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# Barriers to Medication Abortion Among Massachusetts' Public **University Students: Medication Abortion Barriers**

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1	Barriers to Medication Abortion Among Massachusetts' Public University Students
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#### Abstract

# **Objective**

Proposed legislation in Massachusetts would require public university health centers to provide medication abortion services on campus. This study assesses need for these services by investigating current travel time, costs, wait times and insurance acceptance at off-campus, abortion-providing facilities nearest to public universities in Massachusetts.

## **Study Design**

This investigation projected the total number of medication abortions of students at 13 Massachusetts public universities based on campus enrollment figures and age- and state-adjusted medication abortion rates in the state. Using a cross-sectional study design, the research calculated the distance and public transit time from campuses to the nearest abortion-providing facilities. Researchers contacted facilities to determine costs, wait times and insurance acceptance.

# Results

We estimate 50 to 115 of Massachusetts public university students obtain medication abortion services each month, or 600 to 1,380 each year. Students have to travel between 2 and 42 miles to reach the nearest abortion-providing facility, with a population-weighted average distance of 19 miles. Travel time on public transportation to reach the nearest abortion-providing facility takes between 18 and 400 hundred minutes, with a population-weighted average of 103 minutes. Average cost of medication abortion was \$680, and average wait time to the first available appointment was 8 days. Eight of 13 abortion-providing facilities did not have weekend

appointments. All of the nearest abortion-providing facilities in Massachusetts accepted Mass
 Health, but one nearest facility was out of state and did not. All accepted multiple private
 insurance plans.

## **Conclusions**

College students face cost, scheduling, and travel barriers to abortion care. Offering medication abortion on campus would reduce these barriers.

# **Implications**

The barriers to medication abortion experienced by students attending public universities in Massachusetts fall particularly hard on female and low-income students, who are disproportionately students of color. Offering medication abortion on campus would reduce these barriers and enhance gender and racial equity on campus.

Unintended pregnancy and abortion rates are highest among college-aged students (18–24) [1]. Research from the American Association of Community Colleges and the National Association of Education Statistics indicates that student access to abortion healthcare can enhance continued college participation and educational equity for students [2, 3]. Fourteen percent of those who have abortions report interference with education as a reason for seeking the procedure [4]. Abortion healthcare access is also important for the 25% of students who experience sexual assault while in college and may experience pregnancy as a result [5]. Despite the need for abortion, many students face barriers to accessing abortion healthcare.

A study by researchers at Advancing New Standards in Reproductive Health (ANSIRH) at the University of California, San Francisco on barriers to medication abortion services in California found that college students faced cost, scheduling, and travel barriers to abortion care [6]. California students and reproductive health organizations used this study to persuade the California legislature to pass the nation's first law requiring public university health centers to offer medication abortion in 2019 [7].

Inspired by California's law, Massachusetts Representative Lindsay Sabadosa has introduced a bill, H. 3841, to require public university health centers to provide medication abortion services on campus at the state's 13 public universities [8]. This includes four University of Massachusetts campuses and nine State University campuses, encompassing 122,551 students [9].

Replicating the California study's methods, this research assesses the need for this legislation in Massachusetts by investigating the barriers faced by public university students seeking medication abortion health services in Massachusetts and the potential impact of the proposed legislation on student access to these services.

Approved by the FDA for use during the first 10 weeks of gestation, medication abortion uses two types of pills: mifepristone, which interrupts the flow of the hormone progesterone that sustains a pregnancy; and misoprostol, which causes contractions that expel uterine contents. This combination of pills is more than 95% effective and is an extremely safe way to end an early pregnancy [10]. According to the Guttmacher Institute, medication abortion now accounts for 39% of abortions overall and 60% in the first 10 weeks [11]. Patients take mifepristone first, either at a healthcare facility or at home, and then 6 to 72 hours later they take misoprostol at home, where they have uterine contractions and the abortion process ensues. The FDA label strongly recommends a follow-up visit 7 to 14 days later [12]. Follow-up visits may be done remotely, but are still often done in-person by abortion providers in Massachusetts (personal communication).<sup>1</sup>

This study aimed to measure medication abortion barriers experienced by Massachusetts' public university students. Specifically, we estimated current medication abortion use and travel time, costs, insurance acceptance, and appointment availability at the abortion-providing facilities closest to each of the 13 campuses.

#### Methods

Medication abortion demand among Massachusetts' public university students

We estimated how many people obtained medication abortion healthcare per month by using college-, age-, and state-adjusted overall abortion rates and then multiplying that number by the estimated percentage of medication abortions compared to all abortions in the state. Age-

<sup>&</sup>lt;sup>1</sup>Liz Higgins, Director of Clinical Services, Planned Parenthood League of Massachusetts, Springfield, MA, personal communication.

specific abortion rates were taken from the Guttmacher Institute's most recent nationwide projections; the mean of rates for ages 18–19 (1.8%) and 20–24 (2.8%) was used (2.3%) [1]. We then adjusted for higher rates of abortion in Massachusetts using the state-specific abortion rate (1.53%, compared with 1.46% nationally, for an adjustment factor of 1.05) to get a rate of 2.41% [11]. Because these estimates are for all abortion types, we then adjusted for the percent of all abortions which are medication abortions. Nationally, 39% of abortions in 2017 were medication abortions; this figure served as our lower bound [11]. Given increasing popularity of medication abortion and potential higher demand with improved availability, we assumed a high bound of 90% of all abortions as medication abortions. Higher demand is likely if medication abortion were to be provided on campus for two reasons. First, quicker access to the service would likely result in more students being eligible to use abortion pills because more would be under the 10week deadline. Second, more students may choose medication abortion because of increased accessibility in comparison to aspiration abortion (also known as "surgical abortion"), which would require travel off campus. Therefore, we included the possibility that up to 90% of students would opt to have a medication abortion if it was easily available on campus.

Enrollment figures and percent of campus population that was female (as a proxy for the percent of students with uteri) were obtained from U.S. News & World Report [9].

Distance and time to closest facility

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We identified abortion-providing facilities using Massachusetts NARAL's list of abortion providers [13] and AbortionFinder.org [14]. We calculated driving distance and time from every campus to every abortion-providing facility in the state and nearby states using the Connect Origins to Destinations tool in ArcGIS Online. We then calculated public transit time from each

campus to the nearest facility at a standard day and time (Wednesday at 4 p.m.) using Google 122 123 Maps. 124 Facility information In June of 2021, we made "mystery shopper" calls to abortion-providing facilities nearest 125 to public university campuses in Massachusetts to verify the types of abortion provided, cost of 126 127 abortion, acceptance of Mass Health insurance (Massachusetts' Medicare program) and other 128 insurances, wait time until first available medication abortion appointment, and weekend 129 appointment availability. This component of the study was approved by the University of 130 Massachusetts at Amherst's institutional review board. 131 **Results** 132 Monthly usage estimates 133 We estimated that in total, Massachusetts public university students obtain between 50 and 134 135 115 medication abortions each month (see Table) or between 600 and 1,380 each year. 136 137 Table: Campus-level enrollment, medication abortion estimates, travel, and closest facility 138 information (in Massachusetts in 2021) [insert Table here] 139 140 Distance and time to closest facility 141 142 The driving distance from campuses to the nearest abortion-providing facilities ranged from 2 to 42 miles one way, with a population-weighted average of 19 miles. Nine campuses 143 (70%) were 14 or more miles from the nearest abortion-providing facility. The travel time via 144 public transit ranged from 18 to 400 minutes one-way, with a population-weighted average of 145

103 minutes. Eleven campuses (85%) were 40 or more minutes from the nearest abortion provider via public transit. Given that two visits are recommended for medication abortion [12], population-weighted average total driving distance round trip was 72 miles and population-weighted average total public transit time round trip was 388 minutes or 6 hours and 28 minutes travel time.

The average cost of medication abortion at the facilities closest to campuses was \$680. All in-state facilities closest to campuses accepted Mass Health insurance; one out-of-state facility that was closer to one campus (UMass Dartmouth) than the in-state facility did not accept Mass Health (public transportation time to the out-of-state facility was 90 minutes faster than to the in-state facility). Average wait time until first available appointment was 8 days (range 4–21 days). Eight of the 13 facilities closest to campus (62%) were not open on weekends.

### **Discussion**

This research suggests that many public university students in Massachusetts need access to medication abortion healthcare each year but face obstacles to obtaining this service. Public universities in Massachusetts do not provide medication abortion, so students have to find off-campus providers for this service. To reach these providers, many students have to travel long distances, which can be a daunting barrier to abortion care [15]. Students who do not have access to cars may have to rely on public transportation, which can take significant time. For example, only 21 percent of students at the largest University of Massachusetts campus (in Amherst) own cars [9], yet the nearest abortion facility—Planned Parenthood of Western Massachusetts—is 25 miles away and takes 2 hours and 18 minutes one way to reach by public transportation.

Traveling to the abortion provider, obtaining the needed healthcare, and traveling home by bus

takes many hours—time students may not have to spare between classes, jobs and other activities. Eight of the 13 nearest abortion-providing facilities to campus are not open on weekends so students have to go on weekdays, which increases the likelihood of missing classes or employment. While many facilities accept a wide range of insurance plans, students may experience burdens having to negotiate insurance coverage for this service, and they may face high deductibles or co-pays (personal communication).<sup>2</sup> The logistics of obtaining this healthcare off campus may delay access to medication abortion, extending the duration of negative symptoms of early pregnancy such as nausea and vomiting and potentially pushing students past the 10-week limit for obtaining medication abortion, in which case they have to obtain a more invasive aspiration abortion procedure, which is more expensive later in pregnancy [13].

Lack of on-campus access to medication abortion burdens students in other ways too. Navigating the healthcare system as a college student can be challenging. Despite the fact that abortion is legal, access is limited. Staff at on-campus healthcare centers vary in the amount of information they provide to students about where to find abortion healthcare, which leaves some students in the position of having to figure out how to obtain this care on their own (personal communications).<sup>3</sup> This puts students at an increased risk of reaching out to anti-abortion centers (also known as "crisis pregnancy centers"), which can subject them to shaming, misinformation, and delays in accessing to real healthcare [16, 17, 18]. Requiring students to travel off campus may increase students' already-high levels of stress [19] by requiring them to navigate unfamiliar off-campus abortion care, potentially-delayed access to care and having to continue an unwanted

<sup>&</sup>lt;sup>2</sup> Derek Siegel, Intake Coordinator, Abortion Rights Fund of Western Massachusetts, personal communication, November 9, 2021.

<sup>&</sup>lt;sup>3</sup> Leora Cohen-McKeon, Staff Physician, University Health Services, University of Massachusetts, Amherst, personal communication; Derek Siegel, Intake Coordinator, Abortion Rights Fund of Western Massachusetts, personal communication.

pregnancy until care is obtained. For the one in four students who experience sexual assault during college [5], abortion access on college campuses could serve as an important resource for recovery from the assault. Parental consent would not be a barrier for offering medication abortion on college campuses in Massachusetts because the state eliminated its parental consent requirement for people over the age of 16 in December 2020 [20].

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This study is limited by several assumptions. First, we assume that the closest abortion facility is the one from which students obtain medication abortion, but there may be other providers to which health centers refer students. Second, estimates of the numbers of medication abortions are projections based on general population data. Actual abortion rates may differ for this population. Third, this study focuses on barriers related to distance, transportation, scheduling and cost of accessing medication abortion healthcare, but there may be other barriers that college students face in seeking this service. Fourth, the proposed legislation applies only to medication abortion, not aspiration abortion. Some students prefer an aspiration abortion or are not sure what type of abortion they want, so off-campus facilities may still be necessary for students in these situations. Both medication and aspiration abortion could be offered at student health centers, which would remove artificial constraints on student choice about which option to use. Finally, as a result of the FDA lifting restrictions on in-person mifepristone prescribing for the duration of the COVID-19 public health emergency, telemedicine abortion has become increasingly available in Massachusetts, enabling patients to obtain medication abortion without an in-clinic visit [21]. While this option increases availability of medication abortion and could reduce the need for students to travel to obtain in-clinic care, young college students may prefer the reassurance of seeing a provider in-person.

Massachusetts' proposed bill to require public university health centers to provide medication abortion services on campus at the state's 13 public universities would greatly reduce the barriers to abortion healthcare by decreasing the travel, logistical, and cost burdens to students seeking abortion. Requiring students to leave campus for abortion when other health services can be obtained on campus disproportionately burdens students who require abortion care and those who may struggle to cover the cost of abortion, the cost of travel, and lost time away from employment. These burdens fall only on people who can get pregnant—mostly female students—and they fall particularly hard on lower-income students, who are disproportionately students of color [22, 23]. Low-income students with work and family responsibilities that place demands on their time and finances may find obtaining off-campus healthcare particularly burdensome because of financial and time constraints. Offering medication abortion on campus would reduce these burdens and enhance gender and racial equity as well as economic justice on campus.

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Table: Campus-level enrollment, medication abortion estimates, travel, and closest facility information (in Massachusetts in 2021)

Campus type and	Campus		Medication abortions		Travel to closest		Closest facility		
name	enrollment		per month		provider	D., kli a	information	Washand	Contof
			Low	High	Driving	Public transit	First available	Weekend appointment	Cost of medication
	Total	% Female	estimate	estimate	(miles)	(minutes)	appt (days)	availability	abortion
University of Massa			cstillate	Commune	(mics)	(minutes)	appt (days)	avanabinty	abortion
Amherst	31,350	50	12	28	25	138	6	No	700
Boston	15,989	55	7	16	6	57	8	Yes	700
Lowell	18,355	40	6	13	14	40	6	No	650
Dartmouth*	8,154	50	3	7	31	189	21	Yes	600
Massachusetts State	Massachusetts State University Campuses								
Bridgewater	10,881	59	5	12	21	163	6	Yes	675
Fitchburg	7,252	53	3	7	28	99	11	No	700
Framingham	5,456	56	2	6	17	105	5	No	700
MassArt	2,095	73	1	3	2	18	8	Yes	700
MCLA	1,507	60	1	2	38	**	***	No	***
<b>Maritime Academy</b>	1,792	13	0	0	42	400	6	Yes	675
Salem	7,706	62	4	9	4	73	4	No	650
Westfield	5,810	55	3	6	17	105	6	No	700
Worcester	6,204	62	3	7	2	18	11	No	700
Combined results:		Population-			Population-	Population-	Population-		Population-
total or population-		weighted			weighted	weighted	weighted		weighted
weighted average	Total	average	Total	Total	average	average	average		average
UMass campuses	73,848	49	28	65	18	102	8		677
State University									
campuses	48,703	57	22	50	16	105	7		685
All campuses	122,551	52	50	115	18	103	8		680

<sup>\*</sup>There is a nearer abortion-providing facility out of state, which is 28 miles away and takes 99 minutes to reach by public transportation.

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<sup>\*\*</sup>There is no public transportation from MCLA to the nearest abortion-providing facility.

<sup>\*\*\*</sup>Facility would not provide cost or appointment date without prior blood test.