

# **Transition from Fertility to Maternity Care**

MIDWES Physical wellbeing
BABY
Couples
Families are complex INFORMATION
Women Continuity of care
EARLY PREGNANCY CARE
PREGNANCY CARE
UNDERSTANDING
UNDERSTANDING
Single people
Experiences

Journey FETUS
LGBTQI+ Screening

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This document has been designed in collaboration with our members to ensure it meets most accessibility standards. However, if this does not fit your requirements, please contact corporate.communications@rcn.org.uk

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#### Notes to readers

- The RCN recognises that services are provided by registered nurses and midwives, health care support workers/maternity care support workers, assistant practitioners, nursing associates, nursing and midwifery students, and trainee nursing associates.
   For ease of reading, the generic terms 'nurse', 'nursing' and 'nurses' are often used throughout this document.
- As a gender diverse society this guidance can be used by and/or applied to people who identify as non-binary, transgender or gender fluid. Equally not all those who become pregnant will identify as women, and where relevant this has been acknowledged.
- Those accessing fertility and maternity care may present with a protected characteristic. This guidance will refer to those characteristics where possible, ensuring that the spirit and the practice of the Equality Act 2010 is maintained throughout by promoting a culture of respect and dignity.
- A refresh on menstruation and the physiology of reproduction can be found at:
  - RCN (2022) Promoting Menstrual Wellbeing provides an overview of menstruation.
     Available at: rcn.org.uk/publications and rcn.org.uk/clinical-topics/Womenshealth/Promoting-menstrual-wellbeing
  - Physiology of reproduction. Available at: teachmephysiology.com/reproductivesystem and winchesterhospital.org/health-library/article?id=100943

# 1. Introduction

Pregnancy following fertility treatment can be an exciting, challenging and anxious time for expectant parents. Health care professionals may not always have detailed knowledge of the processes that people have gone through to become pregnant (including surrogacy and the use of donor gametes), or the systems in place to support early pregnancy and maternity care. This can lead to challenges in providing comprehensive maternity care, and anxiety and concerns for expectant parents.

This guidance is primarily for nurses, midwives, and health care assistants/maternity support workers, and it can also be useful for all those engaged in fertility care, early pregnancy care and maternity care. The intention is to raise awareness of possible pathways of care for women and others (and their partners/support networks) as they travel through during fertility treatment and pregnancy, and how they can best be supported by the health care professionals they encounter along their journey.

# The key factors influencing this work

- Raising awareness of the challenges some women (and their partners) face once they become pregnant through fertility treatment.
- Understanding the pathways of care to becoming pregnant, using fertility services across the UK, including surrogacy partnerships.
- Understanding the feelings and anxieties that may occur after being though fertility treatment, by working collaboratively with patient focused support groups.
- Identifying next steps once a pregnancy is confirmed.
- Signposting to where help can be sought once discharged from fertility care.
- The potential gap that may exist between fertility care and maternity care.
- The importance of access to early pregnancy care and ongoing maternity care.
- Screening tests and maternity care pathways.
- Considering the reality that some may choose not to keep the pregnancy or, in the case
  of a multiple pregnancy, may choose fetal reduction following fertility treatment.
- Understanding some of the specific risks to be considered during pregnancy.
- LGBTQIA+ (lesbian, gay, bisexual, transgender, queer/questioning (one's sexual or gender identity), intersex, and asexual/aromantic/agender)) will have different needs in all three areas of care, and this will be explored further across the text.
- Understanding that 'mother' is the status given to the person who undergoes the
  physical and biological process of being pregnant, carrying and giving birth to a
  child regardless of gender (England and Wales High Court decisions (2019)), whilst
  acknowledging that not all those presenting for fertility and maternity care may
  identify as 'mother'.
- Understanding that those who identify as coming from ethnic groups and minority groups including Gypsy, Roma and traveller communities may have different needs and experiences. Data from the Human Fertilisation and Embryology Authority (HFEA) (HFEA, 2021a) demonstrates lower levels of access to, and success in fertility treatments, for people from ethnic minority backgrounds.

 UK residents may travel to other countries for fertility treatment and plan to use UK maternity services, should they become pregnant. People from other countries may access UK-based fertility treatment but will not plan to remain in the UK for maternity care, however, they may need access to early pregnancy care before they depart to their country of origin.

This guidance was created towards the end of the COVID-19 pandemic in 2022. The project team recognises the challenges encountered in fertility and maternity services and whilst being optimistic that services are returning to normal capacity, acknowledge the legacy of the impact on health care provision of two years of a pandemic.

The project team also recognises that fertility and maternity care is provided in the NHS and independent sectors and individuals may have a hybrid of private and publicly funded care.

## The potential gap

Once a pregnancy is confirmed following fertility care, the woman will normally be discharged around six to seven weeks gestation. However, with the NHS booking system, it can be four to six weeks until they meet a midwife. This will vary from service to service, and across the four nations of the UK. Having often had high intensity care from fertility services, the wait to access maternity care can be a time of anxiety and emotional disturbance.



I didn't want to leave the clinic but they were like, you're pregnant we've done our job. It was a shock transitioning to maternity care, going from such regular contact to nothing for five to six weeks.

People may not be aware of the procedure for booking maternity care and may find this wait stressful and apprehensive. It can also feel lonely, especially as, not everyone will have a partner to support them throughout their journey. This gap was highlighted by French et al., (2015), and reaffirmed by project team discussions, identifying a need for improvements in the commissioning of services, as well as communication between the services to help reduce the gap that may exist between fertility care and maternity care. This could also be improved with better use of technology, for example, joint access to record systems.

Table 1 provides an overview of how the services might work. Improved communication routes between these services could lessen the risks of women feeling isolated and not knowing who to contact, if they have concerns.



My clinic was exceptional. I got a viability scan very quickly so I didn't have to wait for that. They were very excited when I phoned and I felt they were really rooting for us. When I had some bleeding they really calmed me down.

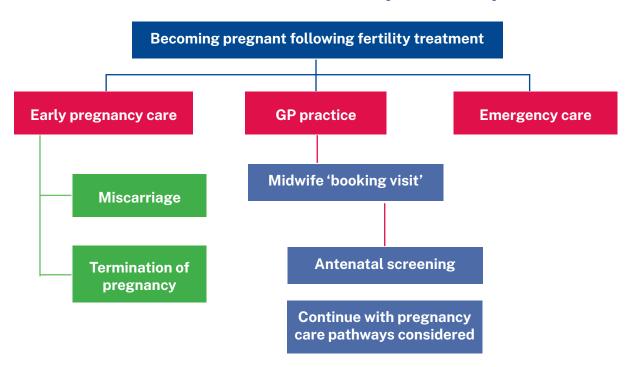


Table 1: Overview of the transition from fertility to maternity care

The guidance has been divided into three distinct areas of practice:

- fertility care
- early pregnancy care
- · maternity care.

Health care professionals need to work together to ensure that women have continuity of care and know who the first point of contact ought to be, should an issue arise.



I don't know where I belong after fertility treatment. I don't feel like I belong in the IVF community because I feel guilty that we had success when others haven't, but I don't feel like I belong in the 'normal' pregnancy community either. I feel very alone sometimes. I didn't expect my pregnancy to feel like this.

# 2. Fertility care

## **Key points**

- Fertility care provides options for parenthood but remains complex and expensive.
- Funded access to care will vary dependent on specifications agreed by the National Institute for Health and Care Excellence (NICE) and geographical location across the UK.
- The journey through fertility care is varied and assumptions cannot be made about how anyone may feel about that journey.
- Emotional support and counselling are key parts of ongoing care.

The journey for those seeking fertility treatment to achieve a pregnancy usually begins with a visit to their general practitioner (GP), general practice nurse (GPN) or primary care health professional, to discuss the issues they are facing. This in turn leads to assessments, tests and referrals, which can be a challenging and sometimes traumatic experience.

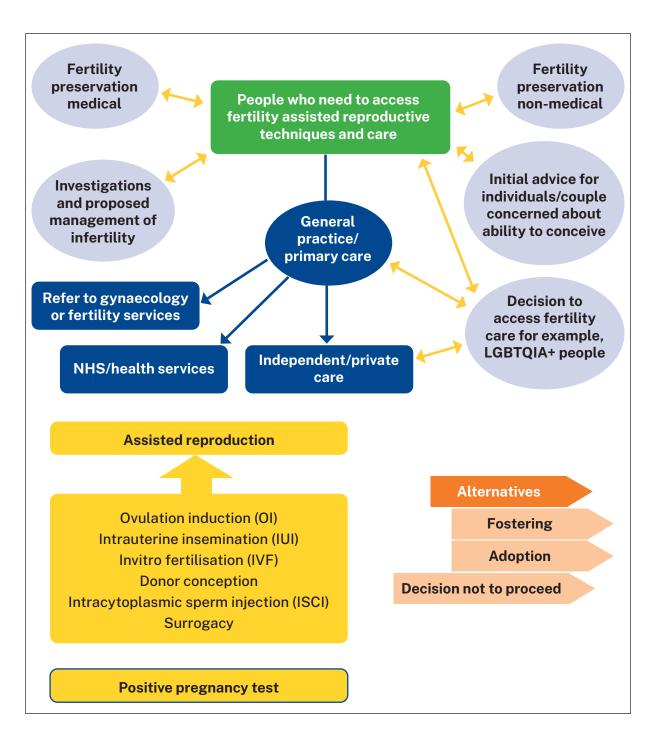
People from the lesbian, gay, bisexual, transgender, queer/questioning, intersex and asexual/aromantic/agender (LGBTQI+) community may not access fertility care this way and will usually self-refer to a local fertility clinic initially, as will those seeking surrogacy arrangements.

The reasons people seek assisted fertility care are varied. This may begin with a life-limiting diagnosis, where sperm or eggs need to be frozen for possible later use, or where someone has decided to defer their fertility choices for personal reasons. Typically, the journey begins with a visit to the GP/GPN, or initial fertility clinic self-referral, where some issues with achieving a successful pregnancy can be resolved. However, this may then lead to more technical care and interventions. **Table 2 on page 8** provides an overview of the possible fertility care pathways. The main routes to care have been identified here accepting that some will need all routes, whereas others may only require one.

- Fertility preservation (egg or sperm cryopreservation). Some people will have had a life-limiting disease, medical treatments/conditions that may impact their fertility, or may choose to delay fertility for non-medical reasons. The RCN (2021b) provides information on fertility preservation for nurses who are supporting and caring for those beginning treatment for potentially life-limiting diseases and where the treatment may adversely affect their ability to have children in the future. The guidance also encompasses those who may wish, for non-medical reasons, to defer having children until later in life, for example members of the armed forces, transgender people, or those considering gender confirmation surgery.
- Primary care options and possible solutions. This can include physical, psychological and psychosexual solutions, which covers most of the algorithm in Table 2. This usually begins with the GP visit, to establish possible causes such as genetic conditions, underlying health problems or lifestyle influences on fertility. GP referrals may also be because of fertility preservation for previous oncology treatment or a decision to delay childbearing. It is more likely that this process will take place at a fertility clinic for those from the LGBTQI+ community.
- Assisted reproduction (also known as assisted reproductive technologies (ART)). This

generally means significant help has been required from health care professionals and advancing technology to achieve a pregnancy. Those who have been though fertility preservation will require ART to achieve a pregnancy. This may be a self-referral or via the GP/GPNs. Medical history will be reviewed, and a diagnosis made by a fertility specialist, to determine further investigations and/or treatment options.

Table 2: Fertility care overview



There is a wide variation in the journey taken though fertility care, which may or may not have involved lengthy fertility treatment and patients will have different emotional needs. Those who have had assisted reproductive technologies to become pregnant will normally have had counselling, offered in line with the HFEA Code of Practice before, during and after treatment.

Once a pregnancy is confirmed the patient will be discharged from the fertility services, however some will continue with their counselling, and others may continue to require medication throughout the pregnancy. Organisations such as the British Infertility Counselling Association (BICA) offer counselling through the transition from fertility to maternity care. The Donor Conception Network (DCN) will also continue to offer support as needed.

Fertility care has enabled many to achieve a successful pregnancy and birth in recent decades, and the understanding and advances in this care are often complex. The HFEA (HFEA, 2020a, 2021a) provides statistics about success rates of treatments, however it needs to be acknowledged that not everyone will achieve a successful pregnancy following treatment.

# **Access to fertility services**

There are two main routes that people can access fertility care for assisted reproductive technologies – either GP referral or self-referral. Many people struggling to conceive will access their GP, or a primary care health professional, who will arrange some preliminary investigations dependant on the individual history and as outlined by NICE (2013). There are several criteria that need to be met to determine whether NHS-funded fertility treatment may be available. The criteria is set by the local authority responsible for commissioning care provision and will include specifications such as body mass index (BMI), age and previous fertility treatment (NHS, 2021). Access to NHS-funded treatment may also be dependent on whether the individual/couple have an existing child.

Self-referral for those who will fund their own care can be made to a fertility clinic in the independent sector or an NHS fertility clinic that also offers self-funded fertility treatment.

All UK fertility licensed centres are regulated by the HFEA, both in the NHS and the private/independent fertility clinics. The HFEA does not regulate all fertility treatment, as investigations may be carried out in non-HFEA licensed centres, such as gynaecology or urology units.

The cost of treatment can range from £4,000 and upwards of £25,000 depending on the clinic, type of treatment and drugs required. Due to high treatment costs, the UK has also seen a rise in reproductive tourism with people travelling abroad to have treatment where clinics are regulated differently, treatment costs differ and where they may have more availability of donor eggs and surrogates. Those who travel abroad for treatment and return to the UK may find themselves in a uniquely isolated position, with a lack of access to a fertility team.

In 2017, NICE reaffirmed its recommendation that women under the age of 40 should be offered three full cycles of IVF treatment on the NHS. In addition, NICE recommended that one full cycle of IVF treatment should be available for those aged between 40-42, if there is no evidence of low ovarian reserve. The RCN reaffirmed its support of these

guidelines in a position statement (RCN, 2020a). Regardless of the recommendations, access to fertility treatment continues to vary significantly depending on where people live and their chosen path to parenthood (Fertility Network UK, 2021).

National guidelines are in place in Northern Ireland, Scotland and Wales, however, access to treatment in England is different and subject to individual clinical commissioning groups (CCGs).

# Fertility care pathways

Following completed investigations, a pathway is chosen which will optimise the chance of achieving a pregnancy. Choice of treatment (Table 3) can also be dependent on individual preference including religious and personal beliefs.

Processes may involve fresh and/or frozen gametes/embryo, with some differences in potential outcomes.

#### Table 3 – Outline of some of the options for treatment

**Ovulation Induction** (OI) is a less invasive treatment which may involve medication to induce ovulation, for example Clomid (to a maximum of six cycles). Ovarian ultrasound monitoring to measure follicular size and number should be an integral part of the treatment to reduce the risk of multiple pregnancy and ovarian hyperstimulation. Ovulation induction requires certain criteria to be met, such as an assumption/test to ensure the fallopian tubes are patent. If a diagnosis of unexplained infertility is made, OI is not recommended.

Optimal candidate	Requirements	Success rate
Pre-menopause women with polycystic ovarian syndrome (PCOS) or underlying conditions inhibiting ovulation.	Medication oral or by subcutaneous injections and regular clinical visits for cycle monitoring with ultrasound and hormone measurements	Depending on age, BMI, and underlying medical conditions OI may restore normal pregnancy rates more than 20% per cycle. The majority will conceive within the first three months.

**Intrauterine Insemination** (IUI) is recommended as an alternative to vaginal sexual intercourse and can be with or without ovarian stimulation. IUI is not routinely offered to those with unexplained infertility, mild endometriosis or mild male factor infertility. There are exceptional circumstances where IUI would be recommended, to support those from ethnic minority groups for reasons such as social, cultural, and/or religious objections to IVF.

Optimal candidate	Requirements	Success rate
Couples unable to have vaginal intercourse (due to physical disability/ psychosexual problem) or specific conditions requiring sperm washing for safety reasons (eg, HIV positive man or women who are positive for blood borne virus), donor insemination procedures, same-sex relationships and single women. In unexplained infertility, mild endometriosis, and mild male factor infertility, IUI could also be offered after a total two-year period of regular unprotected sexual intercourse (NICE, 2017).	Ovulation prediction tests and possible ovulation induction medication, clinical visits for cycle monitoring and a sperm placement procedure.	Varys according to age and underlying medical conditions and is slightly higher using fresh sperm than frozen, however the overall success rate for IUI is estimated at around a third of that for IVF.

**In vitro fertilisation** (IVF) is an assisted reproductive technology for those who are unable to conceive and involves fertilisation outside the body in the laboratory (in vitro). It is a stepwise process, and several procedures are included in the treatment cycle (ovarian stimulation, retrieval of the oocytes, fertilisation of the oocytes, culture of the embryos in the laboratory, embryo transfer). IVF begins with hormone therapy to stimulate ovaries to produce more follicles. Subsequently, ovulation is triggered, and the eggs are collected and fertilised with the sperm in the laboratory. The best one or two embryos or blastocysts developed in-vitro are transferred into the uterus. If one of them attaches successfully, it results in a pregnancy. Additionally, surplus embryos are frozen so that another transfer can be attempted without completing the hormone therapy again (NICE, 2017, RCOG, 2013).

Optimal candidate	Requirements	Success rate
For those aged under 40 years who have not conceived after two years of regular unprotected intercourse (or 12 cycles of artificial insemination where six or more are by intrauterine insemination), and people aged 40-42 years who have never previously had IVF treatment and without evidence of low ovarian reserve.	Self-administered hormone injections and multiple clinical visits for cycle monitoring, egg collection (under sedation) and embryo transfer.	Varys from 10-35% depending on several factors. Rate decrease when the female age rises, the number of unsuccessful cycles increases, the female BMI is outside the range of 19-30, and when there is an excessive consumption of tobacco, alcohol, and/or caffeine. IVF is more effective in women who have previously been pregnant and/or had a live birth.

**Intracytoplasmic sperm injection** (ICSI) is a laboratory technique mainly associated with sperm-related infertility. Under microscopic manipulations, the embryologist pierces the shell of the egg and injects the prepared sperm directly into the egg to increase the chance of fertilisation. The other parts of the IVF cycle, the controlled ovarian stimulation, the retrieval of the oocytes and the embryo transfer, are performed as outlined above (NICE, 2017).

Optimal candidate	Requirements	Success rate
Couples with severe deficits in semen quality and azoospermia, or if the sperm has been previously extracted from testes, or when the previous IVF treatment cycle has resulted in failed or very poor fertilisation.	Repeated semen investigations including, if necessary, a male karyotype or Y chromosome microdeletion tests. Specific genetic counselling and testing should be offered when a genetic defect associated with male infertility is suspected.	Improves fertilisation rates compared to IVF alone, but once fertilisation is achieved the pregnancy rate is not increased.

In addition to fertility treatments outlined above, there may be other pathways to parenthood that may be included as part of the treatment pathway.

**Surrogacy** – a woman will be the gestational carrier for the pregnancy for a person or couple (intended parent/s). This includes same sex male couples, non-binary people, single people, trans people or heterosexual couples. Embryos are created via IVF or using IUI.

**Oocyte donation** – a known or unknown woman will donate oocytes to a recipient and fertilisation will usually take place via IVF or ICSI. Embryos will then be transferred to a recipient either for their own treatment or for a surrogacy arrangement.

**Donor insemination** – a couple/single person may choose IUI (see above) where they will be inseminated around the time of ovulation with donor sperm, either from a known or unknown donor. A preferred option for same sex female couples and single people.

**Reciprocal IVF** – also known as shared motherhood. A preferred treatment method for same sex female couples, one partner will use their eggs to create embryos via IVF or ICSI with donor sperm and one partner will undergo an embryo transfer and carry the pregnancy.

**Embryo transfer/donation** – is the procedure used in assisted reproductive technologies to create embryos either by couples undergoing fertility treatment or from donor sperm and donor eggs for the purpose of donation to be transferred to achieve a pregnancy

**Preimplantation genetic testing for monogenic disorders** (PGTM) – an early genetic test on embryos created by IVF or ICSI, which analyses DNA to diagnose genetic abnormalities for known carriers of a genetic disorder, for example, Tay Sachs in the Jewish community or sickle cell disease in people of African, Middle Eastern, Hispanic, Mediterranean, Asian or Indian descent. Embryos that are found to be unaffected are transferred.

Add-ons – there are several additional laboratory techniques or fertility treatments that may be offered and included as part of the fertility treatment pathway. These are referred to as add-ons. Many have limited or no evidence to suggest that the pregnancy or live birth outcome will be improved through their use (HFEA, 2020b). Fertility clinics are required to provide information regarding effectiveness or appropriateness, however current evidence is very limited on usefulness. A traffic light system devised by the HFEA provides information about the current evidence (HFEA, 2020b). Some of these techniques and treatments include immunology treatments and testing and timelapse technology. Further information on the HFEA's evidence on add-ons is available at: hfea.gov.uk/treatments/treatment-add-ons

# Multiple births

Multiple births are recognised as the greatest risk of fertility treatment, particularly IVF, because of the higher mortality and morbidity for mothers and babies. In 2007, the HFEA launched a national strategy to reduce the incidence of multiple births after fertility treatment by promoting elective single embryo transfer (eSET) as part of its One at a Time campaign. The multiple birth rate following IVF has now fallen from 28% in 2006 to an average of 6% in 2019 (HFEA, 2022).

All HFEA licensed fertility clinics in the UK have a multiple births minimisation strategy and women and their partners must be given information about the risks of multiple pregnancy before starting treatment. One embryo should be replaced unless there are clinical reasons to replace more than one. Those having ovulation induction should also be given information about the risks, and treatment cycles monitored to avoid multiple pregnancies.

When multiple fetal sacs are detected at the first scan to confirm pregnancy, women and their partners/intended parents are likely to have a mixed response and the news is often a shock despite knowing the risk. Having been told of the risks prior to treatment they are likely to be anxious about the pregnancy and its outcome, as well as feeling overwhelmed at the practical and financial costs of having two or more children. They should be reassured that there are specific care pathways for those with a multiple pregnancy and maternity services should have specialist multiple birth midwives and obstetricians to ensure consistent high-quality care for women with a multiple pregnancy (NICE, 2019 and RCN, 2021a).

If triplets or more are diagnosed, there is an option of multifetal pregnancy reduction, which would be supported in a specialist fetal medicine unit, where specialist information and counselling is available.

Further information is available from the RCOG at: rcog.org.uk/en/patients/patient-leaflets/multiple-pregnancy-having-more-than-one-baby and the Twins Trust at: twinstrust.org

# 3. Early pregnancy care

## **Key points**

- Transition from fertility to maternity care can take some time, and can raise anxieties about the pregnancy, and its progress.
- Understanding where care can be accessed easily and quickly is critically important.
- Reassurance scans may help relieve anxiety, however there are concerns about their usefulness and safety.
- Miscarriage and ectopic pregnancy will be uppermost concerns about the progressing pregnancy, and access to early pregnancy care units will be crucial.
- Termination of pregnancy may be an option to be supported.

Once a pregnancy has been confirmed, the woman/partner will be discharged from the fertility services, usually around six to seven weeks gestion, and advised to contact the GP or midwife, for the next stage of the pregnancy journey. This process can take several weeks, and during this time, anxiety can cause stress, as well as not understanding the services available to them, especially if they have specific concerns such as bleeding or pain, or if they are unsure about keeping the pregnancy. Most will transition from fertility to maternity care, and some will also require support in:

- early pregnancy care units
- emergency care, including out of hours/GP services and walk-in centres
- termination of pregnancy services.

All these services can be accessed in the NHS, when the pregnant woman may require reassurance about the progress of pregnancy or have concerns about possible miscarriage or other issues which may arise in the gap between fertility care and maternity care. They may also seek termination of pregnancy services. It is recognised that those who have undergone a surrogacy treatment cycle, will often present as a team at the maternity or NHS services and will discuss joint decisions about the pathway for their care.



I had to pay for the viability scan at the clinic. If IVF doesn't work you get follow up included, but if it does work you have to pay. It cost £300 for a scan with the doctor.

#### Reassurance ultrasound scans

The potential gap in service provision may lead to pregnant women accessing private reassurance scans to provide some degree of assurance about the health of the pregnancy. It is important that they are aware that these are usually non-diagnostic scans. Whilst some private companies can offer a full diagnostic scan to make sure the pregnancy is progressing normally, others will not be able to provide this service. The NHS ultrasound scans offered at around 12 and 20 weeks of pregnancy are considered to be the safest way to monitor a baby's health and growth and look for any potential complications.

In 2015, the RCOG published a scientific paper looking at The use of Ultrasound before 10 Weeks' Gestation (RCOG, 2015), which discusses both medical and non-medical purposes for the use of ultrasound in the embryonic stage of human development.

Fertility patients can become acclimatised to frequent ultrasound scans, whilst maternity care does not usually undertake ultrasound scan assessment until around the 12th week of pregnancy, the delay between services may feel too long. This can result in increased visits to the early pregnancy unit (EPU) for reassurance, or access to private scan services. However, everyone including health care professionals, needs to be aware that there is a theoretical risk in the embryonic phase of development of potential vulnerability due to the limited fetal blood flow and cell division being rapid when the embryo is small (RCOG, 2015). The RCOG paper (RCOG, 2015) concluded that repeated ultrasound exposure in the embryonic period should be avoided unless clinically indicated. The opinions expressed in the paper are of an advisory response, based on a precautionary principle, rather than any specific evidence of harm.



I was worried and they wouldn't give me a scan, so I just paid for it. I spent £650 on additional scans during my pregnancy.

The commercial availability of ultrasound scans, on a self-referral basis, has grown to fill this need for non-diagnostic scans. Even so, routine ultrasound is not associated with improved perinatal outcomes (NICE, 2021), but these extra scans can offer some reassurance about the health of the pregnancy (Thomas et al., 2017). There are also growing concerns about the quality, qualifications, and competence of those providing some of the commercial services, who may not be familiar with safety principles of machines being used, making or missing prenatal diagnosis and no counselling for those accessing the scans (Roberts, J et al., 2015).



I did pay for a lot of scans privately. Up to 17 weeks, I had a scan weekly. I was just so aware that I felt something was going to happen. After that, I had one every two to three weeks.

## Early pregnancy care

The early pregnancy period is a time of great change. The joy of being pregnant can be clouded by the anxiety that this period of growth and development may also bring complications to the mother and fetus/the unborn baby. These may include vaginal bleeding, abdominal pain, nausea and vomiting, hyperemesis, ectopic pregnancy, molar pregnancy and miscarriage.

50% of all early pregnancies may experience vaginal bleeding and abdominal pain in the first trimester of pregnancy, 75% of these women will go on to have a baby (RCOG, 2015).

- One in 80 pregnancies are ectopic, where the pregnancy develops outside of the uterus (Ectopic Trust, 2021), and will not survive. There is an increased incidence of ectopic pregnancy following IVF treatment and in the presence of tubal disorders.
- Initially in early pregnancy, one in four pregnancies may have a miscarriage (The Lancet, 2021); this rate does change and decrease as the pregnancy progresses.
- 2-5% of all pregnant women may develop hyperemesis gravidarum, the term for severe nausea and vomiting during pregnancy, where medical intervention is required, including medications and intravenous fluids to manage symptom control. Some cases may be so severe that women may consider/undergo a termination of pregnancy (RCOG, 2016). In 2021, a study by Nana et al., comprised of self-identifying individuals, reported that 51% of participants contemplated terminating their pregnancy, and up to 5% ended the pregnancy as a result of hyperemesis gravidarum.



I had a big bleed early on in the pregnancy but they didn't tell me how common it was in early pregnancy after IVF. It was only when a doctor came to speak at the pregnancy after infertility group that I found out how common it was.



We know they can't always give us certainty but there is something about hearing our concerns and giving some kind of plausible explanation, or even acknowledging what they don't know, just saying it could be this or it could be this would be helpful. If they could give us an action plan, there would be something to take away, some reassurance.



Early pregnancy care is one of the most frustrating elements of the transition of care. IPs (intended parents) are not included in any correspondence; some surrogates attend scans and don't tell their IPs the appointment was due.

# Miscarriage

Miscarriage is the loss of a pregnancy before the fetus reaches viability (up to 24 weeks gestation) and occurs in up to 25% of all pregnancies (The Lancet, 2021). 1% will go on to experience recurrent miscarriage (RCOG, 2011), which can be a devastating experience for women and their families, not just those who have been through fertility treatment to become pregnant. The NICE (2021) guidance for women experiencing an ectopic pregnancy or miscarriage can be found at: nice.org.uk/guidance/ng126.

In 2022, the RCOG reported that women from Black, Asian and ethnic minority backgrounds have a higher incidence of miscarriage and will need further support when presenting at the EPAU with bleeding and or pain. The explanations for why these disparities are complex and multi-dimensional, the report suggested that:

"A contributing factor to Black, Asian, and minority ethnic women experiencing poorer treatment and outcomes is communication. Ineffective communication from medical staff can hinder consultations, negatively influence treatment options and can ultimately result in these women avoiding interactions with health care professionals." (RCOG, 2022).

Any person experiencing any of these complications may be distressed and/or frightened, consequently, access to a local dedicated early pregnancy unit is of paramount importance for the mental and physical wellbeing of the woman (and her partner) (NICE, 2019). Diagnosis and management by health care professionals trained in early pregnancy scanning, and in breaking bad news is essential.

Fertility units are advised to offer people written contact details of the nearest early pregnancy unit to their home, so they are aware of where to access care. The Association of Early Pregnancy Units (aepu.org.uk) lists all EPUs in the UK.

There is also a higher risk of miscarriage in multiple pregnancy. Not all fetuses may continue to thrive when twins or more are diagnosed. Chorionicity should be determined, because if twins are monochorionic (share one placenta) there is a greater risk to the co-twin if one baby dies. The Miscarriage Association (miscarriageassociation.org.uk) and the Twins Trust (twinstrust.org) have further information and support available.



I don't think people had ever read my records before I went in. I kept being asked if this was my first baby. How do you answer that if you have had misservices 2.Th have had miscarriage? The person doing blood test, the sonographer. the midwife all asked if it was first baby. They didn't seem to see the state I was in.

## **Termination of pregnancy**

In some cases, even though people have had fertility treatment to achieve a pregnancy, there can be circumstances when a termination of pregnancy may be considered. People must be supported to make decisions about their pregnancies according to their own circumstances, free of judgement, regardless of the process they have experienced to become pregnant, acknowledging that this decision can be complex, for example, where a surrogacy arrangement is in place.

Some women may have had changes in their personal circumstances with physical or mental health concerns. In 2020, 9.9% of abortions completed in the UK were reported as being performed due to the risk to the person's mental health (Abortion Statistics England and Wales, 2020).

If a fetal abnormality is diagnosed through screening and diagnostic tests, relevant information should be provided and counselling offered about the options, which may include termination of the pregnancy. Antenatal and Reproductive Choices (ARC) has further information and support at: arc-uk.org

In a multiple pregnancy, multi-fetal pregnancy reduction may be considered in triplet and higher order pregnancies. Selective termination may also be offered if a twin or triplet is diagnosed with fetal abnormalities. Early referral to maternity care is important where there may be an increased risk of chromosomal abnormalities as screening for these is more challenging in multiple pregnancy and requires specialist counselling. Further information is available from RCOG at: rcog.org.uk/en/patients/patient-leaflets/multiple-pregnancy-having-more-than-one-baby and the Twins Trust at: twinstrust.org

A pregnant woman has the right to make an informed decision about her pregnancy. With fertility treatment the person or couple may have used donated gametes or be in a surrogacy arrangement. If they request a termination of pregnancy, there is no legal obligation to involve the family, sperm donor or any other person, and their decision should be respected.

Regardless of the reason for accessing termination services, everyone is required to attend a consultation, either via telephone or in clinic. During this appointment, registered health care professionals will discuss pregnancy options, complete risk assessments, and review the medical and social history to assess suitability for the procedure. Many will be able to access an early medical abortion if under 10 weeks gestation, and surgical termination is also available for anyone who is less than 24 weeks pregnant. All those who request a termination of pregnancy will have a safeguarding assessment, and further support/onward referral is actioned, if required. Most terminations in England and Wales are carried out by independent sector providers under contract to the NHS. However, patients with significant co-morbidities and/or medical complications will require management in an NHS hospital setting. Most people will self-refer into termination services; referrals are also accepted via other professionals such as GP/GPN/ primary care health professional, sexual health services and maternity services. Further information can be found in the NICE guideline on Abortion Care at: nice.org.uk/guidance/ ng140 and generally on termination of pregnancy at: rcn.org.uk/clinical-topics/Womenshealth/Termination-of-pregnancy

# 4. Maternity care

# **Key points**

- Maternity care is about providing support, care and guidance throughout the pregnancy journey.
- Care provision aims to prevent, identify, and treat any complications during pregnancy to provide the best outcomes for the family, whatever that might be.
- The pregnant woman is the centre of that care, and her journey to this point will influence the care she/her partner/support network needs/expects.
- Continuity of care by a midwife/group of midwives is important to ensuring consistency and understanding throughout the pregnancy.
- It is an emotional, life affirming/challenging and changing experience.



Some midwives don't know about IVF and anxiety, they don't Some midwives don't know about IVF and anxiety, they don't understand. As soon as I went in to the first hospital appointment I kept telling everyone it was an IVF baby. I thought maybe they would see that the pregnancy could go at any minute and that I wasn't like everyone else, that although I am pregnant now I may not be when you scan.



Health care professionals really need better education about the psychological impact of fertility problems and IVF.

A fundamental part of maternity care is understanding the person who is pregnant, what their needs and expectations are, and this must take account of the journey they have been on, and the support networks available for this maternity journey.

This requires consideration of all the differing family structures, and not making assumptions about the person. It is always best to ask about the journey, and plan care accordingly. Several potentially useful contacts are listed at the end of this document, and it is always valuable to find out what is available locally.

There is ever increasing support around now for those from LGBTQI+ communities, trans communities and surrogacy partnerships, as well as for health care professionals, who themselves may have been on a fertility journey. For surrogacy arrangements, where possible the intended parents should be included in all aspects of the care pathway. Awareness of family configurations, relationship dynamics, and language that is inclusive when meeting and caring for everyone will enhance the care experience for all.

Maternity care aims to prevent, identify, and treat any complications during pregnancy to provide the best outcomes for the family. Maternity services aim to make contact at around eight to 10 weeks of pregnancy, to provide information about health and

wellbeing, and explore the pattern of expected antenatal care, however, this may be later dependant on service pressures. For people who have conceived after fertility treatment, this may leave a period of time where no service may be making contact (see Section 3 on page 14).

Table 4 (page 21) provides an overview of key points in the maternity care journey, and how uncomplicated antenatal can look, however it must be acknowledged that service provision will vary across the UK, and between the public and private sector. Consequently, it is imperative for nurses working in fertility services to understand what is available locally/local to where the woman is living.

There are also some useful apps available to support parents throughout the pregnancy, birth and postnatally such as:

- Best Beginnings Baby Buddy App bestbeginnings.org.uk
- Pregnancy + apps.apple.com/gb/app/pregnancy/id505864483
- Emma's Diary Pregnancy and Baby App emmasdiary.co.uk/pregnancy-and-birth/ preparing-for-baby/top-pregnancy-apps (this also provides information on other available apps).
- Mother and Baby motherandbaby.co.uk/pregnancy/health-and-wellness/bestpregnancy-apps (this also provides information on other available apps).



My experience of being a parent in a family that doesn't make up your 'typical' mum and dad family (our son has two mums) can often be dealt with by appropriate results. dealt with by appropriate neutral language, and open questions at the beginning.



Our sperm donor's information was included in our maternity notes under the section 'Child's Father', and our booking midwife referred to Our sperm donor's information was included in our maternity notes our sperm donor as 'Dad'.



At times the need to explain I was the second mother felt nothing but relentless. We even had a consultant rudely and pointedly question who I was in the middle of a consultation in the latter part of our pregnancy.



Not all birthing people identify as a woman and may be non-binary.

Table 4 Overview of antenatal care

#### **Antenatal care Early** Pregnancy confirmed Assessing physical and psychological/emotional wellbeing Midwife pregnancy Managing signs and care unit symptoms of early Access a midwife 24/7 throughout the care pregnanacy **GP/primary** Managing early **Emergency care/out** care pregnancy concerns/ of hours GP service/ complications walk in centre **Antenatal booking** and needs visit Discussion and information – taking a history (fertility, medical and social). Initial physical and psychological/emotional assessment, including level of risk for conditions that may be exacerbated during pregnancy or new conditions such as eclampsia. Routine blood tests to establish baseline results. Discuss screening options. Health improvement opportunities. Fetal screening for development, genetic disorders, fetal growth. Maternal screening for DVT and diabetes. Outline and agree plan of care, including appointments, access to emergency care and ultrasound appointments. Managing minor problems which may occur. Parent education Planning place of Ongoing antenatal sessions/preparation birth

for parenthood

care

Referral for specialist support such as existing long-term conditions, counselling and mental health

Continuity of care by a midwife/group of midwives is key to ensuring consistency and understanding throughout the pregnancy journey, and it is well documented (Better Births, 2017) that having a team who are familiar to the person and her partner (if applicable), and intended parents if in a surrogacy arrangement, enhances the maternity journey and reduces anxiety and stress.

Although this guidance is focused on the transition from fertility to maternity care, it is important to acknowledge that throughout the pregnancy and labour, there may be specific issues to take into account for the woman and her partner/support network. Such issues include the ongoing fear or threat of the loss of the pregnancy.



Throughout my whole pregnancy I had this fear and I was convinced something would go wrong. I wished I had a normal pregnancy and not all these fears and worries and risks along the way.



I didn't want to talk about it or even think about it. I was pregnant, it was real, but I felt it could just go at any moment.

Good continuity of care will help with these conversations throughout the pregnancy, and it is important that women understand that they can access a midwife 24/7 throughout their care pathway, and know where to access help, if required.

Antenatal care usually begins with a visit to the midwife/by the midwife, referred to as the booking visit. This is the first meeting between the pregnant woman (and her partner), and the midwife. If there is a surrogacy arrangement in place, this appointment will normally include the intended parents, as well. This meeting is an important first step into care during pregnancy and establishing the relationship with the midwife. It is designed to provide information, reassurance and an opportunity to discuss the plan of care, including identifying what the wishes, and expectations are. Some women will also continue fertility medication throughout the pregnancy, and this will need to be understood by the midwives caring for them.

An independent interpreter should be provided for anyone who may be struggling with their English language skills.

These links provide further details of what can be expected from the first antenatal visit and subsequent visits:

- nhs.uk/pregnancy/finding-out/your-first-midwife-appointment
- nice.org.uk/guidance/ng201/resources/schedule-of-antenatal-appointmentspdf-9204300829

It is also a time to discuss medical, family, social and psychological history, which will inform the pathway of care available, as well as considering any risks/concerns identified. This will also usually include taking blood tests and offering a range of screening tests.

The first ultrasound scan is usually offered between 11 and 14 weeks and performed abdominally. The purpose of this scan is to determine gestational age, detect a multiple pregnancy and provide information as part of screening for fetal anomaly screening (if the woman chooses this). A second scan is offered between 18 and 21 weeks to examine the fetus in more detail. Some services will offer information relating to the fetal sex at this scan. Further scans are not routinely advised unless there are ongoing concerns, however there is emerging evidence for performing a routine growth scan at 35 weeks and some units offer this to all women (Smith, 2020).



My first natural pregnancy, compared to this IVF pregnancy, are worlds apart and I wasn't prepared for that. I couldn't wait for that pregnancy feeling I remembered from my first pregnancy, but this time is riddled with worry, fear of losing, feelings that it's not real. I constantly worry I won't be able to bond with my baby due to my feelings.



through, if there were any complications I wanted him here safe. My I opted for a planned section because of my anxiety and all I had been consultant understood my views and agreed straightaway.



I ended up having a caesarean. I felt my body had failed conceiving naturally and then failed at giving birth. I just felt what's wrong with my body that it can't do this naturally.

Screening tests (used to find people at higher chance of a health condition) and diagnostic tests (used to identify specific conditions) will be offered to both mother and baby. Further details of the screening tests and diagnosis tests offered during pregnancy and after the baby/ies birth are available at: gov.uk/government/publications/ screening-tests-for-you-and-your-baby/introduction

Further details of the UK-wide screening programme are available at: gov.uk/topic/ population-screening-programmes/fetal-anomaly and via the NICE guidelines at: nice. org.uk/guidance/qs22/chapter/quality-statement-10-screening-national-fetal-anomalyscreening-programmes

Non-invasive prenatal testing (NIPT) is a blood test that is sometimes offered, usually around 10 weeks' gestation in the private sector, and sent for analysis for chromosomal conditions. Most of the DNA comes from the mother/surrogate/pregnant woman but some is from the placenta. The test can also determine the sex of the fetus. In the NHS, the test is offered if a person has a higher detection rate for Down's syndrome, Edwards or Patau's syndrome as part of the fetal anomaly screening programme pathway (ARC, 2021). It is a reliable screening test for Down's syndrome but women should be aware that its accuracy for other conditions is variable. If women choose to access NIPT privately it is important they inform their midwife.

Subsequent antenatal appointments are available to women who have not given birth before and are generally offered 10 antenatal appointments, with most of these in the later stages of pregnancy. For those who have had a baby in the past and there have been no problems, they are usually offered seven routine appointments.

The number or frequency of appointments may change depending on individual risk factors, such as previous complications or multiple pregnancy. If the pregnant woman is at a low risk of pregnancy complications, they are usually seen by the midwife at a community venue or GP surgery. If there are other factors to take into account, such as the person is older, has had difficult pregnancies in the past or a history of chronic health conditions, then the maternity care will be shared between an obstetrician and the midwife. Many maternity services have specialist clinics for those expecting a multiple birth or with conditions such as diabetes. Table 5 (page 25) provides an overview from (NICE, 2021) of a generic schedule of appointments, which may vary from service to service, or to accommodate individual need.



The thing I found most shocking and that really surprised me was that Ine thing I found most shocking and that really surprised me was that I kept saying how anxious I was at every appointment, but there was never any mention of any kind of support around that.



Because of my journey, I never believed I would really have my baby alive and well in my arms.



As a same sex women I felt safe and understood when I was with the private fertility clinic. However once I transferred over in the system to public health services I felt I had gone from an individual to a number.



Having an HCP who has an understanding of their (LGBTQI+) journeys Having an HCP who has an understanding of their (LGBTQI+) journ is vital to ensure they feel it is a safe space for them to attend/ be supported in.



The change in standards of care I felt that my being from the LGBTQI+ community wasn't my whole identity in the private clinic, whereas when I transitioned to maternity care, my journey wasn't about my pregnancy, but my sexuality and my identity at every turn.

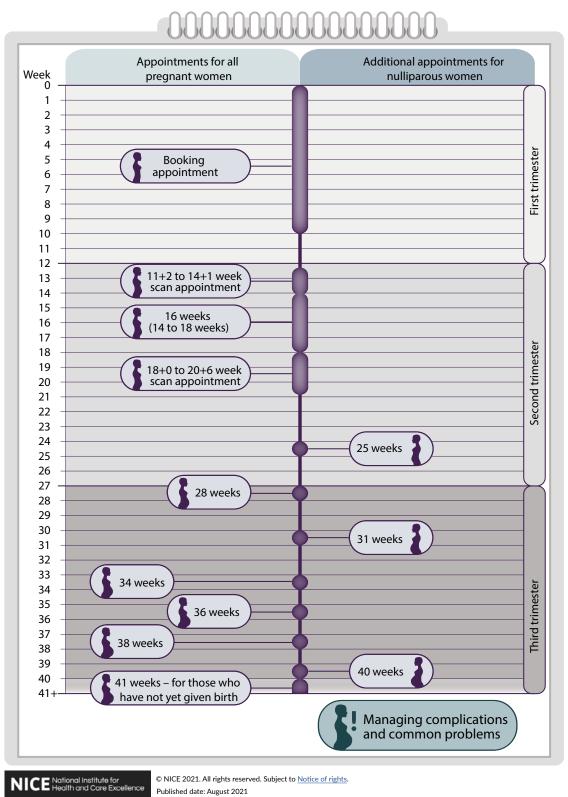


Table 5 – Overview of antenatal appointments

From: nice.org.uk/guidance/ng 201/resources/schedule-of-antenatal-appointment s-pdf-9204300829



Every time I saw the midwife there was a question about mental health. Every time I said I was feeling very anxious and worried and then we went on to the next question without any follow up. I realised it was just a tick box and she wasn't really interested.



I have never been given a leaflet on anxiety in an IVF pregnancy or any kind of education materials. No one signposted me to Fertility Network UK and the pregnancy group. It would be good to have had assessment with perinatal mental health team too.



For me, with my anxiety, I would happing have seen a similar hospital for whole nine months being monitored all the time. I said that at the hospital once. I said you're lucky I'm only here once a well-For me, with my anxiety, I would happily have been admitted to that at the hospital once, I said you're lucky I'm only here once a week. In addition to routine appointments, maternity services also offer a 24-hour triage for anyone with a concern about their pregnancy, such as a change in fetal movements. This offers families a 24-hour access to assessment and specialist input if they have concerns. These services are normally available after 16 weeks of pregnancy and before that time, any pregnancy complications are supported by EPC units and via the GP (see Section 3 on page 14).

Health improvements – antenatal care also provides an opportunity to consider the overall health of the pregnant woman and the family. It provides an ideal opportunity when families often want to improve their general health to support the fetus and improve their overall wellbeing as they plan to welcome a new baby. The NIHR report (Better Beginnings, 2017) identified key areas for improvement, where evidence demonstrated that managing long-term conditions for physical and mental health and addressing complex social needs reduces risks to health and improves pregnancy outcomes. Maternity care provides education and support around nutrition and physical activity, advice around smoking, alcohol and illicit drug use, as well as guidance about safety during pregnancy. Maternity services offer specific support around obesity, smoking cessation and drug and alcohol use, as well as identifying mental health and psychosocial concerns.

Preparation for parenthood or parent education classes are offered during the antenatal period. These may be face-to-face, online or provided by external groups, other than the midwife caring for the person. They are an opportunity to learn more about what is going to happen later in pregnancy, during labour and postnatally, and to meet other parents to be. Sessions include discussions about infant feeding choices, care of the newborn baby and the role of the health visitor in postnatal and ongoing care. These groups are also an opportunity to explore any concerns or anxieties that the person and/or their partner may have.

**Plans for birth** may be considered in early pregnancy but are not generally discussed until the last few months of pregnancy. Most areas provide a choice of giving birth in an obstetric unit, a midwife-led unit or at home. Some families may be concerned about the birth and want to discuss elective induction of labour or birth by caesarean section, which can be related to anxiety about the birth process, or the wellbeing of the baby, or other personal reasons including the fear and/or a reluctance about becoming parents.

NICE guidance (2021) supports women in making their own informed decision regarding mode of birth and recommends that individuals who feel that they wish to consider an elective birth (caesarean or induction of labour) should commence discussion with their midwife at the earliest opportunity to enable continued information sharing, ongoing dialogue and planning. **Table 6** provides some links to creating a birth plan.

#### Table 6 - Creating a birth plan

#### **Guidance on creating birth plans**

- How to make a birth plan
   nhs.uk/pregnancy/labour-and-birth/preparing-for-the-birth/how-to-make-a-birth-plan
- Making your birth plan tommys.org/pregnancy-information/giving-birth/making-your-birth-plan
- Writing a birth plan and deciding about pain relief nct.org.uk/pregnancy/dads-be/writing-birth-plan-and-deciding-about-pain-relief
- Care in surrogacy: guidance for the care of surrogates and intended parents in surrogate births in England and Wales www.gov.uk/government/publications/having-a-child-throughsurrogacy/care-in-surrogacy-guidance-for-the-care-of-surrogates-and-intended-parentsin-surrogate-births-in-england-and-wales
- Creating a surrogacy birth plan that works for everyone extraconceptions.com/creating-surrogacy-birth-plan-works-everyone

Surrogacy births may involve more people, which should be discussed as part of the birth plan. The intended parents may wish to be present at the birth, whilst supporting their surrogate (and she may be accompanied by her partner if she has one). Consent and decision making, as with all pregnancies, may result in some conflict, if different ideas and decisions are being considered, which is why a clear well-prepared plan is important.

Whilst most pregnancies resulting from assisted fertility treatment are uncomplicated, there is an increased chance of some pregnancy conditions being exacerbated, which may result in the recommendation for additional monitoring, treatment and/or earlier birth.

There is evidence that pregnancy following IVF and/or ICSI have increased incidence of low birth weight, pre-eclampsia and gestational hypertension, gestational diabetes and placenta praevia.

There is also evidence of specific risks associated with some fertility treatments, for example a prospective follow-up study carried out in 2010 showed that there was an increased risk (four times higher) of stillbirth in IVF/ICSI pregnancies compared to those in spontaneous pregnancies (ESHRE, 2010). A further study published in BJOG in 2018 found a similar associated increased risk.

Most complications will be detected as part of routine antenatal care, and any increased chance of complications largely falls below thresholds for enhanced screening and monitoring.

Midwives and obstetricians will discuss the benefits and risks with each individual family to help them make the best decision for their circumstances.

# Perinatal mental health and post-fertility/pregnancy care

Most people will, at some stage during their pregnancy, have some fear or anxiety, which is largely a normal reaction to a new situation. However, some people, including those who are pregnant following fertility treatment, will experience high to severe levels of fear and anxiety. This is particularly so during the first trimester of the pregnancy, where higher levels of anxieties may be experienced.

Pregnancies following long donation or surrogacy journeys may also lead to higher anxiety and complex emotions in pregnancy, particularly in relation to the role of, and relationships with, the donor or surrogate and these may require specialist ongoing support from a specialist counsellor.

Some people will have had counselling throughout the fertility journey, and this may continue through the pregnancy, however it is important to consider this at all stages during the pregnancy, and offer counselling as required.

Emotional support and/or counselling will help most women/partners/support networks though their maternity journey, however a small number will suffer an extreme form of fear of pregnancy/labour, known as tocophobia. It is recognised as a specific condition which causes distress, affects general wellbeing during pregnancy and may have a negative effect on the transition to parenthood. Non-pharmacological treatments are recommended and requires a referral to specialist mental health services. O'Connell at al., (2021) provides further information on some of the treatments available and support for this condition.

Around 20% of expectant and new mothers/surrogates/pregnant people will report mental health concerns during pregnancy or during the 12 months after giving birth. For most, the experience may include depression or anxiety disorders. These conditions can adversely affect the health of both the pregnant woman and family and should be recognised as early as possible. The risk of severe mental illness, such as postpartum psychosis, bipolar disorder or schizophrenia can be increased following birth, and requires urgent medical intervention. Further information on perinatal mental health can be found at: rcn.org.uk/clinical-topics/womens-health/pregnancy-and-disability/perinatal-mental-health and through the Maternal Mental Health Alliance at: maternalmentalhealthalliance.org

Those experiencing infertility have a high prevalence of depression, with four in 10 people experiencing long-term infertility expressing suicidal feelings (Sizer, 2022). This psychological impact can continue into pregnancy, where experience of early pregnancy may involve high levels of anxiety and difficulty in accepting the pregnancy. Their idea of pregnancy and parenthood may differ significantly from the actual experience, though an expectation of happiness and being grateful may mean parents are reluctant to disclose difficulties and ask for help.

# **Multiple births**

Midwives and other health care professionals should be aware that people and their partners (if applicable) and intended parents can be shocked and concerned about the risks with a multiple pregnancy alongside the practical, financial, and psychological aspects of having more than one child. These issues should be explored with the woman and her partner regularly, whilst responding with information, reassurance and the support required.

If a multiple pregnancy has already been diagnosed women should be booked with the specialist multiple births midwife at the first appointment (RCN, 2021a) and be cared for by a specialist multidisciplinary multiple births team. Chorionicity should be determined at the first scan and fetuses labelled to ensure consistency in identifying the same fetus in all future scans. Everyone should have the appropriate care pathway for their pregnancy explained to them and the ongoing monitoring in the pregnancy may depend on whether they have dichorionic or monochorionic twins (NICE, 2013).

Before screening tests are undertaken, a specialist multiple births midwife or screening co-ordinator should explain the reliability of the tests, whether the results will apply to the whole pregnancy or each fetus and the decisions the parents may have to make depending on the results. If a screening test gives a high-risk result, people may be referred to a fetal medicine centre for diagnostic tests. If one fetus is affected selective termination may be offered. Information and counselling should be offered by the specialist multiple births team and emotional and psychological support is essential for the rest of the pregnancy. ARC may also be able to provide further help and support (arc-uk.org).

All those with a multiple pregnancy should be cared for by the specialist midwives in the multiple births teams throughout their pregnancy to ensure consistency and continuity with high-quality care (RCN, 2021a).

# 5. The patient perspective

By the time of a positive pregnancy test result, patients who have used fertility services have already been on a journey through uncertainty, tests and treatment. Most are so accustomed to negative outcomes that it can be hard to believe they are finally pregnant.

After regular appointments at the fertility clinic, even the short wait for a viability ultrasound scan can be difficult and the joy of a successful outcome can be overtaken by uncertainty, which can lead to anxiety. Fertility patients are well-versed in the signs of early pregnancy, and they can become anxious if they do not experience everything they are anticipating. They have often lost confidence in their own bodies and moving from the safe confines of the fertility clinic to access maternity services can sometimes feel like being cast adrift.

Going into maternity care, where there may be long gaps between appointments, may leave them feeling isolated and uncertain as to who they should turn to, especially as they may have moved on from their fertility support networks. Bleeding in early pregnancy is common, and former fertility patients are not always told that bleeding is more likely after IVF or given information about the risk of miscarriage at different stages of pregnancy (See Miscarriage Association for further information miscarriageassociation.org.uk).

Paying for additional scans in the private sector between appointments with maternity services may be reassuring, but anxiety can quickly resurface after each scan. See section on reassurance scans on page 14.

Some health care professionals may underestimate the levels of anxiety experienced and may benefit from developing a better understanding of the psychological impact of infertility and treatment. The fear of miscarriage is heightened especially when getting pregnant again may seem an impossibility, and the much longed-for pregnancy is often overshadowed by fears and worries. Although women are asked about anxiety at maternity appointments, they do not always feel the impact on their mental health and wellbeing is taken sufficiently seriously (Fisher et al., 2007 and French et al., 2015).

Evidence from work with former fertility patients (Fertility Network UK, 2021) would suggest that what is needed is more reassurance, and they may feel the only way to access such additional support is to request consultant-led care, where they believe they will be more closely monitored. Pregnancies following IVF treatments are sometimes labelled high risk by merit of the IVF alone and although some may welcome this and the different care pathways offered, it is important to consider whether this can add to anxiety as it reinforces the message that this is not a normal pregnancy. As demonstrated in related evidence (Better Births, 2017) continuity of care in maternity services can make a real difference in reducing anxiety and stress.

With more patients now using donor eggs, sperm or embryos, it is important to be aware of the different issues that can arise during pregnancy. Implications counselling is part of donor treatment, but ongoing emotional support can be vital and charities such as the Donor Conception Network (dcnetwork.org) continue to provide support beyond pregnancy to donor families.

Single people or those from the LGBTQI+ community often find the system makes assumptions which do not apply to their individual situations, and the need to constantly explain themselves to health care professionals adds to their stresses and anxieties.

The shape of modern families is changing, and it is important to understand that single women and the LGBTQI+ community are not a homogenous group. Some will have accessed fertility support due to their family make-up, and others due to a diagnosis of infertility. It is paramount to recognise these differences early on and to provide relevant maternity support. Above all, LGBTQI+ people want to be treated no less favourably than their heterosexual counterparts, but with special recognition for their "family constellation" (Hammond, 2014).

When it comes to giving birth, individual choice is key. For some, an elective caesarean section helps to reduce concerns, while others would rather opt for a vaginal birth after a high-tech conception. Whatever the choice of birth, all the options should be explored before a woman makes her plan of care with support from midwives and obstetrician, if involved. It should also be stressed that the plan may change as the pregnancy progresses, subject to the woman's wishes and the health care professionals' expertise.

Good communication, kindness, empathy and understanding can transform the experience of maternity care for all women, and this is particularly true for women who have had fertility treatment. Signposting them to sources of support and information, whist enhancing the awareness of the journey among health care professionals should enable those expecting a child to have a positive maternity experience.

The RCN would like to thank Fertility Network UK, LGBT Mummies Tribe and TwoDads UK for the contribution of the patient perspective and quotes used throughout the publication.

#### Key messages from those pregnant through fertility treatment

#### Fertility nurses

- Remember that former fertility patients may need reassurance and support in early pregnancy. Offering ongoing support and advice in the gap before maternity care really does make a difference.
- Giving evidence-based information about bleeding in early pregnancy and talking about the possibility of anxiety in pregnancy is helpful.
- Refer women (and partners) to sources of relevant peer support, for example, Fertility Network UK for those who are pregnant after fertility issues.
- Giving more information on topics such as bleeding after IVF pregnancy and referring them to pregnancy support services for those who have experienced fertility problems would be helpful.

#### Early pregnancy care

- Remember that former fertility patients may need reassurance and support in early pregnancy. Offering ongoing support and advice in the gap before maternity care really does make a difference
- Be aware that fertility patients may not always disclose that they have had treatment but if they do, they may need extra reassurance, listening to them and giving a plan of action for any concerns could go a long way to improving the experience of early pregnancy care.
- Early pregnancy care health care professionals should all have a good understanding of the physical and psychological impact of fertility care.
- Giving more information on topics such as bleeding after IVF pregnancy and referring them to pregnancy support services for those who have experienced fertility problems would be helpful.

#### Midwives/maternity care

- All maternity staff should understand the impact of infertility and treatment and be aware of the raised anxieties women may experience during pregnancy and birth.
- If someone admits that they are feeling anxious, they should be offered support or referred to sources of support.
- Recognise that not everyone will wish to disclose their treatment history, but for those who
  do, views about antenatal testing and birth may be influenced by their fertility experiences. A
  reminder that all opinions and choices considered should be respected.
- Remembering that there are increased risks associated with some fertility treatments, for
  example of stillbirth, compared to those in spontaneous pregnancies when considering care
  planning including appropriate referral and follow-up appointments.

# 6. Conclusions

A good place to begin is with "Congratulations...tell me about your journey?"

And "If you don't know, don't assume but do ask me."

The transition from fertility care, though early pregnancy care and into maternity care is a joyous and stressful time for pregnant women, their partners, intended parents, families and support networks.

The challenge for health care professionals who work in these different arenas of practice is to ensure there is good continuity of care from the time a pregnancy is confirmed to the woman engaging with the midwife and the maternity services and throughout the journey of care. Some of the key elements of this journey are detailed below.

Local communication between fertility, early pregnancy and maternity care. The evidence from patient groups and organisations supporting specific groups, such as LGBTQIA+ and those engaged in surrogacy arrangements is that this journey is not always smooth, they are often left feeling abandoned by one service and confused about how to proceed. Improved communication routes between services could lessen the risks of women feeling isolated and not knowing who to contact, if they have concerns.

Health care professionals need to understand the challenges faced by those accessing services, and the concerned expressed about having to repeat their experiences to everyone they meet. Joint access to record systems could enable continuity of care, where different professionals are involved in the care provision.

# **Project team recommendations**

**Written contact information**. Fertility units should offer all those going forward towards maternity care contact details of the nearest early pregnancy care unit and maternity services to their home, so they are aware of where and how to access care.

**Co-produced and shared policies**. Local services need to jointly create clear policies considering which team should be responsible for care in which circumstances, and how joint working can enhance the care pathways for all concerned. This information should be available to access by all health care professionals and those accessing care.

**Formal links between the three services**. There is a need to establish more formal links between fertility care, early pregnancy care and maternity care services. This would enable better understanding of each other's services and could lead to improving the gap that women currently experience.

**Commissioning shared service provision**. There is also a need to lobby for better commissioning of services to help reduce the gap that may exist between fertility care and maternity care.

**Reassurance scans**. The use of biomedical services and the reasons for utilising technology in pregnancy via commercial ultrasound providers is understudied and there is scope for research into the psychological impact on service users, whether it provides false reassurance about the health and wellbeing of the developing embryo. The project team recommends that further research is required to enhance available evidence about the use, value and safety of reassurance scans.

**Pathways of care**. This guideline is primarily designed to support nursing and midwifery practice but can be used by all health care professionals across the three services discussed.

Current practice and access to evidence-based care means there are a range of pathways and algorithms available to inform professionals and service users about the options for care. The project team recommends that care pathways should be easier to understand, accessible and available to all, to enable more informed decision making to enhance the quality of the care they receive throughout their journey.

Consideration of all the differing family configurations, and not making assumptions about the person. It is always best to ask about the journey, and plan care accordingly. A number of potentially useful contacts are listed at the end of this document, and it is always valuable to find out what is available locally. The project team recommends that further work is needed to meet the specific needs of LQBTQI+ communities and those seeking surrogacy arrangements.

In conclusion, it is important that all health care professionals consider the journey the woman and their partner/support network have been though to achieve a successful pregnancy, and empower them to enjoy that journey, feel able to ask questions, and seek help when they need it.

# References and further reading

Allan H T, Odelius A, van den Akker O, Mounce G, Culley L, Symon A (2019) An integrative literature review of psychosocial factors in the transition to parenthood following non-donor assisted reproduction in comparison with spontaneously conceiving couples. *Human Fertility* Jul 22:1-18. Available at: <a href="mailto:pubmed.ncbi.nlm.nih.gov/31328586">pubmed.ncbi.nlm.nih.gov/31328586</a> (Accessed 28 June 2022)

Allan H T, Mounce G, van den Akker O, Culley L (2019) Transition to parenthood after successful IVF: the effects of infertility and IVF on previously infertile couples' experiences of early parenthood. *Health*, 25(4), 434-453. Available at: pubmed.ncbi.nlm. nih.gov/31793806 (Accessed 28 June 2022)

Ali SB, Jeelall Y, Pennell CE, et al. (2018) The role of immunological testing and intervention in reproductive medicine: A fertile collaboration? *Am J Reprod Immunol*. 2018 Mar;79(3). PMID: 29154465. Available at: pubmed.ncbi.nlm.nih.gov/29154465 (Accessed 28 June 2022)

Abortion Statistics for England and Wales (2020) (online). Available at: gov.uk/government/statistics/abortion-statistics-for-england-and-wales-2020/abortion-statistics-england-and-wales-2020 (Accessed 28 June 2022)

Antenatal results and choices (ARC) 2021: *Non-Invasive Prenatal Testing* (online). Available at: arc-uk.org/tests-explained/non-invasive-prenatal-testing-nipt (Accessed 28 June 2022)

Bay B, et al. (2018) Risk of Stillbirth in low-risk Singleton Term Pregnancies following Fertility Treatment: a national cohort study. *International journal of obstetrics and gynaecology* (BJOG) Available at: <a href="mailto:pubmed.ncbi.nlm.nih.gov/30341984">pubmed.ncbi.nlm.nih.gov/30341984</a> (Accessed 28 June 2022)

Care Quality Commission (2021) Adult trans care pathway: What CQC expects from maternity and gynaecology services (online). Available at: cqc.org.uk/guidance-providers/healthcare/adult-trans-care-pathway-what-cqc-expects-maternity-gynaecology-0 (Accessed 28 June 2022)

DHSE (2018) *Having a child through surrogacy* (online). Available at: **gov.uk/government/publications/having-a-child-through-surrogacy** (Accessed 28 June 2022)

England and Wales High Court Decisions (2019) *TT, R (on the application of) v The Registrar General for England and Wales [2019] EWHC 2384 (Fam).* Available at: bailii.org/ew/cases/EWHC/Fam/2019/2384.html (Accessed 28 June 2022)

European Society of Human Reproduction and Embryology (ESHRE) (2019) *Guideline on Ovarian Stimulation for IVF/ICSI* (online). Available at: eshre.eu/Guidelines-and-Legal/Guidelines/Ovarian-Stimulation-in-IVF-ICSI (Accessed 28 June 2022)

Fertility Network UK (2021) Audit on NHS funding in England (online). Available at: fertilitynetworkuk.org/access-support/nhs-funding/england (Accessed 28 June 2022)

Fisher JA, et al. (2007) Antenatal Mood and Fetal Attachment after Assisted Conception, *Fertility and Sterility Journal* (online). Available at: doi.org/10.1016/j. fertnstert.2007.05.022 (Accessed 28 June 2022)

French L, et al. (2015) Antenatal Needs of couples following fertility treatment: a qualitative study in primary care, *British Journal of General Practice* 2015; 65 (638): e570-e577. Available at: bjgp.org/content/65/638/e570 (Accessed 28 June 2022)

Genetic Alliance UK (2022) Preimplantation Genetic Diagnosis: information for patients (online). Available at: geneticalliance.org.uk/information/service-and-testing/preimplantation-genetic-diagnosis-information-for-patients (Accessed 28 June 2022)

Gov.uk (2021) Writing about Ethnicity (online). Available at: ethnicity-facts-figures.service. gov.uk/style-guide/writing-about-ethnicity#bame-and-bme (Accessed 28 June 2022)

Guy's and St. Thomas' NHS Foundation Trust (2022) *Pre-implantation Genetic Testing (PGT-M/SR)* (online). Available at: guysandstthomas.nhs.uk/resources/patient-information/genetics/Pre-implantation%20Genetic%20Diagnosis%20web.pdf (Accessed 28 June 2022)

Homer H (2019) Preimplantation Genetic Testing for Aneuploidy (PGT-A): The biology, the technology and the clinical outcomes. *Aust N Z J Obstet Gynaecol*. 2019 Apr;59(2):317-324. doi: 10.1111/ajo.12960. Epub 2019 Feb 27. PMID: 30811595. Available at: **pubmed.ncbi.nlm.nih.gov/30811595** (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2019) *Code of Practice 9th Edition*, London: HFEA. Available at: portal.hfea.gov.uk/knowledge-base/read-the-code-of-practice (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2020a) Fertility Treatment 2018: trends and figures (online). Available at: hfea.gov.uk/about-us/publications/research-and-data/fertility-treatment-2018-trends-and-figures (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2020b) *Treatment Add-ons with Limited Evidence* (online). Available at: **hfea.gov.uk/treatments/treatment-add-ons** (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2020c) *Treatments* (online). Available at: hfea.gov.uk/treatments/explore-all-treatments (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2021a) Fertility Treatment 2019: trends and figures (online). Available at: hfea.gov.uk/about-us/publications/research-and-data/fertility-treatment-2019-trends-and-figures (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2021b) Fertility Treatment Less Successful for Ethnic Minority Patients, new figures reveal (online). Available at: hfea.gov.uk/about-us/news-and-press-releases/2021-news-and-press-releases/fertility-treatment-less-successful-for-ethnic-minority-patients-new-figures-reveal (Accessed 28 June 2022)

Human Fertilisation and Embryology Authority (2022) *UK Multiple Birth Statistics for IVF and DI Fertility Treatment* (online). Available at: hfea.gov.uk/about-us/publications/research-and-data/multiple-births-in-fertility-treatment-2019 (Accessed 28 June 2022)

Lundin K, Park H (2020) Time-lapse Technology for Embryo Culture and Selection. *Ups J Med Sci.* 2020 May;125(2):77-84. PMID: 32096675. Available at: pubmed.ncbi.nlm.nih. gov/32096675 (Accessed 28 June 2022)

Maxwell SM, Grifo JA, Should Every Embryo Undergo Preimplantation Genetic Testing for Aneuploidy? A review of the modern approach to in vitro fertilization. *Best Pract Res Clin Obstet Gynaecol*. 2018 Nov; 53:38-47. Available at: pubmed.ncbi.nlm.nih. gov/30146380 (Accessed 28 June 2022)

Nana, et al. (2021) Termination of Wanted Pregnancy and Suicidal Ideation in Hyperemesis Gravidarum: A mixed methods study (online). Available at: journals. sagepub.com/doi/full/10.1177/1753495X211040926 (Accessed 28 June 2022)

National Institute for Health and Care Excellence (2013) *Quality Standard 46, Multiple Pregnancy: twin and triplet pregnancies*, London: NICE. Available at: nice.org.uk/guidance/qs46 (Accessed 28 June 2022)

National Institute for Health and Care Excellence (2017) Fertility Problems: assessment and treatment, clinical guideline [CG156] (online). Available at: nice.org.uk/guidance/cg156 (Accessed 28 June 2022)

National Institute for Health and Care Excellence (2019) *NICE Miscarriage and Ectopic Pregnancy Care* (online). Available at: nice.org.uk/guidance/ng126 (Accessed 28 June 2022)

National Institute for Health and Care Excellence (2021) *NICE Clinical Guideline NG 201* Antenatal Care (online). Available at: nice.org.uk/guidance/ng201 (Accessed 28 June 2022)

National Institute for Health Research (2017) Better Beginnings: Improving Health for Pregnancy (online). Available at: uhs.nhs.uk/Media/SUHTInternet/Services/Maternity/Better-beginnings-Improving-health-for-pregnancy.pdf (Accessed 28 June 2022)

NHS EI (2017) Better Births (online). Available at: england.nhs.uk/wp-content/uploads/2016/02/national-maternity-review-report.pdf (Accessed 28 June 2022)

NHS (2021) *IVF Availability* (online). Available at: nhs.uk/conditions/ivf/availability (Accessed 28 June 2022)

Nursing and Midwifery Council (2018) The Code: Professional Standards of Practice and Behaviour for Nurses, Midwives and Nursing associates (online). Available at: nmc.org.uk/standards/code (Accessed 28 June 2022)

O'Connell, et al. (2021) Interventions for Fear of Childbirth including Tocophobia Cochrane Database Syst Rev. 2021 Jul 7;7(7):CD013321. doi: 10.1002/14651858.CD013321. pub2. Available at: pubmed.ncbi.nlm.nih.gov/34231203 (Accessed 28 June 2022)

Roberts J, et al. (2015) Why do Women seek Ultrasound Scans from Commercial Providers during Pregnancy? (online). Available at: onlinelibrary.wiley.com/doi/full/10.1111/1467-9566.12218 (Accessed 28 June 2022)

Royal College of Nursing (2020a) Fertility Provision for the UK, London: RCM. Available at: rcn.org.uk/Professional-Development/publications/rcn-fertility-provision-uk-pub-009494 (Accessed 29 June 2022)

Royal College of Nursing (2020b) Fertility Care and Emotional Wellbeing, London: RCN. Available at: rcn.org.uk/professional-development/publications/pub-007770 (Accessed 28 June 2022)

Royal College of Nursing (2020c) Fair Care for Trans and Non-binary People, London: RCN. Available at: rcn.org.uk/professional-development/publications/rcn-fair-care-trans-non-binary-uk-pub-009430 (Accessed 28 June 2022)

Royal College of Nursing (2020d) *Genital Examination in Women*, London: RCN. Available at: rcn.org.uk/professional-development/publications/rcn-genital-examination-in-women-pub007961 (Accessed 28 June 2022)

Royal College of Nursing (2020e) *Woman's Health Pocket Guides*, London: RCN. Available at: rcn.org.uk/professional-development/publications/rcn-womens-health-cards-uk-pub-009289 (Accessed 28 June 2022)

Royal College of Nursing (2021a) *Multiple Births Midwife Standard*, London: RCN. Available at: rcn.org.uk/professional-development/publications/rcn-multiple-births-midwife-standard-uk-pub-009564 (Accessed 28 June 2022)

Royal College of Nursing (2021b) Fertility Preservation, London: RCN. Available at: rcn.org.uk/professional-development/publications/rcn-fertility-preservation-uk-pub-009531 (Accessed 28 June 2022)

Royal College of Nursing (2022) *Promoting Menstrual Wellbeing*, London: RCN. Available at: rcn.org.uk/publications

Royal College of Obstetricians and Gynaecologists (2011) *Green Top Guideline number 17, Recurrent Miscarriage, Investigation and Treatment for Couples* (online). Available at: **rcog. org.uk/en/guidelines-research-services/guidelines/gtg17** (Accessed 28 June 2022)

Royal College of Obstetricians and Gynaecologists (2013) Fertility: Assessment and Treatment for People with Fertility Problems, National Collaborating Centre for Women's and Children's Health, Commissioned by the National Institute for Health and Clinical Excellence. Available at: <a href="mailto:pubmed.ncbi.nlm.nih.gov/25340218">pubmed.ncbi.nlm.nih.gov/25340218</a> (Accessed 26 July 2022)

Royal College of Obstetricians and Gynaecologists (2015) *Ultrasound from Conception to* 10+0 Weeks of Gestation (Scientific Impact Paper No. 49). Available at: rcog.org.uk/en/guidelines-research-services/guidelines/sip49 (Accessed 28 June 2022)

Royal College of Obstetricians and Gynaecologists (2016) *Green Top Guideline number* 69, The Management of Nausea and Vomiting in Pregnancy (online). Available at: rcog.org. uk/globalassets/documents/guidelines/green-top-guidelines/gtg69-hyperemesis.pdf (Accessed 28 June 2022)

Royal College of Obstetricians and Gynaecologists (2022) RCOG Calls for Urgent Research into Miscarriage Rates (online). Available at: rcog.org.uk/news/rcog-calls-for-urgent-research-into-miscarriage-rates (Accessed 28 June 2022)

Sizer A (2022) Infertility and Perinatal Mental Health (online). Available at: maternalmentalhealthalliance.org/news/infertility-and-perinatal-mental-health (Accessed 28 June 2022)

Smith GCS (2020) A Critical Review of the Cochrane Meta-analysis of Routine Late Pregnancy Ultrasound. *British Journal of Obstetrics and Gynaecology*. Available at: obgyn. onlinelibrary.wiley.com/doi/epdf/10.1111/1471-0528.16386 (Accessed 28 June 2022)

The Centre for Public Impact (2019) The UK Human Fertilisation and Embryology Authority's One at a Time campaign (online). Available at: centreforpublicimpact.org/case-study/uk-human-fertilisation-embryology-authoritys-one-time-campaign (Accessed 28 June 2022)

The Lancet (2021) Editorial, volume 397, issue 10285. Miscarriage: Worldwide Reform if Care is Needed. Available at: thelancet.com/journals/lancet/article/PIIS0140-6736(21)00954-5/fulltext (Accessed 28 June 2022)

Thomas GM, et al. (2017) Ultrasound as a Technology of Reassurance? How Pregnant Women and Health Care Professionals Articulate Ultrasound Reassurance and its Limitations. Available at: onlinelibrary.wiley.com/doi/full/10.1111/1467-9566.12554 (Accessed 28 June 2022)

Zegers-Hochschild F, Adamson GD, deMouzon J, et al. (2009) International Committee for Monitoring Assisted Reproductive Technology (ICMART) and the World Health Organization (WHO) revised glossary of ART terminology. *Fertil Steril*. 2009 Nov;92(5):1520-4. PMID: 19828144. Available at: <a href="mailto:pubmed.ncbi.nlm.nih.gov/19828144">pubmed.ncbi.nlm.nih.gov/19828144</a> (Accessed 28 June 2022)

Wisborg K, et al. (2010) IVF and Stillbirth: a Prospective Follow-up Study. *Human Reproduction*, 2010 Feb; 25(5):1312-1316. Available at: academic.oup.com/humrep/article/25/5/1312/638428 (Accessed 28 June 2022)

# Useful resources and contacts

- Antenatal Results and Choices arc-uk.org
- Association of Early Pregnancy Units aepu.org.uk
- · British Infertility Counselling Association bica.net
- Best Beginnings bestbeginnings.org.uk
- BPAS British Pregnancy Advisory Service bpas.org
- · Chana fertility support for the Jewish community chana.org.uk
- · Donor Conception Network dcnetwork.org
- Fertility Network UK fertilitynetworkuk.org and fertilitynetworkuk.org/pregnancyafter-infertility-group
- LGBT Foundation lgbt.foundation
- LGBT Mummies Tribe contact@thelgbtmummiestribe.com
- Endometriosis UK endometriosis-uk.org
- Maternal Mental Health Alliance maternalmentalhealthalliance.org
- Marie Stopes International msichoices.org.uk/abortion-services
- Mermaids mermaidsuk.org.uk/young-people/resources-for-young-people
- Miscarriage Association miscarriageassociation.org.uk
- My Surrogacy Journey mysurrogacyjourney.com
- NHS Race and Health Observatory nhsrho.org/what-we-do/improving-healthoutcomes
- RCN Fertility Nursing Forum resources rcn.org.uk/get-involved/forums/fertilitynursing-forum and rcn.org.uk/library/subject-guides/fertility-nursing
- RCN Women's Health Clinical Pages rcn.org.uk/clinical-topics/womens-health and rcn.org.uk/clinical-topics/womens-health/publications
- TwoDads UK Surrogacy Support twodadsuk.com
- HFEA Patient Group hfea.gov.uk/about-us/working-with-others
- The Ectopic Trust ectopic.org.uk
- Verity (Polycystic Ovary Syndrome support group) verity-pcos.org.uk

# Glossary of terms

Antenatal care: Care provided by health care professionals when a woman is pregnant

**Anti-oestrogens**: Also known as estrogen antagonists or estrogen blockers, are a class of drugs which prevent estrogens like estradiol from mediating their biological effects in the body

Azoospermia: is the medical term used when there are no sperm in the ejaculate

**Assisted hatching**: An in vitro procedure in which the zona pellucida of an embryo is either thinned or perforated by chemical, mechanical or laser methods to assist separation of the blastocyst (Zegers-Hochschild et al., 2009)

Assisted reproduction: The collective name for treatments designed to lead to conception by means other than sexual intercourse. They include intrauterine insemination (IUI), in vitro fertilisation (IVF), intracytoplasmic sperm injection (ICSI) and donor insemination (DI). The term 'assisted reproduction technology' (ART) is the term sometimes used to collectively describe these procedures and interventions (Zegers-Hochschild et al., 2009)

**Blastocyst**: An embryo, five or six days after fertilisation, with an inner cell mass, outer layer of trophectoderm and a fluid-filled blastocoele cavity (Zegers-Hochschild et al., 2009)

**Couple**: Two people in a partnership, irrespective of gender and sexual orientation, who wish to have a baby but are having difficulty conceiving and are having investigations and possible treatment for infertility

**Donor insemination**: The placement of donor sperm into the vagina, cervix or womb.

**Ectopic pregnancy**: A pregnancy which results when a fertilised egg implants itself outside of the uterus, usually in one of the fallopian tubes. This can be life threatening and needs urgent care.

**Embryo**: The product of the division of the zygote to the end of the embryonic stage, eight weeks after fertilization (Zegers-Hochschild et al., 2009)

**Embryo transfer**: The procedure in which one or more embryos are placed in the uterus or Fallopian tube (Zegers-Hochschild et al., 2009)

**Fertilisation**: The penetration of the ovum by the spermatozoon and combination of their genetic material resulting in the formation of a zygote. (Zegers-Hochschild et al., 2009)

Follicle: A small sac of fluid in the ovaries that contains a developing egg

**Full cycle**: This term is used to define a full IVF treatment, which should include one episode of ovarian stimulation and the transfer of any resultant fresh and frozen embryo(s)

**Gonadotrophins**: Hormones synthesised and released by the anterior pituitary, which act on the gonads (testes and ovaries) to increase the production of sex hormones and stimulate production of either sperm or ova. Follicle stimulating hormone (FSH) and luteinizing hormones (LH) are the main gonadotropins

**Hyperemesis gravidarum**: severe nausea and vomiting during pregnancy, requiring medical intervention, including medications and intravenous fluids to manage symptom control

Intrauterine insemination (IUI): Clinical delivery of sperm into the uterine cavity

**In vitro fertilisation (IVF)**: A technique whereby eggs are collected from a woman and fertilised with a man's sperm outside the body. Usually, one or two resulting embryos are then transferred to the womb with the aim of starting a pregnancy

**Intracytoplasmic sperm injection (ICSI)**: A variation of in vitro fertilisation in which a single sperm is injected into the inner cellular structure of an egg

**LGBTQI+**: Lesbian, Gay, Bisexual, Transgender, Queer/Questioning (one's sexual or gender identity), Intersex, and asexual/aromantic/agender

Medical abortion: method used to end a pregnancy using medication

**Oocyte donation (OD):** The process by which a fertile woman donates her eggs to be used in the treatment of others or for research

**Ovarian Hyper-Stimulation Syndrome (OHSS)**: An exaggerated systemic response to ovarian stimulation characterised by a wide spectrum of clinical and laboratory manifestations. It is classified as mild, moderate or severe according to the degree of abdominal distention, ovarian enlargement and respiratory, haemodynamic and metabolic complications (Zegers-Hochschild et al., 2009)

**Ovulation induction**: The stimulation of the ovary to achieve growth and development of immature ovarian follicles to reverse anovulation or oligo-ovulation

**Ovarian stimulation**: A treatment used before other assisted conception procedures to both induce ovulation and to increase the number of eggs released

**Oocyte**: is a female gametocyte or germ cell involved in reproduction. In other words, it is an immature egg (an immature ovum)

**Polycystic ovarian syndrome (PCOS)**: A condition in which the ovaries produce an abnormal amount of androgens, male sex hormones that are usually present in women in small amounts. The name polycystic ovary syndrome describes the numerous small cysts (fluid-filled sacs) that form in the ovaries

Postnatal care: the care proved for the first six-eight weeks after the baby has been born

**Pre-menopause**: When there are no symptoms of perimenopause or menopause. You still have periods — whether they're regular or irregular — and are considered to be in your reproductive years

**Preimplantation genetic testing for aneuploidy (PGTA)**: A genetic test performed on embryos created through IVF to screen for chromosomal abnormalities

**Semen**: also known as seminal fluid, is an organic fluid created to contain spermatozoa. It is secreted by the gonads (sexual glands) of male and can fertilize the female ovum

**Surgical abortion**: a procedure to end a pregnancy involving an operation either awake or asleep. There are two types of surgical abortion: vacuum aspiration and dilatation and evacuation

**Tocophobia**: a rare and extreme fear of pregnancy and or birth

#### **RCN** quality assurance

#### **Publication**

This is an RCN practice guidance. Practice guidance are evidence-based consensus documents, used to guide decisions about appropriate care of an individual, family or population in a specific context.

#### Description

Pregnancy following fertility treatment can be an exciting, challenging and anxious time for expectant parents. This guidance is primarily to raise awareness of possible pathways of care for women and others (and their partners/support networks) as they travel through fertility treatment and pregnancy, and how they can best be supported by the health care professionals they encounter along their journey.

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#### The Nine Quality Standards

This publication has met the nine quality standards of the quality framework for RCN professional publications. For more information, or to request further details on how the nine quality standards have been met in relation to this particular professional publication, please contact **publications.feedback@rcn.org.uk** 

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