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Structural barriers or patient preference? A mixed methods appraisal of medical abortion use in England and Wales

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ABSTRACT

Although patient choice of abortion method is a key component of quality care, medical abortion (MA) has become the most common method (87%) in England and Wales, as in many countries worldwide. This research aimed to critically examine factors influencing the growth in MA use in England and Wales. Mixed methods were used, combining multi-level regression analysis of national abortion statistics (2011-2020) and key informant interviews with abortion service managers, commissioners, and providers (n=27). Overall trends have been driven by growth in MA use for abortions under 10 weeks in the private non-profit sector. Variation in MA use between patient sub-groups and regions has narrowed over time. Qualitative findings highlight health system constraints that have influenced the shift towards MA, including workforce constraints, infrastructure requirements, provider policies, cost, and commissioning practices involving under-funding and competition, which have caused the private non-profit sector to limit method choice across their services to remain financially viable. While removal of legal restrictions on MA has expanded choice, similar policy progress has not been seen for surgical methods. The study concludes that abortion method choice has been constrained by structural health system factors, with potential negative consequences for service acceptability, inequalities, and patient-centredness.

1. Introduction

Patient choice of medical or surgical abortion is considered a key component of quality abortion care [1,2]. A medical abortion involves the patient taking a course of pills, and then passing the pregnancy vaginally, usually at home, while a surgical abortion involves a health provider conducting a gynaecological procedure to remove the pregnancy. Because each method offers a very different patient experience (Table 1), patients tend to have strong method preferences, and service acceptability is greatest when patients can choose and receive their preferred abortion method [3–10]. Although acceptability is high for both procedures [10], studies have observed higher patient satisfaction with surgical than medical abortion due to lower levels of pain and a faster process [3,7,9,11-17]. Yet, medical abortion (MA) has largely replaced surgical methods in many countries [18], including England and Wales where MA use increased from 5% of abortions when first provided in 1992, to 12% in 2000, 43% in 2010 and 87% in 2021 [19]. Where MA ratios are very high (>80%), this can raise questions about choice [20].

Globally, the extent to which changing distributions in abortion methods are driven by patient preferences or by structural barriers to patient-centred care is poorly understood [18,20]. Although many studies have assessed individual patient preference of abortion method [21], few have considered structural factors at the provider, institutional and health system level that influence method choice [15,22-26]. The perspectives of health providers [15,22,23,25-29], service managers or funding bodies [30] on the changing nature of abortion services have rarely been assessed. Research in England and Wales has consistently identified abortion method choice as an area of care that requires improvement (from a patient perspective or through clinical audit) [3, 31-33]. However, these studies either took place before MA became the most commonly used method [3,31,33] or did not include the private non-profit sector [32], which provides most abortion care. Research is needed to understand whether growing MA use reflects services' increasing ability to meet patient preferences, or whether underlying restrictions on choice suggest a need to improve patient-centred care.

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Table 1
Characteristics of abortion methods and service availability in England and Wales.

	Medical abortion	Surgical abortion
What it involves	Two medicines (mifepristone and misoprostol) are administered (orally / vaginally) and the pregnancy is passed through the vagina in the form of blood and clots.	A gynecological procedure where a tube is entered into the uterus via the cervix and gentle suction is used (vacuum aspiration), or specialised instruments are used (dilation and evacuation, D&E) to remove the pregnancy.
Gestational restrictions	Before 10 weeks the pregnancy can be passed at home and no clinic visit is required usually. After 10 weeks gestation, the entire process will take place in a clinic or hospital and may require an overnight stay.	Before 14 weeks the procedure can be completed under local or general anesthetic, or deep sedation, and is usually vacuum aspiration. After 14 weeks the procedure will involve general anaesthetic or deep sedation and usually uses D&E.
Speed	Drugs are taken 24-48 hours apart, and there may be several hours between administration of medicines and expulsion of pregnancy.	Procedure takes 10-15 mins, but the appointment can last up to 4 hours. Most go home the same day.
Clinic visits	0 or 1 clinic visit.	1 or 2 clinic visits.
Involvement in the process	Patient will manage the process and may see the products of the pregnancy, which might be more visible after 9 weeks gestation.	A health care professional manages the process. Patient will not usually see the products of the pregnancy, unless they choose to do so.
Side effects	Cramping pain & bleeding (greater than a heavy period). Potentially: diarrhea, nausea, vomiting. Some bleeding and cramping <12 days	Discomfort during procedure if awake. Potentially: diarrhea, nausea, vomiting (due to taking misoprostol for cervical priming). Some pain, bleeding and cramping <7 days
Assessing completion	Pregnancy test after 2 weeks (if completed at home).	No further tests or appointments usually required.
Estimated completion rate	93% will not require further surgery <14 weeks. 87% will not require further surgery >14 weeks.	97% will not require further surgery <14 weeks. 97% will not require further surgery >14 weeks.
NHS availability	Inpatient or outpatient, available at later gestations. Limited use of telemedicine.	Limited availability, particularly at later gestations.
Independent sector availability	Outpatient so under 10 weeks gestation only (except one clinic with inpatient facilities). Widespread use of telemedicine since 2020.	Available at earlier and later gestations.

Source: National Institute for Health and Care Excellence Decision Making Tools. https://www.nice.org.uk/guidance/ng140/resources/abortion-before-14-weeks-choosing-between-medical-or-surgical-abortion-patient-decision-aid-pdf-6906582255, https://www.nice.org.uk/guidance/ng140/resources/abortion-from-14-weeks-up-to-24-weeks-choosing-between-medical-or-surgical-abortion-patient-decision-aid-pdf-6906582254 Accessed 8/3/2022

1.1. Aim

Using mixed methods, this research aimed to critically examine the factors influencing the growing use of MA in England and Wales between 2011 and 2020. The specific research questions were: 1) how have trends in MA use varied by population sub-group, provider and commissioner since 2011? and 2) what mechanisms at the health system, provider and individual level are influencing these trends?

1.2. Setting

Abortion has been legalised in Britain since the Abortion Act 1967 [34] which stated that a pregnancy may be lawfully terminated if two medical practitioners are of the opinion that the abortion is justified under one or more of a set of grounds (risk to physical or mental health of woman or any existing children, risk to woman's life, foetal indications). Historically, the private, non-profit sector (known as independent sector providers or ISPs) has been the main source of abortion services since the Abortion Act, due to gynaecologists' reluctance to offer abortion care in the National Health Service (NHS) [35,36]. Three ISPs exist, all specialising in abortion care: British Pregnancy Advisory Services (BPAS), MSI Choices UK (MS UK) and the National Unplanned Pregnancy Advisory Service (NUPAS). Although 77% of abortions in England and Wales were provided by this private non-profit sector in 2021, almost all (99%) were under NHS contracts and free to patients at the point of use [19,35].

After 1967, almost all abortions were surgical procedures until mifepristone was licensed for use in 1991. The Abortion Act's specifications on where abortions could be provided meant patients had to make multiple clinic visits to administer the two sets of pills until recently. From 2015 onwards, some providers introduced simultaneous administration of both sets of MA pills, although this dosing has slightly lower efficacy, because it reduced the number of clinic visits required [37]. In 2018, new approvals allowed patients to take the second set of MA pills (misoprostol) in their home [38]. In 2020, home administration of the first pill (mifepristone) was also approved, which removed the need for in-person appointments for most patients and enabled the introduction of telemedicine [39].

Since 1991, the 'internal market', involving provider competition for selective contracts, has characterised governance of the NHS in England [40]. The internal market was reinforced in England by the Health and Social Care Act 2012 which required commissioners (clinical commissioning groups (CCGs)) to put most contracts out to tender, with the aim of encouraging competition between providers to improve quality and contain costs [40]. CCGs were responsible for commissioning abortion services for their local areas from 2012 till July 2022, when they were replaced by new Integrated Care Systems which now commission abortion services in England [41,42]. In Wales, local health boards are responsible for providing all health services and there is not a purchaser-provider split or provider competition, though abortion services are still commissioned from the private non-profit sector.

Professional standards [43] and clinical guidelines [1] require that patients are offered a choice of abortion method, and method choice is one of six national quality standards for abortion care [44].

2. Methods

This study used a multi-strategy mixed methods approach, including an analysis of national abortion statistics and in-depth interviews with key informants conducted in parallel. The study draws on the socio-ecological framework [45] to understand interactions between individual, interpersonal, organisational, community and policy influences, as this framework offers a useful perspective for understanding how choice can be structured by social systems [46].

The statistical analysis (ref: 16657) and key informant interviews (ref: 23691) received approval from the London School of Economics Research Ethics Committee.

2.1. Analysis of national abortion statistics

I analysed the Department of Health and Social Care's national abortion statistics for England and Wales. Data were at the individual patient level, but multiple abortions of the same individual are not linked. I analysed data for 2011-2020, as this period saw MA become the dominant abortion method, and the removal of various clinical

restrictions on its use. Variables are described in Appendix 1. The total number of abortions included in the analysis was 1,972,569 (see Appendix 2 for details).

First, I assessed trends in MA use descriptively by provider and by gestation, due to the differences in clinical requirements for abortions over and under 10 weeks of pregnancy duration. To assess patient- and provider-level factors associated with MA use (versus surgical) by gestation, I conducted bivariate and then multivariate logistic regression. Potential explanatory variables were limited by data availability, but were selected based on previous literature about factors associated with patient and provider method preference [15,23,32,47–55] and on my own hypotheses about the potential impact of differences in infrastructure, staffing, and financial arrangements between sectors as detailed in Appendix 1. Patient characteristics included age, relationship status, ethnicity, region, gestation, previous abortions and previous births, while the only provider characteristic was whether they were NHS or private non-profit sector (ISPs). To assess MA trends by subgroup over time, adjusted for variations in patient- and provider-related characteristics, I plotted the fitted probabilities of MA use by subgroup from the multivariate model for each gestation.

To investigate the effect of commissioning on MA use in England, I added a random clinical commissioning group (CCG) intercept to the multivariate models by gestation, to estimate the variance in MA use (versus surgical) within and between CCGs, adjusting for patient- and provider-related fixed effects.

2.2. Key informant interviews

To understand trends in MA use and the factors influencing method choice from the perspective of service managers, commissioners and providers, I conducted 27 key informant interviews between August and November 2021. I used purposive, convenience sampling to recruit participants from a range of professional backgrounds, geographic regions, and from both NHS and private non-profit sector providers (ISPs). The methods and participant characteristics are described in detail elsewhere [56].

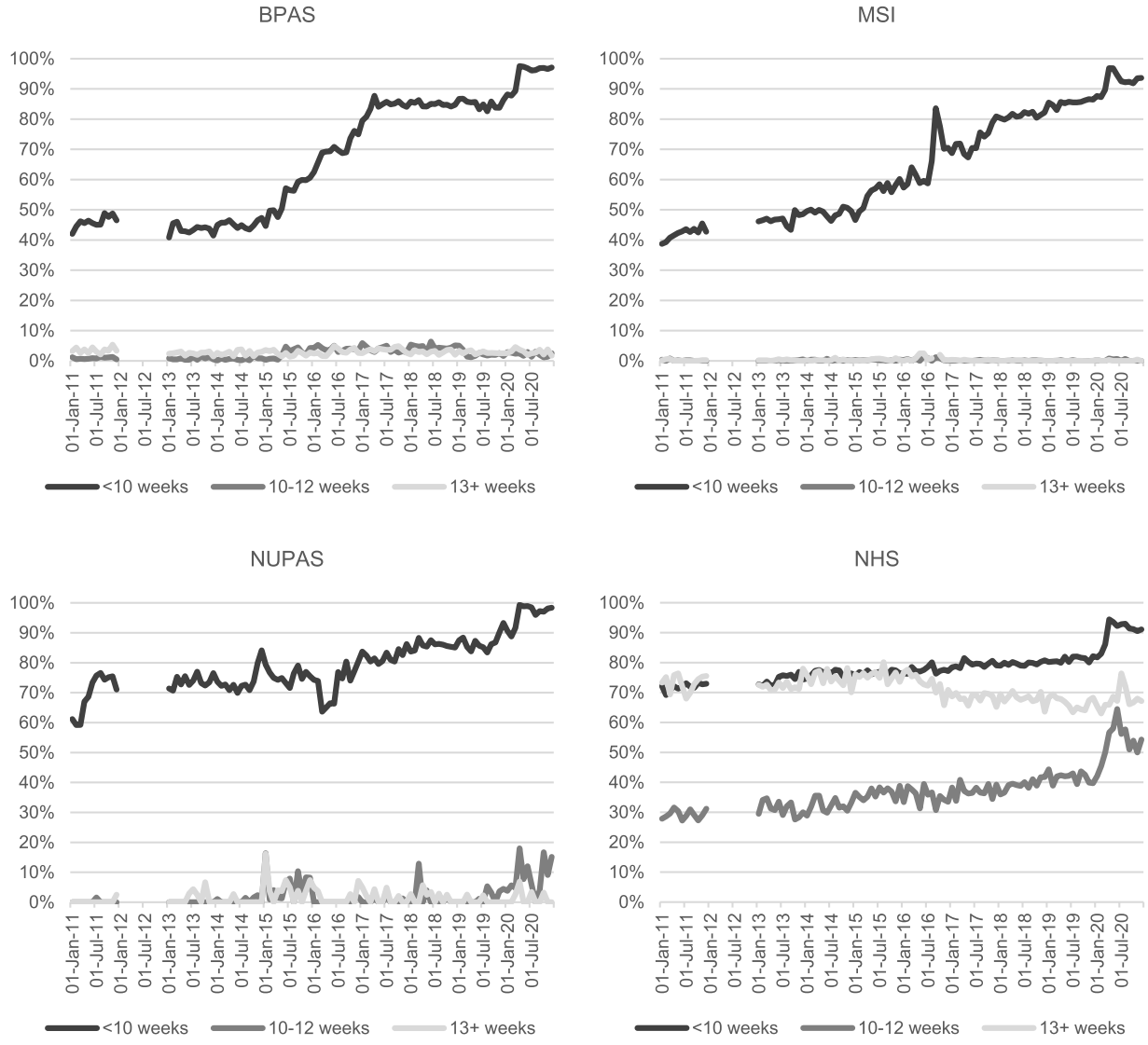

Fig. 1. Trend in % of abortions that are MA, 2011-2020, by provider and gestation

[a]In 2012, clinic names (and therefore provider) were missing from the data.

[b]Key policy changes. 2015: simultaneous administration of mifepristone and misoprostol introduced at BPAS; 2017: simultaneous administration introduced at MSI and NUPAS; 2019: home-administration of misoprostol introduced; 2020: home-administration of mifepristone and telemedicine abortion introduced.

[C]BPAS, MSI and NUPAS are the three largest private non-profit sector providers (ISPs). NHS = public sector. Almost all (99%) abortions in the private non-profit sector are under NHS contracts, so are free at the point of use to patients.

Interviews were held by phone call, Zoom or Microsoft Teams, lasted for 50-60 minutes and were semi-structured using a topic guide. Interviews were flexible, led by the participant's experience and informed by gaps and themes that emerged in previous interviews. There was no reimbursement for participation.

I used framework analysis methods, first developing a coding framework based on topics identified through an initial inductive coding. These topics were categorised into overarching themes using the socio-ecological framework [45]. I coded all transcripts using this framework in Dedoose [57], and then used coded excerpts for each topic to chart the data and develop summaries.

3. Results

3.1. Analysis of national abortion statistics

The overall growth in MA use from 2011-2020 has been driven by abortions under 10 weeks in the private non-profit sector, particularly the two largest ISPs (BPAS and MSI) (Fig. 1), as MA use was already high in NUPAS and the NHS in 2011. For abortions over 10 weeks, MA use has remained very low in the ISPs. MA use over 10 weeks is higher in the NHS, where it has declined slightly for abortions at 10-12 weeks but increased for 13+ weeks. There were spikes in MA use under 10 weeks across all providers from March 2020 at the start of the COVID-19 pandemic, with MA ratios rising over 90%, and MA use also spiked for abortions over 10 weeks in the NHS.

Variation in MA use for abortions under 10 weeks by sub-group narrowed between 2013-2020, particularly the variation between regions, provider, ethnicity, age, and those with or without a previous birth or abortion experience (Fig. 2). Variation in MA use between commissioning areas has also reduced substantially over time (Appendix 3).

In the multilevel logistic regression model, adjusting for patient and provider characteristics, CCG effects only explained 6% of the variation in MA use under 10 weeks in England between 2013-2020 (Table 2). In this multilevel model, the adjusted odds of an abortion being medical were higher if the service user was younger, White or Asian, married (versus single with partner), had no previous abortion or birth experiences, resident of Lancashire and South Cumbria or Cumbria and North East, and if the abortion was provided by the NHS, NUPAS or the private for-profit sector (Table 2). However, the variation in MA use by patient characteristics was limited.

3.2. Key informant interviews

Factors identified by key informants that have influenced the growing use of MA across different levels of the socio-ecological framework are described in turn below, and in more detail in Appendix 4. Most factors were operating at the organisational, or structural health system level.

3.3. Law and policy

Key informants described changes in clinical policy and in legislation having expanded the accessibility of MA for patients under 10 weeks' gestation through the gradual removal of unnecessary clinic visits, inpatient stays, and tests (e.g., Rhesus testing and ultrasound scans), which ISPs have been faster to implement than NHS providers (Appendix 4). However, the impact of policy changes were not all evident in national trends. In Fig. 1, a substantial increase in MA use is visible from 2015 in BPAS services, when clinical policy changes introduced simultaneous administration of both MA medications, reducing the number of clinic visits required [37]. Simultaneous administration was introduced in 2017 at MSI and NUPAS [58], but there was no clear increase in MA use at either provider that year. Across all providers, there appeared to be little increase in MA use in 2019 when legislative change allowed home-administration of misoprostol to be implemented [59], although the impact of this policy on MA use may have been limited due to the prior introduction of simultaneous administration. MA use increased across all providers in 2020 during the COVID-19 pandemic, when temporary legislation allowed at-home mifepristone administration and telemedicine abortion [60]. Although clinical policy and legislative changes were seen to have expanded access to MA, a couple of key informants noted that there has not been the same progress for surgical abortion, which is still limited by the unnecessary requirement for vacuum aspiration for abortion to be conducted by a doctor, despite nurses being authorised to conduct the exact same procedure when the indication is miscarriage.

The 2012 Health and Social Care Act in England was also mentioned by several participants, as these reforms had introduced competitive tendering into health care commissioning:

"With the health service reforms in… 2012 which really embedded competition into the whole system, so there were competitive tenders and bids, that meant there was this race to the bottom… And that just meant, you know, if you're cutting costs, the only real thing you can cut is quality unfortunately". [NHS provider / ISP manager]

Key informants described how the requirement for ISPs to compete with each other for tenders created continuous pressure to accept sub-tariff reimbursement from commissioners, caused cherry-picking of easier and cheaper services (i.e., early MA) by providers, fostered poor collaboration between services, and incentivised manipulation of central booking systems as ISPs want to refer to their own services. These factors were all considered to create an incentive for ISPs to deliver more MA, and a service delivery environment where surgical services are less accessible because they must be organised into (infrequent) lists to limit costs, leading to high waiting times. Both commissioners and providers described a lack of understanding and ownership of abortion within some CCGs, as abortion was fragmented from the rest of sexual health during the 2012 reforms and abortion is a low priority for most commissioners.

3.4. Organisational

Most factors identified through the key informant interviews were operating at the organisational or health system level and most were seen to be incentivising the provision of MA or reducing accessibility of surgical methods, particularly in the ISPs, which have seen the main growth in MA use (Fig. 1). The importance of these higher level health system factors may explain why variation in MA use under 10 weeks by sub-group narrowed between 2013-2020 (Fig. 2).

Organisational factors included workforce issues, infrastructural requirements, service structure, provider policies and leadership, reliance on ISPs, the cost of methods, and commissioning and competition (Appendix 4). Many of these factors were seen to reduce method choice, particularly for surgical abortion. For example, limited surgical skills in the health workforce, conscientious objection and the greater infrastructural requirements of surgical abortion make it more difficult for the NHS and ISPs to offer surgical methods:

"The reason that there's a two week wait for a surgical is because a lot of surgeons won't do it and a lot of anaesthetists won't do it. So you might have a surgeon to do the list but you don't have an anaesthetist, so you're stuck." [NHS doctor]

"One of our providers closed their centre where they provided surgicals… because they were like, this is no longer financially feasible… So they moved premises to a smaller medical site where… they can do scans, you know, that sort of thing, but they can't provide surgical abortion there" [Commissioner]

Workforce was identified as a particularly important issue for the NHS, where there was seen to be historically limited capacity and willingness to provide abortion. Within ISPs, the structure of services also limited surgical access pre-pandemic, as patients were usually booked into the earliest appointment which tended to be an MA-only facility, while surgical appointments are delivered through lists which

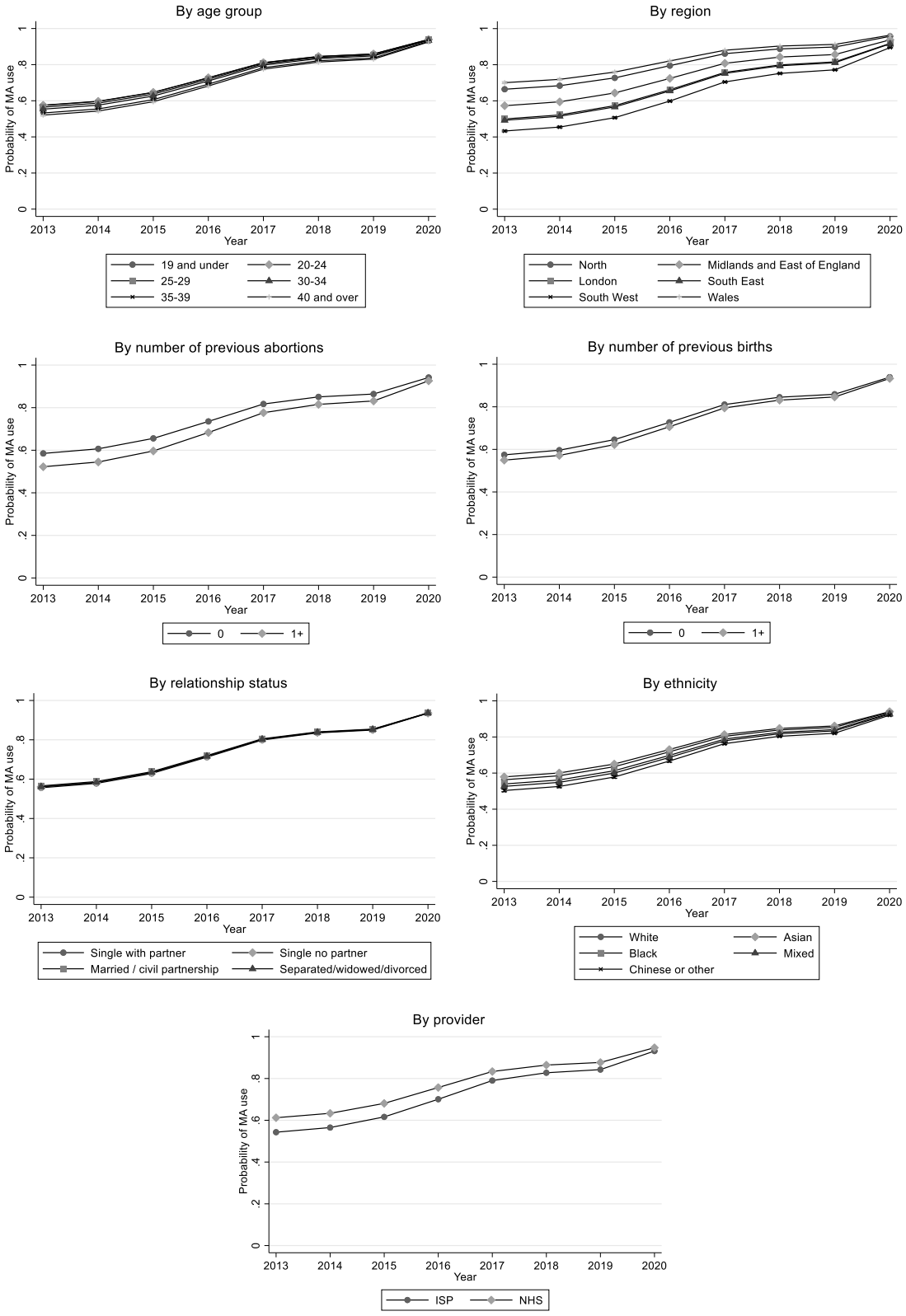

Fig. 2. Fitted probabilities of MA use under 10 weeks, 2013-2020, adjusting for age, previous births and abortions, relationship status, ethnicity, region, and provider type (n=1,276,692)

Note: Data for 2011-2012 were excluded due to missing data on provider type in 2012. Only results for abortions under 10 weeks are shown because the growth in MA use during the study period was among abortions under 10 weeks.

Table 2
Multilevel logit model with a random CCG effect for the odds of a medical abortion <10 weeks, England, 2013-2020.

	Odds ratio	95% Confidence Intervals
Age group		
19 and under	ref.	
20-24	1.004	[0.989; 1.021]
25-29	0.970***	[0.953; 0.986]
30-34	0.930***	[0.913; 0.947]
35-39	0.862***	[0.845; 0.880]
40+	0.827***	[0.805; 0.848]
Previous births		
No prev. births	ref.	
1+ births	0.889***	[0.880; 0.899]
Previous abortions		
No prev. abortions	ref.	
1+ abortions	0.768***	[0.761; 0.775]
Relationship status		
Single (unmarried) with partner	ref.	
Single (unmarried) no partner	1.003	[0.992; 1.015]
Single (unmarried) not stated	1.078***	[1.052; 1.105]
Married/civil partnership	1.028***	[1.013; 1.043]
Separated/widowed/divorced	0.995	[0.967; 1.025]
Not known & not stated	1.104***	[1.076; 1.132]
Ethnicity		
White	ref.	
Asian	1.019*	[1.002; 1.037]
Black	0.906***	[0.891; 0.922]
Mixed or multiple ethnicities	0.855***	[0.835; 0.874]
Chinese or other ethnic group	0.781***	[0.759; 0.803]
Not known / not stated	1.147***	[1.114; 1.179]
Provider		
BPAS	ref.	
MSI	0.964***	[0.951; 0.977]
NUPAS	2.293***	[2.230; 2.358]
NHS	1.245***	[1.224; 1.266]
Private for profit	1.365***	[1.288; 1.447]
Sub-region		
Central Midlands	ref.	
Cheshire and Merseyside	0.731	[0.522; 1.024]
Cumbria and North East	3.795***	[2.750; 5.236]
East	0.907	[0.659; 1.248]
Greater Manchester	0.850	[0.607; 1.189]
Hampshire Isle of Wight Thames Valley	0.690**	[0.513; 0.928]
Kent Surrey Sussex	0.586***	[0.437; 0.785]
Lancashire and South Cumbria	1.833**	[1.240; 2.709]
London	0.607***	[0.462; 0.797]
North Midlands	0.743*	[0.549; 1.005]
South West North	0.552**	[0.380; 0.804]
South West South	0.455***	[0.296; 0.699]
West Midlands	0.962	[0.700; 1.324]
Yorkshire and Humber	1.188	[0.892; 1.582]
Year		
2013	ref.	
2014	1.078***	[1.061; 1.095]
2015	1.358***	[1.336; 1.379]
2016	2.018***	[1.986; 2.051]
2017	3.247***	[3.191; 3.304]
2018	4.089***	[4.016; 4.163]
2019	4.562***	[4.480; 4.645]
2020	11.566***	[11.270; 11.869]
Observations	1,200,175	
Intraclass correlation [Standard Error]	0.060	[0.0053]

Notes: * p<0.05, ** p<0.01, *** p<0.001 Data for 2011-2012 were excluded because data were not available for provider type in 2012 and for CCG prior to 2013. Only results for abortions under 10 weeks are shown, because the growth in MA use during the study period was among abortions under 10 weeks.

require the patient to be willing and able to wait.

Provider policies have also limited access to surgical methods, particularly since the pandemic, as ISPs made telemedicine MA the *"default"* option for abortions under 10 weeks to manage the risk of COVID-19 transmission:

"Last year when the pandemic hit… we were basically told um, look anybody under 10 weeks is getting a medical abortion, they will not have the option of a surgical unless there are compelling reasons… Um, and so that sort of basically took the choice away". [Former ISP nurse]

However, two former ISP nurses said that MA was also offered as a default prior to the pandemic in one of the ISPs. Within the NHS, clinical leadership and senior management decisions could either expand or limit capacity to provide method choice, but with significant variation experienced by key informants from different NHS hospitals and trusts. Reliance on ISPs to provide abortion was seen by several participants to limit choice because ISPs are more heavily influenced by the cost of delivering different services. Reliance on ISPs to provide abortion was also seen to enable a lack of engagement with abortion in the NHS, and the low capacity to provide surgical abortion in NHS facilities.

Many participants noted that the costs of providing a surgical abortion are higher than the costs of providing MA due to the infrastructure requirements and the level and number of staff involved. Commissioning, funding, and competition therefore have an important impact on method choice. Many of the providers argued that tight competition had resulted in the ISP providers being reimbursed for delivering abortion care at sub-tariff rates, particularly for surgical abortion, and that this indirectly incentivised ISPs to increase MA use and reduce surgical access, because MA can be delivered at less of a loss:

"Within the services, there's been a war, well it is like a bidding war to get the contracts… And this has affected the service. Because of all this undercutting. Um, it's not made it financially viable… to run the service." [NHS nurse]

"There's absolute cherry picking… it's the EMAs [Early Medical Abortions]. The EMAs are relatively easy to deliver with a reduced financial outlay. What nobody particularly wants to do is take on additional surgical caseload because of the way it's commissioned in terms of the financial reimbursement" [ISP manager]

Some commissioners empathised with providers on this issue, but there was also an argument among commissioners that the tariffs being paid to ISPs must be adequate because the ISPs hadn't ceased operating: *"my black and white answer to that is, you haven't gone broke"* [Commissioner].

Key informant accounts of the substantial impact of varying commissioning practices and tariffs contrast with this study's quantitative finding that CCG effects only explained 6% of the variation in MA use in England. However, this discrepancy may be explained by the way that ISPs are able to cross-subsidise nationally:

"*There's dramatic geographical variation [in commissioning], actually, which is also problematic… so one commissioning contract is actually functionally, subsidising another CCG contract that doesn't pay as well, just so that we can keep the whole thing going" [ISP manager].*

Abortion services being reimbursed at sub-tariff prices by some commissioners may therefore have a nationwide effect, as ISPs limit costs and choice across their services in efforts to remain financially viable. Although commissioners in some areas have pushed back on attempts by ISPs to close abortion clinics, another commissioner accepted that in-clinic abortions would eventually become unsustainable: *"at some point I think we would be tacitly acknowledging that it's no longer a choice, it's an offer of a medical abortion" [Commissioner].*

3.5. Interpersonal

At the interpersonal level (Appendix 4), participants identified the importance of patient-provider interactions for providing an informed choice. Some providers expressed a strong desire to ensure patients could access the method that best suited their needs. However, several participants acknowledged that providers could influence patients towards either method, depending on how they provide information, and may be motivated to do so, for example due to perceptions of patient discomfort or risk, their personal exposure to either method, desire to protect surgical lists or to retain surgical skills, the amount of work

involved or their discomfort with either procedure.

Also at the interpersonal level, a couple of participants suggested wider social norms may have influenced the shift towards MA, as social networks sharing their abortion experiences may create an expectation among patients that an abortion will involve MA.

3.6. Individual

At the individual patient-level (Appendix 4), participants identified medical and social factors (e.g., housing status, childcare commitments) that could influence patients to prefer either medical or surgical abortion, depending on their individual situation. Participants also highlighted the importance of patient agency to access surgical abortion, as patients are not always openly informed and offered both options. This can limit patient choice of surgical abortion before 10 weeks gestation in ISPs and after 10 weeks in the NHS, unless patients inform and advocate for themselves.

4. Discussion

Medical abortion is often seen as revolutionary, offering a non-medicalised and self-managed treatment option which can afford people greater control of their reproductive autonomy [20,61,62]. However, MA may not feel emancipatory when patients lack an alternative option [63]. This study finds that the shift towards MA in England and Wales over the past decade has been driven in part by constraints on patient choice and particularly by barriers at the health system level relating to skills gaps, infrastructure requirements, service structure, provider policy and leadership, cost, reliance on the private non-profit sector, and commissioning practices involving under-funding and competition. While removal of legal restrictions on MA has expanded access, similar policy progress is needed for surgical methods, which still cannot be provided by nurses and midwives. These findings build on previous literature in England and Wales, which found limited choice of MA pre-2010 [3,31] but more recently identified that waiting times, availability of trained staff, service locations and gestational limits were impeding patient choice of surgical abortion [32,64]. In the global literature, similar health system and clinic-level factors influencing method choice have been observed, including clinical regulations, provider skill and availability, how abortion is funded, and the relative roles of the public and private sector [24,65–68]. Concerns about provider resistance, costs, infrastructure and training requirements have also influenced the decision to only offer MA in some countries where abortion is newly legalised [65,66].

This body of literature suggests that structural barriers to patient-centred care may be an important determinant of changing distributions in abortion methods. This has important implications for patient experience, as people place a high value on being able to choose their method of abortion [3,8,69] Constraints on choice also have implications for inequalities in abortion care, as this study identified that patients are required to inform and advocate for themselves to overcome implicit and explicit limitations on access to surgical abortion [56]. This may deepen inequalities in access to patient-centred abortion care, particularly given that many of the individual-level factors that impact abortion method preference or acceptability are closely linked to inequalities (e.g., age, education, ethnicity, employment, living conditions, availability of support [32,49–53,68,70]). If method choice is not retained as a standard of quality care, a more consistent and transparent assessment of patient eligibility for surgical abortion is required, that prioritises patients' need over patients' ability to self-advocate. Now that telemedicine has been approved as a permanent feature of abortion services in England and Wales [71], the need to determine a clear policy for patient choice of surgical and in-person abortion care is even more urgent. Moreover, as there will always be a clinical need for surgical abortion, it is vital to ensure this option is accessible for those who are not clinically eligible for medical abortion.

Accounts of key informants suggest that the financial pressure placed on abortion services is influencing their ability to offer abortion method choice. Yet many of the challenges identified in this study have implications that go beyond the issue of method choice. These findings highlight the fragility of abortion services in England and Wales, owing to a lack of funding, poor health system integration and fragmentation of sexual and reproductive health [42]. The historical outsourcing of abortion care to the private non-profit sector makes abortion services particularly vulnerable to the (negative) impacts of competition-focussed health reform on quality of care [72]. Abortion is a low priority for commissioners within CCGs, in part due to its relatively low overall costs, and the fragmentation of abortion from sexual health commissioning in local authorities also means abortion commissioners often have limited knowledge about the topic and limited familiarity with the importance of method choice [56]. Closer monitoring is needed of the impact of financial pressures on quality of abortion care, including method choice. Tariffs for abortion services in the private non-profit sector must be reviewed through a transparent and fair costing. Separate commissioning processes for medical and surgical abortion may help to negate some of the impact of commissioning practices on method choice. Improved collaboration between the private non-profit sector and NHS may also be required to safeguard access to surgical abortion in the long-term, if it is more cost-effective to deliver surgical options through NHS staff and infrastructure. Abortion method choice could also be improved by strengthening training and workforce planning to protect and expand surgical abortion skills, and clarifying that nurses and midwives can provide vacuum aspiration for abortion, as they already do for miscarriage [56,73].

The study has limitations. There may have been self-selection bias in recruitment of key informants, with participation more likely from those who have a stronger interest in the issue of method choice. Key informants may have been concerned about how their organisation or interests would be represented in the findings from this research, which may have influenced their responses, though informants were assured their organisation would be anonymised. For the analysis of national statistics, the data I could access were limited in terms of the variables and categorisations, so there is no information about deprivation status, employment, education or gender for example, and some categorisations were difficult to interpret (e.g. ethnicity). These data exclude abortions obtained outside of the conditions of the Abortion Act 1967, for example if MA pills are obtained online.

The study also has several strengths. It is the first to assess the shift towards MA from a structural, systemic perspective, identifying influencing factors across the patient, provider, institutional and health system levels. The research broadens the existing literature on method choice to include the perspectives of service managers and funding bodies, in addition to patients and providers. It offers the first analysis of MA trends over time in England and Wales by population sub-group and region, and the first use of multi-level modelling to understand structural factors that might influence MA use.

Conclusion

With evolving abortion technologies, patients theoretically have greater choice, enabling them to access abortion care that best meets their needs and preferences. However, in this study, accounts from key informants suggest that constraints on patient choice have also influenced the shift towards newer abortion technologies (MA) in England and Wales over the past decade, primarily at the health system level. Constrained choice of abortion methods may negatively impact service acceptability and inequalities. Abortion method choice can be improved by strengthening training and workforce planning to protect and expand surgical abortion skills, implementing a review of commissioning practices for abortion care including a transparent and fair review of tariffs, clarifying that nurses and midwives can provide vacuum aspiration for abortion, and improving integration of private non-profit sector and

NHS services. If method choice is not going to be safeguarded as a standard of quality care, a more consistent and transparent assessment of patient eligibility for surgical abortion is required, that prioritises patients' needs over patients' ability to self-advocate. This study has broader global implications for countries where MA has largely replaced surgical methods, highlighting the need to better understand the structural factors at the provider, institutional and health system level that may be driving the MA revolution, beyond patient preference.

Declaration Competing Interest

None.

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Supplementary materials

Supplementary material associated with this article can be found, in the online version, at doi:10.1016/j.healthpol.2023.104799.

References

[1] National Institute of Health and Care Excellence. Abortion care 2020. https://www.nice.org.uk/guidance/NG140 (NG140).
[2] WHO. Safe abortion: technical and policy guidance for health systems. Geneva; 2012.
[3] Slade P, Heke S, Fletcher J, Stewart P. A comparison of medical and surgical termination of pregnancy: choice, emotional impact and satisfaction with care. BJOG An Int J Obstet Gynaecol 1998;105(12):1288–95.
[4] Rodriguez MI, Seuc A, Kapp N, et al. Acceptability of misoprostol-only medical termination of pregnancy compared with vacuum aspiration: an international, multicentre trial. BJOG An Int J Obstet Gynaecol 2012;119(7):817–23.
[5] Kanstrup C, Mäkelä M, Hauskov Graungaard A. Women's reasons for choosing abortion method: a systematic literature review. Scand J Public Health 2018;46(8):835–45.
[6] Moreau C, Trussell J, Desfreres J, Bajos N. Medical vs. surgical abortion: the importance of women's choice. Contraception 2011;84(3):224–9.
[7] Henshaw RC, Naji SA, Russell IT, Templeton AA. Comparison of medical abortion with surgical vacuum aspiration: women's preferences and acceptability of treatment. Bmj 1993;307(6906):714–7.
[8] Robson SC, Kelly T, Howel D, et al. Randomised preference trial of medical versus surgical termination of pregnancy less than 14 weeks' gestation. Health Technol Assess (Rockv) 2009;13(53). i-148.
[9] Rørbye C, Nørgaard M, Nilas L. Medical versus surgical abortion: comparing satisfaction and potential confounders in a partly randomized study. Hum Reprod 2005;20(3):834–8. https://doi.org/10.1093/humrep/deh643.
[10] Kapp N, Lohr PA. Modern methods to induce abortion: Safety, efficacy and choice. Best Pract Res Clin Obstet Gynaecol 2020;63:37–44. https://doi.org/10.1016/j.bpobgyn.2019.11.008.
[11] Lohr PA, Hayes JL, Gemzell-Danielsson K. Surgical versus medical methods for second trimester induced abortion. Cochrane Database Syst Rev 2008;(1).
[12] Kelly T, Suddes J, Howel D, Hewison J, Robson S. Comparing medical versus surgical termination of pregnancy at 13-20 weeks of gestation: a randomised controlled trial. BJOG An Int J Obstet Gynaecol 2010;117(12):1512–20.
[13] Schmidt-Hansen M, Lohr PA, Cameron S, Hasler E. Surgical or medical abortion of pregnancies between 13+ 0 and 23+ 6 weeks' gestation? A systematic review and new NICE national guidelines. BMJ Sex Reprod Heal 2020:47:e10.
[14] Hill NCW, Ferguson J, MacKenzie IZ. The efficacy of oral mifepristone (RU 38,486) with a prostaglandin E1 analog vaginal pessary for the termination of early pregnancy: complications and patient acceptability. Am J Obstet Gynecol 1990;162(2):414–7.
[15] Loeber OE. Motivation and satisfaction with early medical vs. surgical abortion in the Netherlands. Reprod Health Matters 2010;18(35):145–53.
[16] Urquhart DR, Templeton AA. Psychiatric morbidity and acceptability following medical and surgical methods of induced abortion. BJOG An Int J Obstet Gynaecol 1991:98(4):396-9.
[17] Bachelot A, Cludy L, Spira A. Conditions for choosing between drug-induced and surgical abortions. Contraception 1992:45(6):547-59..
[18] Popinchalk A, Sedgh G. Trends in the method and gestational age of abortion in high-income countries. BMJ Sex Reprod Heal 2019;45(2):95–103.
[19] Department of Health and Social Care. Abortion statistics in England and Wales: 2019. London: Government of United Kingdom; 2020.
[20] Miani C. Medical abortion ratios and gender equality in Europe: an ecological correlation study. Sex Reprod Heal matters 2021;29(1):214–31.
[21] Winikoff B. Acceptability of medical abortion in early pregnancy. Fam Plann Perspect 1995;27(4):142–8.
[22] Simonds W, Ellertson C, Springer K, Winikoff B. Abortion, revised: participants in the US clinical trials evaluate mifepristone. Soc Sci Med 1998;46(10):1313–23.
[23] Newton D, Bayly C, McNamee K, et al. How do women seeking abortion choose between surgical and medical abortion? Perspectives from abortion service providers. Aust New Zeal J Obstet Gynaecol 2016;56(5):523–9.
[24] Ramos R. Women's choice regarding abortion methods. In: 4th International Congress on Women's Health and Unsafe Abortion, February 19-22 2019, 2019.
[25] Norman W, Munro S, Guilbert E, et al. What factors influence implementation of mifepristone medical abortion among Canadian physicians? Results of a national qualitative investigation. J Obstet Gynaecol Canada 2020;42(5):687.
[26] Coles MS, Makino KK, Phelps R. Knowledge of medication abortion among adolescent medicine providers. J Adolesc Heal 2012;50(4):383–8.
[27] Purcell C, Cameron S, Lawton J, Glasier A, Harden J. The changing body work of abortion: a qualitative study of the experiences of health professionals. Sociol Heal Illn 2017;39(1):78–94.
[28] Chahal H, Mumtaz Z. Abortion and fertility control in Pakistan: the role of misoprostol. J Fam Plan Reprod Heal Care 2017;43(4):274–80.
[29] Acharya R, Kalyanwala S. Knowledge, attitudes, and practices of certified providers of medical abortion: evidence from Bihar and Maharashtra, India. Int J Gynecol Obstet 2012;118:S40–6.
[30] Oppegaard KS, Sparrow M, Hyland P, et al. What if medical abortion becomes the main or only method of first-trimester abortion? A roundtable of views. Contraception 2018;97(2):82–5.
[31] Thomas J, Paranjothy S, Templeton A. An audit of the management of induced abortion in England and Wales. Int J Gynecol Obstet 2003;83(3):327–34.
[32] Heath J, Mitchell N, Fletcher J. A comparison of termination of pregnancy procedures: patient choice, emotional impact and satisfaction with care. Sex Reprod Healthc 2019;19:42–9. https://doi.org/10.1016/j.srhc.2018.12.002.
[33] Lipp A. Service provision for women undergoing termination of pregnancy: Progress in Wales, UK. J Fam Plan Reprod Heal Care 2009;35(1):15–9.
[34] UK Parliament. Abortion Act. 1967.
[35] Paintin D. Abortion law reform in Britain 1964-2003: a personal account by David Paintin. Stratford; 2015.
[36] Roe J, Francome C, Bush M. Recruitment and training of British obstetrician-gynaecologists for abortion provision: Conscientious objection versus opting out. Reprod Health Matters 1999;7(14):97–105.
[37] Lohr PA, Starling JE, Scott JG, Aiken ARA. Simultaneous compared with interval medical abortion regimens where home use is restricted. Obstet Gynecol 2018;131(4):635.
[38] The Abortion Act 1967- Approval of a Class of Places. Dep Heal Soc Care; 2018. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/768059/Approval_of_home_use_for_the_second_stage_of_early_medical_abortion.pdf.
[39] Department of Health & Social Care. The Abortion Act 1967—Approval of a Class of Places. 2020. https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/876740/30032020_The_Abortion_Act_1967_-_Approval_of_a_Class_of_Places.pdf.
[40] Anderson M, Pitchforth E, Edwards N, Alderwick H, McGuire A, Mossialos E. United Kingdom: Health System Review. 2022.
[41] Astbury-Ward E. Abortion 'on the NHS': the National Health Service and abortion stigma. J Fam Plan Reprod Heal Care 2015;41(3):168–9.
[42] BSACP, RCOG, FSRH, RCM. National service specification for NHS abortion care. 2022. https://www.rcog.org.uk/media/ujmfhg0h/national-service-specification-for-abortion-care-nov-2022.pdf.
[43] British Society of Abortion Care Providers. BSACP position statement: Providing Genuine Choice, 2020. https://bsacp.org.uk/wp-content/uploads/2020/06/BSACP-Providing-Genuine-Choice-Statement-10062020.pdf.
[44] National Institute for Health and Care Excellence. Abortion care Quality Standard QS 2021;199. https://www.nice.org.uk/guidance/qs199.
[45] Mcleroy KR, Bibeau D, Steckler A, Glanz K. An ecological perspective on health promotion programs. Heal Educ Behav 1988.
[46] Rothman BK. The meanings of choice in reproductive technology. In: Jaggar A, ed. Living with contradictions: controversies in feminist social ethics. New York: Routledge; 1994. p. 325–9.
[47] Schaff EA, Fielding SL, Westhoff C, et al. Vaginal misoprostol administered 1, 2, or 3 days after mifepristone for early medical abortion: a randomized trial. Jama 2000;284(15):1948–53.
[48] Harvey SM, Beckman LJ, Satre SJ. Choice of and satisfaction with methods of medical and surgical abortion among U.S. clinic patients. Fam Plann Perspect 2001;33(5):212–6.

[49] Rørbye C, Nørgaard M, Nilas L. Medical versus surgical abortion: comparing satisfaction and potential confounders in a partly randomized study. Hum Reprod 2005;20(3):834–8.
[50] Wiebe ER. Choosing between surgical abortions and medical abortions induced with methotrexate and misoprostol. Contraception 1997.
[51] Taylor D, Postlethwaite D, Desai S, et al. Multiple determinants of the abortion care experience: from the patient's perspective. Am J Med Qual 2013;28(6):510–8.
[52] Teal SB, Dempsey-Fanning A, Westhoff C. Predictors of acceptability of medication abortion. Contraception 2007;75(3):224–9.
[53] Lohr PA, Wade J, Riley L, Fitzgibbon A, Furedi A. Women's opinions on the home management of early medical abortion in the UK. J Fam Plan Reprod Heal Care 2010;36(1):21–5.
[54] Schaff EA, Fielding SL, Westhoff C. Randomized trial of oral versus vaginal misoprostol at one day after mifepristone for early medical abortion. Contraception 2001;64(2):81–5.
[55] Schaff EA, Fielding SL, Eisinger SH, Stadalius LS, Fuller L. Low-dose mifepristone followed by vaginal misoprostol at 48 hours for abortion up to 63 days. Contraception 2000;61(1):41–6.
[56] Footman K. Revolution in abortion care? Perspectives of key informants on the importance of abortion method choice in the era of telemedicine. Sex Reprod Health Matters 2023;31(1).
[57] Dedoose. Dedoose Version 9.0.46 web application for managing, analyzing, and presenting qualitative and mixed method research data. 2022. www.dedoose.com.
[58] Marie Stopes UK. Quality account 2017/18. London, 2018.
[59] Jordan P. 2017-18 governmental decisions to allow home use of misoprostol for early medical abortion in the UK. Health Policy 2020;24(7):679–83.
[60] Aiken ARA, Lohr PA, Lord J, Ghosh N, Starling J. Effectiveness, safety and acceptability of no-test medical abortion (termination of pregnancy) provided via telemedicine: a national cohort study. BJOG An Int J Obstet Gynaecol 2021;128(9):1464–74.
[61] Erdman JN, Jelinska K, Yanow S. Understandings of self-managed abortion as health inequity, harm reduction and social change. Reprod Health Matters 2018;26(54):13–9.
[62] Berer M. Reconceptualizing safe abortion and abortion services in the age of abortion pills: a discussion paper. Best Pract Res Clin Obstet Gynaecol 2020;63:45–55.
[63] Broussard K. The changing landscape of abortion care: Embodied experiences of structural stigma in the Republic of Ireland and Northern Ireland. Soc Sci Med 2020;245:112686. https://doi.org/10.1016/j.socscimed.2019.112686.
[64] Blaylock R, Makleff S, Whitehouse KC, Lohr PA. Client perspectives on choice of abortion method in England and Wales. BMJ Sex Reprod Heal 2021:1–6. https://doi.org/10.1136/bmjsrh-2021-201242.
[65] Lince-Deroche N, Harries J, Constant D, et al. Doing more for less: identifying opportunities to expand public sector access to safe abortion in South Africa through budget impact analysis. Contraception 2018;97(2):167–76.
[66] Chavkin W, Stifani BM, Bridgman-Packer D, Greenberg JMS, Favier M. Implementing and expanding safe abortion care: An international comparative case study of six countries. Int J Gynecol Obstet 2018;143:3–11.
[67] Baum SE, Sierra G, Grossman D, Vizcarra E, Potter JE, White K. Comparing preference for and use of medication abortion in Texas after policy changes in 2014 and 2018. Contraception 2022:109912.
[68] Wingo E, Ralph LJ, Kaller S, Biggs MA. Abortion method preference among people presenting for abortion care. Contraception 2021;103(4):269–75.
[69] Howie FL, Henshaw RC, Naji SA, Russell IT, Templeton AA. Medical abortion or vacuum aspiration? Two year follow up of a patient preference trial. BJOG An Int J Obstet Gynaecol 1997;104(7):829–33.
[70] Cameron ST, Glasier AF, Logan J, Benton L, Baird DT. Impact of the introduction of new medical methods on therapeutic abortions at the Royal Infirmary of Edinburgh. BJOG An Int J Obstet Gynaecol 1996;103(12):1222–9.
[71] UK Parliament. Health and Care Act, 2022.
[72] Goodair B, Reeves A. Outsourcing health-care services to the private sector and treatable mortality rates in England, 2013-20: an observational study of NHS privatisation. Lancet Public Heal 2022;7(7):e638–46.
[73] Sheldon S, Fletcher J. Vacuum aspiration for induced abortion could be safely and legally performed by nurses and midwives. J Fam Plan Reprod Heal Care 2017;43(4):260–4.