the next morning, and submit a camera image of dipstick and color board according to in-app instructions. The app then opened a brief acceptability survey, which asked about ease of use, preference for self-testing vs clinic testing, and problems encountered. Participants not submitting an image within 24 hours received reminder calls. The primary outcome was feasibility, assessed as the proportion of participants submitting an interpretable image within 48 hours. Acceptability (secondary) outcomes included ease of use, testing preference, and proportion experiencing a problem with the test. We used descriptive statistics, and χ^2 analyses were used for comparisons between groups. The Johns Hopkins institutional review board approved the study, which was funded by Dip.io.

RESULTS: After piloting study procedures, we enrolled 179 participants; 156 (87.2%) attempted the test. Of these, 150 (96.2%) successfully submitted image data, and 139 of those 150 (92.6%) completed the survey. The majority (93/150, 62.0%) submitted an image within 24 hours, and 57 of 150 (38.0%) submitted between 24 and 48 hours.

The Table shows demographics and feasibility outcomes. Total test completion was similar across age and education levels. Individuals with >12 years of education vs fewer (72.7% vs 52.7%, $P = .03$), and those aged 26–45 years vs 18–25 years (68.8% vs 41.8%, $P = .01$), were more likely to complete the test without a reminder. Of 139 completing the acceptability survey, most (96.0%) found the app very easy or easy to use. Most (62.6%) preferred at-home self-testing, while 10.1% preferred in-clinic testing. Eight (5.3%) reported problems (internet connectivity, n = 3; image quality, n = 2; or test kit complaints, n = 3); all successfully submitted an image.

CONCLUSION: Participants found smartphone-based dipstick testing to be feasible and acceptable, and largely preferred self-testing. Integration of day-of-visit home testing into clinic protocols and electronic health records could streamline visits for patients and providers. Smartphone technologies may also offer novel ways to improve access for those with limited resources, increase convenience, and enhance patients' ownership over their health care. These pilot results may not be generalizable; future research could focus on younger individuals, those with lower health literacy, and individuals with high-risk pregnancies. ■

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Routine screening of pregnant women for Zika virus in the setting of local transmission—Miami–Dade County, Florida, 2016–2017

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OBJECTIVE: On July 29, 2016, the Florida Department of Health (FDOH) announced that active transmission of Zika virus (ZIKV) had been detected in a 1-square-mile area of Miami–Dade County. Centers for Disease Control and Prevention (CDC) guidance recommended ZIKV testing for asymptomatic pregnant women with an epidemiological link to that area,[1] with testing recommendations expanded to include additional areas as identified. Miami–Dade was considered a Zika cautionary area through June 2, 2017, and screening was recommended for women in Miami–Dade who conceived up to 8 weeks after that date.[2,3] From August 3, 2016, through July 2017, ZIKV testing was available to

pregnant women free of charge via the Bureau of Public Health Laboratories (BPHL) and contracted commercial laboratories. Results of this screening program are described.

STUDY DESIGN: Laboratory results were analyzed for 20,731 women aged 15−50 years who were tested for ZIKV in Miami−Dade with an initial date of specimen collection between July 29, 2016, and July 28, 2017. Results were matched on name, date of birth, and case identification number. Persons tested for ZIKV identified to the FDOH through means other than routine screening (eg, active surveillance initiated by a case, blood donation screening, provider report) were excluded.

A positive screen was defined as a non-negative ZIKV immunoglobulin M (IgM) test in serum or cerebrospinal fluid and/or a presumptive positive reverse transcription−polymerase chain reaction (RT-PCR) result from a commercial laboratory in any specimen. Positive RT-PCR and non-negative IgM specimens from commercial laboratories received repeat testing at the BPHL or CDC; plaque reduction neutralization testing (PRNT) was performed on specimens with non-negative reference laboratory IgM results.

Among patients who met epidemiologic and laboratory criteria, ZIKV infection or disease cases were classified as confirmed, probable, or suspected according to FDOH case definition.[4] Additional data were obtained via chart review and patient interview for these cases.

RESULTS: Between July 29, 2016, and July 28, 2017, a total of 20,731 women aged 15−50 years were tested for ZIKV in Miami-Dade, including 4664 women (22.5%) known to be pregnant at testing.*

A total of 32 women (0.2%) had positive RT-PCR results at the BPHL and were considered to be confirmed ZIKV cases without screening positive (Table). In addition, 592 (2.8%) women had a positive screen result and required confirmatory testing; among these, 207 (35.0%) were classified as confirmed, probable, or suspected cases. The majority of women (385, 65.0%) who screened positive had negative confirmatory results.

Routine screening during July 2016 to July 2017 identified 181 pregnant women who were ZIKV cases; 171 (94.5%) had a possible exposure during pregnancy or less than 8 weeks before conception. Only 39 cases (21.5%) in pregnant women were locally acquired. Pregnancy outcome information was available for 164 (90.6%) of the 181 women identified through routine screening, none of whom has delivered an infant or fetus with congenital Zika syndrome or infection.

TABLE
Summary of positive laboratory results for reproductive-aged women tested in Miami−Dade County, July 2016 to July 2017 (N = 624)

Laboratory result	Total (N = 624)
Confirmed without screening positive	32
Screened positive	592[a]
Via RT-PCR (commercial laboratory)	17[a]
Via non-negative[b] IgM (commercial laboratory or BPHL)	493[a]
Screened positive with positive confirmatory testing	207
Confirmed ZIKV case (by RT-PCR and/or serologic testing)	46
Probable ZIKV case (by serologic testing)	154
Suspected ZIKV case (by serologic testing)	7
Total with positive confirmatory testing	239

BPHL, Bureau of Public Health Laboratories; *IgM,* immunoglobulin M; *RT-PCR,* reverse transcription−polymerase chain reaction; *ZIKV,* Zika virus.

[a] A total of 36 probable and suspected ZIKV cases had screening results that could not be matched to their confirmatory results. Thus, they are not included in the counts of women who screened positive by result type, although they are included in the total. In addition, some women may have screened positive on both IgM and RT-PCR, and thus may be counted in both the screened via RT-PCR and screened via non-negative IgM figures, although they were counted only once in the total number of individuals who screened positive; [b] Non-negative IgM results included "positive," "presumptive positive," "possible positive," "presumptive Zika virus positive," "possible Zika virus positive," "equivocal," "indeterminate," and "inconclusive," as exact serology terminology varied by assay.

Logue. Routine screening of pregnant women for Zika virus in the setting of local transmission. Am J Obstet Gynecol 2019.

CONCLUSION: Most women with a positive ZIKV screen result during July 2016 to July 2017 had negative confirmatory results. A low rate of predictive value positive is not uncommon when the prevalence of a disease is low; the FDOH has reported 288 locally acquired ZIKV cases in Miami−Dade since 2016.[5] Although federal testing guidance has been updated,[6] the Miami−Dade experience with ZIKV demonstrates challenges of screening in low-prevalence settings. ■

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*Some demographic data, including pregnancy status, were not consistently reported to the FDOH's surveillance database alongside laboratory results. Pregnancy status was not available for 15,059 women (72.6%) included in this study. It is likely that many of these women whose pregnancy status was not available were pregnant, because our screening program targeted this population and included controls to ensure that FDOH-funded tests went to pregnant patients.

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Compliance with cervical cancer screening guidelines in young female patients: rates and trends of screening in New Haven County, CT

OBJECTIVE: In 2012, updated guidelines on the prevention and early detection of cervical cancer were released after a collaborative consensus process that involved 25 professional societies.[1] These guidelines maintained that cervical cancer screening with cytologic testing (known as Papanicolaou [Pap] test) in women <21 years of age and human papillomavirus (HPV) testing for high-risk genotypes in women <30 years of age provided a marginal to no net benefit.[2] Although individual organizations previously had released guidelines based largely off of the same body of evidence, concordance did not exist between the recommendations before 2012.[3] The objective of the current analysis was to investigate how the rates of unindicated cervical cancer screening for adolescents and young adults changed in response to the release of the 2012 consensus guidelines.

STUDY DESIGN: Results of cervical cancer screening were reviewed from 2 large outpatient gynecology practices