Unintended pregnancy remains a major public health problem in the United States. Over the past 20 years, the overall rate of unintended pregnancy has not changed and remains unacceptably high, accounting for approximately 50% of all pregnancies (1). The economic burden of unintended pregnancy has been recently estimated to cost taxpayers $11.1 billion dollars each year (2). According to the Institute of Medicine, women with unintended pregnancy are more likely to smoke or drink alcohol during pregnancy, have depression, experience domestic violence, and are less likely to obtain prenatal care or breastfeed. Short interpregnancy intervals have been associated with adverse neonatal outcomes, including low birth weight and prematurity, which increase the chances of children's health and developmental problems (3).

Many factors contribute to the high rate of unintended pregnancy. Access and cost issues are common reasons why women either do not use contraception or have gaps in use (4). Although oral contraceptives (OCs) are the most widely used reversible method of family planning in the United States (5), OC use is subject to problems with adherence and continuation, often due to logistics or practical issues (6, 7). A potential way to improve contraceptive access and use, and possibly decrease unintended pregnancy rates, is to allow over-the-counter access to oral contraceptives (OCs). Screening for cervical cancer or sexually transmitted infections is not medically required to provide hormonal contraception. Concerns include payment for pharmacist services, payment for over-the-counter OCs by insurers, and the possibility of pharmacists inappropriately refusing to provide OCs. Weighing the risks versus the benefits based on currently available data, OCs should be available over-the-counter. Women should self-screen for most contraindications to OCs using checklists.

Interest in Over-the-Counter Access

A 2004 national telephone survey of 811 women aged 18–44 years found that 68% of women at risk of unintended pregnancy would utilize pharmacy access for OCs, the contraceptive patch, the contraceptive vaginal ring, and emergency contraception. Also, 47% of uninsured women and 40% of low-income women who were not using OCs, the contraceptive patch, or the contraceptive vaginal ring said they would start using those methods if they were available from pharmacies without a prescription (8). In another survey of 1,271 women aged 18–49 years, 60% of women not currently using a highly effective contraceptive method said they would be more likely to use OCs if they were available over-the-counter (9). A national survey of 2,725 pharmacists found that 85% were interested in providing hormonal contraception, with 66% expressing concerns about reimbursement (10).
were authorized to provide hormonal contraception. The provision of hormonal contraceptive methods and several pharmacists received specialized education in this area. In the Direct Access Study in Washington State, the outcome was more accurate. In the same study, the demographics of patients (obese or lacking health maintenance services) may have affected the outcome. In one study, approximately 6% of the 1,271 women aged 18–49 years had unrecognized hypertension. Both studies showed that in cases of discrepancy, women were more likely to report contraindications than were health care providers. A study conducted in the United Kingdom replicated the findings that women take a more conservative approach compared with clinicians and also demonstrated that none of the 328 women studied would have incorrectly used OCs based on self-screening (20). Another study found that women obtaining OCs from pharmacies were no more likely to have contraindications than those who got OCs from a clinic (21). A study of women seeking to buy OCs online through a special program for patients of a clinic found that online participants (n=243) were as knowledgeable about contraindications and adverse events as women seen in the clinic (n=161) (22). It is acknowledged that the women with Internet access may not be comparable to the general population. In contrast to the aforementioned studies, one U.S.-based cohort study found that women who obtained OCs over-the-counter in Mexican pharmacies were more likely to have relative contraindications rather than absolute contraindications (23) (see Box 1). At least one relative contraindication to OC use was found in 13% of the over-the-counter group versus 9% of the prescribed group (P=.006) but with similar frequencies of absolute contraindications (7% versus 5%, P=.162). However, women who purchased OCs over-the-counter in this study were not self-screened using any standardized process, and the demographics of patients (obese or lacking access to health maintenance services) may have affected the outcome.

Pharmacist provision (behind-the-counter access) of hormonal contraceptive methods also has been evaluated. In the Direct Access Study in Washington State, several pharmacists received specialized education in the provision of hormonal contraceptive methods and were authorized to provide hormonal contraception including OCs, the contraceptive patch, and the contraceptive vaginal ring (24). Pharmacists successfully used checklists to identify women without contraindications to OCs according to the World Health Organization’s Medical Eligibility Criteria for Contraceptive Use; blood pressure and body mass index also were measured (24). Continuation of use through 12 months was fairly high (70% of 127 women), although most women were continuing users (either currently using OCs or had used hormonal contraceptives in the past), and only 65% (127 of 195 women) completed the 12-month interview. Acceptability was also high, although most women had to pay out-of-pocket for the pharmacist evaluation because most insurance providers did not cover that service (24).

### Box 1. Categories for Medical Eligibility Criteria for Contraceptive Use

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
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<tbody>
<tr>
<td>1</td>
<td>A condition for which there is no restriction for the use of the contraceptive method.</td>
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<tr>
<td>2</td>
<td>A condition for which the advantages of using the method generally outweigh the theoretical or proven risks.</td>
</tr>
<tr>
<td>3</td>
<td>A condition for which the theoretical or proven risks usually outweigh the advantages of using the method.</td>
</tr>
<tr>
<td>4</td>
<td>A condition that represents an unacceptable health risk if the contraceptive method is used.</td>
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Other concerns about over-the-counter access include that women who choose to purchase OCs over-the-counter might be less adherent, less likely to continue their method, or less likely to choose more effective long-acting methods of contraception. However, efforts to improve use of long-acting methods of contraception should not preclude efforts to increase access to other methods. In one study, 68% of the women who might avail themselves to over-the-counter OCs reported not currently using any contraceptive method (8). Furthermore, continuation may be increased with better access. In a U.S. cohort study of approximately 1,000 women over 9 months, those who obtained OCs over-the-counter in Mexican pharmacies had slightly higher continuation rates (79.2%, P=.12) compared with those who obtained OCs in U.S. public clinics (74.9%, P=.12), although the increase was statistically insignificant (25). Access to multiple pill packs at one time results in higher rates of continuation. In a 2011 randomized trial, investigators compared 6-month contraceptive continu-
regarding women’s preventive services will require new Department of Health and Human Services guidelines access should address issues of cost. The recent U.S. Regardless, any plans to improve access to OCs by on the number of pill packs they could receive (32). average of $16 per pill pack, and many reported limits particularly young women and the uninsured, paid an lose insurance coverage for their preferred contraceptive method. However, OCs are already a significant expense method. However, OCs are already a significant expense long-term data of adverse health consequences for over-

Use of Preventive Services
Another theoretic concern is that women who choose to purchase OCs over-the-counter will forgo screening and other preventive services. However, cervical cancer screening or sexually transmitted infection (STI) screening is not required for initiating OC use and should not be used as barriers to access (27, 28). The American College of Obstetricians and Gynecologists recommends an annual health assessment for every woman as a fundamental part of medical care (29). This visit also includes a discussion of a woman’s reproductive health plan. She can review her health plan with her obstetrician–gynecologist on a periodic basis (30). This review provides an opportunity for the clinician to ask the patient what type or types of birth control she uses and to educate her about adverse effects of her chosen method and alternatives.

In a 2012 study, researchers compared the screening habits of U.S. women who had obtained their OCs from U.S. clinics with those who had obtained their OCs from Mexican pharmacies (31). Both groups reported high screening rates of Pap tests within the past 3 years (greater than 88%), ever having received STI testing (greater than 71%), and ever having had a clinical breast examination (greater than 88%), all higher than national screening proportions. Rates were slightly higher among those receiving OCs from clinics. Among those receiving OCs over-the-counter, the reasons given for no Pap testing included inconvenience, cost, and not knowing where to go to get screened (31). Currently, there are no long-term data of adverse health consequences for over-the-counter OC users.

Cost
It is possible that some women might be adversely affected by changing to over-the-counter OCs if they lose insurance coverage for their preferred contraceptive method. However, OCs are already a significant expense for many women. In a recent national survey, women, particularly young women and the uninsured, paid an average of $16 per pill pack, and many reported limits on the number of pill packs they could receive (32). Regardless, any plans to improve access to OCs by moving toward behind-the-counter or over-the-counter access should address issues of cost. The recent U.S. Department of Health and Human Services guidelines regarding women’s preventive services will require new private health plans to cover without cost sharing all U.S. Food and Drug Administration-approved contraceptive methods, sterilization procedures, and patient education and counseling for women with reproductive capacity (33). It remains to be seen how these guidelines will be implemented, and it should be noted that they do not apply to Medicaid. Pharmacy consultative services may incur additional costs.

Data From Developing Countries
Although the results of studies from developing countries may not be generalizable to a U.S. population, this information allows health care providers to examine the potential benefits and challenges of over-the-counter access to OCs in the United States. Some obstacles found in these studies include pharmacist refusal and a lack of counseling of patients on the proper use of OCs. (See Table 1 for additional data from developing countries.)

Conclusions and Recommendations
In the interest of increasing access to contraception, and based on the available data, the American College of Obstetricians and Gynecologists’ Committee on Gynecologic Practice makes the following conclusions and recommendations:

- Weighing the risks versus the benefits based on currently available data, OCs should be available over-the-counter.
- Women should self-screen for most contraindications to OCs using checklists.
- There are concerns about payment for pharmacist services, payment for over-the-counter OCs by insurers, and the possibility of pharmacists inappropriately refusing to provide OCs.
- Screening for cervical cancer or STIs is not medically required to provide hormonal contraception.
- Continuation rates of OCs are higher in women who are provided with multiple pill packs at one time.

References
Table 1. Data From Developing Countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Study</th>
<th>Conclusions</th>
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<tbody>
<tr>
<td>Jamaica</td>
<td>Chin-Quee DS, Cuthbertson C, Janowitz B. Over-the-counter pill provision: evidence from Jamaica. Stud Fam Plann 2008;37:99–110.</td>
<td>• Low-dose OCs have been available behind-the-counter since 1998.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Primary source of information of OCs was a doctor, nurse, or member of the clinic staff, not a pharmacist.</td>
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<td></td>
<td></td>
<td>• Access was restricted because of contraindications or younger age.</td>
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<td></td>
<td></td>
<td>• Few women were counseled about how to use OCs and few were counseled regarding side effects.</td>
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<tr>
<td></td>
<td></td>
<td>• Pharmacy users had slightly higher continuation rates compared with other women but statistical significance is not reported.</td>
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<tr>
<td>Thailand</td>
<td>Ratanajarit C, Chongsuivatavong V. Survey of knowledge and practice on oral contraceptive and emergency contraceptive pills of drugstore personnel in Hat Yai, Thailand. Pharmacoepidemiol Drug Saf 2001;10:149–56.</td>
<td>• Knowledge of how to obtain a proper medical history and counseling on the proper use and side effects of OCs was fair to good among both pharmacists and nonpharmacists.</td>
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<tr>
<td></td>
<td></td>
<td>• Pharmacists were likely to have better knowledge overall than nonpharmacist staff members.</td>
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<td></td>
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<td>• Secret shopper data reported that OCs were usually dispensed with little or no medical history or counseling.</td>
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Abbreviation: OC, oral contraceptive.


