

Early abortion services in the United States: a provider survey

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Abstract

The objective of this study was to describe the availability of early surgical and medical abortion among members of the National Abortion Federation (NAF) and to identify factors affecting the integration of early abortion services into current services. Telephone interviews were conducted with staff at 113 Planned Parenthood affiliates and independent abortion providers between February and April 2000, prior to FDA approval of mifepristone. Early abortion services were available at 59% of sites, and establishing services was less difficult than or about what was anticipated. Sites generally found it easier to begin offering early surgical abortion than early medical abortion. Physician participation was found to be critical to implementing early services. At sites where some but not all providers offered early abortion, variations in service availability resulted. Given the option of reconsidering early services, virtually all sites would make the same decision again. These data suggest that developing mentoring relationships between experienced early abortion providers/sites and those not offering early services, and training physicians and other staff, are likely to be effective approaches to expanding service availability. © 2003 Elsevier Science Inc. All rights reserved.

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1. Introduction

Prior to the 1990s, abortion services were limited primarily to women desiring termination of an unwanted pregnancy of 6–7 weeks since the last menstrual period (LMP) or later. Recent technological improvements and renewed interest in existing technologies have made early abortion services more feasible and more desirable. Early abortion has become a safe and practical option due to advances such as highly sensitive urine pregnancy tests, including kits for home use, development of effective regimens for medical abortion and vaginal ultrasonography [1].

Administration of the drug mifepristone followed by misoprostol (or other prostaglandin) is an effective technique for medical termination of pregnancy up to 63 days LMP, with a complete abortion occurring at rates varying from 92% to 98% of procedures [2–6]. Vacuum aspiration

has been shown to be a safe and effective technique for surgical uterine evacuation through 12 weeks LMP and, in 1997, was used for 97% of all abortions performed in the United States, with either electric or manual vacuum sources [7–9]. Manual vacuum aspiration (MVA), a non-electric variation of vacuum aspiration, is increasingly used for early surgical abortion and as a back-up technique in cases of failed medical abortion [1,10,11].

Early abortion offers numerous advantages to women and providers. Women anxious to end an unwanted pregnancy can do so quickly, and the option to choose between a surgical or medical abortion method can increase their satisfaction with the experience [12]. Providers are able to diagnose potentially life-threatening ectopic pregnancies sooner [1]. Moreover, the availability of medical and surgical methods for early pregnancy termination could improve women's access to care through increased numbers and types of providers offering early abortion services. For example, a 1997 national survey of health-care providers indicated that about half of obstetricians-gynecologists, family practice physicians, nurse practitioners and physi-

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cian assistants—including some practitioners who did not then offer surgical abortions—were interested in providing mifepristone for medical abortion when it became available [13]. An increased awareness of the benefits of early abortion by providers and women could also facilitate an overall shift to earlier abortions at all stages of pregnancy.

The proportion of US abortion clients who obtain an early abortion is still relatively small. In 1996, 33% of US abortions were performed at 7 completed weeks (55 days) gestation or less, increasing to 36% in 1997 [7,14]. In 1996, 42% of nonhospital abortion providers offered services for women at less than 6 weeks of pregnancy, compared to 33% in 1992 [15].

The reasons that earlier medical and surgical abortion services are not more widely available are not well documented but likely relate to early reports of failure in abortions performed at 6 weeks or less LMP, clinical practice of providers who received their training prior to the 1980s, and gynecology residency programs that have not incorporated current early abortion practice into their curricula [16].

The purpose of this research was to describe the availability of early abortion services among National Abortion Federation (NAF) members in the United States. More specifically, the study objectives were to:

- Explain the factors that have facilitated the incorporation of early abortion into services offered and
- Identify the barriers that have precluded other abortion sites from offering early medical and surgical abortion services.

2. Methods

The study sample was selected from two groups of NAF members as of January 2000: (a) All 74 Planned Parenthood affiliates that are also abortion providers [Consortium of Planned Parenthood Abortion Providers (CAPS)]; and (b) a random sample of 57 abortion service sites selected from a roster of 248 sites (referred to as independent sites), after excluding duplicates, nonservice providers, non-US providers and Planned Parenthood abortion sites (the latter were included in the CAPS group). Among the 74 CAPS sites, two sites were not included in the analysis (one for nonresponse and one for invalid responses). Among the 57 sampled independent sites, 16 were not included for the following reasons: respondents declined to be interviewed, current contact information was unavailable, difficulties scheduling the interview and invalid responses. Overall, 113 of 131 eligible sites are included in this analysis (72 CAPS sites and 41 independent sites), yielding a response rate of 86%.

The Director of CAPS and the Executive Director of NAF sent letters to the contact person for the site as listed on their organizational rosters, introducing the study and alerting them that an interviewer would contact them. The contact person, oftentimes the site director, manager or

owner, then designated an appropriate staff member knowledgeable about early abortion practice in their location to participate in the interview. Fifteen percent of respondents personally performed abortions at their site. Telephone interviews occurred between February and April of 2000, during a period when mifepristone approval by the US Food and Drug Administration (FDA) was anticipated. Interviewers made multiple attempts to contact sites at different times and on different days.

The study team developed the questions and responses with experts in the field who verified response options and provided past questionnaires on the topic of early abortion services as examples. The resulting questionnaire focused on the early abortion practices of sites; the process of considering, planning and introducing such services and barriers to and advantages of providing such services. The questionnaire was pretested with several individuals familiar with the provision of abortion services and clinic administration where abortions were available. Questions about the types of obstacles to the provision of early abortion were developed through a review of relevant literature and consulting with experts, and then refined during the pretest process.

Clinical definitions of “early abortion” vary throughout the literature and include abortion performed at ≤ 7 weeks, ≤ 6 weeks or < 6 weeks LMP. For the purposes of this study, the investigators defined < 6 weeks LMP as early abortion. This definition was selected because many sites have provided abortions at 6 or 7 weeks LMP as longstanding, routine practice. Use of ≤ 7 or ≤ 6 weeks LMP would have included these locations as “early abortion providers,” when in fact, they had not made a decision to lower the gestation of abortions offered in their facility.

Two interviewers participated in a day-long training on questionnaire administration and study logistics. Each interviewer conducted an observed interview to ensure consistent administration of the questionnaire. All statistical analyses were performed using SAS 8.01 (SAS Institute, Inc., Cary, NC, USA).

To account for the stratified sampling of sites based on affiliation, weighted data are presented for descriptive analysis of the overall sample. Specifically, the 72 sampled CAPS sites were weighted to represent the entire CAPS population of 74 sites, while the 41 independent sites were weighted to represent the entire independent population of 248 sites. Next, CAPS respondents were compared to independent respondents, yielding no statistically significant differences for the variables of interest (namely, a comparison of sites that provided early abortions and those that did not). Given the similarity between CAPS and independent respondents and the small sample sizes, subgroup analysis has been presented for unweighted data only. Responses describing current abortion services reflect the practice of the site at the time of the interview. For questions concerning major obstacles to providing services, only the most frequently endorsed responses were reported. Unweighted cat-

Table 1
Characteristics of respondents (weighted)

	Sites reporting (N = 113) (%)	
Respondent performs abortions		
Yes	15	
No	85	
Respondent's profession		
Administrator/manager	33	
Nurse/certified nurse midwife/nurse practitioner/physician assistant	33	
Physician	12	
Social worker	6	
Other	16	
Type of site		
CAPS	23	
Independent	77	
Site participated in medical abortion clinical trial		
Yes	16	
No	84	
	Median	(Q1, Q3)
Years respondent has worked at the site	8	(2, 12)
Abortions per year at site	1700	(1000, 3000)

egorical data are presented as n (%) of nonmissing responses, while continuous data are presented as median (Q1 = 25th percentile, Q3 = 75th percentile).

3. Results

3.1. Characteristics of respondents

Weighting the 113 sites included in this analysis to represent all CAPS and independent sites, the majority (85%) of respondents did not personally perform abortions at their site and reported their profession as administrator/manager (33%), nurse/certified nurse midwife/nurse practitioner/physician assistant (33%), physician (12%), social worker (6%) or other (16%), as shown in Table 1. Respondents had spent a median of 8 years working at the site (Q1 = 2, Q3 = 12). Overall, 23% of clinics were CAPS sites while the remaining 77% were independent. Sites reported offering abortions for a median of 20 years (Q1 = 13, Q3 = 26) and providing a median of 1700 abortions per year (Q1 = 1000, Q3 = 3000). Sixteen percent of sites reported past or current participation in a clinical trial for medical abortion (methotrexate or mifepristone).

Fig. 1 shows earliest abortions offered by the sites in weeks LMP for weighted data. Eleven percent of sites began offering abortion services at 3 weeks LMP, 18% at 4 weeks LMP, 30% at 5 weeks LMP, 28% at 6 weeks LMP, 11% at 7 weeks LMP and 2% at 8 weeks LMP. Overall, 59% of sites reported that they provided early abortion services (defined as <6 weeks LMP), while 41% said they did not.

Among the 78 sites in this sample providing early abor-

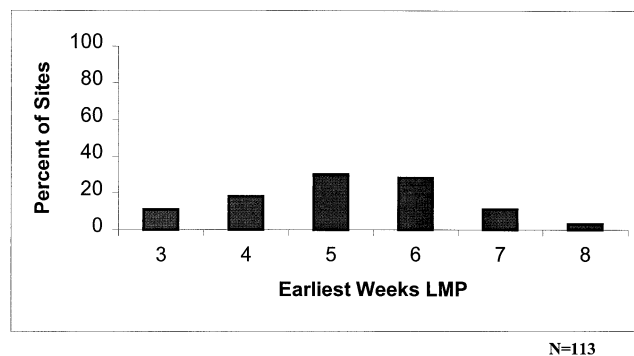


Fig. 1. Weighted distribution of earliest abortion offered, in weeks LMP.

tion services, 37 (47%) provided only early surgical abortions, 6 (8%) provided only early medical abortions and 35 (45%) provided both early surgical and early medical abortion services (unweighted sample). Among the 35 sites not providing early abortion services, 16 (46%) were planning to offer such services sometime within the next year, while 19 (54%) were not planning to offer them (unweighted sample).

3.2. Sites offering early surgical abortion services

The 72 sites offering early surgical abortion services had provided these services a median of 2 years (Q1 = 2, Q3 = 4), offering a median of 120 (Q1 = 52, Q3 = 324) early surgical abortions per year. Table 2 presents clinical practices of the sites offering early surgical abortion services. Sixteen (23%) reported using only the electric pump, 28 (39%) reported using only the manual vacuum syringe and 27 (38%) reported using both the electric pump and manual vacuum syringe for performing early surgical abortions. Vaginal ultrasound was always performed before the early surgical abortion at 59 (83%) sites, under certain conditions at 11 (16%) sites, and never at one (1%) site. Vaginal ultrasound was always performed after early surgical abortion at 18 (26%) sites, under certain conditions at 46 (66%) sites, and never at 6 (8%) sites. Most sites providing early surgical abortions, 61 (87%), reported performing a urine pregnancy test before the procedure, while 2 (3%) performed both urine and blood tests and 7 (10%) neither urine nor blood tests. If there is a positive pregnancy test but no gestational sac visible on the vaginal ultrasound, only 15 (22%) of the sites will perform a surgical abortion. If no gestational tissue is seen in the tissue examination, 55 (76%) of the sites usually follow with serum β -hCG, 46 (64%) usually send for pathological examination, 26 (36%) usually repeat the aspiration and 53 (74%) usually perform a vaginal ultrasound.

Table 3 describes the decision to offer early surgical services at sites offering these services and major obstacles met during service start-up. For this study, major obstacles were defined as those issues that required effort over and

Table 2
Clinical practices of sites offering early surgical abortion (unweighted)

	Sites reporting (N = 72)	
	n	(%)
Method used		
Electric pump only	16	(23)
Manual vacuum syringe only	28	(39)
Both electric pump and manual vacuum syringe	27	(38)
Vaginal ultrasound before abortion		
Always	59	(83)
Under certain conditions	11	(16)
Never	1	(1)
Vaginal ultrasound after abortion		
Always	18	(26)
Under certain conditions	46	(66)
Never	6	(8)
Pregnancy test before abortion		
Urine only	61	(87)
Both urine and blood	2	(3)
Neither urine nor blood	7	(10)
Perform abortion if positive pregnancy test but no gestational sac		
Yes	15	(22)
No	54	(78)
If no gestational tissue seen after early surgical abortion, site usually (can choose more than one response):		
Follows with serum β -hCG	55	(76)
Sends for pathological examination	46	(64)
Performs repeat aspiration	26	(36)
Performs vaginal ultrasound	53	(74)

above the usual challenges of offering a new service. The Medical Director was most often involved in the decision to

Table 3
Decision to offer early surgical abortion and service start-up issues (unweighted)

	Sites reporting (N = 72)	
	n	(%)
Decision to offer services		
Medical Director	45	(63)
Other	27	(38)
President/CEO	6	(8)
Primary reasons decided to offer		
Ensure service availability	66	(96)
Clients wanted them	62	(89)
Cutting edge of technology	61	(87)
Major obstacles to start-up		
≥ 1 Obstacle reported	50	(69)
No obstacles reported	22	(31)
Primary major obstacles to start-up		
Training in vaginal ultrasound	27	(38)
Training in surgical techniques	17	(24)
Training in counseling	13	(18)
Difficulty getting services up and running		
About what expected	35	(50)
Easier than expected	30	(42)
Harder than expected	6	(8)

offer early surgical abortion services [45 (63%)], followed by others (clinic administrators, physician providers and staff) for 27 (38%) sites, and the site President/CEO for 6 (8%) sites. The most commonly reported reasons for deciding to offer early surgical abortion services were to ensure service availability in their geographic region [66 (96%)], to provide services desired by clients [62 (89%)] and to remain on the cutting edge of technology [62 (87%)].

Respondents were asked whether or not their site had experienced each of 13 obstacles to initiating early surgical abortion services (listed in Fig. 2). The majority of sites [50 (69%)] reported one or more major obstacles to start-up of early surgical services. Among these sites, the three obstacles most often cited were the challenges of providing additional staff training in the areas of vaginal ultrasound [27 (38%)], use of new surgical techniques [17 (24%)] and counseling [13 (18%)]. Overall, 65 (92%) respondents felt that providing early surgical abortion services was easier than expected or about what was expected, while 6 (8%) felt that it was more difficult than expected. Sites reported that the median number of cases required before the provision of early surgical abortions became routine was 24 (Q1 = 8.5, Q3 = 62.5).

Table 4 describes the sites' current experience of providing early surgical abortion services. Fewer than half of the sites [31 (43%)] reported experiencing one or more major obstacles to current service provision. The three most commonly named obstacles were providing additional staff training in vaginal ultrasound techniques [14 (19%)], providing staff training in new surgical techniques [8 (11%)] and an increase in incomplete abortions [6 (8%)]. The three most frequently reported advantages of providing early surgical abortion services included meeting client demand [69 (96%)], remaining on the cutting edge of technology [67 (93%)] and improving staff skills [59 (83%)]. If making the decision over again, all 72 sites would recommend that early surgical abortion services be offered.

3.3. Sites offering early medical abortion services

Forty-one sites had provided early medical abortion services for a median of 3.5 years (Q1 = 1.5, Q3 = 4). The sites performed a median of 52 (Q1 = 20, Q3 = 84) early medical abortions each year. Table 5 presents the clinical practices for these sites. As expected, methotrexate accounted for the majority of early medical abortions since mifepristone was not yet FDA-approved and methotrexate is inexpensive and easily available. Furthermore, from 1996–97, Planned Parenthood conducted a multi-site clinical trial of methotrexate. Thirty-five (87%) reported using only methotrexate, 1 (3%) reported using only mifepristone, and 4 (10%) reported offering both methotrexate and mifepristone for early medical abortions. Vaginal ultrasound was very common before the medical abortion, with 37 (92%) sites reporting that they always performed it. However, an additional 2 (5%) sites did vaginal ultrasound

- Early Surgical Abortion Obstacles
1. Need to train staff in use of new surgical techniques
 2. Need to provide additional staff training in counseling
 3. Need to provide additional staff training in vaginal ultrasound
 4. More time required for counseling
 5. Increase in number of incomplete abortions
 6. Additional cost for new equipment such as ultrasound
 7. Addition of new protocols for pregnancy testing
 8. Difficulty handling increase in client caseload
 9. Need to publicize services
 10. Increase in client admissions to emergency room
 11. Increase in numbers of phone calls from clients
 12. Compliance with state/local laws and regulations
 13. Other
- Early Medical Abortion Obstacles
1. Need to provide additional staff training in counseling
 2. Need to train staff in use of new medical abortion procedures
 3. Need to provide additional staff training in vaginal ultrasound
 4. More time required for counseling
 5. Logistics of multiple visits by medical abortion patients
 6. Increase in number of incomplete abortions
 7. Additional cost for new equipment such as ultrasound
 8. Addition of new protocols for pregnancy testing
 9. Difficulty handling increase in client caseload
 10. Need to publicize new services
 11. Increase in client admissions to emergency room
 12. Increase in numbers of phone calls from clients
 13. Compliance with state/local laws and regulations
 14. Other

Fig. 2. Major obstacles to starting and continuing early abortion services.

Table 4
Current issues of offering early surgical abortion (unweighted)

	Sites reporting (N = 72)	
	n	(%)
Current major obstacles		
≥1 Obstacle reported	31	(43)
No obstacles reported	41	(57)
Primary current major obstacles		
Training in vaginal ultrasound	14	(19)
Training in surgical techniques	8	(11)
Increased incomplete abortions	6	(8)
Advantages to offering early surgical services		
Clients want services	69	(96)
Cutting edge of technology	67	(93)
Staff likes new skills	59	(83)
Would site decide to offer, in retrospect		
Yes	72	(100)
No	0	(0)

before the procedure only under certain conditions and 1 (3%) site never did. Vaginal ultrasound was always performed after early medical abortion in 35 (87%) sites, performed under certain conditions in 4 (10%) sites, and never performed in 1 (3%) site. Similar to the findings for early surgical abortions, the majority of sites reported using a urine pregnancy test before the procedure [32 (84%)], while 3 (8%) sites performed both urine and blood tests, and another 3 (8%) sites used neither. If there is a positive pregnancy test but no gestational sac visible on the vaginal ultrasound, 14 (41%) of sites will perform an early medical abortion.

Table 6 describes the decision to offer early medical abortion services. As with early surgical abortions, the Medical Director was most often involved in the decision [22 sites (55%)], followed by others (physician providers, administrators and staff) for 14 (35%) sites, and the Chief Executive (Executive Director or President/CEO) for 9 (23%) sites. The three reasons sites reported most often for choosing to offer early medical abortion services were to

Table 5
Clinical practices of sites offering early medical abortion (unweighted)

	Sites reporting (N = 41)	
	n	(%)
Method used		
Methotrexate only	35	(87)
Mifepristone only	1	(3)
Both methotrexate and mifepristone	4	(10)
Vaginal ultrasound before abortion		
Always	37	(92)
Under certain conditions	2	(5)
Never	1	(3)
Vaginal ultrasound after abortion		
Always	35	(87)
Under certain conditions	4	(10)
Never	1	(3)
Pregnancy test before abortion		
Urine only	32	(84)
Both urine and blood	3	(8)
Neither urine nor blood	3	(8)
Perform abortion if positive pregnancy test but no gestational sac		
Yes	14	(41)
No	20	(59)

ensure the service was available in their geographic region [37 (95%)], to keep the site on the cutting edge of technology [35 (90%)] and to respond to clinician interest in offering the service [32 (82%)].

Respondents were asked whether or not they had experienced each of 14 obstacles to beginning early medical abortion services (listed in Fig. 2). Most [35 (85%)] re-

Table 6
Decision to offer early medical abortion and service start-up issues (unweighted)

	Sites reporting (N = 41)	
	n	(%)
Decision to offer services		
Medical Director	22	(55)
Other	14	(35)
Executive Director or President/CEO	9	(23)
Primary reasons decided to offer		
Ensure service availability	37	(95)
Cutting edge of technology	35	(90)
Clinician interest	32	(82)
Major obstacles to start-up		
≥ 1 Obstacle reported	35	(85)
No obstacles reported	6	(15)
Primary major obstacles to start-up		
Time for counseling	26	(68)
Training in counseling	22	(58)
Logistics of multiple visits	22	(58)
Difficulty getting services up and running		
About what expected	20	(50)
Easier than expected	13	(33)
Harder than expected	7	(17)

Table 7
Current issues of offering early medical abortion (unweighted)

	Sites reporting (N = 41)	
	n	(%)
Current major obstacles		
≥ 1 Obstacle reported	28	(68)
No obstacles reported	13	(32)
Primary current major obstacles		
Time for counseling	15	(38)
Logistics of multiple visits	9	(23)
Training in counseling	8	(20)
Advantages to offering early medical services		
Clients want services	39	(100)
Staff likes new skills	36	(95)
Cutting edge of technology	35	(90)
Would site decide to offer, in retrospect		
Yes	37	(94)
No	1	(3)
Not sure/don't know	1	(3)

ported one or more major obstacles to start-up of early medical abortion services. The three most frequently cited major obstacles included increased time for counseling [26 (68%)], need for staff training in counseling [22 (58%)] and logistics of multiple visits for early medical abortion clients [22 (58%)]. Overall, 33 (83%) sites felt that providing early medical abortion services was either easier than expected or about what was expected, while 7 (17%) felt it was more difficult than expected. Sites reported that the median cases required before the provision of early medical abortions became routine was 24 (Q1 = 6, Q3 = 36).

Table 7 describes the current experiences of sites providing early medical abortion services. Approximately two thirds of sites [28 (68%)] reported one or more current major obstacles to providing services. The three most cited obstacles to current services provision included increased time for counseling [15 (38%)], logistics of multiple visits [9 (23%)] and training in counseling [8 (20%)]. The three primary advantages to the sites of providing early medical abortion services were meeting client demand for early medical abortions (100%), improving staff skills [36 (95%)] and remaining on the cutting edge of technology [35 (90%)]. If making the decision over again, respondents at nearly all the sites would recommend offering early medical abortion services [37 (94%)].

3.4. Sites not offering early abortion services

Among the 35 sites whose respondents said that they were not offering any abortion services less than 6 weeks LMP, 16 (46%) planned to do so within the next year. A full 75% of sites planning to offer early abortion services were waiting for FDA approval of mifepristone. Among the 16 sites planning to provide early abortion services, 2 sites planned to offer only early surgical abortions, 7 sites

planned to offer only early medical abortions, and 7 sites planned to offer both methods. Three sites planned to use the electric pump, 5 sites planned to use the manual vacuum syringe, 8 sites planned to use methotrexate and 12 sites planned to use mifepristone. The three primary reasons respondents cited for deciding to offer early abortion services included ensuring service availability, remaining on the cutting edge of technology and responding to client demand.

Among the 19 sites that did not offer any early abortion services and did not plan to do so, 2 sites had considered offering services but decided not to offer them. These sites indicated a need for additional training in counseling and clinical techniques for early medical abortions, financial support for equipment and help ensuring adequate back-up. The remaining 17 sites had never formally considered offering early abortion services. The primary concerns reported by these sites included: questions about the safety and effectiveness of early surgical abortion (12 sites), lack of provider interest in providing early abortions (12 sites), logistics of multiple visits for early medical abortion (10 sites) and the need for staff training in new surgical techniques (9 sites).

4. Discussion

Our study found that early abortion services were available in the majority of sites surveyed. A 1997 study of surgical abortion practices of NAF members in the US and Canada documented that 42% of sites offered surgical abortion at less than 6 weeks gestation [17]. While our 2000 findings included both early surgical and medical abortion in the US, the 59% of sites offering early services is further evidence of the shift to earlier procedures. Respondents from early abortion sites indicated that early services had been implemented without major difficulties and reported overall positive experiences. The reasons that sites originally decided to offer early services were similar for both early surgical and medical sites, suggesting messages that could be effective in encouraging providers to offer such services. Given the option of reconsidering early services, virtually all sites would make the same decision again. A comparison of the findings for early surgical and early medical abortions suggested that, in general, implementing early surgical services was easier for sites, probably because offering early surgical services is primarily an extension of current practice. Fewer major obstacles were reported, both at start-up and currently, by sites offering early surgical services than by sites offering early medical abortion. Almost all sites offering early medical abortion always performed a vaginal ultrasound before and after the abortion, consistent with common practice in the US. One site did not conduct ultrasound at either point, but our data do not enable us to provide additional analysis of the clinical practice of this individual site.

A fair number of sites planned to initiate early abortion services once mifepristone became available. However, a number of providers did not plan to offer early abortion services and there was some suggestion that sites that did provide services were not publicizing them or providing them on a routine basis as standard practice of all providers. Of the 19 sites that had no plans to offer early services, 17 had never formally considered early services, primarily due to providers' safety concerns and lack of interest.

Although it comprised a small proportion of sites interviewed, this latter group offers the most challenges to incorporating early abortion services into their ongoing program. Successfully encouraging a shift to early services will likely require time and effort to explore general obstacles such as concerns about method safety and effectiveness and site-specific challenges such as changes in administrative or medical leadership. These sites are likely to require a variety of strategies in order to facilitate early service provision. These approaches could include sensitizing physicians and other staff about the advantages of early services both for women and the site, sharing the experiences of sites that have successfully implemented early services and linking physicians and other personnel not offering early services with physicians and clinical managers experienced in such services.

The findings of this investigation must be viewed in light of the methodological constraints of the study. Site information came primarily from self-report by a single informant and may have been subject to bias of the individual being interviewed about staff opinions and decision-making, although in some instances responses were verified with other clinic staff. In addition, the questions were retrospective and subject to the recall bias of the respondent. Thus, this study would have benefited from additional sources of information, such as review of clinic records, client interviews or observation of services. Furthermore, this study focused on two types of NAF members, CAPS and independent sites; thus, the study findings may not be entirely generalizable to other abortion providers such as independent sites that are not members of NAF.

In addition, findings from participant comments suggested that the clinical practice and motivation of individual physician providers were critical to assuring service availability—a topic that was not well covered in our study interview. As a result, this study would have benefited from additional questions focusing on the practices of individual providers (e.g., how many abortion providers work at your site? How many of them perform early medical and surgical abortions? etc.). Physician impact on services will be a key area of future research.

These research findings are useful to those interested in ensuring that a variety of abortion services are available to women in the US. Sites providing one or both types of early services may benefit from additional staff training in clinical and counseling aspects of care, as well as additional publicity on the availability of early abortion services. With the

approval and current availability of mifepristone, sites that planned to offer services can proceed with provision of both medical and early surgical services. These sites can now focus on developing protocols for offering early abortion services, training staff and publicizing their services. Finally, staff at sites that have never formally considered adding early abortion services may benefit from education that reflects current research about and practice of early abortion, along with mentoring of opinion leaders from these locations by experienced early providers.

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