ec29c3516>
24. ukctg-vue [Internet]. *bepartofresearch.nihr.ac.uk*. [cited 2024 May 24]. Available from: <https://bepartofresearch.nihr.ac.uk/results/search-results?query=sexual%20health&location>
25. Wellings K, Jones KG, Mercer CH, Tanton C, Clifton S, Datta J, et al. The prevalence of unplanned pregnancy and associated factors in Britain: findings from the third National Survey of Sexual Attitudes and Lifestyles (Natsal-3). *The Lancet* [Internet]. 2013 Nov;382(9907):1807–16. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3898922/>
26. Godfrey KM, Titcombe P, El-Heis S, Albert BB, Elizabeth Huiwen Tham, Barton SJ, et al. Maternal B-vitamin and vitamin D status before, during, and after pregnancy and the influence of supplementation preconception and during pregnancy: Prespecified secondary analysis of the NiPPeR double-blind randomized controlled trial. *PLOS Medicine*. 2023 Dec 5;20(12):e1004260–0.
27. Myo-Inositol, Probiotics, and Micronutrient Supplementation From Preconception for Glycemia in Pregnancy: NiPPeR International Multicenter Double-Blind Randomized Controlled Trial 2021 <https://pubmed.ncbi.nlm.nih.gov/33782086/>
28. Impact of preconception and antenatal supplementation with myo-inositol, probiotics, and micronutrients on offspring BMI and weight gain over the first 2 years 2024 <https://pubmed.ncbi.nlm.nih.gov/38287349/>

29. Jaz Lyons-Reid, José G. B. Derraik, Kenealy T, Albert BB, Ramos M, Monnard CR, et al. Impact of preconception and antenatal supplementation with myo-inositol, probiotics, and micronutrients on offspring BMI and weight gain over the first 2 years. *BMC Medicine*. 2024 Jan 30;22(1).
30. Bartholomew V, Hundley V, Clark C, Parris B (2024) The RETHINK Study: Could pain catastrophisation explain why some women are more likely to attend hospital in early labour. *Sexual & Reproductive Healthcare* 39: 100941
<https://doi.org/10.1016/j.srhc.2023.100941>
31. Centre for Midwifery & Women’s Health [Internet]. www.bournemouth.ac.uk. [cited 2024 May 22]. Available from: <https://www.bournemouth.ac.uk/research/centres-institutes/centre-midwifery-womens-health>
32. Mylod DCM, Hundley V, Way S, Clark C. Using a birth ball to reduce pain perception in the latent phase of labour: a randomised controlled trial. *Women and Birth* [Internet]. 2023 Dec 12; Available from: <https://www.sciencedirect.com/science/article/pii/S1871519223003116>
33. Edwards RA, Way S, Hundley V. Let’s talk early labour: The L-TEL randomised controlled trial. *Women and Birth*. 2023 Nov 1;36(6):552–60.
34. Felton M, Hundley VA, Grigsby S, McConnell AK. Effects of slow and deep breathing on reducing obstetric intervention in women with pregnancy-induced hypertension: a feasibility study protocol. *Hypertension in Pregnancy*. 2021 Jan 2;40(1):81–7.
35. Clark CJ, Kalanaviciute G, Bartholomew V, Cheyne H, Hundley VA. Exploring pain characteristics in nulliparous women; a precursor to developing support for women in the latent phase of labour. *Midwifery*. 2021 Oct;103174.
36. Taylor A, Atkins R, Kumar R, Adams D, Glover V. A new Mother-to-Infant Bonding Scale: links with early maternal mood. *Archives of Women’s Mental Health*. 2005 May;8(1):45–51.
37. Bienfait M, Maury M, Haquet A, Faillie JL, Franc N, Combes C, et al. Pertinence of the self-report mother-to-infant bonding scale in the neonatal unit of a maternity ward. *Early Human Development* [Internet]. 2011 Apr 1;87(4):281–7. Available from: <https://pubmed.ncbi.nlm.nih.gov/21316876/>
38. Background and Mission [Internet]. ICHOM. Available from: <https://www.ichom.org/aboutus/>
39. Moseley RL, Druce T, Turner-Cobb JM. Autism research is “all about the blokes and the kids”: Autistic women breaking the silence on menopause. *British Journal of Health Psychology*. 2020 Sep 30;26(3).

40. Educational Resources | Treasure Your Chest <https://www.treasureyourchest.org/>
41. A review of health and social care in women's prisons [Internet]. 2023. Available from: <https://www.england.nhs.uk/wp-content/uploads/2023/11/pm1912-a-review-of-health-and-social-care-in-womens-prisons.pdf>
42. Mental Health Foundation. Women and mental health [Internet]. www.mentalhealth.org.uk. 2021. Available from: <https://www.mentalhealth.org.uk/explore-mental-health/a-z-topics/women-and-mental-health>
43. National Institute of Mental Health. NIMH» Women and Mental Health [Internet]. www.nimh.nih.gov. 2021. Available from: <https://www.nimh.nih.gov/health/topics/women-and-mental-health>
44. The NIHR Wessex Applied Research Collaboration: <https://www.arc-wx.nihr.ac.uk/mental-health-hub>
45. Oliver L, Harvey O, Garvie A, Mbe J, Campbell A. Themes arising from the Violence Against Women and Girls Conference: June 2023 Acknowledgements [Internet]. [cited 2024 May 16]. Available from: <https://sigbi.org/bournemouth/files/2023/10/VAWG-2023-Conference-Report-.pdf>
46. Thomas. Summit Meeting at BU to Change Culture of Violence Against Women and Girls | News | Blog | Events [Internet]. SI Bournemouth. 2024 [cited 2024 May 16]. Available from: <https://sigbi.org/bournemouth/2024/03/07/summit-meeting-at-bu-to-change-culture-of-violence-against-women-and-girls/>
47. Domestic Abuse and Life-Limiting Illness: identifying and supporting adults at risk (DALLI Study) [Internet]. NIHR ARC Wessex. 2016 [cited 2024 May 22]. Available from: [https://www.arc-wx.nihr.ac.uk/research-areas-list/domestic-abuse-and-life-limiting-illness%3A-identifying-and-supporting-adults-at-risk-\(dalli-study\)](https://www.arc-wx.nihr.ac.uk/research-areas-list/domestic-abuse-and-life-limiting-illness%3A-identifying-and-supporting-adults-at-risk-(dalli-study))
48. Myall M, Taylor S, Lund S. The DALLI Toolkit [Internet]. [cited 2024 May 22]. Available from: https://998f8078c8c14d9abe828e196315f521.usrfiles.com/ugd/6fe132_4b6ee5d3c4134242880ec028db09ce8b.pdf
49. AgeUK. Osteoporosis | Information and advice | Age UK [Internet]. Ageuk.org.uk. 2022. Available from: <https://www.ageuk.org.uk/information-advice/health-wellbeing/conditions-illnesses/osteoporosis/>
50. MRC Lifecourse Epidemiology Centre – Medical Research Council Lifecourse Epidemiology Centre [Internet]. www.mrc.soton.ac.uk. [cited 2024 May 22]. Available from: <https://www.mrc.soton.ac.uk/>
51. Wessex ARC: <https://www.arc-wx.nihr.ac.uk/ageing-dementia>

52. Bournemouth University Ageing and Dementia Research Centre:
<https://www.bournemouth.ac.uk/research/centres-institutes/ageing-dementia-research-centre>
53. Southampton: Research Dementia Network
<http://research.uhs.nhs.uk/news/southampton-joins-new-50m-national-dementia-research-network>
54. Public Involvement in Education and Research [Internet]. www.bournemouth.ac.uk.
Available from: <https://www.bournemouth.ac.uk/about/our-faculties/faculty-health-social-sciences/public-involvement-education-research>
55. Dignity and respect during pregnancy and childbirth: a survey of the experience of disabled women 2018 [BMC Pregnancy and Childbirth | Full Text \(biomedcentral.com\)](https://doi.org/10.1186/s12916-018-1111-1)
56. Centre for Seldom Heard Voices [Internet]. www.bournemouth.ac.uk. [cited 2024 May 22].
Available from: <https://www.bournemouth.ac.uk/research/centres-institutes/centre-seldom-heard-voices>
57. Diversity data 2018–2019 [Internet]. NMC. [cited 2024 May 24]. Available from:
https://www.nmc.org.uk/globalassets/sitedocuments/annual_reports_and_accounts/edi/edi-2018-19-data-tables.pdf
58. Linehan M. DBT skills training manual. 2nd ed. New York: The Guilford Press; 2014.
59. Networking for health for all [Internet]. www.wessexglobalhealthnetwork.org. [cited 2024 May 16]. Available from: <https://www.wessexglobalhealthnetwork.org/>
60. Lifelab | University of Southampton [Internet]. www.southampton.ac.uk. [cited 2024 May 22]. Available from: <https://www.southampton.ac.uk/lifelab>
61. University works with teens on vaping education | University of Southampton [Internet]. www.southampton.ac.uk. Available from:
<https://www.southampton.ac.uk/news/2024/02/university-works-with-teens-on-vaping-education.page>
62. Home [Internet]. Theatre For Life. [cited 2024 May 22]. Available from:
<https://www.theatreforlife.co.uk/?DramaGroups>
63. Wessex Reach Strategic Review. Available by request at: enquiries@wessexhp.org.uk