Improving Access to Contraception

Extended community pharmacy services would improve quality and outcomes

Summary and Recommendations

- Ensuring that every child is wanted and born into an environment with the emotional and material
 resources needed to care for her or him well is a vital public health goal. The maxim 'children by
 choice, not chance' is as relevant today as it was during the genesis of the UK's family planning
 services in the 1920s. Contraceptives ranging from condoms and 'the pill' to intrauterine devices
 (IUDs) and long acting injectable and implantable products enable women to control their fertility and
 improve their lives, as well as those of their children and partners.
- Minimising the harm caused by sexually transmitted infections (STIs) like syphilis, gonorrhoea, chlamydia and genital herpes is another important public health goal. Britain can claim success in preventing and treating HIV and STIs such as syphilis via the NHS. Citizens of all the UK nations enjoy free access to a wide range of high quality sexual and reproductive health (SRH) services.
- This heritage is valuable. However, until recently rates of unintended conceptions to British teenagers were well above the western European average. Despite improvements since 2005, the UK's teenage conception rate is still twice that reported in nations like Germany and Sweden. There are also concerns that women in their later 20s and over have been relatively neglected, and that their access to some clinic-based SRH services is declining. Around 80 per cent of women obtain their contraception from primary care.
- The use of long acting reversible contraceptives (LARCs) such as IUDs is lower in the UK than in countries like France. Despite high levels of satisfaction with GP care – original findings presented in this report indicate that up to two thirds of women feel that their GPs and practice nurses give them the information they need to make good contraception choices – this is partly because of limited GP training and, the RCGP has claimed, insufficient payments for LARC administration. Such factors can distort uptake patterns.
- LARCs, including injectable and implantable options as well as IUDs, are more effective and for some women more appropriate than either combined oral contraceptive or progestogen only pills (PoPs or mini-pills), as well as barrier methods such as condoms. The latter can have a 20 per cent annual failure rate.
- It has been widely reported that in England the 2012 Health and Social Care Act (HSCA) fragmented service commissioning and generated financial threats linked to the shift of 'public health' to Local Authorities, so undermining the confidence of SRH care providers. Against a background in which births to women in their 40s have doubled since the start of the 1990s this may have impaired the capacity of the NHS and partner agencies to respond strategically to changing reproductive and sexual health needs. Both specialist SRH services and the provision of contraception via primary care professionals like GPs are in large part funded via limited Local Authority public health budgets. In the SRH context public health spending is set to fall by 5 per cent in 2017/18 as against 2016/17.

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- In addition to increasing LARC uptake, potential opportunities for enhancing contraception in the UK countries include optimising the contribution of emergency contraception (including both hormonal methods and IUD use) to the minimisation of unintended conception rates and ensuring that access to contraception and SRH care is as convenient as possible for women at every life stage. The new evidence offered here shows that in England one woman in seven strongly believes that existing provisions could be made more convenient. Dissatisfied service and contraceptive product users are at raised risk of unwanted conceptions.
- Community pharmacists and on line services already provide emergency hormonal contraception (EHC). Over a half of the female population agrees with the statement 'women should be able to obtain items like The Pill directly from their pharmacist, rather than after seeing a doctor or a nurse if that is what they prefer'.
- Extending the role of community pharmacists in prescribing and administering oral contraceptive pills (OCPs) and LARCs (when necessary via direct referral to SRH clinics) could safely and affordably improve women's access to contraception and NHS sexual health care. It would also release GP and practice staff time to focus on services they are uniquely able to provide. In American States like California pharmacists are already prescribing OCPs and other forms of contraception.
- In the UK countries multiple pilot schemes have demonstrated that community pharmacy based NHS services can enhance women's access to contraception and other forms of SRH care. Evidence from less advantaged communities such as Lambeth and Southwark in South London confirms benefits for young women at raised risk of unintended conceptions. Well-designed, a national programme based on the results such projects could also provide greater convenience for women with established contraception preferences and address unmet needs amongst women in their 30s and over.
- For community pharmacy contributions to contraception and other forms of clinical care to be extended, awareness of the health and economic benefits this could generate for NHS users and the wider community needs to be raised. One 'next step' towards achieving increased SRH primary care capacity outside the GP practice setting might be for the Royal Pharmaceutical Society, with other pharmacy organisations and related bodies, to undertake a review of the opportunities available and conduct an appropriately structured consultation. This may generate a strengthened consensus on how an optimally effective nationwide community pharmacy service should be established.
- No single group can assure SRH service excellence. Achieving the best affordable outcomes will
 require complementary efforts aimed at meeting service users' needs on the parts of all those
 involved. Key groups include hospital based medical consultants and their nursing and specialist
 pharmacist colleagues, GPs and practice nurses, and other NHS, LA and voluntary organisation
 personnel. The latter include health visitors, midwives and social workers.
- To strengthen their role as health professionals, community pharmacists must demonstrate their ability to work closely with service users and other care providers. This may in part be achieved through greater involvement in new service models such as primary care home based provision. Pharmacy should also seek to communicate to decision makers why improving access to contraception and other forms of sexual and reproductive health care is central to protecting the health of the nation.

Introduction

Records from the early 1800s onwards show that when communities start to enjoy a standard of living above that of simple subsistence, and the women and men living in them gain access to improving diets and better education, death rates begin to fall. This reduction in mortality happens first amongst young adults, and later amongst children and then infants. Subsequently, as people become more confident that their babies will survive, birth rates decline (Bongaarts, 2009). In Britain, for example, average life expectancy at birth was still under 50 years in 1900, despite the many achievements of the Victorian era. The birth rate was then about 30 per 1000 population (Roser, 2017). Today, by contrast, the equivalent figures are about 80 years, and 12 per 1000 (CIA, 2017).

Similar developments have taken place in countries ranging from France and Sweden to China and Brazil (Roser, 2017), albeit those nations that commenced their demographic transitions more recently – that is, since the 1940s – have undergone faster changes than those which started their mortality and fertility reduction processes in the nineteenth century. Figure 1 illustrates the fact that in the period since the creation of the NHS the number of babies born to the average British woman has fallen from a peak of around 3 at the start of the 1960s to about 1.8 today (ONS, 2016a). In the 1860s, by comparison, the typical UK woman had 6 children over the course of her reproductive life (Pooley, 2013).

Modern contraceptives like 'the pill' and longer acting alternatives such as IUDs and progestogen implants and injections have helped to facilitate birth rate declines and linked social developments since the end of the 1950s. They have aided the achievement of greater equality between men and women in the educational, domestic and work environments. Yet globally there are still examples of countries with birth rates that are higher than they were in the United Kingdom in the 1800s, when the population was expanding despite the then still heavy burden of infant and child deaths due to infectious diseases. In nations like Niger, Somalia and Uganda, for instance, the number of babies born annually is currently some 40-45 per 1000 people (CIA, 2017).

At the other end of the spectrum the birth rate in Germany and Japan is now in the order of 8 per 1000 population (CIA, 2017). Such stark differences underline the fact that although the existence of effective contraceptive techniques is important, technologies alone cannot guarantee desired outcomes. A wide range of additional social and economic factors influence women's wishes and freedoms to help optimise individual and population health by ensuring that every child born is positively wanted and can be cared for with adequate resources.

The regulation of fertility and sexual activity has throughout history been a controversial topic. This was not least

because of religious concerns that have in part reflected political interests in maintaining population sizes and the capacity of rulers to raise armies or deploy workforces. Men's desires to assure the paternity of their children and control the behaviour of females in their families have also influenced attitudes towards contraception.

Figure 1 UK fertility 1940-2015

Source: ONS 2016a Live births Number (thousands 1,000 800 by boom 600 400 200 Abortion Act World War II (1967) 0 TFR Total fertility rate (number of children per woman) 3.0 2.5 2.0 1.5 1.0 0.5 0.0 1950 1970 1940 1960 1980 1990 2000 2010

In the UK a significant proportion of women had limited access to 'birth control' until the 1970s (BBC, 2011), while in Japan – where medical authorities at one stage tended to favour offering abortions to women faced with unwanted conceptions – 'the pill' was not licensed until 1999 (The Japan Times, 2009). Even in Britain today some women's choices relating to contraception may be restricted because of cultural factors and/or local service limitations. For instance, when husbands believe that their wives should not use contraception the women involved might feel they need access to 'invisible' long acting methods, rather than products that need to be taken daily. But such options may not be consistently available to those most in need of them.

This report explores issues relating to access to contraception and allied forms of sexual health and social care in England and the UK more widely, with special reference to optimising the use of the full range of contraceptive techniques by women as they progress from the start of their sexual lives in their teens (the average age of first sexual intercourse for females in Britain is 16 years – FPA 2011a; NATSAL, 2013) and twenties and on through their thirties, forties and fifties.

The NHS and voluntary sector services that provide 'birth control' and help to maintain sexual and reproductive health in this country are amongst the most comprehensive in the world. Yet the available data indicate that, UK-wide, there are still around 200,000 conceptions a year (out of a total of around a million) that end in an abortion. Of the remainder approaching 300,000 conceptions are not intended, even if the great majority of babies born are eventually welcomed.

Despite recent advances, reported rates of unplanned pregnancy amongst teenage women are still higher in this country than in other Western European settings. The annual birth rate amongst the female population aged 15-17 years was just under 7 per 1000 in 2014. This is still closer to the rates presently observed in Eastern Europe than those recorded in Western European nations, where teenage pregnancies are typically about 50 per cent less

Box 1. The Evolution of Family Planning Services

Contraception has a long history. Yet the emergence of legally constituted birth control services in countries like the UK and the US dates back little more than 100 years. In the 1800s the law was on a variety of occasions used to prevent the distribution of information about how to prevent unwanted conceptions. But Malthusian thinking and (albeit poorly understood) concerns about threats to the genetic fitness of the population began in Britain to generate favourable attitudes towards contraception and 'family planning' in the final decades of Victoria's reign (Ledbetter, 1977).

Marie Stopes famously founded the UK's first family planning clinic in Holloway in London 1921, shortly after the end of the First World War. She had gained a degree and subsequently a Doctorate from University College London at the start of the twentieth century, and published an influential guide to birth control called *Married Love* in 1918. Stopes opposed abortion but at the same time espoused, perhaps for political reasons, what were at that time widely held eugenic views. She argued that the constructive use of contraceptive techniques would allow not only each individual child to be valued and well cared for, but would also lead to the entire population (or, in the terminology of the day, 'the British race') being strengthened.

During the later 1920s several more Marie Stopes clinics were established, along with other voluntary organisations committed to extending access to contraception and promulgating the concept of having *'children by choice, not chance'*. In 1930 these bodies came together to form the National Birth Control Council, a forerunner to today's FPA. The Family Planning Association – now the FPA – was created in 1939, by which time there were also a growing number of Local Authority funded birth control clinics for married women (FPA, 2011b).

Examples of key developments in the period after the establishment of the NHS in 1948 include (FPA, 2011b):

 1960 – Helen Brook opened the first contraception service for unmarried women in a Marie Stopes Clinic near the Whitfield market in East London. This led to the establishment of the Brook Advisory Centres later frequent than in Britain (FPA, 2016a). At the same time some observers believe that an increased concentration of resources on meeting the needs of teenagers and other younger women has resulted in the relative neglect of some older and less advantaged service users, particularly those in their forties (Bateson, 2013).

Fears of service decline should not be exaggerated. But there is some evidence standards of contraception support and sexual health care available may be falling as public health spending restrictions have intensified and service pressures have built up in contexts such as women's access to GUM clinics – see Foley et al, 2017.

in the 1960s, although across the nation as a whole the ability of unmarried women to access contraception was to remain limited until towards the end of the 1970s. Other advances in the 1960s included the introduction of the pill (see text), the supply of IUDs via the FPA from 1965, and the opening of FPA vasectomy clinics for men from 1968 onwards.

- 1974 the NHS Reorganisation Act eventually led to contraception being supplied by GPs and other health professionals, including appropriately trained nurses. It also permitted the network of hospital based NHS Genitourinary Medicine (GUM) clinics to be further developed.
- 1984 Victoria Gillick instigated a legal action which temporarily blocked the supply of contraceptive services to women aged under 16. This judgement was overturned in 1985, but ambivalent public attitudes towards providing contraception to young females at risk of unintended conceptions persisted. It was soon after this that – despite reported concerns on the part of figures like Margaret Thatcher and David Willets – Government advertising began raising awareness of HIV/AIDS risks.
- 2001 the Department of Health published and began to implement a new English *National Strategy for Sexual Health and HIV*. This built on the positive achievements of past decades, and was part of the policy framework that enabled 'new Labour' to effectively address public health issues ranging from tobacco smoking and its impacts on health through to reducing teenage pregnancy rates.

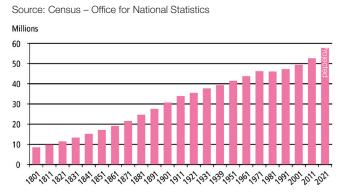
Throughout the last 50 years UK politicians of all main parties have defended the principle of assuring free access to contraception and protecting the entire population from sexually transmitted disease. It is to be hoped that this success will continue into the 2020s, notwithstanding any challenges to publicly funded health care and public health improvement programmes which might emerge after Britain's exit from the EU. At any one time about one women in ten is dissatisfied with the contraceptive method she is using (Donnelly, 2015). Findings presented later in this report also indicate that over 40 per cent of women would like to see improvements in the ways they can access contraceptive products and advice (see Figure 9, page 17).

One way of further improving access to items like combined oral contraceptives (COCs) and progestogen only pills (POPs/minipills) or longer acting injectable and other LARCs which do not require daily administration could, along with relaxing requirements for medical prescription, be to enhance the roles of community pharmacists and on-line service providers.

Contraception supply and related information provision are areas in which community pharmacy has long been involved (Anderson, 2001). There is today a robust social and health policy case for further extending women's abilities to obtain contraception and allied services via an extended range of safe, convenient and nonjudgemental sources. Such progress should not be pursued via measures that threaten the overall capacity of the system that has emerged since the time of 'family planning' pioneers such as Marie Stopes – see Box 1 - to protect individuals who are at particularly high risk of unplanned pregnancies or of other forms of harm and distress associated with sexual behaviours. But improving pharmacy based access to contraception and linked products and services need have no such effect, given well informed and public interest focused policies.

Optimising sexual and reproductive health is in the final analysis not only about maximising the choices available to women. It demands social and economic conditions in which the relationships between females and males are as far as possible characterised by respect and well-educated choices based on rational and emotionally informed decision making, and the harmonious pursuit of shared life goals. Providing access to appropriate pharmaceutical care and support relating to contraception should facilitate such behaviours. Yet from a policy perspective human development also requires fostering the social conditions in which drugbased and other biomedical technologies can be used to best effect, via investment in fields like education, housing and employment.

Figure 2 The Population of England, 1801-2021



Technical Progress and Social Change

Figure 2 shows the population growth that has occurred in England over the past two centuries, which has been rather faster than that for the overall UK. Declining age specific mortality and falling overall fertility rates have 'aged' communities, reduced average family sizes and led to new patterns of marital and non-marital relationships. The average age at first marriage has, for instance, risen by about 10 years since the start of the 1970s. Inter-generational interactions have also shifted, with older people often playing extended parts in the care of their grandchildren and providing economic support for multi-generational family life.

Such trends help explain why little more than 40 per cent of all conceptions are today to married women (ONS, 2017). Together with the fact that values tend to shift away from '*traditional natalism*' towards '*rational secularism*' as people become more physically and psychologically secure (Inglehart and Welzel, 2005, 2008) changes in fertility and sexual behaviour can also be linked to the observation that most people in the UK no longer believe that homosexuality is 'wrong'. (See, for instance, Coast and Freeman, 2016). Figure 3 presents data illustrating relevant attitudinal shifts.

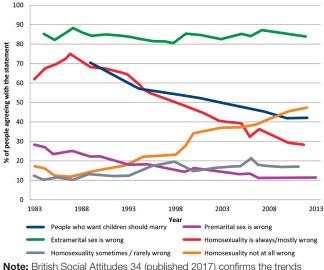
Evidence from the National Surveys of Sexual Attitudes and Lifestyles shows that whereas in 1990 the average woman aged 16-44 reported having had 4 sexual partners, the equivalent figure for 2010 was 8 partners. Over the same period the percentage of British women saying that they have had experience with a same sex partner quadrupled, from under 2 per cent to almost 8 per cent (Mercer et al, 2013).

The research findings available also confirm that, although the frequency of sexual intercourse in established relationships appears to have fallen, women are typically starting to have sex at a younger age than was previously reported. Almost a third of young British women and men now say that they first had intercourse below the age of 16. At the other end of the spectrum a proportion of older females and males report continuing to have active sex lives into their 70s (NATSAL, 2013).

Such data underline the need for age appropriate access to contraception and the support needed to optimise method selection and use at all stages of life, and for services for the prevention and management of sexually transmitted infections to be conveniently available to different population groups. STIs occur much more frequently amongst teenagers and young adults in their early twenties than other groups. But older sexually active individuals are not immune to them (FPA, 2016b).

Figure 3. Attitudes to Sex and Relationships in Britain, 1980-2013

Source: Coast & Freeman, 2016, from NatCen data



Note: British Social Attitudes 34 (published 2017) confirms the trends described in this Figure

Contraception's evolution

There is evidence that throughout the last two to three millennia people living in settings from, for instance, ancient Rome (where women on occasions drank extracts of a plant called silphium in the belief that it acted as a contraceptive) to medieval Britain, have tried to prevent unwanted conceptions. They did so not only via 'natural' methods such as *coitus interruptus* or avoiding vaginal intercourse but through interventions such as the use of pessaries impregnated with spermicidal herbs. In some communities abortion and infanticide were also employed to prevent unwanted births, or – sadly – to dispose of undesired babies (Kolata, 1994). Even in Victorian London it was not uncommon for infant bodies to be found in the Thames.

Abortion after 'quickening' (when movement can first be detected, typically at around 12-16 weeks) was made illegal under English law in the 13th century. But penalties became harsher in the 1800s, during which period the distinction between pre- and post- quickening was dropped. For instance, the 1861 Offences Against the Person Act demanded life imprisonment for both women attempting self-abortions and third parties conducting them. Such legislation did not stop illegal abortions (Abortion Rights, 2015). However, preventing appropriate medical involvement may well have made them more hazardous than might otherwise have been the case during the century that followed.

Condoms made of materials like linen, skins, or oiled paper are also likely to have been in use for around two thousand years, although historically affluent men were often motivated more by a desire to avoid infections than to protect female partners from pregnancy. During the sixteenth century (after syphilis had become a significant health problem in Europe, probably because of contacts with the Americas) condoms made of animal membranes became more widely employed, although their cost was sufficient to put them out of most people's reach (Kahn et al, 2013). Following the development of vulcanised rubber in the middle 1800s¹ products more like modern condoms were manufactured. Yet it was not until the 1920s that mass produced latex condoms became available for widespread use as contraceptives as well as for the prevention of sexually transmitted diseases (STIs) (Coast and Freeman, 2016). The development and sale of diaphragms and spermicides for female controlled contraception also began in around the 1880s, albeit that such products were not commonly affordable. Subsequent innovations during the lead up to World War 1 included the introduction of the first intrauterine devices for birth control, and the marketing of early types of female condom. Surgical techniques for the voluntary and involuntary sterilisation of men and women were in addition pioneered in the late nineteenth and early twentieth centuries (FPA, 2010).

The horrors of the 1914-18 conflict, which in total killed over 15 million (predominantly male) individuals and left many mothers (along with children and other adults of both sexes) bereaved and vulnerable, bequeathed a legacy of mental and physical harm across Europe which lingered on for much of the twentieth century. Yet that tragedy had some positive effects in that in the absence from home of many men British women had fresh opportunities for taking on work involving abilities and competencies previously seen as male preserves.

Problems such as the spread of 'venereal disease' amongst soldiers also forced the development of more informed policies towards sexual health education and the prevention and treatment of STIs (Kahn et al, 2013). The passage 100 years ago of the 1917 Venereal Disease Act, which was the first legislation to introduce the concept of a prescription only medicine, was a pioneering attempt to professionalise sexual health care. It was in part needed because of difficulties in obtaining genuine supplies of Paul Erhlich's 'breakthrough' treatment for syphilis. Called Salvarsan, this medicine was initially marketed by the German company Hoechst in 1910.

However, despite wartime progress the health promotion community of the day suffered deep rooted divisions between the advocates of 'safe sex' and the proponents of sexual abstinence. Once again, the echoes of such distant conflicts have tended to linger. But there is now a strong body of evidence showing that positively supporting (in a non-judgemental manner) individuals who are seeking to enjoy their lives as they choose without causing harm to others or themselves is a more effective approach to promoting welfare and preventing disease than the alternative of making authoritarian attempts to forbid unwanted behaviours. (See, for instance, Raitz, 2015).

¹ There is evidence that some South American cultures had developed techniques for 'curing rubber' over 3,000 years before the work of pioneers like Hancock and Goodyear, who were awarded British and US patents for vulcanising techniques within weeks of each other in 1845.

Service developments

In the aftermath of the Second World War – which was in large part a continuation of the rivalries and European governance failures that underpinned the 'Great War' – female participation in work, politics² and learning became better established. By the 1950s the creation of the NHS had transformed British women's access to GP care. It also helped – at least until the 1974 reorganisation of the NHS – to strengthen the Local Authority run mother and child health and social care services which had built up in the inter-war period.

It is arguable that although – or perhaps because – the UK was by the late 1940s well into the process of losing its Empire, the country was emerging as a more domestically focused and welfare oriented society than it had been before. The need to recover from shared wartime hardships also helped to drive reform and innovation, and for a period limited the power of sectional interests to impede progress in contexts like extending publicly funded health and social care provision.

However, the extent of the gains made against gender based inequality, or in reducing class and race linked forms of disadvantage and prejudice, should not be exaggerated. With regard to extending access to contraception, poorer and single women were still less able to obtain information about 'birth control' techniques and 'family planning' products than their better educated and married peers. Male controlled use of condoms was still the dominant means of contraception available.

It remained common during the 1950s for marriages to take place because of unintended conceptions. Further, although the scale of 'back-street' abortions that were still being conducted in the UK is not known, there is good reason to believe that a significant problem existed.

However, from the start of the 1960s the marketing (initially by a company called G D Searle, which is now part of Pfizer) of combined hormonal oral contraceptive pills (COCs) opened the way to a further transformation in women's lives and their ability to control their childbearing (Szarewski et al, 2010). The UK introduction of Enovid (which contained the synthetic oestrogen mestranol together with norethynodrel, a progestin – see Box 2) in 1961 was widely welcomed, albeit it was also surrounded by controversy about the new product's costs and possible impacts on women's sexual behaviour (BBC, 1961).

There were claims that providing the pill would 'bankrupt the NHS' and that unknown side effects might cause immense long term harm. Although the then Health Minister Enoch Powell announced that the pill would

Box 2. Progestogens, Progestins and Progesterone

Progesterone (P4) is a steroid hormone which is an intermediary in the production of key biological substances such as sex hormones and corticosteroids. P4 itself also directly plays important roles in the brain and in regulating the menstrual cycle, as well as in the processes involved in facilitating fertilisation and maintaining pregnancy.

The term 'progestogen' refers to any progestational agent, including not only progesterone but also progestins. The latter are synthetic molecules. They have biological effects similar to, but not necessarily identical to, those of progesterone (BMJ, 2009).

Altering progestogen levels can prevent pregnancy by stopping sperm reaching the ova or inhibiting ovulation. In general, low dose 'progesterone/ progestin' only pills (POPs or mini-pills) owe their contraceptive effects to their ability to thicken the cervical mucus. Higher dose products and POPs containing the relatively new progestin desogestrel inhibit ovulation to a greater extent than lower dose formulations.

Orally taken progestogen mini-pills are are less likely to cause the clotting and other side effects associated with the oestrogens in COCs. But they typically have to be taken at close to exact times in order to achieve optimal effectiveness – see main text. Hence both monophasic (constant month long dose) and phasic (variable dose) COCs remain much more widely used, especially in young women. COCs are also valued for properties like their capacity to protect against dysmenorrhoea and menorrhagia, to reduce premenstrual tension, and to protect against ovarian cancer.

be 'available to all' (BBC, 1961) he declined to specify what that meant, preferring instead to leave it to doctors to judge who should be prescribed the 'shilling a day' medicine.

In fact, many GPs initially took a conservative position on prescribing oral contraceptives to unmarried women as compared, for instance, to their relative willingness to recommend benzodiazepine medicines, which were also first made available in the 1960s (Lader, 1991). Local Authorities were empowered to fund contraception for both married and unmarried women on 'social as well as *medical grounds*' from (in England) 1967 onwards. Yet it was not until after the 1974 NHS re-organisation and the 1977 NHS and 1978 NHS (Scotland) Acts that *de facto* all British women became entitled to birth control advice and the full range of contraceptive products available free of charge via the NHS (FPA, 2011b).

The advent of the pill had a significant impact on UK society during and after the 1960s. Given additional

² Better off British women aged 30 and over won the vote in 1918, while universal suffrage for everyone aged 21 and over was achieved 90 years ago, in 1928 (UK Parliament, 2017).

factors associated with the long term processes of demographic, epidemiological and socio-economic transition (including increasing disposable incomes amongst teenagers and people in their early twenties, plus a growing confidence that 'VD' could be reliably treated by antibiotics) attitudes towards sexuality and marriage continued to change.

The extent to which the middle decades of the twentieth century witnessed a fundamental break with the past is questionable. But the 1970s certainly saw an acceleration of trends that had started during Queen Victoria's reign, in part because of increasing access to effective and easy to use contraception.

There is powerful evidence from both the US and the UK that as and when medical and other barriers to supplying 'the pill' to young unmarried women were overcome this had the dual effects of increasing female involvement in extended-duration education (because it cut the risk of unintended pregnancies) and raising the average age of marriage³. Women gained more choices in life because they felt more able to enter into sexual partnerships which assured them that they would at a later date be in a position to marry desirably at a time of their choosing, if they wished after they had qualified and established their careers (Goldin and Katz, 2002).

Other major milestones in the development of family planning services and techniques over the past fifty to sixty years have included:

• The 1967 Abortion Act

The use of abortion as a means of birth control, as distinct from maternal health protection or a way of avoiding the births of babies with only short life expectancies and/or severe disabilities, tends to decline as societies develop and enjoy mass prosperity. Yet variables other than material wealth are also involved in shaping attitudes to conducting abortions in the first two or three months after conception, as well as later in pregnancy (see The Economist, 2016).

There are significant differences, for instance, between current European abortion rates and the markedly lower rates seen in the US (Sedgh et al, 2012). Such observations highlight the importance of cultural variations with complex social origins, such as the impacts of the civil war that still influences the values of modern America⁴.

For some people terminating a life, even during the very early stages of embryonic development, is morally unacceptable, regardless of whether or not those involved are making voluntary choices. Yet from another ethical perspective denying women access to safe abortions when they are seeking them in an informed manner can be seen as an undesirable type of social control that risks harmful mental and physical sequelae, particularly in settings which lack good quality universal health care.

Figures 4 and 5 present data on the provision of abortions to women in England and Wales from the late 1960s onwards, and on recent changes in age specific abortion rates. In total some 186,000 such interventions were conducted for women resident in the domestic population in 2015, just over 3,000 of which were authorised because of fears that a full term pregnancy would lead to the birth of either a dying or a severely disabled baby. In 2015 the abortion rate amongst English women in their teens and early to mid 20s was lower than it was in 2005 (DH, 2016).

By contrast there have been marginal increases in the abortion rate amongst women in their 30s in the same period (DH, 2016). This may be an indicator of unmet contraceptive care and support related needs in less advantaged sections of the latter group, although the extent to which this is likely to be a valid conclusion should not be overstated. It is of note, for instance, that the absolute number of births to women aged over 40 has doubled since the start of the 1990s.

Figure 4 Age standardised abortion rate, England and Wales, 1969-2015



Source: DH 2016

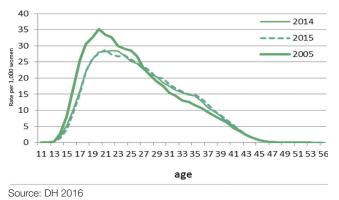


Figure 5 Age specific abortion rates, England and Wales, 2005, 2014 and 2015

³ In the 1860s the average age of first marriage for British women was high for Europe at that time, at around 25 years. A century later it had fallen to a little over 20 years. Today it is about 31 years, which is two to three years above the average age at first child birth in the UK (Thane, 2014; ONS, 2016b, 2016c).

⁴ Slave owners sought to control the fertility of the people they owned, and some imposed sanctions against abortion. There is limited evidence that black Americans are today more opposed to abortion than their white counterparts. It is of note that across many societies opposition to 'taking lives' by abortion tends to be negatively correlated with opposition to taking lives by capital punishment.

• New technologies, including LARCs and emergency contraception

Since the start of the 1960s there have been important technical advances in the field of oral contraception (involving, for example, reductions in the hormone doses delivered by COCs and the development of in some respects for some women less side effect prone progesterone only pills - POPs) and in the design and supply of alternative methods of birth control. These range from hormone impregnated vaginal rings and sponges to an expanded range of long acting reversible contraceptives (LARCs). The latter include copper IUDs and (low dose) hormone releasing intra-uterine systems, as well as implantable progestin releasing devices and injectable formulations. LARCs of all types can, when appropriately selected and taken, offer significant benefits to the women who elect to use them in terms of safety and effectiveness (Peipert et al, 2011).

If using LARCs of any sort were to be imposed on women in a coercive manner this would clearly be wrong. Nevertheless, NICE has recommended the voluntary use of LARCs like IUDs because of their relative safety and efficacy in practice. This is linked to the fact that users do not have to remember to take them every day (NICE, 2014). For some people sterilisation after family completion is an ideal choice (Box 3). But short of that using intrauterine or implantable devices which have protective life spans of several years can be seen as most advantageous in the context of reducing dependence on user action for the maintenance of contraceptive efficacy.

Turning to emergency hormonal contraception, the first experiments with EHC took place in the 1960s. However, it was not until 1984 that a medicine called Schering PC4 (the active ingredients of which were ethinylestradiol and norgestrel) became available for prescription in Britain. This product has since been replaced by progestin-only EHC presentations containing levonorgestrel and (more recently) ulipristal acetate⁵. The latter extends the period after intercourse for which protection from pregnancy is provided to up to five days, compared to three days with levonorgestrel containing products (see EMC 2017a, EMC 2017b).

Levonorgestrol based EHC has been available in the UK as a Pharmacy (P) medicine from 2001, as has a ulipristal acetate based product from 2015. The change from prescription only medicine (POM) status followed WHO advice on the safety and benefits of such medicines (WHO, 2010). The available British evidence indicates that access to EHC has been improved as a result. Yet concerns remain about the extent to which women are

Box 3. Vasectomy and Female Sterilisation

Surgical methods of preventing conception are not consistently reversible and are therefore usually regarded as suitable for use by men or women who are sure that they will not wish to have children in the future. Vasectomies can be classed as minor surgical interventions, and are normally undertaken under local anaesthesia. A number of alternative techniques exist, but all effectively involve severing the male *vas deferens*. Although ejaculations remain normally experienced this prevents sperm from entering the urethra and so being able to pass via the cervix into the uterus during sexual intercourse (FPA, 2015b).

Vasectomies were pioneered in animal models during the 1800s and were first used in men at the start of the twentieth century to sterilise convicted criminals and others who it was judged should not reproduce. Yet it was not until the 1950s that vasectomy based contraception programmes were organised on a large scale voluntary basis in settings like the USA (Sergey, 2014). Vasectomies are, when appropriately conducted, safe and highly effective. Yet on rare occasions the ends of the vas deferens reconnect. This in something like one in every two thousand cases leads to a regaining of fertility (FPA, 2015b).

Female sterilisation normally involves administering a general anaesthetic. The Fallopian tubes leading from the ovaries to the uterus are tied, cut or otherwise blocked. There are again limited risks of their reforming or reconnecting, albeit this is unlikely to occur in more than 1 in 200 interventions (FPA, 2015b). Hysterectomies also result in sterilisation. But such operations are today unlikely to be conducted only for contraceptive purposes.

In the US women have traditionally been more likely to opt for sterilisation than men (Bartz, 2008). By contrast, in the UK more men have until recently opted for vasectomies than women have accepted tubal ligations (Rowlands and Hannaford, 2003). In 2004/05 the NHS and allied service providers undertook some 25,500 of these last operations in England, compared with 31,000 vasectomies. But in 2014/15 these figures stood at 14,000 and 11,000 respectively (NHS Digital, 2016). These declines are in part likely to be due to people having their children later in life, lowering the perceived need for an irreversible 'contraception solution'.

being discouraged by what they see as the judgemental attitudes of pharmacists and other professionals (Cooper et al, 2008; Cooper et al, 2009).

Some observers also believe that opportunities to encourage the take up of alternative forms of contraception may be being lost at the point in time when 'morning after pills' are being obtained, while the British Pregnancy Advisory Service has argued the UK

⁵ Ulipristal acetate can be described as a selective progesterone receptor modulator. Copper IUDs inserted within 5 days of unprotected intercourse offer in excess of 99 per cent protection from conception (NHS Choices, 2017). This is considerably better than that provided by any form of EHC. See also the main text on page 16.

prices of EHC medicines are too high – see BPAS, 2016. In part because of the regulations on access to EHC in this country the cost to users has been four times that incurred in some other EU settings.

BPAS has noted that a third of all sexually active women in the UK have unprotected sex in any one year, and claims that if prices were lower a significantly larger proportion would use EHC to reduce conception risks. Some price reductions have recently been announced. At present in the order of half a million British women a year take EHC after unprotected sexual intercourse, or because of feared condom or other contraception failures. It is estimated here that the current level of use prevents in the order of 20,000 unintended conceptions per annum.

• Impacts of the HIV pandemic

The dissemination of information about contraception and access to contraceptives has on occasions been impeded by the stigmatisation of their users, linked to assumptions that women seeking to find the best possible

Box 4 Sexually Transmitted Infections

In 2015 there were 437,000 new STI diagnoses reported in England, implying a current UK wide total of around 500,000 cases annually. The most common STI is today chlamydia, which accounted for just under half of all new infections in 2015 (PHE, 2016). Recorded genital chlamydial infection rates have doubled in the last ten years, a trend which may only be partially accounted for by improved detection rates. Females are 20-30 per cent more likely to contract chlamydia than males. At any one time about 5 per cent of British women aged between 16 and 25 are likely to be infected (PHE, 2016). Testing rates have tended to fall recently, although fears that cuts to sexual and reproductive health service provision are driving up the overall prevalence of sexually transmitted diseases in the UK nations should not be overstated.

Other prevalent STIs include genital warts (the diagnosed rates of which are now falling in both males and females, in all probability as a result of HPV vaccination uptake by young women) and genital herpes, which represents a particular threat to young heterosexual women. Syphilis and gonorrhoea are more likely to be diagnosed in older sexually active individuals. Their incidence has recently increased by 10 and 20 per cent a year respectively. Yet in absolute terms syphilis remains relatively uncommon. There are currently around 5,000 new cases diagnosed in England annually. This is similar to the number of new HIV infections recorded. By contrast there are a little over 40,000 new cases of gonorrhoea a year (PHE, 2016).

birth control methods are at unusually high risk of STIs (Morrison et al, 2009). From an intellectual perspective the topics of contraception and sexually transmitted disease avoidance and/or detection and treatment can be regarded as separate matters. However, in practice services for the promotion of reproductive and sexual health are for reasons of both provider and consumer convenience often linked, even though this is not desired by all service users.

In the 1970s the recorded incidence of many sexually transmitted diseases was rising – see Box 4. This was a function of better surveillance and improved diagnostic capacity, along with changes in behaviour associated with the fact that STIs had become seen as easily treatable with antibiotics as opposed to being at best chronic and at worst life threatening afflictions. The advent of 'the pill' and with it reduced reliance on male condoms and other barrier methods for contraception had also exposed some sections of the population to an increased risk of infections.

Infections contracted by men who have sex with men presently account for around three quarters of all the new cases of syphilis and gonorrhoea recorded in males across the UK. Recent rises in STI incidence rates in this population are to a degree linked to changing perceptions of the hazard represented by HIV/AIDs, and a corresponding reduction in 'safe sex' practices. This 'on the ground' reality underpins the economic and social case for extending access to prophylactic anti-HIV medicines.

More broadly, young black people are more likely to contract STIs than similarly aged white males and females, while in British Asian communities this risk appears to be lower than the community-wide average (PHE, 2016). Concerns about changing patterns of sexual behaviour in recent decades need to be put into the context of not only the introduction of the pill – see main text – and the subsequent start of the HIV pandemic in the 1980s, but also the availability of antibiotics and other effective STI treatments from the end of the 1940s.

However, the burden of disease imposed by STIs of all types has in fact fallen markedly in the UK since the end of the Second World War. In the context of syphilis, for instance, the number of cases diagnosed each year in the mid-1940s was about 20,000. This total fell rapidly at around the start of the 1950s but then began to climb slowly in the 1960s and 1970s, only to drop again to a historic low in the late 1980s and early 1990s when HIV/AIDS was seen as both untreatable and invariably fatal. Today's volume of new syphilis cases is similar to that in the 1970s, but is still only a quarter of that recorded in 1946/47 (Hughes and Field, 2015). But the start of the HIV pandemic in the early 1980s (Terry Higgins, one of the first known UK victims, died in 1982, at around the time the term Acquired Immune Deficiency Syndrome was first coined) reversed such trends. The UK's response to the threat of HIV/AIDS to not only men who have sex with other men but the wider heterosexual population has since proved one of the world's most successful. The number of individuals living with the disease has been confined to little more than 100,000, including those cases of infection acquired abroad in settings such as sub-Saharan Africa.

This achievement can be attributed to freely accessible NHS sexual health facilities and the willingness of political leaders like Sir Norman (now Lord) Fowler – who was in the 1980s Secretary of State for Health in Margaret Thatcher's administration – to openly discuss the threat of HIV/AIDS. There are today concerns that British policies may be shifting towards a more restrictive focus⁶. But for the purposes of this analysis the most important points to emphasise relate to the fact that although rates of HIV infection are low amongst non-drug using UK born females and their heterosexual male counterparts they should not be discounted altogether. The more rates of infection and levels of infectivity in high risk groups are controlled the more the population as a whole will be protected.

At the same time the risks to young sexually active women of contracting infections like chlamydia, genital herpes and genital warts are appreciable. At least 50 per cent of all recorded STIs occur in people aged under 25 (PHE, 2016). There is evidence that around a quarter of all individuals reporting new sexual partnerships do not consistently practice 'safe sex'. Amongst groups like University students this proportion is higher. Such data emphasise the continuing importance of maintaining investment in sexual health services, even if they are costly as compared to contraception provision alone.

Better services for teenage women

Despite the successes of the NHS, the UK when it entered the twenty first century had by Western European standards very high rates of unintended teenage pregnancies. This problem, which could be regarded as a significant national failing within the European context, reflected not only class related socioeconomic disadvantages but also the active choices of some groups. Yet following a health policy decision taken early during the Labour administration led by Tony Blair, conception rates amongst women in their teens halved in the ten years from 2005-15 – see Figures 6 and 7. This progress was achieved via a range of initiatives, from improvements in sex and relationship education to the enhanced provision of both condoms and LARCs. In areas such as South London (which has for some decades reported particularly high teenage conception rates amongst females with West Indian heritages) extended community pharmacy services were introduced. With other factors, this had positive effects on access to contraception. In time values and norms relating to the desirability of early life pregnancies began changing (Wellings et al, 2016).

Figure 6 Under 18 conception rate, England and Wales, 1969-2015

Source: Office for National Statistics

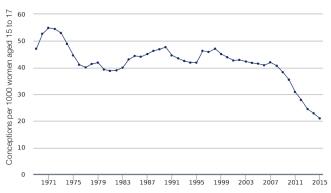
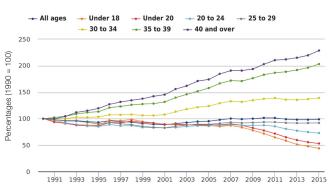


Figure 7 Relative changes in age-specific conception rates, 1990-2015

Source: Office for National Statistics



The UK still has higher recorded teenage conception and birth rates than other Western (as opposed to Eastern) European nations (FPA, 2016a). Yet the trends recorded over the past decade or so can be regarded as exemplary. Even if public spending in this field were as some fear to reduce further, the long term benefits of changed attitudes and preferences amongst younger people should to a degree be maintained. However, this is not a reason for complacency. More could and arguably should be done to reduce unintended pregnancy rates amongst very young women in Britain, and also to meet the contraception needs of more mature individuals.

• The 2013 'Lansley reforms'

A final set of key developments relates to the impacts of the English NHS reforms introduced by Andrew Lansley

⁶ For example, representatives of NHS England have said that supplying pre-exposure prophylaxis (PreP) medicines to individuals who are at risk of HIV because of their sexual behaviours could reduce the supply of some treatments for (implicitly innocent) children. Although British Courts have found against the legality of denying PreP supply and the NHS in Scotland provides such medicines, access in England still appears to be being limited for budgetary and attitudinal rather than health care reasons.

(now the Lord Lansley), who was the Secretary of State for Health in Westminster during David Cameron's first administration. Lansley was the architect of the 2012 Health and Social Care Act (HSCA). The changes this brought included disbanding bodies like the Primary Care Trusts that were until then mainly responsible for commissioning sexual and reproductive health services and managing many aspects of primary and community care. In their place Clinical Commissioning Groups (CCGs) were created, along with Public Health England and NHS England (Box 5).

The underlying aim of these shifts was to improve the performance of the health service, in part by placing more reliance on *'informed purchaser led'* (in essence, GP and NHS England guided) market competition amongst an expanded range of *'qualified service providers'*. Yet in practice a principal effect of the Lansley reforms was, according to many critics, to disrupt and fragment processes of health and social care delivery. There are concerns that because of the transfer of public health functions to Local Authorities and subsequent reductions in their resourcing – see again Box 5 – the provision of sexual and reproductive health care is being undermined as a result of the 2012 Act. Local government services have been politically less able to defend their funding than the NHS.

More recent high level initiatives have centred on the formation and local delivery of joint NHS and local authority Sustainability and Transformation Plans (STPs). These could serve to reduce the risk of such unintended consequences, and facilitate better integrated care. More radically, the STP programme might, together with interventions such as the introduction of 'Accountable Care Organisation' (ACO) or other models of NHS primary health and LA social service provision, in time lead to an effective end to the purchaser/provider divide currently embedded in the English NHS (NHS, 2017).

The implications that such possibilities have for family planning and allied services are as yet uncertain. Experts interviewed during the preparation of this report hope that it will be possible to maintain and in some areas enhance well-integrated, publicly funded networks of universally available support for women (and men) seeking optimal forms of contraception and other types of SRH care. However, there is currently only very limited evidence of such services having a prioritised place in STPs. It might eventually be that future economic conditions and policy responses will mean that more reliance is placed on selffunded options, at least amongst those sections of the population thought least likely to be in need of tax payer support for their 'family planning'.

Box 5 Commissioning SRH Services in England

The 2012 Health and Social Act introduced far reaching changes to the NHS in England. They ranged from the dissolution of Primary Care Trusts and Strategic Health Authorities through to the creation of new national bodies like NHS England and Public Health England, and the establishment of over 200 local Clinical Commissioning Groups (PHE, 2015). The return of 'public health' to local government was another important step. Although it arguably weakened some aspects of NHS service planning and commissioning, it was welcomed by many Directors of Public Health.

There was much well-intended logic underlying the reforms imposed by the then coalition government. Yet in the event the new system proved complex. Many people working in and using the NHS experienced it as serving to fragment rather than unify care commissioning and provision. Critics have argued that it contributed little if anything to promoting better co-ordination between health and health related social service activities, and some claim that the loss of ring-fencing for public health resources has offset gains derived from moving 'public health' back to its local authority origins.

Recent developments have called into question the future of health service commissioning as a discrete function in England – see main text. The RCGP has recently advocated a re-integration of sexual and reproductive health service commissioning. But at present responsibilities are divided three ways, as follows (RCGP, 2017a):

- Local authorities 'purchase' services such as chlamydia screening and HIV testing and specialist support like contraception provided in community clinics. They are responsible for funding some GP and community pharmacy services together with sexual health promotion, young people's sexual health care, teenage pregnancy services, HIV prevention and services in schools and colleges.
- **CCGs** commission abortion and sterilisation services for men and women, together with functions like psycho-sexual health support and gynaecological care in respect to fields like using contraceptives for non-contraceptive purposes.
- NHS England commissions family planning as an additional GP service; HIV treatment and care; opportunistic STI testing; sexual health care in prisons; sexual assault support and care; and cervical screening.

Local arrangements vary, but in much of England CCGs cross-charge primary care contraception outlays to Local Authorities for them to paid for out of public health budgets. Given that spending on items like sexual health promotion may fall by as much as 30 per cent in 2017/18 as compared with 2016/17 and that overall LA public health budgets are set to decline by five percent, this is creating significant concerns (Buck, 2017). Even if it could be shown to be cost reducing or efficiency promoting, funding NHS community pharmacy based contraception services may well prove problematic because other providers will resist resource reallocations.

Current Patterns of Contraception Use

Different methods of birth control are used to varying extents by women of differing ages and socio-economic and ethnic backgrounds. For example, young British women are much more likely to use COCs than their older peers. The latter tend to favour alternatives like PoPs and IUDs/IUSs. Most people who opt for sterilisation are also in their thirties or forties.

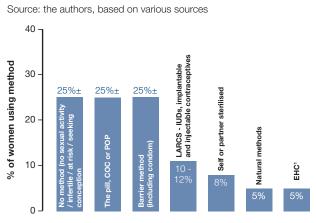
There is in addition evidence of variations in the extent to which women with South Asian cultural backgrounds use contraceptives before and within marriage, as compared to the patterns observed amongst others in the population. In addition, a proportion of single young black women have, until recently at least, been more likely to report having had unprotected sexual intercourse than their peers in other cultural groups. This helps to account for above average abortion rates amongst some sections of the black British female population (Coast and Freeman, 2016).

Yet notwithstanding these and other variations (which include, for instance, significant contrasts in the use of contraceptives between nations, as illustrated by the fact that overall UK women are much less likely to use IUDs than French women⁷ – see Sonfield, 2007; Moreau et al, 2014. Figure 8 offers an overview of the numbers of women using each main type of contraceptive method in Britain.

The remainder of this section explores issues relating to the possible advantages and draw-backs – including the side effect risks – associated with alternative ways of preventing conception. The analysis provided here is intended to inform the policy discussion offered at the end of this report, rather than being an attempt to provide a comprehensive guide to the 'pros and cons' of competing forms of contraception. People seeking such information may wish to consult sources like NHS Choices and/or the FPA website (http://www.fpa.org. uk/), in addition to talking with professionals working in the NHS or experts in the voluntary sector.

A second point to stress is that although concerns about the possible side effects of birth control methods demand attention, all forms of contraception that are legally available in Britain can be considered acceptably free from hazard, provided that individuals' risk profiles are taken into due account when relevant choices are being made. In some instances potential drawbacks – such as the fact that oestrogen containing medicines might in some instances accelerate the growth of breast cancers – are, as is discussed on page 14, counterbalanced by significant protective effects. No form of pharmaceutical or other medical intervention should be said to be absolutely safe. But beliefs about the dangers of contraception (or indeed of undergoing medically managed abortions) are sometimes exaggerated, not least as compared to the risks of 'normal pregnancy'. Promulgating unjustified fears can put vulnerable individuals at a raised risk of unwanted conceptions.

Figure 8. Patterns of Contraception Use in Modern Britain, Women aged 16-49, 2017



1. About 5% of women aged 16-49 will use EHC one or more times in 2017

'Natural' methods

Before the advent of affordable modern contraceptives it was more often than is presently the case said that if people did not want children they should abstain from sexual pleasure. There is evidence, for instance, that in Britain from the 1600s right up to the early twentieth century an important limitation on the rate of population increase was a late average age of marriage coupled with strong social sanctions against extra-marital sexual activity, at least as far as most females were concerned.

Collectively imposed restraints included the punitive stigmatisation of unmarried women who became pregnant, and the rejection of 'illegitimate' children. Even within marriage abstinence from intercourse may well have played a more important part than is often realised in limiting family sizes up until the middle of the twentieth century, particularly amongst 'the respectable poor'.

However, promoting sexual abstinence is not now widely regarded as an effective or desirable approach to reducing unintended conception rates. The great majority of women of reproductive age opt for what might be termed interventional contraception, albeit at any one time in the order of one in every twenty women is relying on a 'natural' method. The latter range from trusting males to withdraw before ejaculation through to sophisticated fertility awareness based techniques involving the use of calendars, temperature monitoring and ovulation testing, combined with the avoidance of vaginal intercourse during periods when conception is likely to occur.

⁷ This is for the most likely part to relate to differences in the advice and information given to women by French as opposed to British doctors

For some people natural contraception is an informed preference, which when carefully practiced is for them adequately effective. Its possible benefits encompass freedom from fears of drug induced or contraceptive device associated side effects, and from safety concerns which may be partly linked to beliefs that using active forms of fertilisation prevention is ethically unacceptable. But for others relying on 'natural' methods can prove a less than ideal option. They risk high failure rates and a lack of protection against STIs.

Barrier methods

The principal physical barrier based means of contraception is the male condom. It is employed by around a quarter of all women aged between 16 and 49, either passively via reliance on their partners or more assertively through pro-active female involvement in their purchase and use. Female condoms, together with diaphragm based methods and contraceptive sponges which combine barrier based protection with a spermicide, are utilised by about one per cent of women.

The nationwide C-Card scheme (http://c-card. areyougettingit.com/Default.aspx) offers free access to condoms to all individuals aged between 13 and 25 years. Condoms can also be easily purchased in settings such as community pharmacies or via vending machines and/or the internet.

The relatively recent introduction of items such as flavoured condoms is indicative of manufacturers seeking to make their products as attractive as possible. Condoms are often employed during first and early stage sexual relationships (Wellings et al, 2001). When used competently they protect against STIs. Yet against their potential advantages some men encounter difficulties in wearing them, and the available research indicates a failure rate of some 20 per cent during a typical first year of use by an inexperienced couple (Wellings et al, 2007). The failure rates reported for diaphragm and spermicidal cream use are lower, but are still very high from the perspective of people who are clear they want to minimise their conception risks.

Encouraging young (and older) women and men to employ condoms to guard against disease and unplanned pregnancy in circumstances in which they would otherwise have unprotected intercourse is likely to be moderately cost effective (Sadler et al, 2016) and for most people ethically justifiable. It is also possible for condom usage to offer an acceptable means of long term birth control for established couples, in that failure rates decrease as men and women become experienced in using barrier methods of all types. They can also be reduced when emergency contraception – see below – is employed as a back-up. Yet even so, barrier methods are highly 'user dependent' for the achievement of optimal contraceptive effects. They also limit sexual pleasure amongst those who find them 'messy' as well as sensation reducing.

Oral hormonal contraception

Used as intended by their makers, both modern low dose combined oestrogen and progesterone containing birth control pills and progesterone/progestin (synthetic progesterone) only products (POPs or minipills) are in excess of 99 per cent effective (NHS Choices, 2017). About a quarter of all women of conventionally defined child bearing age (ie 16-49 years) are taking an OCP (oral contraceptive pill) at any one time⁸.

COC use is highest amongst those in and around their late teens and early twenties, while progesterone only products tend to be taken more by older women. This shift is associated with individuals encountering unwanted side effects like, for example, headaches, and or developing other contra-indications for COC use as they reach their 30s and beyond. Such phenomena include the presence of, or a past history of, thrombotic disorders; a history of migraine with focal (specifically located) neurological symptoms; and diabetes with vascular system involvement.

Raised blood pressure, a body mass index of 35 or over and being a smoker are also factors which raise the risks of COC taking, albeit they are on occasions ignored by medical prescribers (Briggs et al, 2013). The unwanted side effects of combined hormonal contraceptives include breakthrough bleeding and, more rarely and more seriously, venous thromboembolisms. Increases in breast cancer incidence rates have - as previously noted - also been linked with taking the pill, especially in the case of high oestrogen formulations. Yet this risk appears to return to normal within a decade of stopping usage. It is in addition offset by long term (30 year plus) declines in the incidence of other neoplastic diseases, most notably ovarian, endometrial and bowel cancers (Iversen et al, 2017). Hence in net terms COC use is in all probability negatively associated with cancer mortality.

POPs/minipills avoid some of the contraindications for taking combined oral contraceptives (White et al, 2012). But they too have drawbacks. Common side effects include headaches and preventing menstruation⁹. In addition, most forms of oral progestogen-only contraception have to be taken within three hours of the target time (as opposed to 12 hours for COCs) for their efficacy to be assured. This is a key reason why prescribers are more likely to recommend COCs to women in their

⁸ Another combined hormonal contraception option is patch based administration via the skin, which provides protection on a week by week basis.

⁹ Some may judge this last a benefit although it is not desired by women who welcome the reassurance that they are not pregnant given by regular menstruation.

teens and twenties, albeit 'third generation' desogestrel based POPs are more 'user friendly' and progestogen delivery via injectable, implantable or intrauterine LARCs is inherently consistent.

Taken in the round, there is a robust case for concluding that orally administered hormonal contraceptives are suitable for supply as Pharmacy (P) medicines, as opposed to on a Prescription Only (POM) basis. The reasons for believing this relate to their safety in use and the fact that they are easy for most women to selfadminister. During interviews undertaken during the preparation of this report (see Box 6) it was argued that taking the pill on a daily basis provides many users with a sense of control. They may feel that because they can stop using OCPs whenever they wish their hormone levels can if necessary be quickly returned to normal, and hence that oral contraception is normally rapidly reversible.

However, against this the available evidence is that because adherence with daily pill taking regimens is rarely perfect the efficacy of the pill in practice is likely to be no more than 90-95 per cent. That is, there is in everyday practice a 5 per cent plus annual failure rate, with the efficacy of OCPs being lowest amongst more vulnerable individuals at the highest risk of inconsistent use. In addition, even in well supported environments like Sweden around 30 per cent of individuals who start on COCs find they need to change product or turn to another means of contraception within 6-12 months of commencement (see, for instance, Josefsson et al, 2013). POPs such as desogestrel only products have also been reported to have high early discontinuation rates.

Such observations raise questions as to whether other forms of contraception should be more widely used amongst women of all ages as first or second line choices. But before considering the case for extended LARC use it is relevant to note that progestin containing pills can also be used as 'morning after' contraceptives. As already described, levonorgestrel and ulipristal acetate formulations are already available as P medicines in the UK. As with other OCPs they are even more freely available to women in many other parts of the world. Britain's approach to deregulation from POM status has increased overall access to EHC, albeit not to the degree some observers believe desirable. This is partly because free NHS supply via GPs and Community Contraceptive Clinics has fallen since 2000 – see, for example, HSCIC, 2016.

Emergency Hormonal Contraception is, notwithstanding resolvable side effects like nausea, well tolerated and up to of 95 per cent effective when used

Box 6 Qualitative and Quantitative Research

The research undertaken for this report included:

- 1. A structured literature review, focused primarily on English language sources published since 2000 using Web of Science and PubMed databases, alongside Google Scholar and other internet searches for relevant 'grey literature' and individual paper hand searches for key documents identified during the review process. Over 200 publications were read in full.
- 2. A series of twelve semi-structured interviews with individuals involved in the commissioning and provision of contraception and other forms of SRH service in England. Interviews took place throughout Autumn 2016. A number of themes were identified during the interview process.
- 3. A quantitative survey of 808 women aged 18-50 living in England. This was undertaken by Ipsos Mori in the Autumn of 2016. Fifty two per cent of the respondents were aged under 35 and 48 per cent were between 35 and 50 years old. Sixty per cent of the total sample were working, and the same proportion reported that they were living as married women. Just under 60 per cent were categorised as being in social classes A, B and C1, while just over 40 per cent were in social classes C2, D and E. (For further information contact the authors – see back page.)

During the qualitative work undertaken a lack of service integration and limited access were identified as key themes. Interviewees suggested that problems had been exacerbated by the 2012 Health and Social Care Act (HSCA), which they said had led to a patchy service with standards varying significantly, depending on both GP performance and commissioning strategies. They expressed concerns that this was leading to a situation in which the needs of a proportion of women, including less advantaged individuals aged 30 and above, are not being adequately met. It was said that in some instances women do not now know where to go to access effective SRH care.

Interviewees were concerned that the HSCA reforms have led to responsibility for services linked to contraception provision shifting to local authorities at a time when acute funding shortages were developing. Localism can have value. But there is a danger of a new form of 'postcode lottery' emerging, despite the ongoing existence of NICE. Some interviewees also felt that the focus on reducing teen pregnancies, whilst valuable and justified, may have shifted too much focus away from women in their late 20s or 30s. They emphasised the society-wide importance of ensuring that all methods of contraception are available to all women in all localities, regardless of their age and social positioning. as recommended. It works by inhibiting ovulation before fertilisation, rather than as an abortifacient. This mode of action means that the 'morning after pill' is not ideal as a long term form of contraception. Yet despite this the World Health Organisation argues that females of all ages have a right to use EHC when they wish to and that it should be made as freely available as possible (WHO, 2016). Even in relatively conservative countries like the UK there appears to be growing support for enabling women to obtain supplies on an advanced basis for use as and when they judge appropriate.

The available data suggest that around 500,000 British women will use a morning after pill on one or more occasions in 2017. Some observers believe that EHC should be more widely used, and that fears, especially on the part of teenagers and other younger women, of judgemental attitudes being expressed by professionals like pharmacists are in part responsible for sub-optimal consumption. Options like on-line purchasing may to a degree remedy such problems. However, even in this case relatively high out-of-pocket costs could be restricting demand.

It is also important to emphasise that the most effective form of emergency contraception is via the insertion of a copper IUD. This should ideally be done within 5 days of unprotected intercourse. Most GP practices are able to offer this intervention. However, a proportion of women are unaware of its availability and/or its potential advantages. Pharmacists offering EHC should provide local information about accessing IUD based emergency contraception.

LARCs

Long acting contraceptive methods such as IUDs and implantable or injectable progestin based formulations have the advantage of not requiring daily voluntary action on the part of their users. IUDs are now available as low dose hormone releasing devices (normally referred to as Intrauterine Systems or IUSs) as well as in forms such as copper coils. Modern IUDs are, together with IUSs, over 99 per cent effective in normal use – see NHS Choices, 2017.

There is a low possibility of problems such as pelvic infections occurring after insertion or, on rare occasions, of IUDs penetrating the uterine wall. More common side effects include abdominal pain for a time after insertion and irregular or unusually heavy bleeding. Yet overall consumer satisfaction with IUDs is reportedly higher than that for other methods of contraception (Peipert et al, 2011). In the UK IUD and other forms of LARC use tends to be concentrated amongst older individuals, and in younger women viewed as having special needs. Approaching one British woman in every 10 is presently using a LARC of any kind.

LARC use in the UK might in future increase if awareness of their potential benefits rises amongst health professionals and women seeking convenient and safe contraception. But for this to be achieved it will be important to communicate that their advantages for individual users can go well beyond their not needing to be taken on a daily basis. Relative safety and freedom from unwanted side effects are also vital concerns. The limited time available to and partial knowledge of birth control opportunities currently possessed by GPs and other health professionals are also thought to be a reason why LARCs may be being under-used in Britain. Some sources suggest that up to 50 per cent of GPs believe themselves to have inadequate knowledge of contraceptives such as implants (Wellings et al, 2007; Donnelly, 2015).

Formulations of medroxyprogesterone are now available for either intramuscular or subcutaneous injection. They typically provide 12 and 13 weeks protection respectively per 'shot' and also have failure rates of under one per cent (EMC, 2017c; EMC, 2017d). A third form of injectable contraception containing a progestogen called norethisterone enanthate is licensed for shorter term use, with each injection offering around 98 per cent protection from pregnancy for 8 weeks (EMC, 2017e).

As with any drug, all LARCs have unwanted effects. Some people dislike injections and there are concerns, for instance, that progestin containing 'injectables' reduce bone density and increase the risks of fractures and osteoporosis in vulnerable individuals. More common problems include either irregular or absent periods (a 'problem' which is welcomed by some users) or – less frequently – unusually heavy bleeding. In addition some women experience headaches, breast tenderness and/or weight gain. Also, LARCs do not protect against the sexual transmission of infections.

Some commentators argue that because contraceptive implants such as those which deliver the progestin etonogestrol¹⁰ and IUDs/IUSs can provide protection from conception for between three and ten years without any user action they should always be seen as the preferred form of LARC. However, not all women are seeking contraceptives that act over such extended periods. Professionally or self-administered injectable contraceptives taken on a quarterly basis can for some offer an attractive 'half way' option, the efficacy of which could be optimised by low cost adherence aids like, for example, automated text and/or email reminders (Trent, 2015).

¹⁰ Etonogestrol is also contained in 'vaginal ring' contraceptives. These provide a low dose of progestin over a period of weeks and are primarily intended for use during breast feeding (EMC, 2017f)

Women's Views on Improving Access to Contraception

The network of NHS Trust based and primary care and voluntary sector run reproductive and sexual health services available in the UK is a valuable asset. Despite acknowledged limitations such as the fact that in the later decades of the twentieth century the rate of teenage pregnancies recorded in Britain was well above that seen in most other Western European settings, it represents a heritage that should be defended. Yet this is not to say that enhancements in access to contraception and related forms of care quality could not be made.

Through the Ipsos Mori research, just over 800 English women aged 18-50 were asked in 2016 about the extent to which they agreed or disagreed with a series of eight interlinked statements relating to their satisfaction with their access to contraception. As described in Box 6, qualitative interviews were also carried out with a range of professional and other respondents. Figure 9 provides a summary overview of the quantitative survey responses obtained. The sections below offer additional information and highlight some key implications of the findings generated.

Access to information about contraceptive choices

The women taking part in the 2016 survey reported a high level of agreement with the statement 'I feel that I have access to all of the information I require from my GP or practice nurse to make an informed decision about my contraceptive needs'. In total 64 per cent of those participating either strongly agreed (29 per cent) or tended to agree (35 per cent). Only 5 per cent strongly disagreed.

In partial confirmation of this finding, 49 per cent of respondents expressed disagreement with the contrasting statement 'no-one has ever given me good information about long acting reversible contraception methods such as the injection, implant or coil.' Twenty six per cent of those taking part strongly disagreed with this second statement. By contrast, only 20 per cent expressed any degree of agreement, and within this total just 7 per cent said they strongly agreed. The remainder were neutral or felt unable to answer.

Women in their early twenties, those in full time education and those with social class AB backgrounds were most likely to say that their access to information about LARCs

Figure 9. Survey Results: The Extent of Women's Agreement with Eight Test Statements

Note: Columns do not total 100 per cent because some women Percentages did not provide answers to all questions 20 50 60 70 80 90 \cap 10 30 40 100 I would prefer to go to a special clinic rather than my GP or Practice Nurse to discuss issues such as the possibility of having a sexually transmitted disease. I think the current NHS arrangements for providing contraception to women of my age could be made more convenient. No-one has ever given me good information about long-acting, reversible contraceptive methods such as the injection, implant or coil (IUD/IUS). Women should be able to obtain items like 'the Pill' directly from their pharmacist rather than after seeing a doctor or a nurse if that is what they prefer. I feel that I have access to all of the information I require from my GP or Practice Nurse to make an informed decision about my contraceptive needs. I would be prepared to pay £10 every three months to be able to obtain my contraception from the pharmacist without having to first go to my GP or an NHS clinic. The more we can access health information and services on-line rather than from health professional directly the more I will prefer it. In my personal opinion, women should have to go to their doctor to ask for the 'morning after pill' rather than being able to get it from a pharmacy. Tend to agree Neither agree nor disagree Strongly agree

Tend to disagree Strongly disagree

is good. Women with social class DE backgrounds were in statistical terms significantly less likely (at a 95% level of confidence) to feel satisfied with the information about contraception available to them.

Non-white respondents were marginally less likely to indicate satisfaction than their white peers, as were women of 35 years and over as compared with those aged 18-24 years.

Such figures are to a degree reassuring. Nevertheless, about third of women living in less advantaged socioeconomic settings expressed concerns about the quality of the contraception related information (and in particular the LARC options) available to them. This observation is important, and can be linked to concerns that – despite its theoretical strengths – the NHS record in supporting less advantaged sections of the community tends to be patchy.

There is strong evidence from a wide range of sources that both men and women typically have high degrees of trust in their GPs, and to a lesser extent other NHS practitioners. However, the previous section noted evidence that a significant proportion of GPs themselves question aspects of their knowledge about contraception. There is good reason for women living in Britain to value the universally available family planning services provided by the NHS and allied agencies. But on occasions high satisfaction rates are associated with modest expectations, and limited service user knowledge of the full range of opportunities available in an ideal world.

Pharmacy provision of 'the pill' and other contraceptive methods

The statement 'women should be able to obtain items like 'the Pill' directly from their pharmacist rather than after seeing a doctor or a nurse, if that is what they prefer' received the second highest level of agreement recorded in the research reported here. Out of the 54 per cent of the sample agreeing to any extent, 22 per cent strongly agreed. Just 10 per cent of the women interviewed strongly disagreed. (In aggregate about a quarter of the sample neither agreed nor disagreed, or for other reasons did not provide an answer.) Younger women and those in full time education again agreed more than other groups, while non-white respondents were marginally less likely to agree than the average woman.

Against this, the contrasting statement '*in my personal* opinion women should have to go to their doctor to ask for 'the morning after pill' rather than being able to get it from a pharmacy' was accepted by only 28 per cent of respondents. Twelve per cent strongly agreed, as against 28 per cent who strongly disagreed. In this instance, women in social classes D and E and those

lacking formal educational qualifications were to a statistically significant extent more likely to think that women should seek medical approval for EHC use than their peers in the wider female population. In this context there was no association with respondents' ages or the extent to which they favoured an extension of community pharmacy's role in providing 'the pill' and contraceptives such as injectable or implantable LARCs.

These findings suggest a greater reliance on and/or belief in professional authority as opposed to autonomous selfdirection amongst less educated and socio-economically less advantaged women compared with other sections of the population. The policy implications of this observation are discussed later. But it is worth pointing out here that the available research findings from sources such as Natsal-3 indicate that although in the UK a majority of women would like better access to contraception via 'retail oriented outlets' such as pharmacies, males are more likely to say that they want better access to GP advice about contraception. This gender linked variation implies a need for a more individual needs sensitive balance between the availability of medical advice and the advantages that can offered by alternative services.

Convenience

Forty four per cent of respondents agreed with the statement '*I think that the current NHS arrangements for providing contraception to women of my age could be made more convenient*', with 16 per cent (that is about one in seven of the total sample) agreeing strongly. Only 5 per cent strongly disagreed. Some 40 per cent had no opinion or said that did not know or preferred not to say. The level of agreement was relatively even across social classes and between white and non-white women, although it was highest amongst younger women and those in full time education.

The available evidence indicates that reducing waiting times for GP and practice nurse appointments for consultations relating to contraception is one of the main ways many women feel that service convenience could be enhanced (FSRH, 2016). A minority, around 10 per cent at any one time, also say that presently they cannot access their most preferred form of contraception via primary care.

Specialist clinics for STI treatment

Younger women were also more inclined to agree with the statement '*I would prefer to go to a specialist clinic rather than my GP or practice nurse to discuss issues such as the possibility of having a sexually transmitted disease*' than were members of other groups. Over half (52 per cent) of 18-24 year olds expressed a degree of agreement with this view, compared to 39 per cent for the sample as a whole. This observation was statistically significant at the 95 per cent level. Social class A and B respondents and women in and around their 30s were the least likely to agree with this statement.

Such data are in part indicative of changing needs and preferences as women mature. Younger women are more likely to contract STIs and to want protection from what they experience as judgemental attitudes. Specialised clinics which can offer diagnostic and treatment services and when required contraception on a relatively anonymous basis appear more likely to be preferred by women who are starting their sex lives and/ or who are in 'experimental' relationships.

For some people too much reliance on 'one stop local shops' could therefore be undesirable. Older women in established relationships (or who may be confident about their life style choices, even if these are regarded as unconventional) appear more likely to prefer contacts with known professionals. However, the extent to which this difference exists because older individuals also think it relatively improbable that they will contract an STI is uncertain.

On-line information and contraception supply

Just over a third (35 per cent) of the 808 women interviewed agreed with the statement 'the more we can access health information and services online rather than from health professionals directly the more I will prefer it'. This included 13 per cent who strongly agreed. A slightly greater proportion (36 per cent) of women disagreed. Of these 21 per cent (ie almost two thirds of the 'disagree' total) strongly disagreed.

Once again, younger women and those in full time education were to a significant degree more likely to agree than the members of other groups. This may in part link to the nature of the contraception and allied support needs of those near to the start of their sexual lives. But it could also reflect an inter-generational shift towards preferring online transactions in every sphere of life.

Favouring online service provision appeared to be inversely linked to factors such as higher household incomes and home ownership. Women living in London, the North and in rural locations were more inclined to say that 'the more we can access health information and services online rather than from health professionals directly the more I will prefer it' than respondents living in the South of England.

Multiple factors are likely to underlie a preference amongst more affluent women for direct professional contact. They might include a reduced likelihood of their living with financial worries and time pressures, together perhaps with social confidence issues.

Willingness to pay

As might be expected, the statement 'I would be prepared to pay £10 every three months to be able to obtain my contraception from the pharmacist without having to first go to my GP or an NHS clinic' received less support than most of the other test statements. Out of the total sample of women questioned only 23 per cent expressed agreement, and within that proportion only 8 per cent (that is about a third) strongly agreed. By contrast 42 per cent disagreed, just over half of them (22 per cent) strongly.

Women aged 35 and over were most likely to reject this viewpoint, although those in social classes A and B (some 30 per cent of whom indicated that they would be willing to pay such a charge) were significantly more likely to agree. Respondents living in London and in private rented accommodation (who range from aspirant young professionals to less advantaged tenants) were also more likely to answer positively with respect to making personal payments than members of other groups.

The concept of paying for NHS contraception supply raises a number of concerns. The available evidence suggests that moving away from comprehensive publicly funded health service provision would increase the numbers of unintended conceptions, and so impose costs on individuals and society as a whole. In relation to pharmacy services it could also distort the future of primary care provision, were – for instance – women to obtain free contraception via GPs/GP Practices yet be required to pay a charge for the (for some preferable) option of pharmacy access. However, experience in areas such as the private purchasing of 'morning after pills' demonstrates that some women are willing to pay for benefits like enhanced convenience, more assured anonymity or other aspects of personal service quality.

Policy Choices

NHS England's recently published *Next Steps on the NHS Five Year Forward View* (NHS, 2017) highlighted financial and service delivery challenges currently facing the health service. It described the difficulties inherent in keeping within allocated health and social care budgets while at the same time maintaining or improving urgent care and other services. The *Next Steps* analysis paid particular attention to introducing innovations in the delivery of primary care (through which 80 per cent of UK women obtain their contraception – FSRH 2016) and community services, and to enhancing outcomes in high profile fields such as cancer and mental health care. These two service areas alone account for 6 and 14 per cent of NHS outlays respectively. Given this and the magnitude of strategic tasks like establishing Multi-speciality Care Providers (MCPs), integrated Primary and Acute Care organisations (PACs) or other forms of local hub centred or 'primary care home' based format in ways that will strengthen personal service delivery, it is perhaps not surprising that Next Steps on the NHS Five Year Forward View makes little or no specific mention of contraception, or to sexual and reproductive health care more broadly. But it is important not to lose sight of the scale of the contributions that SRH services make to public health and to both physical and mental wellbeing. Nor should the additional long term health, social and economic costs that would be incurred if the effectiveness of such services were to be impaired be under-estimated (FSRH, 2016).

Even including the funding of HIV/AIDS prevention and treatment, SRH services of all types are unlikely to account for more than 2 per cent of overall NHS spending¹¹. There is evidence that failures to prevent unintended conceptions or the transmission of HIV and other STIs could over time impose costs an order of magnitude higher than any savings that might be achieved from reducing SRH outlays. For example, research commissioned by the Family Planning Association (FPA, 2015a) found that a projected 10 per cent reduction in access to SRH services would, from 2015 to 2020, be likely to lead to additional public sector outlays of over £1 billion a year during that period. This burden would exist on top of the costs already imposed by problems such as unintended conceptions, and would increase after 2020.

Aspects of such projections may be questioned. However, they are consistent with DH estimates that investing appropriately in SRH services like contraception generates benefits that are around 10 times the costs involved (DH, 2013). Fears that reproductive and sexual health services will be undermined in England by recent curbs on overall NHS and social care spending (see Figure 10), and in particular the 20 per cent plus cut in local government public health allocations presently scheduled for the period 2015-20, ought not to be overstated. But neither should warnings given by expert observers or the likely significance of recent observations indicating reducing access to genitourinary medicine (GUM) clinics, particularly for older and asymptomatic women, be ignored (Foley et al, 2017).

Box 7 offers further discussion of such concerns and summarises current sexual and reproductive health priorities in the four UK countries. Key national objectives range from further improving services for women in their teens and twenties who are most at risk of unintended conceptions through to minimising the numbers of people with HIV, and optimising treatment outcomes for those contracting the condition. Preventing, diagnosing and treating STIs such as syphilis and gonorrhoea in high risk groups like men who have sex with men another priority, as is taking forward the work of initiatives like the (English) National Chlamydia Screening Programme.

Improving the quality of contraception and wider SRH support available to women in their 30s and 40s may by some be seen as comparatively unimportant. Yet in reality the long term community-wide value of ensuring that all NHS users can access good quality family planning services provided in ways that meet their needs effectively is no less significant than that of meeting more newsworthy goals. It is with this background in mind that this report now turns to the topic of extending the role of NHS community pharmacies and pharmacists in providing better access to contraception, and in helping people of both sexes optimise their sexual and reproductive health.

Enhancing community pharmacy supply and support offers the possibility of not only increasing convenient access to contraception for women who find current primary care arrangements less than ideal, but of freeing GPs' and GP practice personnel's time in order to permit them to improve those services they are uniquely capable of offering. The ongoing evolution of community pharmacies into places in which twenty first century primary health care and support is provided could also be important in promoting professionally supported self-care skills.

However, before exploring the viability of this option in more detail two more sets of initial points are worth emphasis. They relate to, first, the quality of NHS strategic planning and, second, notwithstanding the financial pressures affecting health and social care, to the advantages of maintaining SRH services that are publicly funded and free at the point of demand.

The House of Lords Select Committee on the Long-term Sustainability of the NHS published its 2016-17 report in April 2017 (House of Lords, 2017). This questioned the quality of NHS Strategic Planning. It argued that on too many occasions urgent concerns linked to managing acute financial problems have been permitted to 'crowd out' careful consideration of, and effective action on, more important long term health and health care improvement

¹¹ That is, around £3 billion a year UK wide. (Authors' estimate, based on various sources.) There are uncertainties relating to the extent to which expenditures such as central and local NHS management and commissioning costs or non-clinical GP practice outlays should be allocated to SRH service provision costs. Although 'free contraception' is sometimes assumed to be expensive, this is not true as compared with many other elements of health and social care. NHS expenditures on 'the pill' vary but are typically about £30 per user per year, or £7.50 per quarter, in net ingredient cost (NIC) terms. Alternatives such as injectable contraception can be as or more affordable, albeit NIC figures do not include dispensing fees or other administration and care delivery costs. NHS IUD supply and administration costs normally range from £100-£300 per insertion. But IUD/IUS use can be judged more cost effective than OCP use when contraception failure rates and the duration of protection provided are fully accounted for.

Box 7 UK Sexual and Reproductive Health Strategies

Foley et al (2017) found that 91 per cent of genitourinary medicine (GUM) clinics in the UK were in 2015 offering, when contacted by telephone, symptomatic patients appointments within 48 hours. The figure for 2014 was over 95 per cent. This decline affected female service users more than males. When mystery shoppers posing as asymptomatic service users contacted GUM clinics the proportion offered an appointment within 48 hours rose from 51 per cent in 2014 to over 74 per cent in 2015. But this positive trend was accounted for by improvements in responses to males rather than to females. The researchers involved concluded that access to GUM clinics and their services is worsening for women.

However, it is also of note that when Dr Elizabeth Foley and colleagues conducted similar work in 2000 (Foley et al, 2001) they reported that only 78 per cent of patients with severe acute symptoms were given an appointment within 48 hours. Such observations suggest that in overall terms standards in 2015 were relatively good, but that the impacts of the HSCA and linked pressures on SRH service providers have created an environment in which confidence is low and there are widespread fears that the future will see more reductions in NHS care supply relating to contraception provision and STI treatment.

Similar concerns exist amongst members of the GP community (RCGP, 2017b). RCGP Council Chair Professor Helen Stokes-Lampard recently criticised the fragmentation of SRH service commissioning in England. She noted problems like access difficulties in rural areas and GP training inadequacies regarding LARC provision, and said that funding for prescribing LARCs does not cover the costs incurred by practices. This may drive a bias towards OCP supply. Such factors should be accounted for in comprehensive SRH strategies. National approaches to sexual and reproductive health in the four UK countries may be summarised as follows:

• the implementation of the Framework for Sexual Health Improvement in England (DH, 2013) is a local responsibility. This implies a need for robust service quality targets and/or outcome comparisons in fields like contraception uptake and STI prevention. Priorities identified in the Framework relate to further reducing under 18 conception rates, increasing chlamydia diagnosis rates in people aged under 25 and further improving the identification of HIV at all stages of the disease's development;

opportunities. As far as this report is concerned such limitations relate to both shortfalls in protecting women's (and men's) sexual and reproductive health at all stages of their lives, and promoting the ongoing development of community pharmacies as 'healthy living' resources and of community pharmacists (CPs) as fully engaged NHS health professionals.

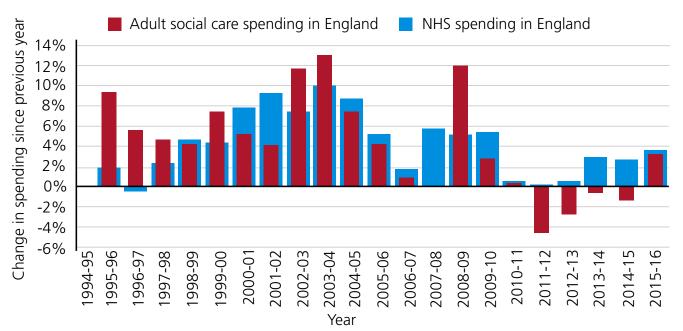
- in Scotland, the document Respect and Responsibility: Strategy and Action Plan was first published by the Scottish Executive in 2005. There have been a number of updates and additional policy initiatives since then, together with the inclusion of SRH goals in local delivery plans supported by Healthcare Improvement Scotland. Scottish priorities largely parallel those identified in England. There has in addition been a focus on health inequality reduction in the SRH arena, reducing coercion and harm in sexual relationships, and improving treatment outcomes for people with blood borne viral infections (Scottish Government 2007, 2015);
- the most recent written Welsh Government statement on progress with implementing the *Sexual Health and Wellbeing Action Plan for Wales 2010-2015* was made in November 2016. It noted achievements relating to declines in the numbers of new cases of infections such as gonorrhoea and HIV, and in reducing STI transmission amongst men who have sex with men and the introduction of the Welsh HPV immunisation programme (Welsh Assembly Government, 2010, 2016); and
- in Northern Ireland the Sexual Health Promotion: Strategy and Action Plan was published in 2008. It too has been updated via subsequent policy and practice documents. Its priorities mirror those identified elsewhere in the UK, albeit the NI document places particular emphasis on seeking to optimise the sexual and reproductive health of people aged under 25 who are or have been in care and on sex worker health (DHSSPS, 2014).

In Northern Ireland there are many more restrictions on women being able to choose an abortion than there are other parts of the UK. This causes over 1,000 individuals a year to travel 'abroad' for such interventions. Bloomer and Hoggart (2015) have commented '*Northern Ireland presents as a classic case of legal restrictions on accessing abortion not halting (it), but displacing it to another jurisdiction or contributing to abortions being conducted away from a healthcare setting.*'

Recent policy changes made in the wake of the June 2017 general election promise that Northern Irish women will be able to obtain abortions as NHS patients elsewhere in the UK. This development goes some way to equalising service access across the nation, although some women in Northern Ireland may still feel that their situation remains relatively disadvantaged.

NHS England has highlighted action presently being taken to increase the numbers of clinical/practice pharmacists working in general medical practice settings. There are currently (in mid 2017) about 500 such professionals employed in general practices in England. Places for another 200 have recently been funded and it is intended that their total number will rise to about 1300 by 2020.

Figure 10 Changes in real spending on the NHS and adult social care in England, 1994-2014



Source: Health Foundation/House of Lords 2017

This is a significant development, which – notwithstanding some long term funding related doubts on the part of GPs and other observers – ought in time to make a measurable contribution to relieving pressures on GPs and their practice colleagues, as well as to enhancing medicines use in the community. But alone it can do little to change the *status quo* in NHS primary care in England. From a strategic standpoint more arguably needs to be done to increase service capacity outside the GP practice and health centre settings, if more far reaching gains are to be achieved

There are presently just over 8,000 General Practices and almost 12,000 Community Pharmacies in England¹², in which some 40,000 GPs (plus over 100,000 other practice staff) and 30,000 community pharmacists (together with another 100,000 other staff) work (Colin-Thomé et al, 2016). Important though GP practice based clinical pharmacy may in future prove to be, such data indicate that extending the roles of community pharmacists working in pharmacies and, not least from a service user satisfaction viewpoint, developing a better balance between GP and community pharmacy health care workloads could do more to improve health outcomes than introducing 1,000 or so pharmacists into the GP practice clinic setting.

Practice based pharmacists may prove able to facilitate greater community pharmacy engagement in care delivery relating to contraception and other areas. Yet it is unlikely that they could substitute for it. However, even if this interpretation is accepted there are important barriers to be overcome with respect to repositioning community pharmacies/pharmacists as direct primary health care providers. For example, Mossialos et al (2013, 2015) have pointed to not only the weaknesses in the international evidence base supporting such policies, but also the potentially destabilising impacts they might have on others working in primary health care systems.

Nevertheless, the view taken here is that in the UK greater CP involvement in supplying contraceptives and providing the care and support needed to optimise their use, as well as in helping to meet other sexual and reproductive health care requirements, could serve as a valuable stepping stone towards a re-engineering of primary care as a whole. Such progress should ideally be achieved in ways which combine the advantages of scale with the benefits of independent contractor status and 'small-business-like' – relationship based – care delivery (Colin-Thomé et al, 2016).

Forming networks of general practices and community pharmacies that function as integrated 'primary care homes' which are technically efficient and in addition respect the human needs of service users and professionals for autonomy and well-rooted relationships will demand ongoing IT advances¹³. It will also require changed public attitudes towards (professionally supported) self-care.

Turning to the issue of charging for SRH services, some policy makers or influencers may see extending community pharmacy based contraception and allied care provision as an opportunity for transferring costs directly to people seeking to avoid unintended pregnancies or harm due to STIs. However, the position

¹² For the UK as a whole the equivalent figures are 11,000 and 14,000 respectively.

¹³ These should lead to not only wider – albeit ideally service user controlled – access to common health records, but also to new opportunities for health professionals such as CPs to support individuals in their self-care oriented efforts to use computer based diagnostic systems and treatment selection aids.

taken here is that a wholesale shift away from public funding would be likely to disadvantage those most in need of better support.

As the survey findings presented in the previous section illustrate, a proportion of women feel able and willing to pay for innovative services that they find convenient or in other ways more satisfactory than existing provisions. Ethically, the case for denying individuals the right to spend their money on such options is weak. Further, new private income streams may be essential for pharmacists and other health professionals who are acting as service pioneers. Without them alternative ways of improving outcomes may be impossible to fund.

However, there is also evidence that charging for items like medicines or preventive interventions can at the population level bias their uptake in ways that disadvantage those most likely to benefit from their use. Such observations indicate that once the value of new approaches has been demonstrated, universal access is most likely to be assured via adequate public funding. Hence the conclusion offered here is that while 'health entrepreneurs' should be as far as possible encouraged to risk setting up privately funded service options, the NHS should fund them in the longer term.

Can community pharmacy's role in providing contraception be extended safely?

Inmost of the world OCPs are available without prescription. Local circumstances vary, as may health outcomes. But the evidence available indicates that at the population level women living in relatively poor settings such as Mexico can use 'the pill' to their advantage without a doctor's authorisation (Grindlay et al , 2013). There is also evidence that even in less advantaged first world settings women can with some support self-screen for contra-indications to taking 'the pill' (Grossman et al, 2008). In more affluent communities appropriately appropriately managed 'over the counter' care can (even in relation to groups such as 'adolescents' – see, for instance, Upadhya et al, 2017) be provided with acceptable degrees of safety and efficacy, albeit that as women grow older the risks associated with taking OCPs rise.

Medical supervision of access to hormonal contraception and other types of contraception has potential benefits. But it can, like any type of professional control, reduce welfare if it needlessly adds to costs¹⁴ or restricts the development of informed self-care. There has for several decades been growing interest in the US and other developed countries in exploring opportunities for making POPs, COCs and other means of hormonal contraception more easily obtainable. (See, for instance, Trussel et al, 1993). The main alternatives to having to see a doctor to obtain a prescription for contraceptives include – short of making them free sale items – facilitating their use via community pharmacies and/or online services involving suitably qualified staff.

Pharmacist prescribing and supply of OCPs (and in some instances products such as vaginal rings and other progestogen based contraceptives) is now permitted in, for example, California and Oregon. There are similar provisions in a growing number of other US States. There is substantive evidence that the option of pharmacy led supply and care is supported by many American women, and that – despite some doctor's concerns that individuals will to their detriment to obtain hormonal contraception without medical examination – it offers levels of safety comparable to those achieved in settings that require medical prescription (Landau et al, 2006; Rafie et al, 2016).

There is also evidence from the US that self-screening for contra-indications to oral contraception using validated checklists including items of personal history, life style and current health status is relatively accurate, especially when supported by health professionals such as appropriately trained pharmacists (Grossman et al, 2008). Indeed, if community pharmacists were to extend their offer to the public in relation to monitoring blood pressure levels and other vascular disease linked risks this could deliver additional health benefits to people of all ages, whether or not they are 'pill' users.

The politics and economics of health care in the United States differ significantly from those in the UK and other Western European countries, in large part because of the nature of the US health insurance market. It has been suggested, for example, that some American advocates of extended pharmacy provision of contraception have wanted to avoid insurers being required to cover the costs of 'family planning' (Rafie et al, 2016). But even if this has on occasions been true this charge does not apply to all US proponents of better pharmacy care. There is also independent interest in and support for enhancing pharmacists' roles in contraception provision (and other life style linked health improvement contexts) in the UK and in nations such as Eire (Brown et al, 2012; Barlassina, 2015).

In some cases researchers have sought to build on pharmacists' experience in EHC supply in order to enhance access to other forms of contraception like progestin only pills (see Michie et al, 2014). Arguably the most important British illustration of such an approach began trial in 2009 in the South London boroughs of Southwark and Lambeth. This initiative involved providing special training for community pharmacists, designed to enable them to offer a contraception service specified via a locally established Patient Group Direction (PGD – Parsons et al, 2013). In the UK PGDs permit pharmacists to prescribe prescription items in circumstances agreed by the doctors responsible for their design.

¹⁴ As alluded to earlier, critics of community pharmacy supply of EHC in the UK as against countries like France argue it has led to 'morning after pill' prices being unduly high, albeit the fall-off in free NHS EHC supply via specialist SRH services seen in England can in part be regarded as a consumer choice led trend.

The Southwark and Lambeth community pharmacy pilot¹⁵ (which is ongoing – Soni, 2017) was of limited scale. Only five pharmacies have participated. Nevertheless, they were demonstrably successful in encouraging significant numbers of young women, half of whom had never taken an OCP before, to start using oral contraception. For the purposes of this report the Southwark and Lewisham pilot offers good evidence that community pharmacists can safely and effectively play an extended part in NHS contraception and other forms of SRH service provision, given necessary training is available and that adequate financial incentives are in place.

Future developments in Lambeth and elsewhere (Birmingham provides another example of a locality with a comprehensive pharmacy based contraception service - see http://psnc.org.uk/?our-services=umbrella-service) could involve pharmacists in prescribing and administering LARCs such as injectable and implantable contraceptives through to strengthening community pharmacists' links with local GUM clinics and other SRH service providers. This would permit better co-ordinated patterns of support, with pharmacists referring some service users directly to specialist support as and when appropriate. If there proves to be sufficient public, professional and managerial support for new service models it is also possible that more family planning nurses and/or GPs will choose to practice from pharmacies, not least to enable them to provide more adequate 'out-of-hours' care across localities.

Will pharmacists accept an extended role in contraception provision and SRH care?

There is evidence that a significant proportion of women (initially up to 25 per cent, the Ipsos Mori research data presented earlier in this report imply) would be interested in using a nationwide enhanced pharmacy based contraception service. Specified appropriately, this could be of value to not only a proportion of young individuals seeking access to birth control in the early stages of their sexual lives but also to women with established contraception choices, and to individuals in their late 30s and 40s who are seeking to adapt to changes in their lives. The qualitative research undertaken amongst health professionals for this report identified concerns that the interests of a proportion of sexually active women in their thirties and above are not at present being given sufficient attention.

Pharmacy based contraception supply and linked SRH support services could – both directly and indirectly – help more women understand the positive advantages of LARCs of all types, as well extending access to OCPs

as and when appropriate and cost effectively releasing GP resources for use in other contexts. Yet questions arise as to the degree to which community pharmacists will be willing and able to take on a more central role in primary care SRH service delivery.

Currently, the dispensing of medicines and allied products accounts for over 95 per cent of community pharmacy's NHS earnings in England. Although expanding service delivery via pharmacies has been much discussed, the degree of practical progress achieved to date has been modest. Furthermore, even in service areas where there has been demonstrable change there is evidence that the quality of care provided has been inconsistent.

For instance, in relation to Emergency Hormonal Contraception there have, as noted earlier, been concerns that some pharmacists seem unduly judgemental, and that pharmacy settings may for some people fail to provide an adequate sense of privacy (Seston et al, 2007). Some pharmacists have also been unwilling to supply 'morning after pills' on their own authority, even though they dispense such products when medically prescribed. This can be interpreted as pharmacy having a 'subordinate' professional culture that relies on doctors for moral and other forms of leadership. When coupled with the workplace isolation often experienced by dispensing pharmacists, this can impair their capacity to work as autonomous health professionals (Cooper et al, 2009).

Smoking cessation provides another example of a field in which the performance of a minority of pharmacists is exemplary, while that of others might be described as 'lacklustre'. The ability of community pharmacists to maintain best practice standards in relation to cessation support has been variable, resulting in medicines like Nicotine Replacement Therapies (NRT) being supplied without the complementary psychological inputs needed to optimise their impact (West, 2016).

Yet against negative perceptions of community pharmacy as a partial profession that has too often been reluctant or unable to play an extended role in fields such as SRH, there are a variety of reasons to believe that important changes are now taking place. They include:

• pharmaceutical market shifts, coupled with the development of dispensing and information management technologies and online pharmaceutical supply and health care systems. These are making it inevitable that community pharmacy must either adapt in order to meet service users' health needs in valued new ways, or undergo a radical downsizing. Were the latter to take place it is likely to leave a relatively small residual pharmacy workforce in the community, the members of which will mainly operate in what might be 'dispensing warehouses' or relatively large GP practices and (community hospital like) health centres;

¹⁵ Related pilot projects and services have been funded in locations ranging from Hackney in East London to Manchester, North Tyne, Edinburgh and Aberdeen. In Isle of Wight a first contraception service was funded, which permitted pharmacists to provide POPs to young women at risk of unwanted conceptions while in Newcastle community pharmacists fit contraceptive implants.

- the emergence of new generations of pharmacists with restricted opportunities to become community pharmacy owners and little wish to be fulltime dispensers. An increasing number of pharmacy graduates appear unwilling – even if suitably paid positions were to be available – to spend their lives playing narrow medicines purchasing and supply roles, and are instead actively seeking chances to make clinical contributions. At the same time NHS hospital pharmacy may be a field in which the number of jobs on offer has peaked; and
- changed regulatory attitudes on the part of bodies such as the General Pharmaceutical Council (GPhC). The latter is taking a progressively more assertive approach to building and maintaining professional standards throughout Britain. This was illustrated, for example, by the GPhC's recent consultation on *Religion, Personal Values and Beliefs in Delivering Person-centred Care in Pharmacy* (GPhC, 2016) and its 2017 decision to implement reforms relevant to areas such as EHC provision. In this instance pharmacists not wishing themselves to provide EHC now have enhanced professional obligations to assure alternative access routes.

The conclusion drawn here is that, taken together, these developments mean that further changes in community pharmacy are certain, and that community pharmacists will increasingly seek tasks like improving women's access to contraception. They are also likely to want to work in more constructive partnerships with other SRH providers.

However, pharmacists alone cannot decide whether or not they will be successful in achieving this ambition. The views of GPs and other professionals, as well as those of service users, will be critically important, as will the ability of NHS and other health service managers to effectively address questions of strategic importance regarding the future of primary care.

Medical concerns

Research undertaken in the US has revealed mixed medical attitudes towards extending the role of pharmacists in prescribing and supplying OCPs and other forms of contraception. A minority of American physicians strongly oppose such proposals because of perceived health risks to service users or because of business model based concerns. But a majority say that they favour the appropriately regulated development of pharmacy based contraceptive care (Rafie et al, 2016).

The position in the UK appears to be similar, even if the practical record of medical organisations in supporting the development of community based clinical pharmacy outside the GP practice setting may be seen as disappointing. This might in part be because of funding concerns. From the perspective of this report it is of note that GPs themselves have been reported as having concerns about their abilities to advise women about the contraception related options available to them in fully comprehensive manner. While the value of existing NHS services should not be denied there is acknowledged room for improvement (Donnelly, 2015).

One way forward could involve a further strengthening of educational outreach to GPs and their colleagues. For instance, Public Health England has recently piloted the '*3Cs & HIV programme*'. This addresses issues relating to chlamydia testing and contraception supply – including free condom provision – as well as improving HIV diagnosis rates (Town et al, 2015). In addition to enhancing knowledge levels and practice skills, the strategic goals of this initiative include building sustainable relationships between GP practice staff and local sexual health service providers.

Depending on their cost effectiveness, such educational interventions are clearly desirable. But the fact that there is a recognised need to support general practice performance in the SRH sphere can also be taken to underline the importance of opportunities for systemwide primary care improvements. These could and arguably should involve pharmacists alongside GPs and professionals such as practice nurses with an interest in contraception and other SRH issues in developing better service offers. Greater pharmacist involvement in new care model initiatives such as the establishment of 'primary care homes' ought to help facilitate such progress.

Next steps?

There can be no single way of delivering a step change improvement in female and male access to personalised contraception support and other forms of reproductive and sexual health care. Incremental service evolution in an environment characterised by an evidence based awareness of the importance of 'planned parenthood' in maintaining and improving public health, and of the current strengths and weaknesses of the English, Welsh, Scottish and Northern Irish SRH care systems, is the only realistic way forward.

At a 'macro' level much will in future depend on the funding of health and social care in the post-Brexit environment, and the ability of those responsible for defending public interests in sexual and reproductive health services to achieve adequate resourcing levels in what may prove to be a financially stressed period. Increased political insight into the value of contraception and its role in fields like further reducing class and gender related inequalities is likely to prove necessary for success in this context. More specific categories of 'next step' opportunity for improving access to contraception include:

- stimulating regulatory and allied changes that will permit more hormonal contraceptives to be classified P or GSL products, and more non-medical health professionals to be able to prescribe and administer LARCs as well as OCPs;
- promoting professional and management practice developments that encourage better collaboration between primary and secondary care providers in order to provide women and men with safe and convenient access to SRH services that are sensitive to their life-stage linked and other personal requirements. Approaches to commissioning and funding services which reinforce counter-productive functional boundaries and restrict opportunities for

Box 8. The Economics of Extending Access to Contraception and SRH Care via Community Pharmacies

The UK-wide cost to the public of NHS community pharmacy services is about £3 billion annually, net of the £10 billion plus outlays on the medicines and other items supplied. Pharmacies also enjoy additional discount payments and private income from the sale of non-NHS medicines and related products. Yet for many their NHS income represents in excess of 90 per cent of their total revenues.

There are, as described in this report, almost 12,000 community pharmacies in England. In 2016-17 they received NHS payments of circa £2.6 billion. This total represented a £200 million cut from the previous year's level of NHS spend because of Ministers' desires to keep within prescribed budgets. A recent Judicial Review revealed that the 'in year' decision to reduce NHS pharmacy's earnings was the result of an essentially arbitrary top-down process.

Seen negatively, outlays on community pharmacy services can be regarded as 'dead weight' cost which it is in the public's interest to minimise. Some policy makers may believe that this could desirably be achieved by radically reducing the number of NHS funded community pharmacies, and concentrating as much dispensing as possible in large automated centres. These might supply medicine consumers directly via postal or other home delivery services, or by 'batch' distributions to GP practices and other locations. In parts of Scandinavia the number of community pharmacies per capita stands at half the current NHS level because the system is supplemented by secondary pick-up points in settings such as supermarkets.

It might be argued that, when backed by IT based advances in information provision and online patient support, aggressive policies could reduce NHS pharmacy costs by between a quarter and a half. However, such savings estimates may well be greatly exaggerated. A contrasting view is that building on the strengths of the existing community pharmacy network in ways that cost effectively (ie that exploit opportunities for 'marginal cost' clinical service extensions) deliver increased access in areas such as contraception choice while maintaining a proven pharmaceutical supply system would be more economic. Considerations to be taken into account include:

- 1. The community pharmacy network already delivers value over and above the cost of medicines supply. PricewaterhouseCoopers (PwC, 2016) found that NHS community pharmacy services in England alone contributed additional socio-economic benefit worth £3 billion in 2015, with an extra £1.9 billion expected to accrue by the mid-2030s. Value generating functions other than medicines supply itself include supervised drug administration and needle and syringe exchange programmes; the local management of prescribing errors; and the provision of non-commissioned professional support for self-care and the treatment of (on occasions misleadingly termed) 'minor ailments'. If the number of community pharmacies were to be significantly cut the added value returns that they provide in addition to the medicines supply for which pharmacists are primarily paid would reduce.
- 2. Not all medicines can be supplied via remote mechanised dispensing options. A quarter to a third of all prescriptions are likely to demand local dispensing. Because of the fixed cost elements involved, the average unit 'price' of supplying such acute items will rise as the total volume of local dispensing reduces. Further, the savings made from 'warehouse' dispensing might in large part be offset by the increased distribution costs involved in supplying medicines directly to their users.
- 3. The value of extending the role of community pharmacy in areas such as contraception and STI testing and treatment (including instituting direct pharmacy referrals to GUM and allied SRH clinics with expertise in fields like IUD/ IUS fitting) will partly depend on the extent to which the medical time released is devoted to activities which have additional cost reducing effects. Unless health service workloads can be cascaded 'down' in ways that reduce duplication, curb overall labour costs and enhance self-care, ambitions to limit future NHS and social care spending without severely disadvantaging patients and other service users are unlikely to be realisable.

innovation need reform. At the same time service-user need focused under-graduate and post-graduate education on providing contraception and preventing, diagnosing and treating STIs at both the individual and population levels should be strengthened (FSRH, 2016); and

 facilitating further advances in the public understanding of fertility and sexual behaviour linked mental and physical health issues. This will require better and more comprehensive – socially and bio-medically informed – sexual and reproductive health and relationship education, designed to complement and where possible guide trends in fields like the mass use of social media and online information sources.

Such innovations have the potential to increase informed demand for professional SRH services and at the same time open the way to greater levels of community wide competency in self-care, and insight into topics such as the relative advantages and disadvantages of OCPs as compared to using IUDs or other LARCs. It is important, for instance, that women are not led to believe that the only advantage of long acting contraceptives is that they do not have to be taken daily. Over and above convenience, they can also be more effective than and otherwise preferable to other options.

One way forward might, perhaps with the involvement of the Royal Pharmaceutical Society and/or other pharmacy bodies, be to organise a consultation aimed at forming a strengthened professional consensus on how community pharmacists should develop their current role beyond that of providing EHC and advice about medicines taking and the use of products such as condoms and pregnancy tests. Such an exercise might also, if possible in partnership with the NHS and other professional and consumer bodies, seek to further develop the economic rationale for extending the role of community pharmacies in areas such as contraception and STI testing – see Box 8.

Over and above finding ways forward that combine respect for service user choice and privacy with a recognition of the value of well integrated, appropriately accessible, SRH and wider health records, the additional questions such a consultation could address include:

- given foreseeable IT and allied developments, should future community pharmacists be empowered to both prescribe and provide 'the pill' and most if not all LARCs?
- ought all NHS pharmacies to offer an extended contraceptive service, or might it be better for a limited number to provide such support in any particular locality? And

• how in a changing world can members of the public best be informed as to what clinical and related services they should expect from primary health care professionals like community pharmacists?

Conclusions

The NHS was created in the aftermath of World War II because of the British people's desire for a better future, together with a widely shared political commitment to establishing not merely an adequate low cost service but the best system of care the country could collectively afford. In the seventy years that have followed much positive progress has been made in areas like establishing universal female access to effective contraception and protecting the health and wellbeing of every baby born. Ensuring that children are wanted and can be well cared for by their mothers and/or fathers is one of the most important tasks of any public health system.

Improved health and social care, coupled with free access to pharmaceutical science based advances such 'the pill' and long acting reversible contraceptives, has helped to change the place of women in society and enhanced the ability of people of both sexes to enjoy their lives as they wish to experience them. In the related area of sexual health the UK can claim to have mounted one of the world's most effective responses to the HIV pandemic. The NHS offers the British population good access to all forms of STI diagnosis and treatment.

However, this country has not always been at the forefront of desirable change. It was, for instance, only after criticism from the WHO and others at around the start of the twenty-first century that an effective programme to lower teenage pregnancy rates amongst the most vulnerable sections of the community was introduced. Currently, there are fears that the strength of the nation's commitment to providing optimal levels of publicly funded health and social care has waned. There is a risk that this will impact negatively on sexual and reproductive health and health care, particularly amongst those less advantaged groups most at risk of avoidable harm.

Britain today spends less of its national wealth on health and allied services than European States like Germany, The Netherlands and France and presently appears, at least in the English public health context, to be set on (in GDP percentage terms) decreasing levels of public investment in the years to 2020. The threat that this presents to the quality of SRH care delivered should not be exaggerated. But at the same time there is amongst many service providers a wish to defend existing standards and to communicate to policy makers positive arguments for service improvements. From an economic perspective the case for continuing to pay special attention to supporting teenage and other women at high risk of unintended conceptions remains robust. There are still in the order of 200,000 abortions conducted every year in the United Kingdom. Such operations may be judged a necessary and appropriate means of reducing distress. But even so the total still undertaken is an indicator of the potential price of failing to provide good quality SRH care, and of the importance of providing effective contraception to all women able to benefit from it.

There are also arguments for spending resources on minimising the transmission of HIV, together with other sexually transmitted infections ranging from chlamydia and genital herpes to gonorrhoea and syphilis, and for treating them effectively when they occur. Specialist GUM centres have a vital part to play in this. But the analysis provided in this report also highlights the value of further developing primary care in order to meet the contraception and allied sexual health needs of women and their male partners as conveniently as possible at every stage of their lives.

There is a powerful case for building on pilot projects that have demonstrated the potential of NHS community pharmacies to provide enhanced access to contraception and other SRH services on a nationwide basis. These could, if appropriately designed, further improve access to not only emergency and other forms of hormonal contraception but also facilitate an increased use of long acting reversible contraceptives, when this is consistent with the interests of the women concerned. It could also help to ensure that there is enough system-wide capacity to address the contraception and other sexual health requirements of older women, some of whom do not feel they presently have adequate access to their GPs or any alternative form of professional support.

In the final analysis no one group of providers can in isolation assure SRH service excellence. Achieving the best affordable sexual and reproductive health care standards will require complementary efforts on the parts of all the actors involved, from hospital based medical consultants and their nursing and specialist pharmacist colleagues to GPs and practice nurses and other NHS, Local Authority and voluntary sector staff. The latter include midwives, health visitors and social workers

If they are to extend their role in contraception prescribing and supply community pharmacists will need to be able to demonstrate their understanding of this system-wide reality to other professionals and the wider public. They will also need to work with all other stakeholders in sexual and reproductive health – including service users – to communicate to policy makers why investing adequately in family planning will always be central to optimising the health of the nation.

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