For Second-Trimester Abortion with Misoprostol, Oral Dosing May Not Yield the Quickest Result

Second-trimester medication abortion regimens in which misoprostol is administered vaginally or sublingually may work more quickly than those in which the drug is given orally, according to findings from a randomized controlled trial in Australia. All women in the trial received mifepristone and then an initial dose of misoprostol given vaginally; those whose follow-up doses of misoprostol were administered vaginally or sublingually had complete abortions approximately two hours sooner than those who took the subsequent doses orally. Women in all three groups reported comparable levels of satisfaction with their abortion procedure.

The study was conducted at a hospital in Perth in 2009-2013; women were eligible to participate if they were 14–24 weeks pregnant and were admitted for a medication abortion because they had a medical complication or their fetus had an abnormality. All women received 200 mg of mifepristone orally 24-48 hours before admission and 800 mcg of misoprostol vaginally when they entered the hospital. They then received the regimen to which they had been randomly assigned: 400 mcg of misoprostol taken orally every three hours a maximum of five times; 400 mcg of misoprostol administered vaginally very four hours a maximum of five times; or 400 mcg of misoprostol administered sublingually every three hours a maximum of five times. If the fetus was not expelled after the final allowable dose, the regimen was repeated 12 hours later. Every three hours until the abortion was completed, women's vital signs were checked and they reported on their levels of pain and nausea; analgesia was provided on request. Before leaving the hospital, women completed a four-item satisfaction questionnaire. Characteristics and outcomes were compared across groups by means of chi-square tests, analyses of variance and hazard regression

A total of 302 women were enrolled in the study, of whom 100 each were randomized to the oral and vaginal protocols, and 102 were assigned to the sublingual regimen. In

each group, women were, on average, about 32 years old and 19 weeks into their pregnancy; nearly all women were white. Women's median number of prior pregnancies was 2–3, and their median number of births was one; the proportions of women who had had a cesarean delivery (16–27%) were statistically indistinguishable.

Abortion took significantly longer for women who received oral misoprostol (median, 9.5 hours) than for those in the vaginal and sublingual groups (7.4 and 7.8, respectively). (It also took longer among nulliparous women and among women who had had a cesarean than among parous women with no history of cesarean delivery, and longer among those at 17 or more weeks' gestation than among women who were less than 17 weeks pregnant.) Twelve hours after the initial dose of misoprostol was given, the proportion of women who had not had a complete abortion was significantly higher in the oral group (37%) than in the others (21% each); the same was true after 24 hours (11% in the oral group, compared with 4% in each of the others).

Women who took the misoprostol orally received a significantly higher total dosage than those who received it vaginally or sublingually (1,600 mcg vs. 1,200 mcg). Other measures related to the procedure or its aftermath—e.g., the need for analgesia, the occurrence of vomiting, blood loss and the need for transfusion—did not differ among the three groups. Likewise, the satisfaction questionnaire revealed no differences among groups in women's opinion of the procedure, their perception of pain, whether they would recommend the procedure to others or how well they felt their pain had been managed.

The researchers note as a limitation of their study that the length of time between administration of mifepristone and the first dose of misoprostol varied; additionally, they point out that women who were more than 22 weeks pregnant and in whom a feticide would have been necessary were excluded. Nonetheless, they assert that their findings

on the duration of abortion with the different misoprostol regimens and the variations in duration among certain subgroups of women have practical implications. These results, they write, represent "important information to provide to women during the preprocedure counseling process, because they typically desire data on the abortion duration and this should be tailored to [their] individual obstetric characteristics."—D. Hollander

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Early Sex Does Not Appear to Predict Later Risky Behavior

In a study designed to "critically examine whether early sexual initiation [poses] a unique risk for later sexual risk-taking," first intercourse at a young age was not independently associated with later levels of risky behavior among a cohort of individuals followed from age 10 to 33. Rather, the strongest predictors of participants' reporting risky sexual behavior during their early 20s or early 30s were their having said at young ages that their closest friends or other peers took part in activities that characterized them as antisocial (e.g., gang involvement) and that they themselves engaged in risky or impulsive behavior.

The analyses used data from the Seattle Social Development Project, a longitudinal study that began in 1985 with a sample of fifth graders from 18 public schools in high-crime neighborhoods. Data were drawn from surveys conducted when participants were aged 10–14, 21, 24, 30 and 33. Researchers assessed participants' reports of selected sexual risk behaviors at two important developmental stages: the transitions to young adulthood (ages 21–24) and to adulthood

(30–33). They conducted a series of probit regressions to determine whether early sexual initiation (defined as first intercourse prior to age 15) and environmental and individual characteristics assessed at various times at ages 10–14 predicted risky behavior during these periods. Analyses controlled for participants' gender, ethnicity and childhood socioeconomic status.

A total of 808 fifth graders enrolled in the study. The sample was evenly divided by gender, and half of respondents were from low-income households. Forty-seven percent of youth were white, 26% black, 22% Asian and 5% Native American; 5% were Hispanic. Ninety percent or more participated in each follow-up survey.

When asked at ages 21–24 about sexual risk behaviors in the past year, 76% of respondents reported that they had used condoms inconsistently, 29% that they had had three or more partners, 26% that they had had sex while under the influence of drugs or alcohol, and 4% that they had exchanged sex for money. Most respondents reported none or only one of these risk behaviors (18% and 44%, respectively); 23% reported two, 11% three and 2% all four.

Similarly, when they were 30–33 years old, 52% reported inconsistent condom use, 28% sex under the influence of substances, 20% three or more recent partners and 4% exchanging sex for money. During their early 30s, 37% reported none of these behaviors in the past year, 24% one, 19% two, 9% three and 3% all four.

Thirty-six percent of participants first had intercourse before age 15. The initial probit model, including only early sexual initiation, suggested that these young people reported more sexual risk behaviors at ages 21–24 than did those who postponed first sex (coefficient, 0.37). When demographic characteristics were added, the magnitude of the association was reduced (0.33); in this model, males reported more risky behaviors than females (0.21), and Asians reported fewer risks than whites (-0.42). Inclusion of environmental characteristics further reduced the association between early initiation and risky behavior (0.25), as well as reducing the coefficients for gender and Asian race; of the environmental characteristics, having antisocial peers at ages 10-13 was associated with increased sexual risk (0.27). With the addition of individual characteristics, early sexual initiation and gender were no longer significant, but the association with reporting antisocial peers remained (0.23); in addition, behavioral disinhibition, which measured risky or impulsive behavior at age 14, was associated with reporting more, rather than fewer, sexual risk behaviors (0.18). Exposure to antisocial peers and behavioral disinhibition interacted such that the effect of reporting the former was greater at lower than at higher levels of the latter. Results in a model including this interaction were essentially the same as those in the previous model.

Findings for recent sexual risk behavior at ages 30-33 largely followed the same pattern. Notably, however, the coefficient for early sexual initiation (0.37 in the model containing only this measure) was sharply reduced when demographic characteristics were added (0.23) and was nonsignificant in all subsequent models. Males appeared to be at greater risk than females only in the model containing early sex and demographic characteristics; race was not significant. Having had antisocial peers was significant in every model in which this measure was included (0.21-0.25), as was behavioral disinhibition during youth (0.12-0.16); again, a negative interaction was observed between these two measures. Reported childhood sexual abuse also was associated with increased levels of risky sexual behavior during the ages marking the transition to adulthood (0.38-0.41).

The notion that adolescent sexuality is "inherently dangerous," the researchers note, is the principal assumption of curricula that promote abstinence until marriage. However, they continue, their findings suggest that rather than being a predictor of risky behavior later in life, early sexual initiation "may be a marker for...the underlying causal variables." While acknowledging that the study is limited in generalizability and by weaknesses of the questions regarding sexual intercourse, the researchers conclude that they find "little justification for continuing to promote abstinence among adolescents on the basis of preventing an occurrence that marks a course of risky sexual behavior."—D. Hollander

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Sexting Is Positively Linked To Sexual Experience Among Middle School Students

Texting and "sexting" activities (i.e., sending or receiving sexually explicit mobile phone text or photograph messages) are associated with an increased likelihood of risky sexual behavior among young adolescents. According to a study of middle school students in the Los Angeles area with access to a text-capable mobile phone, those who sent 100 or more text messages per day, had ever sent a sext or had ever received a sext were more likely than others to report being sexually experienced.1 Youth who had sent 100 or more text messages per day and those who had received a sext were more likely than others to report being sexually experienced and not having used a condom at last sex rather than to say they were not sexually experienced.

The study—designed to examine relationships between texting and sexting, and between sexting and sexual activity, specifically among early adolescents—used data collected from 1,173 Los Angeles middle school students who completed a supplemental questionnaire administered in conjunction with the 2012 Youth Risk Behavior Survey. Participants were asked about their access to and use of mobile phones, as well as their demographic characteristics and sexual history. Multivariate and multinomial logistic regression analyses were used to examine characteristics associated with texting and sexting behaviors and sexual behaviors among adolescents with access to a textcapable mobile phone.

Respondents' ages ranged from 10 to 15 years; the mean age of the sample was 12.3 years. Fifty-two percent of youth were male; 61% were Hispanic, 18% were black, 15% were white and 7% belonged to other racial or ethnic groups. The vast majority of youth (96%) reported being heterosexual. Threefourths of adolescents reported having access to a text-capable mobile phone; of those, 39% reported excessive texting (i.e., sending at least 100 texts per day), 20% had ever received a sext and 5% had ever sent one. Eleven percent reported having ever had oral, vaginal or anal sex; among those who were sexually experienced, 61% reported having used a condom at last sex.

In multivariate analyses among adolescents with a text-capable mobile phone, excessive texting and ever having sent a sext were positively associated with ever having received a sext (odds ratios, 2.4 and 22.7, respectively); increased age and being black (rather than Hispanic) were also associated with this outcome (1.3 and 1.8). Similarly, excessive texting and ever having received a sext were positively associated with ever having sent a sext (4.5 and 22.8); being male and being nonheterosexual were also associated with this outcome (4.8 and 9.5). Adolescents who texted excessively, had sent a sext or had received a sext were more likely than others to be sexually experienced (3.2-7.0); in addition, males were more likely than females, and whites were less likely than Hispanics, to be sexually experienced (2.6 and 0.4). None of the characteristics studied were found to be significant in a model examining correlates of nonuse of condoms at last sex.

Multinomial analyses showed some links between texting and use or nonuse of condoms at last sex. Adolescents who texted excessively, had received a sext or had sent a sext were more likely than others to report having used a condom at last sex rather than being sexually inexperienced (odds ratios, 3.4–5.5). Similarly, those who texted excessively or had received a sext—but not those who had sent a sext—were more likely to report not having used a condom at last sex rather than being sexually inexperienced (4.7 and 12.1, respectively).

The authors comment that the study was, to their knowledge, the first "to examine sexting among a probability sample of middle school students." Yet, given its limitations, such as the use of cross-sectional data, the possibility of social desirability biases and the lack of generalizability, they call for more research on "how middle school students are engaging with one another via text messaging, and how specifically sexting behaviors relate to sexual behaviors." Even so, on the basis of their findings, the authors recommend that health educators, pediatricians and parents initiate conversations with young adolescents about sexting and sexual behavior.—*J. Rosenberg*

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If Long-Acting Reversible Contraceptives Are Made Accessible, They May Be the Choice of Many Teenagers

Long-acting reversible contraceptive (LARC) methods—IUDs and implants—are uncommon choices for U.S. teenagers overall. However, in a St. Louis program that removed financial and access barriers to birth control, and that promoted these methods because of their effectiveness in preventing unintended pregnancy, the majority of teenage participants opted to obtain one.¹ The apparent result was that over a five-year period, rates of pregnancies, live births and abortions among these teenagers were substantially below national averages. Differences were particularly striking for older teenagers and black teenagers.

The program, the Contraceptive CHOICE Project, enrolled more than 9,000 women aged 14-45 between 2007 and 2011. Eligible women were English- or Spanish-speaking, lived or sought contraceptive services in the St. Louis area, did not wish to become pregnant for at least one year, were or were planning to be sexually active with a male partner, and were not using contraceptives or were willing to switch methods. Participants received standardized counseling on the most commonly used reversible contraceptives, which counselors presented in order from most to least effective. Barring medical contraindications, women then received the method of their choice, free of charge. At enrollment, participants completed a baseline interview that covered their demographic characteristics, reproductive history, contraceptive use and sexual behavior; follow-up interviews were conducted by phone three months and six months later, and then every six months for a total of 2-3 years.

In all, 1,404 teenagers participated. Researchers used information reported by those who were 15–19 years old at any time during the study to calculate pregnancy, birth and abortion rates for this age-group over the period 2008–2013. They compared these rates with national rates for 2008, the most recent available.

Sixty-three percent of teenagers were black, 30% were white and the rest reported another racial identity; 44% were of low socioeconomic status. At enrollment, four in 10 had private health insurance, three in 10 no insurance and three in 10 coverage under a public

program. Virtually all teenagers were sexually experienced; their median number of male partners was three. Twenty-five percent had had at least one birth, 48% an unintended pregnancy and 18% an abortion; 24% had had an STD. After receiving counseling, 72% chose to obtain a LARC method—37% an IUD and 35% an implant. Thirteen percent opted for oral contraceptives, 9% an injectable, 5% a ring and 2% a patch.

Results of chi-square testing indicated that at baseline, 18–19-year-olds, who made up about two-thirds of adolescent participants, had had more male partners, were higher parity and had had a greater frequency of STDs than younger teenagers. In both subgroups, LARC methods were the most common contraceptive choice.

During follow-up, teenagers reported 56 pregnancies, of which 32 ended in live births, 16 in abortions, seven in miscarriages and one in stillbirth. Most pregnancies occurred among women who were using no method (25), the pill (13) or condoms (nine). Four pregnancies were among users of the ring, and 1–2 each among users of the patch, IUDs and the injectable.

Between 2008 and 2013, the average annual pregnancy rate among participants was 34 per 1,000; by contrast, in 2008, the pregnancy rate was 57 per 1,000 among all U.S. teenagers and 159 per 1,000 among those with sexual experience. The average birthrate per 1,000 was 19 among CHOICE enrollees, 34 among teenagers nationwide and 94 among sexually experienced U.S. teenagers. Program participants had an abortion rate of 10 per 1,000, whereas the rates for U.S. teenagers overall and for those with sexual experience were, respectively, 15 and 42 per 1,000.

Analyses stratified by age and race showed lower rates of all reproductive outcomes among CHOICE participants than among teenagers nationwide; the largest differentials were for older teenagers and blacks. For example, among 15–17-year-olds, pregnancy rates per 1,000 were 21 for program participants and 30 nationwide; among older teenagers, rates were 40 and 96 per 1,000 respectively. Likewise, among white women, pregnancy rates per 1,000 were 27 for CHOICE enrollees and 38 nationwide; among

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blacks, 32 and 100, respectively. Differences in pregnancy rates between CHOICE participants and sexually experienced U.S. teenagers were dramatic: 21 vs. 136 for younger teenagers and 40 vs. 178 for older ones; 27 vs. 137 for whites and 32 vs. 253 for blacks.

The researchers acknowledge a number of limitations that may affect the interpretation of their findings. Among these, they note that CHOICE enrollees received counseling that "may differ from the usual" and that participation in regular follow-up surveys may have encouraged women to continue using their chosen method. Additionally, the birthrate among teenagers in the United States has been on the decline, so the findings may overstate differences between CHOICE participants and all teenagers nationwide (although the researchers note that these differences still "are substantial and of public health importance"). Despite these shortcomings, the researchers conclude that in the absence of typical barriers to use, a large proportion of their teenage cohort chose to use LARC methods, and reproductive outcomes among these teenagers were substantially better than average.—D. Hollander

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Problems with Condom Use Not Unusual Among Men Who Have Sex with Men

In a sample of men who have sex with men surveyed in 2010-2012, only four in 10 of those who had used a condom during recent insertive anal intercourse reported effective use; the rest had experienced condom failure (i.e., breakage or slippage) or incomplete use (i.e., had put a condom on too late or removed one too soon).1 Substantial proportions reported errors such as completely unrolling a condom before putting it on and using oil-based lubricants with condoms. Black men were less likely than whites to report effective use, but overall, the two groups were about equally likely to report condom errors. Half of respondents had had problems with the way condoms fit or felt; these men had elevated odds of reporting condom failure or incomplete use.

Survey respondents were enrolled in a prospective cohort study that focused on disparities in HIV and other STD incidence between black and white Atlanta-area men who have sex with men. Participants were recruited in 2010-2012 online and at venues frequented by men who have sex with men. Upon entering the study, men were screened for HIV and completed a computer-administered self-interview that asked about their demographic characteristics, sexual behavior, HIV knowledge and condom use in the past six months. Researchers conducted bivariate and multivariate analyses to compare the condom use behaviors and experiences of black and white men.

The analytic sample consisted of 278 black and 197 men who had used a condom during insertive sex within the past six months. Overall, 33% of these men were 18-24 years old, 30% were 25-29 and 37% were 30-39; some 83% had at least some postsecondary education. One in 10 men had had one partner during the previous six months, half had had 2-5 and the rest had had more. One in three tested positive for HIV at enrollment. Results of bivariate analyses indicated that compared with white participants, black men were less likely to have more than a high school education, were more likely to have had more than one recent partner and to test positive for HIV, and scored lower on a test of HIV knowledge.

Thirty-six percent of participants were categorized as having used condoms effectively during insertive sex in the last six months: They had experienced no condom failures and reported no incomplete use. However, 31% reported condom breakage, 18% condom slippage during sex and 23% slippage while they were pulling out; 32% had removed a condom before sex was over, and 36% had put a condom on too late. In analyses adjusting for age, education, HIV knowledge and number of male partners in the past six months, blacks were less likely than whites to report effective use (prevalence ratio, 0.6); they were more likely to report all problems related to effectiveness except slippage during sex (1.4-1.9).

Whereas 31% of men had used condoms correctly during recent insertive sex, 16–40% had made a variety of errors: They had let a condom touch a sharp object, made one of several mistakes in applying it (e.g., unrolled it completely before putting it on), not left

space at the tip, used a dry condom or, most commonly, used an oil-based lubricant with a condom. The overall prevalence of correct use did not differ by race, but black men were more likely than whites to report having completely unrolled a condom before putting it on (prevalence ratio, 1.6) or used an oil-based lubricant (2.1).

Fifty-four percent of participants said that they had had a problem with the way a condom fit or felt, 63% had experienced erection problems while putting one on and 60% had had erection problems during sex when using a condom. Problems with fit or feel, as well as erection problems during sex, were less commonly reported by black men than by white participants (prevalence ratio, 0.8 for each).

An additional set of multivariate models assessing characteristics related to condom failure or incomplete use adjusted not only for men's demographic characteristics, but also for errors in condom use and problems with erection or with the fit or feel of condoms. In these models, black men were more likely than whites to report condom breakage and slippage (odds ratios, 2.1 and 1.8, respectively), as well as early removal and delayed application of a condom (3.5 and 2.0). Condom use errors and problems with erections were generally not related to effectiveness of use. Notably, however, men who reported problems with the way condoms fit or felt had elevated odds of reporting all four measures of condom failure and incomplete use (2.7-5.5).

Results of the study, the researchers point out, do not establish causal relationships, may have limited generalizability and may be affected by recall or social desirability bias, as well as by the use of self-reported data. However, the investigators write, the findings might lead health care providers to offer men "extended learning sessions designed to promote complete (start-to-finish) and correct use of condoms," and might increase providers' awareness of men's use of oil-based lubricants, which sharply reduce condoms' effectiveness.—D. Hollander

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Sexual Health Talk in Early Dating Relationships Linked to Similar Talk with Parents, Best Friends

Fewer than half of students surveyed at three junior high schools had talked to a recent dating partner about at least one of six sexual health topics, and fewer than one in 10 had discussed all six.¹ However, seven in 10 had talked with their parents, and three-quarters with their best friend, about any of these topics. Notably, the greater the number of sexual health topics youth reported having discussed with their parents and best friend, the greater the number they said they had discussed with their dating partner.

The survey was conducted via computerassisted self-interview among seventh and eighth graders attending schools in a rural area of the Southeast in 2012. Questions included participants' communication in the past year with their dating partner, best friend and parents about the following topics: condom use, other birth control use, STD risk, HIV risk, pregnancy risk and abstinence. (A dating partner was defined as a boyfriend or girlfriend, or someone else who was "more than" a friend and whom the participant hung out with or talked to.) To study patterns of sexual health communication, researchers conducted a series of descriptive, bivariate and multivariate analyses on data from youth who said that they had had a dating partner in the past year and provided information about communication with that partner.

In all, 603 youth were included in the analyses, 57% of whom were female. Participants ranged in age from 12 to 15 (mean, 13.1); reflecting the overall makeup of their school district, 46% were white, 24% were black, 22% were Latino and the rest were of other races.

Some 46% of youth said that in the past year, they had talked with their dating partner about one or more of the specified sexual health topics; 8% reported having discussed all six. By contrast, 71% had discussed any topic, and 26% all six, with their parents; 75% and 20%, respectively, with their best friend. Abstinence was the most commonly discussed topic: Thirty-three percent of participants had discussed this with their partner, 62% with their parents and 58% with their best friend. The use of birth control other than condoms was the least frequent topic of conversation—17%, 34% and 30%, respec-

tively. In general, youth more frequently reported having talked to their parents than to their partner or best friend about sexual health topics; the exception was that they discussed condoms more often with their best friend (54%) than with their partner (30%) or parents (47%). All differences by communication partner were statistically significant in chi-square tests.

Findings from mixed methods analyses of variance revealed that on average, participants discussed the same number of topics with parents and friends (2.8-2.9), but significantly fewer with dating partners (1.5). Female students discussed more topics (1.6-3.3, depending on communication partner) than did males (1.3-2.4), and sexually experienced youth discussed a greater number (3.0-3.8) than did those who had not yet had intercourse (1.3-2.8). Black participants reported discussing more topics (1.7–3.5) than did whites (1.4-2.8) or Latinos (1.4-2.9). Bivariate correlations indicated that the older participants were, the more topics they had discussed with each type of communication partner.

According to results of a binomial regression model, the greater the number of topics youth discussed with their parents or best friend, the greater the number they discussed with their dating partner (mean ratios, 1.1 and 1.4, respectively). However, a model that included an interaction term indicated that communication with parents was significant only for youth who reported infrequent sexual communication with their best friend.

Among the 53 youth who had had intercourse in the past year, 38% reported inconsistent condom use, 55% said that they had used a condom at first intercourse and 15% reported use of dual methods at first sex; 17% had not discussed any of the specified sexual health topics with their dating partner. The number of topics sexually experienced participants had discussed with their dating partner was positively correlated with both frequency of condom use and use of dual methods at first intercourse (coefficient, 0.3 for each).

The researchers acknowledge a number of weaknesses of their study, including its crosssectional design, the narrow age range of participants and the use of a broad definition of "dating partner." They also note that the survey did not collect parents', dating partners' or best friends' perceptions of sexual communication, and that it did not assess the quality of discussions. Despite these limitations, they contend, their study "provides evidence that many adolescents do not discuss important sexual health topics with the very people in their lives...who could help them make safer sexual decisions." Furthermore, they conclude that it suggests a need for interventions to focus on developing youths' sexual communication skills to ensure their ability to safeguard their sexual health.—D. Hollander

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Little Improvement In HIV Testing Level For Key Age-Group

Between 1993 and 2006, the Centers for Disease Control and Prevention (CDC) issued three sets of recommendations aimed at expanding HIV screening, but analyses based on data from two national surveys of health care facilities show little, if any, change in the rates at which 13-64-year-olds were tested.1 In this age-group, which is a specific focus of the most recent recommendations, individuals visiting outpatient departments were more likely than patients at emergency departments or physicians' offices to have an HIV test, and demographic disparities were evident in the odds of testing. Notably, in all three health care settings, Hispanics were more likely than other ethnic groups, and blacks were more likely than whites, to be tested for HIV.

The 2006 recommendations include a call for large-scale opt-out screening of 13–64-year-olds in settings where the prevalence of undiagnosed HIV infection is 0.1% or more. Therefore, analysts studied trends in testing among this age-group, using 1992–2010 data from the National Hospital Ambulatory Medical Care Survey (which gathers information from emergency and outpatient departments) and the National Ambulatory Medical Care Survey (which covers physicians' offices). They used t tests to

compare testing rates across health care settings, logistic regression to assess trends in testing at each type of site and multivariable logistic regression to identify characteristics associated with testing.

Over the study period, the proportion of visits that included HIV testing was significantly higher in outpatient departments (0.7–1.6%) than in emergency departments (0.2–0.6%) or physicians' offices (0.3–0.8%). Testing rates remained flat in outpatient and emergency departments; increased testing in physicians' offices in 2009 and 2010 resulted in a small overall rise for the period (odds ratio, 1.04).

Regardless of health care setting, males and females were equally likely to have an HIV test. However, in every type of facility, the likelihood of testing was higher among Hispanics than among others (odds ratios, 1.6–2.0), and among blacks than among whites (2.1–2.4); in emergency departments and physicians' offices, individuals of other races also were more likely than whites to be

tested (1.5 each). Additionally, in each setting, Medicaid recipients had a greater likelihood of being tested than did those covered by private insurance (2.0-2.4); in emergency and outpatient departments, patients who lacked insurance were more likely than those with private coverage to have an HIV test (1.8-2.1). Some variation was seen by geographic region; emergency department patients in the Northeast were more likely than their counterparts in the Midwest to be tested (1.6), and Southerners who visited outpatient departments and physicians' offices had greater odds than Midwesterners visiting such facilities of undergoing testing (1.6 and 2.0, respectively).

The analysts note that the lack of significant change in HIV testing between 1992 and 2010 stands in contrast to "improvements in HIV testing technologies over this period, breakthroughs in antiretroviral medications to combat HIV, reductions in AIDS-related mortality, and recent efforts by CDC to streamline HIV testing methods."

Moreover, they observe that the number of new infections reported to the CDC rose slowly over the study period (although it is unclear whether this change reflected an actual increase in infections, more testing or more positive results from HIV tests). They acknowledge that their data cannot explain the lack of change in testing and are subject to a number of limitations (including potential sampling biases and problems arising from shortcomings in data collection). Nevertheless, the analysts suggest that the "absence of a mandate," inadequate financial support, and poor knowledge and insufficient dissemination of the CDC recommendations are among the possible barriers to testing that merit attention.—D. Hollander

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