This publication was withdrawn on 5 November 2026

This publication has been superseded by Saving babies' lives version three: a care bundle for reducing perinatal mortality.

Public Health England

Protecting and improving the nation's health

This guidance is being reviewed and will be updated in due course. In the meantime, the current guidance should be followed.

Maternity high impact area: Improving planning and preparation for pregnancy



About Public Health England

Public Health England exists to protect and improve the nation's health and wellbeing and reduce health inequalities. We do this through world-leading science, knowledge and intelligence, advocacy, partnerships and the delivery of specialist public health services. We are an executive agency of the Department of Health and Social Care, and a distinct delivery organisation with operational autonomy to advise and support government, local authorities and the NHS in a professionally independent manner.

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Foreword – Professor Viv Bennett

Giving every child the best start in life is a key strategic priority for Public Health England. If we want to achieve universal health improvement for babies and children and to narrow the health gap for those who are most vulnerable, we need to work together to embed care and support for healthy conception and pregnancy through care pathways for everyone of reproductive age.

Improving prevention through individualised care pathways, with groups of women at specific or increased risk of poor outcomes, and at a population level, is key to achieving the ambitions and recommendations of Better Births and reducing inequalities in outcomes for mothers and babies.

This resource supports the drive to increase action on prevention to improve wellbeing, reduce risk and tackle inequalities from preconception through to 6 to 8 weeks postpartum and ensure every woman is fit for and during pregnancy and supported to give children the best start in life. Every woman should have access to services and support to plan a healthy intended pregnancy and advice to adopt healthy behaviours and for reducing or managing risk factors. Reducing unplanned pregnancy rates and improving heath for and during pregnancy improves individual and population outcomes and represent a significant return on investment.

These resources set out the latest evidence, guidance, resources and local practice examples for 6 key topic areas known to affect maternal and child outcomes. They aim to promote prevention across the maternity pathway by providing clear calls to action for NHS and Local Authority Commissioners, and providers and professionals including midwives, health visitors and primary care to promote a life course approach to prevention.

My thanks to the author and the team, you should be rightfully proud of your work. On behalf of PHE I am pleased to present this work to support local areas to achieve best possible outcomes

Professor Viv Bennett CBE
Chief Nurse and Director Maternity and Early Years, Public Health England

Foreword – Professor Jacqui Dunkley Bent

As England's first Chief Midwifery Officer for the NHS, I want to make sure that all women are given the right information to make safe choices that are heard and respected during a woman's life course including the preconception, pregnancy, birth and as they transition into parenthood. Consistent advice and guidance from health care professionals across the maternity pathway can make a significant contribution to the health of future generations by reducing risk before and during pregnancy. Evidence has linked the environment in the womb to the health of the baby, child and adult.

If we are to make big, long-term improvements in maternity care we need to address the inequalities that we see in society. This is as true in England as it is in the rest of the world. I want to work with groups that we inconsistently engage with such as travellers, sex workers, asylum seekers, refugees and other groups, to make sure that they receive the best maternity care possible so that their human rights are respected.

Recommendations from the National Maternity Review: Better Births are being implemented through Local Maternity Systems (LMSs) to ensure that care is personalised and therefore safer. This means that more care is provided in the community so that it is available for women that will benefit most. LMSs bring together the NHS, commissioners, local authorities and other local partners with the aim of ensuring women and their families receive seamless care, including when moving between maternity or neonatal services or to other services such as primary care, health visiting, mental health or post-natal care.

Our NHS Long Term Plan aims to support people to live longer, healthier lives by helping them to make healthier lifestyle choices and treating avoidable illness early. Our new services will help more people to stop smoking, maintain a healthy weight and make sure their alcohol intake is within a healthy limit. These behaviours are all contributing factors that can be modified before, during and after pregnancy to improve outcomes. This means working with colleagues across the health sector to ensure a person-centred life course approach for women and their families.

These documents support a system wide approach to embedding prevention across the maternity pathway. They provide the latest evidence and guidance to NHS and Local Authority commissioners and providers with the aim of promoting a comprehensive view of maternity care in England. My thanks to the team developing these documents, you should be proud of your work.

Professor Jacqueline Dunkley-Bent
Chief Midwifery Officer for the NHS

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Maternity high impact areas: overview

Why the 6 maternity high impact area documents have been developed and how they contribute to public health priorities

The maternity high impact area documents were developed to assist Local Maternity Systems (LMS) embed prevention approaches to better support women before, during and after pregnancy through a whole system life-course approach.

The documents provide LMS's with the latest evidence, guidance, resources and local practice examples for the high priority topic areas known to affect maternal and child outcomes in England. Implementation of the High Impact Area's will help support recommendations in Better Births, the Maternity Transformation Programme and the NHS Long Term Plan.

The maternity high impact areas addressed in this publication suite are:

- improving planning and preparation for pregnancy
- supporting parental mental health
- supporting healthy weight before and between pregnancy
- reducing the incidence of harms caused by alcohol in pregnancy
- supporting parents to have a smokefree pregnancy
- reducing the inequality of outcomes for women from Black, Asian and Minority Ethnic (BAME) communities and their babies

The documents were produced between 2019 and 2020 and updated prior to publication in light of the COVID-19 pandemic. Emerging evidence from the UKOSS COVID-19 study shows the disproportionate impact of COVID-19 on Black, Asian and ethnic minority pregnant women, and overweight and obese women, highlighting the importance of a continued focus in these areas. The results are also in line with earlier MBRRACE-UK findings relating to poorer outcomes for pregnant women in these groups outside of the pandemic. The HIA reports take account of new evidence and ways of working, particularly in relation to the most vulnerable mothers and babies as part of PHE's Best Start in Life strategic priority.

These resources contribute to the strategic ambitions of NHS Universal Personalised Care Model and the Modernisation of the Healthy Child Programme. Additionally, the high impact areas reflect the needed approaches to tackle health inequalities, as outlined in the Marmot Review 10 Years On.

The high impact areas are intended to be used alongside the Healthy Pregnancy Pathway and sits within the broader All Our Health framework that brings together resources and evidence that will help to support evidence-based practice and service delivery, Making Every Contact Count, and building on the skills that healthcare professionals and others have to support women.

How these documents were developed

The development of this document was led by Monica Davison (Public Health England) and Maria Garcia Dr Frutos with support from Dr Ellinor Olander (Centre for Maternal and Child Health Research, City University of London) from October 2019 to March 2020. The documents were reviewed by Sue Mann, Alison Hadley, Catherine Swann and Tamara Bacchia (Public Health England). The document was systematically developed using 3 strands of evidence – academic research, current UK guidance and policy and the experiences of those working in Local Maternity Systems. Firstly, a rapid review was conducted using Scopus and PubMed to identify international reviews and UK empirical studies published since 2014 on preconception health. Relevant journals not included in these databases (such as 'Journal of Health Visiting') were hand searched. Search terms included preconception, pre-pregnancy and variations of these. Good quality evidence was ensured by only including peer-reviewed research. To be included studies had to provide information preconception health and could be randomised controlled trials, surveys, service evaluations and qualitative studies with either women or healthcare professionals. These inclusion criteria were used to ensure focus was on practical suggestions in line with current guidelines for those working within Local Maternity Systems.

Secondly, the websites of Institute of Health Visiting, NICE, NHS England, Royal College of Midwives, Royal College of Obstetricians and Gynaecologists and Public Health England were searched to identify relevant and current reports, guidelines as well as good practice examples. The database OpenGrey was also used to identify practice examples. Examples were deemed good practice if they were in line with current guidelines and provided information on positive outcomes for women. The most recent MBRRACE ('Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries') reports were also checked for relevant information.

Finally, the draft document was reviewed by topic experts, public health experts and healthcare professionals. Twenty-four representatives from Local Maternity Systems, national bodies and Public Health England also attended a review workshop in January 2020. Based on this feedback the documents were revised and further academic research was added when it had been deemed missing from the first draft. The document was subsequently reviewed by a small number of topic experts within PHE before being finalised. As such, this document benefited from many people providing feedback, and we thank them for their time and input.

Who these documents are for and how they should be used

These resources are for LMS professionals who wish to acquaint themselves with the latest evidence and good practice guidance on maternity priority topics in England.

The documents should be used a guide to support the early signposting of evidence-based actions that can be practically applied according to local population needs

Executive summary

The importance of improving planning and preparation for pregnancy

Women and partners who are healthier at conception have a better chance of becoming pregnant, having a healthy and safe pregnancy and giving birth to a healthy baby. Improving planning and preparation for parenthood is a fundamental principle of the Maternity Transformation Programme and Better Births' vision for maternity services.

Good health during the preconception period is a public health priority. Many of the health behaviours and risk factors for poor birth outcomes (for example, smoking, alcohol, folic acid, maternal weight) are established prior to pregnancy, often with limited potential to reduce these risks after conception.(1-3) Health for both men and women before conception are important not only for pregnancy outcomes but also for health across generations.(3, 4)

Preconception care encourages health improvement for individuals across their reproductive life-course, aligning local services to provide universal support for everyone and targeted support proportionate to individual need. This includes access to a full range of contraceptive choice.(5) Because maternal and child health morbidity and mortality are higher in socio-economically deprived families, some people and communities may need more support and care than others.(6 to 8) This is an important step to reducing health inequalities.(9)

Local Maternity Systems (LMSs) have a direct role in the delivery of universal preconception care to women in the inter-pregnancy period, coordinating preconception care from the first pregnancy through to subsequent pregnancies. This ensures that preconception care is part of the routine postnatal care offer. However, for preconception care before a first pregnancy, other services (for example, contraception and sexual health, oral health) also need to be engaged. LMSs are also well positioned to drive actions needed to by wider services in local systems to support people outside of maternity.(4)

The importance of effective outcomes across preconception care relies on strong partnership working between all partners in health (primary and secondary), Local Authorities (including early years services), and voluntary sector.

High impact area connections with other policy areas and interfaces

This document supports the delivery of the Maternity Transformation Programme, and interconnects with the policy ambitions of the Healthy Child Programme 0-19 agenda, Marmot Review 10 Years On (2020), NHS Long Term Plan (2019) and the All Our Health approach.

Summary of key actions

This is a summary of key actions for LMSs to undertake in implementing prevention approaches in their work to address 'Maternity high impact area: Improving planning and preparation for pregnancy'.

See sections Evidence for good practice preconception care and Associated tools and guidance for supporting evidence, guidance and good-practice case studies.

These actions relate to supporting women and partners before a first pregnancy and before subsequent pregnancies.

Frontline healthcare professionals

- promote smoking cessation (see 'Maternity high impact Area: smoking'), provide advice on nutrition (see The Eatwell Guide), oral health, physical activity (see 'Maternity High Impact Area: healthy weight'), alcohol intake (see 'Maternity high impact area: alcohol') and folic acid supplements as part of preconception care
- identify high-risk groups, women with co-morbidities, and families who could need a more targeted preconception care approach (see 'Maternity high impact area: support parent mental health', 'Maternity high impact area: reducing the inequality of outcomes for women from black and ethnic minority (BAME) communities and their babies' and 'Framework for supporting teenage mothers and young fathers')
- refer women and partners to reliable online platforms to raise awareness on preconception care (for example, Tommy's Planning for Pregnancy tool)
- provide information regarding contraception advice following discharge from maternity services
- ask about pregnancy intention in clinics for baby checks or pre-nursery children and provide preconception health advice for future pregnancies including both mother and partner
- normalise conversations about planning for pregnancy during routine visits and provide advice for optimal preconception health, for example:
    - during contraception consultations
    - during cervical screening consultation
    - during routine management of long-term conditions such diabetes, hypertension or epilepsy

  - during new patient registration at a GP practice.
  - during a sexual health consultation
  - when buying a fertility or pregnancy test at a community pharmacy
  - when requesting emergency contraception at a community pharmacy
  - during mandated health visitor visits

Providers

- provide training on preconception health for frontline healthcare professionals
- offer healthy conversations skills training for frontline healthcare professionals
- make resources available to women and families, for example:
  - information leaflets and posters with preconception health and relevant care services in GP surgeries, A&E, pharmacies and outpatient clinics waiting areas.
  - information leaflets with preconception health and relevant services to be included in cervical screening reminder letters/packs.
  - include male population in the preconception health advice and recognise the need to commission key services such as sexual health clinics
- read Public Health England's 'Making the case for preconception care'

Commissioners

- commission services to provide information and support regarding preconception health for both women and families, and healthcare professionals
- commission training on preconception health for healthcare professionals
- reorient health services towards preconception care, including the creation of protocols and referral pathways, and additional capacity for preconception care services
- read Public Health England's 'Making the case for preconception care'

Partnership approaches to improve outcomes

This is a summary of key actions to improve partnership approaches in collaborative commissioning, effective service delivery, and professional mobilisation.

Effective collaborative commissioning can lead to a reappraisal of the serious health, social and economic impacts of poor planning and preparation for pregnancy on the wellbeing of women, pregnant and pre-pregnant, on children, on families and on the long-term health of the population.

Service delivery can be made more effective through a review of service design and embedding good preconception care opportunistically into reproductive health services.

Professionals can be mobilised to improve planning and preparation for pregnancy through improving access to preconception care for all health professionals in universal and specialist services.

Collaborative commissioning

- use the Public Health Outcomes Framework indicator reported and benchmarked by Public Health England and local commissioning information sharing agreements in place across all agencies
- integrate commissioning of services, this could include services that are available in pregnancy and subsequently after pregnancy
- contribute to and utilise data from UK Midwifery Study System(10)
- link with early years services, including children's centres
- ensure Information sharing agreements are in place across all agencies
- plan the design of delivery of services together through Local Maternity Systems
- develop Joint Strategic Needs Assessments, including Early Years Foundation Stage data and Fingertips (Public Health profiles) to identify and respond to agreed joint priorities
- develop systems to capture vulnerable parents or families
- ensure data collection includes reporting of parental or service user satisfaction
- demonstrate value for money and Return on Investment

Effective service delivery

- integrate IT systems and information sharing across agencies
- develop and implement integrated pathways prior, during and after pregnancy
- ensure systematic collection of service user experience questionnaire to inform action
- increase the use of prevention and evidence-based interventions and multi-agency programmes to improve preconception health across the life-course of the population
- improve partnership working, for example maternity, primary care (including dental services), specialist sexual and reproductive health services, school nursing, social care and early years services and education providers
- provide consistent, culturally relevant information for parents and health care professionals
- ensure data is collected during antenatal booking and postnatal visits
- ensure fathers and partners are included in prevention and early intervention

Professional or partnership mobilisation

- develop multi-agency training on preconception health, planning and preparation for pregnancy
- deliver universal and targeted, evidence-based prevention and early intervention programmes for preconception care
- integrate the preconception and reproductive health pathway
- identify the skills and competencies needed to enable integrated working
- increase integration and working with early years services or specialist sexual and reproductive health teams or primary care teams to promote preconception health and support for planning and preparation for parenthood
- ensure that the provision of local public health services that support the wider health and wellbeing of families includes preconception
- upskill the required workforces to give preconception public health advice, offer or refer to interventions

Measuring success

High quality data, analysis tools and resources are available for all public health professionals to identify the preconception health of the local population using national data sources. This contributes to the decision-making process for the commissioning of services and plans to improve people's preconception health and reduce inequalities in their area including Public Health and NHS Outcomes Frameworks. This can be achieved using local measures including those listed below:

Access

- up to date, evidence-based preconception health policies setting best practice in relation to preconception health education, behavioural change support and multi-agency referral services
- local commissioner and provider data confirm access to preconception care services

Effective delivery

- implementation of evidence-based preconception care policies setting out best practice in relation to preconception care services via local commissioner and provider data
- trends in data from the London Measure of Unplanned Pregnancy (currently piloted in a large maternity service with a view to inclusion in the Maternity Services Dataset)

Outcomes

- food consumption, nutrient intake and nutritional status data of reproductive age women and men available from the UK National Diet and Nutrition Survey
- physical activity, fruit and vegetable intake, and other risk factors for pregnancy outcomes, in the reproductive age population from The Health Survey for England, commissioned by NHS Digital
- pregnant women access to antenatal care by 10 weeks (NICE [QS22])
- smoking, alcohol intake and BMI data from maternity booking records
- trends in preconception health from clinical records of women accessing maternity services through the NHS Maternity Services Dataset* (with the opportunity to link data from primary care, family planning services and assisted reproduction clinics)

*Several indicators of preconception and early pregnancy care are routinely collected when women attend their booking appointment. This information is included in the 'Health of Women Before and During Pregnancy' toolkit, includes a national report on inequalities and a tool to identify risk factors and needs for preconception in populations locally.

User experience

- feedback from NHS Friends and Family Test from maternity service user experience on satisfaction with preconception support, via local commissioner and provider data
- feedback and co-production from the Maternity Voices Partnerships groups
- feedback on satisfaction with preconception support from wider sexual and reproductive health services (for example, contraception and sexual health clinics, abortion services, fertility services)

Supporting evidence and good practice guidance

Context

About 45% of pregnancies and a third of births are unplanned or associated with feelings of ambivalence.(6) Although teenagers are the group at highest risk of unplanned pregnancy, the greatest number of pregnancies occur in women aged 20 to 34.(11)

The time before a woman becomes pregnant is important from 2 perspectives: the individual perspective (the time when a woman and her partner self-identify that they want to become parents) and the population perspective (the period that women are of childbearing age; see Figure 1).

Figure 1: Preconception health's 2 main concepts



The Chief Medical Officer calls for a comprehensive strategy that includes schools, youth services, health services and the wider public to improve preconception health.(12) Public health strategies need to be tailored for 3 different stages in the life course: children and adolescents; adults with no current intention to become pregnant; and adults intending to become pregnant.

Together, these strategies contribute to increased preconception awareness, planning and preparation for pregnancy. Neither awareness nor planning alone is likely to have much of an effect on preconception health.(3)

Preconception care interventions have the potential to improve maternal knowledge, self-efficacy and behavioural change by improving planning, preparation and fitness for pregnancy.(13) These interventions can also address health inequalities and radically upgrade prevention of population ill-health by improving pregnancy outcomes. Poor preconception care has been associated with great economic loss for the health system.(4)

The importance of Local Maternity Systems

Better Births, the Maternity Transformation Programme and NHS Long Term Plan set out a clear vision and principles for how maternity services can be brought together through Local Maternity Systems with strong links to services to provide personalised, kinder and safer care to women and their families.

The purpose of a Local Maternity System is to provide system leadership for transformation, putting in place the infrastructure that is needed to support services to work together effectively, including interfacing with other services that have a role to play in supporting women and families before, during and after birth.

Local Maternity Systems' strategic role

The Local Maternity Systems play a critical role in leading a collaborative approach between primary care, maternity services, public health and local authorities in the provision of preconception care not only for first pregnancies but also for subsequent pregnancies.(4) This includes the:

- implementation of preconception policies and guidelines, education of relevant professionals and a clear pathway for referrals and care delivery responsibilities.(14)
- implementation of a dual intervention strategy at both the public health level and at the individual level may be needed in order to raise awareness of preconception health and to normalise the notion of planning and preparing for pregnancy for both women and their partners(15)
- enhancing existing strategies that targeting common risk factors, such smoking and obesity, could recognise the preconception period as one that offers a unique opportunity for intervention, based on life-course epidemiology and maternal motivation(3)

Better Birth recommends that on a more local level, providers and commissioners should operate as local maternity systems, with the aim of ensuring that women, babies

and families are able to access the services they need and choose, in the community, as close to home as possible. The purpose of a Local Maternity System is to provide place-based planning and leadership for transformation through:

- developing and implementing local plans to transform services
- shared clinical and operational governance to enable cross-organisational working and ensure that women and their babies can access seamlessly the right care, in the right place at the right time

Local Maternity System membership

Potential membership of a Local Maternity System is presented in Figure 2 and includes service users, commissioners, providers and community groups and organisations. By bringing these stakeholders together, the Local Maternity Systems can create shared protocols, information sharing and coherent plans to implement and apply the Better Births vision and principles to meet their population's needs.

Figure 2: Potential membership of a Local Maternity System

Potential membership of a Local Maternity System	
Service user voice	• Maternity Voices Partnerships, Healthwatch and representative parent groups where appropriate • local stakeholders and charities representing service users
Commissioners	• Clinical Commissioning Groups • NHS England • local authority directors of public health • other local authority as appropriate • providers
Providers	• providers of NHS antenatal, intrapartum and postnatal care including independent midwifery practices and voluntary and community sector providers involved in providing the local NHS funded maternity offer • local Neonatal Operational Delivery Network • primary care • dietetics • mental health teams, including IAPT, AMHS, CAMHS • community child health and tertiary centres • local authority providers of health visitor services, children and adult social care teams and public health programmes • weight management services

Others	• representatives of other clinical networks, higher education establishments and teaching hospitals involved in workforce training and research • local workforce advisory boards • representatives of the staff voice, such as professional organisations and trade unions • community organisations

Using evidence to embed prevention through a community-centred approach

A place-based, or community-centred, approach aims to develop local solutions that draw on all the assets and resources of an area, integrating services and building resilience in communities. This will help individuals take control of their health and wellbeing and have more influence on the factors that underpin good health.

The place-based approach offers new opportunities to help meet the challenges public health and the health and social care system face. This impacts on the community and aims to address issues that exist at the community level, such as poor housing, social isolation, poor/fragmented services, or duplication or gaps in service provision.

Preconception care focuses on helping individuals through providing services, support and advice to plan and be fit for pregnancy. This includes targeting behaviours such as smoking cessation (see ‘Maternity high impact area: smoking’), alcohol consumption (see ‘Maternity high impact area: alcohol’), and awareness of the risks of substance misuse and achieving and maintaining a healthier weight (see ‘Maternity high impact area: healthy weight’). However, preconception care also helps to create healthier communities and populations through:(4)

- integrating contraception and fitness for pregnancy care so that preconception care happens at the same time as contraception consultations and an earlier stage before pregnancy
- continuing preconception care (both planning and fitness for pregnancy) during and between pregnancies
- ensuring that high risk groups including women with long term conditions and those with multiple vulnerabilities receive help early to plan pregnancy and additional support to have a healthy pregnancy (see ‘Maternity high impact area: support parent mental health’ and see ‘Maternity high impact area: reducing the inequality of outcomes for women from black and ethnic minority (BAME) communities and their babies’)

Healthy Pregnancy Pathway

The Maternity high impact area documents can be used alongside the Healthy Pregnancy Pathway.

The Healthy Pregnancy Pathway is an online interactive tool that provides Local Maternity Systems easy access to the latest maternity life-course guidance using a stepped-up service level approach, from universal to targeted and specialist care systems grounded in the community setting.

The Healthy Pregnancy Pathway uses a place-based approach through the integration with the All Our Health Townscapes.

The Healthy Pregnancy Pathway uses the following service level descriptors across the maternity pathway (preconception, antenatal and birth 6 to 8 weeks):

Universal - Universal service is offered to all people, ensuring they receive immunisations, screenings, contraception, maternity advice, support and referral to specialist services according to need.

Targeted - Targeted service provides people with timely, personalised expert advice and support when they need it for specific issues, such perinatal mental health, diabetes management and breastfeeding.

Specialist - Specialist service provides people specialist practitioner treatment, where providers will often work with other agencies to coordinate holistic wrap around support for people with acute or ongoing needs, including complex needs management.

Evidence for good practice preconception care

This section outlines the supporting guidance and good-practice case studies for 'Maternity high impact area: Improving planning and preparation for pregnancy'.

See above for a summary of this section under the headline Summary of Key Actions.

Individual

Healthcare professionals can influence preconception health through support smoking cessation, provide advice on nutrition, oral health, physical activity, alcohol and folic acid supplements. Opportunities to promote preconception health and reduce risk occur across the early and reproductive years of the life-course.(2, 3)

At the individual level, services need to identify women or couples planning a pregnancy and who could benefit from improving their health before conception. This may require reorientation of the health services to include a focus on preconception health. Healthcare professionals may need training to normalise conversations about planning for pregnancy during routine visits, for example, for contraception, cervical screening, and for management of long-term conditions such as diabetes (see Box 1, next page). Since plans to conceive might not be disclosed spontaneously to healthcare professionals, awareness – among both healthcare providers and the public – of the importance of optimising preconception health is needed.(3)

Unplanned pregnancy is a risk factor for a range of adverse outcomes, including low birthweight, prematurity and postnatal depression.(11) Substantial health and financial gains can be obtained from investing in health at this time in the life course.(14 to 16) Therefore, providing good access to contraception and using a validated measure could help to identify women who could benefit from additional support(12) (for example, the London Measure of Unplanned Pregnancy).

Box 1: Case study extracted from Community-based pre-pregnancy care programme improves pregnancy preparation in women with pre-gestational diabetes

Case Study 1: Community-based pre-pregnancy care programme to improve pregnancy preparation in women with pre-gestational diabetes

A pre-pregnancy care (PPC) was introduced into 422 primary care practices and 10 NHS specialist antenatal diabetes clinics. The PPC was multi-faceted and included identifying and sending PPC information to all eligible women, electronic preconception care templates, online education modules and resources and regional meetings and educational events.

A prospective cohort study compared pregnancy preparation measures before and during/after the PPC intervention in women with pre-existing diabetes. Compared to before the PPC intervention, pregnant women with type 2 diabetes were more likely to achieve target HbA levels and take 5mg folic acid daily. Women with type 1 diabetes attended antenatal care earlier after the intervention.

For those pregnancies that are planned, the window of opportunity to intervene is often much wider than assumed.(15) Women do not often discuss with health professionals their intentions to become pregnant, but they frequently come into contact with services for related reasons; these opportunities are frequently missed (see Box 2).(12)

Examples of opportunities for preconception health in primary care health settings

Settings and opportunities for preconception health interventions, such as giving simple written information, advice and supplies (for example, folic acid supplements and healthier eating advice as reflected in the Eatwell Guide) or access to mobile health platforms to promote preconception health (for example, Tommy's Planning for Pregnancy tool).(4, 6 to 8) Settings include:

- community pharmacy – when buying a fertility or pregnancy test, accessing or buying emergency contraception
- sexual health services – when attending consultations including removal of an intrauterine device or implant and contraception advice (these can include both women and men to increase parental preconception health awareness and care)(15)
- GP – when attending a new patient check consultation, a contraception consultation, a cervical cancer screening appointment or the mandatory 6 to 8-week postnatal check
- early pregnancy unit or abortion services – when attending for consultation after miscarriage or following abortion
- clinics for baby checks or pre-nursery children - asking about intention to conceive again in the near-to-medium future (about 1 in 5 mothers are likely to be planning another pregnancy)(16)
- routine antenatal care – unplanned pregnancy can be discussed at booking
- postnatal visits by health visitor where future pregnancy intention can be disc

Training for healthcare professionals: starting the conversation about preconception care

Every day millions of women of childbearing age in the UK have contact with health and social care practitioners. These contacts provide opportunities to engage women in thinking about their health and in planning for pregnancy. A simple approach to start the conversation is the discussion of the 4 Ps, unifying aspects of reproductive and family health that can be addressed at multiple points during the life course when women interact with health services:(12)

- pregnancy prevention
- pregnancy planning
- pregnancy preparation
- preparing for parenthood

Healthy conversation skills

Healthy Conversation Skills is a brief programme of training developed in Southampton, which equips practitioners with skills in engaging and motivating people to change their lifestyles. The training helps practitioners empower clients to problem-solve and make lifestyle changes, and increases women's confidence that they can adopt healthier behaviours.(17)

Healthy Conversations Skills training core competences

Communication is enhanced through practitioners developing the skill of asking open-ended, or open discovery, questions – those that generally begin with 'how' and 'what'. Such healthy conversations allow a patient or client to explore an issue, identify barriers, and generate solutions that can be reviewed with the practitioner at their next encounter. Training aims to increase self-efficacy and the sense of control of both practitioners and their patients and clients. The 5 core skills are:

- to be able to identify and create opportunities to hold 'healthy conversations'
- to use open discovery questions (those that specifically support exploring of issues, barriers and priorities; problem-solving; and goal-setting)
- to reflect on practice
- to listen rather than provide information
- to support goal-setting through SMARTER planning (Specific, Measurable, Action-oriented, Realistic, Timed, Evaluated, Reviewed goals)

(From 'Making every contact count': evaluation of the impact of an intervention to train health and social care practitioners in skills to support health behaviour change)(17)

Community

Local Maternity Systems can provide practical help and expert advice to build community capacity to implement preconception care interventions. Local Maternity Systems can work together with midwives, health visitors, general practitioners and other healthcare professionals. Strong partnership working and developing an understanding of each other's roles and responsibilities will ensure seamless support and transition between services.

A multi-agency approach is likely to meet the needs of the local population and is crucial to improve public services. A partnership of programmes in adolescent health, sexual and reproductive health, preconception, antenatal and postpartum services could provide a pathway of healthcare which allows multiple points of access and continuity of care. This might be achieved through sustained provision of community health facilities such Children's Centres as well as youth and other social services.(3, 12) Community interventions can also ensure that high risk groups, including women with long term conditions and those with multiple vulnerabilities, receive help and additional early support.

Population

At the population level, a wide, parallel strategy is needed to reduce preconception risk factors, irrespective of pregnancy planning. Key to this approach is recognising the impact of the wider determinants of health – poverty, education, employment, and support networks – on preconception risk factors. The preconception health agenda will best be served by general reduction of social inequalities in health and by supporting individuals to develop health awareness. Advocacy must emphasise society's responsibility for preconception health and create a demand for an environment that fosters good preconception health.

Leaders and politicians across social care, the food industry, the environment, and employment could be encouraged to engage with preconception care. Political actors are recognising the importance of preconception health at population level and this has been demonstrated through documents such First 1,000 days of life and Advancing our health: prevention in the 2020s.

Associated tools and guidance

Information, resources and best practice to support frontline health professionals, providers and commissioners working in Local Maternity Systems

Intelligence toolkits and outcomes frameworks

Relevant indicators can be found in the Pregnancy and Birth Profile in the Child and Maternal Health section of PHE's Fingertips Platform. These indicators are presented in a standardised format showing trends over time, local benchmarking and relevant inequalities. This profile will be enhanced to include the new indicators which are under development and to provide a downloadable report (stocktake of progress) against the high impact areas.

Practice resources

- Planning for pregnancy tool, Tommy's, accessed January 2020
- Your Pregnancy and Baby Guide, NHS 2017 accessed January 2020
- The Eat Well Guide, NHS 2019 accessed January 2020
- Breastfeeding and dental health guidance, PHE 2019 accessed January 2020
- Your Pregnancy and Baby Guide, NHS 2017 accessed January 2020
- The Eat Well Guide, NHS 2019 accessed January 2020

Policy

- 1001 Critical Days: The Importance of the Conception to Age Two Period: A cross-party manifesto, WAVE Trust, 2014
- A consensus statement: reproductive health is a public health issue, Public Health England 2018
- Better Births: Improving outcomes of maternity services in England – A five year forward view for maternity care, NHS England, 2016
- Chief Medical Officer: The health of the 51%, Department of Health and Social Care, 2015
- Fair society, healthy lives (The Marmot review), UCL Institute of Health Equity, 2010
- First 1000 days of life, Department of Health and Social Care 2019
- From evidence into action: opportunities to protect and improve the nation's health, Public Health England, 2014
- Health of Women before and during pregnancy: health behaviours, risk factors and inequalities, Public Health England 2018
- Making the case for preconception care, Public Health England, 2018
- Making every contact count, Public Health England, 2016

- Public Health Outcomes Framework 2016 to 2019, Department of Health and Social Care, 2017
- Towards a smoke free generation: A tobacco control plan for England, Department of Health and Social Care, 2017

Guidance

- Better beginnings: Improving health for pregnancy, National Institute for Health Research, 2017
- Better births: Improving outcomes of maternity services in England: A five year forward view for maternity care, NHS England, 2016
- Guideline for contraception after pregnancy, Faculty of Sexual and Reproductive Health, 2017
- Healthier weight promotion: Consistent messaging, Public Health England, 2018
- Health Matters: Preconception health and pregnancy planning, Public Health England, 2018
- Health of women before and during pregnancy: Health behaviours, risk factors and inequalities: An initial analysis of the Maternity Services Dataset antenatal booking data, Public Health England, 2018
- Health visiting and midwifery partnership –pregnancy and early weeks, Public Health England, 2015
- Healthy Child Programme 0 to 19: health visitor and school nurse commissioning, Public Health England, 2016
- Making the Case for Preconception Care report, Public Health England, 2018
- Planning for pregnancy, Tommy's, accessed January 2020
- Preconception animation, Public Health England, 2018
- Rapid review to update the evidence of the Healthy Child Programme 0-5, Public Health England, 2015
- Reproductive health: What women say, Public Health England, 2018
- Teenage Pregnancy Prevention Framework. Public Health England and LGA. 2018; updated 2019.
- A Framework for supporting teenage mothers and young fathers. Public Health England and LGA. 2016; updated 2019.

NICE guidance

- Behaviour change: General approaches, NICE Public Health Guideline [PH6], 2007
- Behaviour change: Individual approaches, NICE Public Health Guideline [PH49], 2014
- Postnatal care up to 8 weeks after birth, NICE Clinical Guidance [CG37], 2015
- Postnatal care, NICE Quality Standard [QS37], 2013
- Preconception: Advice and management, NICE Clinical Knowledge Summary, 2017
- Pregnancy and complex social factors, NICE Clinical Guideline [CG110], 2010

- Oral health promotion: general dental practice, NICE Guideline [NG30], 2015

Research

- What do women say? Reproductive Health is a public health issue, Public Health England 2018
- Preconception health: The Lancet, 2018
- The effects of preconception interventions on improving reproductive health and pregnancy outcomes in primary care: A systematic review, Hussein N, Kai J, Qureshi N. European Journal General Practice, 2016; 22(1):42–52.
- Intervention strategies to improve nutrition and health behaviours before conception, Barker M, Dombrowski SU, Colbourn T, Fall CHD, Kriznik NM, Lawrence WT, et al. The Lancet, 2018; 391(10132):1853–64.
- Preconception health in England: a proposal for annual reporting with core metrics, Stephenson J, Vogel C, Hall J, Hutchinson J, Mann S, Duncan H, et al.. The Lancet, 2019; 393(10187):2262–71

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