

MODULE ONE: UNDERSTANDING ABORTION CARE

One of the goals of the *APC Toolkit* is to present abortion care as a normal part of primary care and to provide the evidence for abortion care as a natural extension of the work of APCs, who care for women at risk for or experiencing an unintended pregnancy.

Module One presents evidence regarding the safety of abortion, the need for more abortion providers, and the role of CNMs, NPs, and PAs in providing abortion in the United States. In addition, it describes the multiple barriers that APCs face in becoming abortion providers, including lack of clinical training opportunities, professional and abortion politics, isolation of abortion care from professional credentialing or legal/regulatory mechanisms, and the wide variation in state practice and regulatory environments.

SECTION I. ABORTION IN CONTEXT

OBJECTIVES:

1. Provide background information about the need for abortion in the United States.
2. Describe the range of abortion care, and provide evidence of the safety and efficacy of early abortion procedures.
3. Explain how terminology impacts interpretations of scope of practice.
4. Provide an overview of abortion providers in the United States.

A. AN OVERVIEW OF THE ABORTION CARE SPECIALTY

As noted earlier, about half of all pregnancies in the United States are unintended (Finer & Henshaw, 2006). *Healthy People 2010*, an initiative of the U.S. Department of Health and Human Services, established a national goal to reduce unintended pregnancy (U.S. Department of Health and Human Services, 2000). Access to reproductive health care, including pregnancy options counseling and contraceptive counseling, is critical for reaching this goal.

Differences in adolescent and adult sexual and reproductive health indicators between the United States and other countries shed light on the important role of primary and secondary prevention strategies in reducing unintended pregnancies. Figure I.1 compares reproductive health outcomes in the United States with those in Sweden, France, Canada, and Great Britain.

The illustration shows that adolescents in the United States initiate sexual activity at basically the same age as their European and Canadian counterparts (Darroch, Singh, & Frost, 2001). However, U.S. adolescents are much less likely to use a form of contraception and far more likely to experience an unintended pregnancy. France has the lowest rate of adolescent pregnancy, 20.2 per 1,000 women aged 15–19, with Sweden just slightly higher at 25 per 1,000. Canada and Great Britain report 45.7 and 46.7 pregnancies per 1,000 women aged 15–19, whereas the United States reports 83.6 pregnancies per 1,000 women 15–19, a much higher rate than the other countries in the comparison.

Broadening the focus to include adult women further highlights the importance of preventing unintended pregnancies. For example, in the Netherlands, only 3% of pregnancies

are unplanned, compared with 57% in the United States (Sedgh, Henshaw, Singh, Bankole, & Drescher, 2007). With its low rate of unplanned pregnancies, the Netherlands also has a much lower abortion rate than the United States: 9 abortions per 1,000 women aged 15–44, compared with 21 per 1,000 in the United States (Delbanco, Lundy, Hoff, Parker, & Smith, 1997; Sedgh et al., 2007). Ensuring and expanding access to contraception and comprehensive reproductive health care can help the United States achieve its goal of reducing unintended pregnancies.

FIGURE I.1

Sexual and Reproductive Health: Comparison Among Sweden, France, Canada, Great Britain, and the United States

	Sweden (1996)	France (1995)	Canada (1995)	Great Britain (1995)	United States (1996)
Median age at first sex	17.1	18	17.3	17.5	17.2
Percent who used at least one method of contraception at last intercourse	93.5	89.1	86.8	95.9	80
Pregnancies per 1,000 women aged 15–19	25	20.2	45.7	46.7	83.6
Abortions per 1,000 women aged 15–19	17.2	10.2	21.2	18.4	29.2
Births per 1,000 women aged 15–19	7.8	10	24.5	28.3	54.4

Adapted from: Darroch et al., 2001

Although abortion rates among adolescent and adult women in the United States have decreased somewhat since the late 1990s, approximately 1.2 million abortions were provided in the United States in 2005, making abortion one of the most common procedures women of reproductive age experience (Jones et al., 2008). The Guttmacher Institute estimates that approximately one-third of all women will have an abortion at some point in their lives (Boonstra et al., 2006).

FIGURE I.2

Number of Abortions per 1,000 Women Aged 15–44 in 2003

	Number per 1,000
Switzerland	7
Belgium	8
Germany	8
Netherlands	9
Denmark	15
England and Wales	17
France	17
United States	21

From: Sedgh et al., 2007

Despite the great need for abortion care, most women face multiple obstacles when accessing abortion. A scarcity of clinicians trained and empowered to provide abortions is one such obstacle. Women in rural areas are particularly affected; 35% of women in the United States live in counties without an abortion provider (Jones et al., 2008). Ninety-nine percent of all facilities that perform more than 400 terminations per year are located in metropolitan areas (Jones et al., 2008). Many states also have laws mandating that only physicians may perform abortions (“physician-only” laws). These laws further impede access to abortion care by denying appropriately trained APCs the opportunity to serve their patients’ needs.⁴

FIGURE I.3

“Aspiration” versus “Surgical”: What’s in a Name?

This *APC Toolkit* uses the term *aspiration abortion* when discussing first trimester abortion care because it more accurately depicts a first trimester abortion than does *surgical abortion*. *Surgical* “implies incision, excision and suturing and is associated with the physician subpopulation of surgeons” (Weitz, Foster, Ellertson, Grossman, & Stewart, 2004, p. 78).

Most abortions performed during the first trimester use electric or manual suction to empty the uterus. These simple procedures require only local or oral analgesics and can easily be performed in a primary care setting. Using the term *surgical abortion* to describe both less invasive aspiration procedures as well as more invasive procedures blurs the boundary between these very different types of procedures (Weitz et al., 2004).

Not only does the term *aspiration abortion* clarify the important differences between types of abortions, its use can assist with efforts to challenge the thinking that only physicians should provide abortion care. Surgeons perform surgery. Aspiration abortion is not surgery. Primary care providers, including APCs, provide a wide range of procedures, including intrauterine device (IUD) insertion, endometrial biopsy, management of early pregnancy loss, and abortion. Use of the term *aspiration*, rather than *surgical*, abortion to refer to these procedures is a small but important step that all of us can take to help de-mystify early abortion techniques.

B. BASIC TYPES OF ABORTION PROCEDURES

An important first step in advocating for APCs as abortion providers involves education about the abortion procedure itself. Politicians and regulators as well as clinicians are often unaware of the basic training that is required to become a provider of medication or early aspiration abortion. This lack of understanding can lead to misinformed decisions that unduly restrict training and access.

Although there are multiple types of abortion procedures, this *APC Toolkit* focuses on the two methods most commonly used during the first trimester of pregnancy: aspiration and medication.⁵ (See Figure I.3 for a discussion of why the language used to describe these procedures is important.) The vast majority of women seeking abortion care do so in the first trimester, and this is the time when early intervention by an APC is most advantageous. Nationally, APC providers are most likely to perform abortions during this time frame.

⁴ To determine whether you are practicing in a physician-only state, contact the Abortion Access Project at <http://www.abortionaccess.org> or the National Abortion Federation at <http://www.prochoice.org>. To see an overview of state laws relating to abortion, visit the Guttmacher Institute’s website at http://www.guttmacher.org/statecenter/spibs/spib_OAL.pdf

⁵ See Janet Singer’s article—*Share with women. Early termination of pregnancy*. *J Midwifery Womens Health* 2009;54:93-4—which provides evidence-based information on early termination of pregnancy that can be used during the essential clinician–patient options counseling for a woman with an unintended pregnancy who is considering abortion or pre-abortion counseling for a woman who has chosen that option.

Medication Abortion

Medication abortion is a method of pharmacologic termination of the early first trimester of pregnancy. Depending on the agent(s), the regimen, and the provider, medication abortion may be initiated as soon as a woman finds out she is pregnant, through 7–9 weeks (49–63 days) of gestation (via menstrual dating). Together, these methods account for 13% of all abortions in the United States (Jones et al., 2008).

In the United States, three medications are available for use as abortifacients: (1) mifepristone, (2) methotrexate, and (3) misoprostol. Both mifepristone and methotrexate are only acceptably effective in terminating intrauterine pregnancy when used in combination with misoprostol (Creinin, 2000; Pymar & Creinin, 2000). Mifepristone is the only one of these agents that has been specifically labeled by the FDA for use as an abortifacient. It blocks the uptake of progesterone by receptor cells in the uterus. Without this essential hormone, the lining of the uterus begins to break down, and the cervix softens. Methotrexate, by contrast, interferes with the DNA synthesis of rapidly dividing cells—in this case, the developing embryo. Misoprostol is a prostaglandin analogue that stimulates uterine contractions and softens the cervix, facilitating uterine emptying. It is most effective when used following either mifepristone or methotrexate. Where neither methotrexate nor mifepristone is available, regimens for misoprostol alone may be used, although efficacy is lower, and the risk of side effects is higher (Carbonell et al. 2003; Singh et al. 2003)

FIGURE I.4

Abortion Method Terminology

Medication abortion refers to termination of pregnancy using one or more of the pharmacologic agents mifepristone, methotrexate, and/or misoprostol. Medication abortion may sometimes be referred to as RU486 (its original European name), “the abortion pill,” or as “medical” abortion.

Aspiration (or *suction*, or *surgical*) *abortion* refers to procedures that terminate a pregnancy by using manual or electric suction to empty the uterus. These procedures are also known as manual vacuum aspiration (MVA) or electric vacuum aspiration (EVA).

Dilation and evacuation (D&E) and *dilation and extraction* (D&X) describe abortion procedures performed with instrumentation of the uterus and fetus. These procedures are generally used in second trimester abortion care.

Medication Abortion Regimens

Medication abortion regimens are based on the most current clinical research evidence. The World Health Organization (WHO), the American College of Obstetricians and Gynecologists (ACOG), and several other general and specialty health organizations have described safe and effective regimens of early medication abortion (American College of Obstetricians and Gynecologists, 2005; Cheng, 2008; Chien & Thomson, 2006; Grossman 2004; Odusoga & Olatunji, 2002).

As professional organizations that together represent the majority of abortion providers in the United States, the National Abortion Federation (NAF) and the Planned Parenthood Federation of America (PPFA) offer their members continuously revised protocols for safe and effective administration of abortifacients in the first 9 weeks of pregnancy (National Abortion Federation, 2008a). Figure I.5 summarizes the most common regimens (NAF, 2008a).

Early Aspiration Abortion in the U.S.

In the first trimester, abortion can be performed as a simple office procedure using a vacuum aspirator. The designator *aspiration abortion* more accurately describes this procedure (see Figure I.3) than the traditional appellation *surgical abortion*. In aspiration abortion, the cervix usually is gradually stretched with tapered rods. After the cervix is dilated sufficiently, a plastic cannula attached to the suction apparatus is inserted into the uterus. Gentle suction (<60 mmHg) is applied to empty the contents of the uterus. Local anesthesia by means of paracervical and/or intracervical injection is almost universally used, and many clinics offer various other medications for relief of anxiety and pain management. General anesthesia is less commonly used in early abortion but may be offered in some facilities that have specialized equipment and dedicated anesthesia services.

FIGURE I.5

from NAF (2008a): Comparison of FDA-Approved and Other Evidence-Based Regimens

	FDA-Approved Regimen	Evidence-Based Alternative Regimens (vaginal misoprostol)	Evidence-Based Alternative Regimen (buccal misoprostol)	Evidence-Based Alternative Regimen (oral misoprostol beyond 49 days' EGA)
Mifepristone dose	600 mg orally (three 200 mg tablets)	200 mg orally (one 200 mg tablet)	200 mg orally (one 200 mg tablet)	200 mg orally (one 200 mg tablet)
Misoprostol dose	400 µg orally	800 µg vaginally	800 µg buccally	800 µg orally (given as 2 doses of 400 µg, 2 hours apart)
When misoprostol taken	48 hours after mifepristone	6–72 hours after mifepristone \leq 56 days' gestation; 6–48 hours after mifepristone \leq 63 days' gestation	One or two days after mifepristone \leq 56 days' gestation; 24–36 hours after mifepristone \leq 63 days' gestation	One day after mifepristone, to be repeated on day 7 (vaginally) if abortion is incomplete
Where misoprostol taken	At the medical office	At home	At home	At home
Gestational age limit	49 days' gestation	63 days' gestation	63 days' gestation	63 days' gestation
Timing of initial follow-up examination	Approximately day 14	Within approximately 4 days (e.g. day 4–14)	Within approximately 14 days (e.g. day 4–14)	One week after mifepristone and at 2 weeks (if still incomplete on day 7)
				A one-week follow-up visit is mandatory. According to one study, 10.4% of women needed to receive more misoprostol at their follow-up visit. This second dose was administered vaginally. These women returned for an additional follow-up visit 1–8 days later. Note: an initial dose of 800 µg of misoprostol orally is less effective than giving the same dose vaginally or buccally for women 53–63 days' gestation.

Efficacy and Safety of Early Abortion

Aspiration abortion is highly effective, with success rates (complete abortion) at 99% (National Abortion Federation, 2009). It is also extremely safe. Both major and minor risks are lowest when women receive abortion care in the first trimester (Boonstra, 2006). One community-based study of 1,132 aspiration abortions reported that 88% of patients had been less than 13 weeks pregnant (Paul, Mitchell, Rogers, Fox, & Lackie, 2002). Of these women, 97% reported no complications, 2.5% had minor complications (e.g., infection, bleeding, incomplete abortion) that were handled at a medical office or abortion facility, and less than 0.5% had more serious complications that required some additional surgical procedure and/or hospitalization. No deaths were reported.

Medication abortion is also an extremely safe procedure, with complications occurring in less than 0.5% of cases when evidence-based mifepristone/misoprostol regimens are used (Grimes, 2005). In less than 2% of medication abortions (using evidence-based regimens), the medications do not successfully terminate the pregnancy and an aspiration procedure is necessary.

Both major and minor risks are lowest when women receive abortion care in the first trimester (Boonstra, 2006). Rarely, excessive bleeding or uterine infection may occur (ACOG, 2005; Soper, 2007; Paul, Lichtenberg, Borgatta et al, 2009). Figure I.6 compares aspiration and medication abortion, describing how each works and the advantages and disadvantages of each method.

FIGURE I.6

First Trimester Abortion: A Comparison of Procedures

Procedure	How It Works	Advantages	Disadvantages
Mifepristone	Mifepristone blocks the action of progesterone, causing uterine lining to thin, the cervix to soften and dilate, and the pregnancy to detach. It also increases prostaglandin production resulting in uterine contractions. Misoprostol, a prostaglandin analogue taken orally, vaginally or buccally within a few days of mifepristone, induces uterine contractions and increases the effectiveness of mifepristone to approximately 95–98%.	<ul style="list-style-type: none"> - Usually does not require the use of surgical instruments, avoiding risk of cervical or uterine injury. - Anesthesia not required. - High success rate (95–98%) with vaginal or buccal misoprostol up to 9 weeks. - Resembles a “natural miscarriage.” - May offer women more privacy. - Can be used very early in pregnancy. - Procedure completed within 24 hours of the misoprostol administration in 90% of women. - Approved by the FDA for early abortion. 	<ul style="list-style-type: none"> - May require at least 2 visits. - Takes hours or, rarely, weeks to complete. - Postprocedure bleeding may last longer than with surgical abortion. - Women may see blood clots and pregnancy tissue.
Vacuum Aspiration	The cervix is opened gradually with tapered rods. A cannula (strawlike tube), which is attached to a suction apparatus (either an electric machine or a hand-held syringe), is inserted into the uterus. The contents of the uterus are emptied by suction.	<ul style="list-style-type: none"> - Usually requires only one visit to the provider. - Procedure is usually completed within minutes. - Allows for anesthesia and/or sedation if desired. - High success rate (approximately 99%). - Can be used early in pregnancy. 	<ul style="list-style-type: none"> - Is an invasive procedure. - May seem less private to some women than aborting at home.

Adapted from: National Abortion Federation, 2009

C. WHO CAN PROVIDE ABORTION CARE?

In 2005 the majority of abortions (69%) were performed at specialized clinics that provide a large number of abortions; nonspecialty clinics provided 25% of abortions, and the remainder were performed in hospitals (5%) and private physician practices (2%) (Jones et al., 2008).

Specialist Providers of Abortion Care

Although there are no regulatory or legislative restrictions related to which categories of physician may provide abortion care, most abortions are currently provided by obstetrician-gynecologists. While the inclusion of abortion care education in obstetric/gynecology residency programs has varied over the past 20 years, the most recent study indicates that more than half of residency programs provide routine training in abortion care and another 40% provide opportunities for residents to train in their elective time (Eastwood, Kacmar, Steinauer, Weitzen, & Boardman, 2006). Only 10% of programs do not provide training opportunities in abortion care to their residents (Eastwood, Kacmar, Steinauer, Weitzen, & Boardman, 2006). Obstetrician-gynecologists may be trained in first trimester as well as second trimester procedures (often referred to as D&Es, or dilation and extraction). Recently, the American College of Obstetrics and Gynecology (ACOG) issued a formal Committee Opinion emphasizing the need for all medical school and obstetric/gynecology residency programs to integrate abortion care training into their curricula to ensure the “availability of safe, legal and accessible abortion care” (ACOG, 2009). While obstetrician-gynecologists comprise an important constituency of abortion providers, other clinicians—in particular, those providing primary care services—are well positioned within the health care system to provide abortion care.

Primary Care Providers of Abortion Care

A variety of primary care providers are showing a growing interest in including abortion care among the comprehensive range of services they offer within their practices. Primary care clinicians, a category which includes family physicians, NPs, PAs, and CNMs (IOM Committee & Donaldson, 1996), are much more likely to provide care to women at risk for unintended pregnancy who live in medically underserved areas than are specialists such as obstetrician-gynecologists (Grumbach et al., 2003).

PAs in Vermont and Montana were among the first providers of aspiration abortion after the Supreme Court decision in *Roe v. Wade* legalized abortion in the United States in 1973 (Joffe & Yanow, 2004). In Vermont, PAs and NPs have continued to provide a significant proportion of the state’s abortion care services, and their training program for physicians as well as for other APCs is one of the most respected in the nation. Although physician-only laws in other states may be daunting, there has been growing interest in defining abortion care as within the scope of practice of APCs. In a survey conducted in 1992, 52% of CNMs surveyed believed that they should be allowed to perform abortions, 19% said they might be willing to perform aspiration abortions themselves, and 57% indicated that they wanted prescriptive authority for medication abortion (McKee & Adams, 1994). More recently, approximately one quarter of APCs in a California study expressed interest in obtaining medication abortion training (Hwang, Koyama, Taylor, Henderson, & Miller, 2005). At the time of publication of this *APC Toolkit*, APCs are providing medication and/or aspiration abortion care in numerous states in a variety of clinical settings (Berer, 2009). A timeline of important historical events in APC provision of abortion care can be found on the Clinicians for Choice website at <http://www.prochoice.org/cfc/resources/timeline.html> (National Abortion Federation, 2008b).

SUMMARY

- Approximately half of all pregnancies in the United States were unintended in 2006; a U.S. national health goal to reduce the rate of unintended pregnancy to 30% by 2010 is unattainable.
- Abortion is one of the most common and safe procedures experienced by women of reproductive age; abortion care can be considered a secondary prevention strategy to reduce the rate of unintended pregnancy.
- Despite the great need for abortion care, most women face multiple obstacles when accessing abortion, including a scarcity of clinicians trained and empowered to provide the procedure.
- Most women seeking abortion do so in the first trimester, when abortion is safest and when early intervention by an APC is most advantageous.
- Both medication and aspiration abortion procedures have excellent efficacy and safety profiles, with major complications occurring in less than 1–2% of cases.
- Aspiration abortion is most commonly provided as a simple ambulatory care procedure; medication abortion is commonly completed by the woman in her home following evaluation, education, and guidance by a health care professional.
- Currently, obstetrician-gynecologists provide most abortions, although primary care clinicians (CNMs, NPs, PAs, and family physicians) are much more likely to provide care to women at risk for unintended pregnancy who live in medically underserved areas.
- Primary care clinicians in certain states have been providing safe, effective abortion care since legalization, demonstrating that early abortion combined with continuity of care reduces complications and increases access.

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