

Pharmacy and clinic partnerships to expand access to injectable contraception

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Abstract

Objective: To explore the potential of pharmacist-administered contraceptive injections and feasibility and acceptability among patients, pharmacists, and clinicians.

Setting: Throughout California, 27 pharmacists practicing in 26 community independent and chain pharmacies partnered with 19 clinics/physician offices.

Practice description: In spring 2003, Pharmacy Access Partnership launched a 2-year demonstration program in which established users of depot medroxyprogesterone acetate (e.g., Depo-Provera—Pfizer) hormonal contraception at participating clinics were given the option of returning to their regular clinic for reinjection or going to a participating pharmacist trained in injection technique and contraceptive management.

Practice innovation: Program feasibility and acceptability by patients, pharmacists, and clinicians were evaluated to offer insights into the potential of pharmacist-administered depot medroxyprogesterone injections.

Intervention: Intake forms collected during pharmacy reinjection visits, data from interviews with pharmacists and clinicians, and evaluations with patients.

Main outcome measures: To determine whether contraceptive reinjection at a pharmacy is feasible and acceptable for patients, pharmacists, and clinicians and to determine the characteristics of women most likely to use the service.

Results: A total of 69 women received 143 depot medroxyprogesterone injections during the project. Patients were ethnically and racially diverse and spanned a wide age range (19–45 years). Women 20 years of age or older used pharmacists' services more frequently than did younger patients, perhaps because they were more familiar with the injections and they more often worked, therefore needing the expanded hours offered by the community pharmacy setting. Experiences of two pharmacies with successful programs are described.

Conclusion: The pharmacy option for reinjection is most viable for women who can comfortably manage their injection cycle, prefer not to have to schedule a clinic appointment quarterly, and do not require the ongoing attention and appointment supervision available from the clinic. To be successful, program promotion requires provider support, integration, and involvement at the clinic level.

Keywords: Contraceptives, injections, medication adherence, collaboration, medication therapy management.

Received October 3, 2006, and in revised form January 23, 2007. Accepted for publication April 26, 2007.

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Disclosure: The authors declare no conflicts of interests or financial interests in any product or service mentioned in this article, including grants, employment, gifts, stock holdings, or honoraria.

Funding: The injectable contraception program was supported by The David and Lucile Packard Foundation and The William and Flora Hewlett Foundation.

Acknowledgments: To Jane Boggess, who was a true visionary and without whom this program would not have been possible; to Mike Policar, Martha Baird, and Lili Sims for their role in training and program development; to the pharmacists and clinic staff, whose participation contributed to women's greater access to injectable contraception; and to Ingrid Dries-Daffner and Gena Pennington for careful manuscript review and valuable input.

Previous presentation: The American Public Health Association Annual Meeting, Philadelphia, December 12, 2005.

J Am Pharm Assoc. 2007;47:527–531.

doi: 10.1331/JAPhA.2007.06112

A substantial number of women select injectable contraceptives such as depot medroxyprogesterone acetate (e.g., Depo-Provera—Pfizer) as their method of pregnancy prevention. At least 2 million U.S. women used depot medroxyprogesterone injections in 2002,¹ and more than 1 million of them were adolescents.^{2,3} Approximately one-quarter of women in California who use hormonal methods select contraceptive injection to prevent pregnancy, making it a particularly popular choice.⁴

Objective

Our goal was to explore the potential of pharmacist-administered depot medroxyprogesterone injections and feasibility and acceptability among patients, pharmacists, and clinicians.

Practice description

Depot medroxyprogesterone acetate, a hormonal progestin, is administered quarterly by a health care provider via deep intramuscular injection in the deltoid or gluteus. Women may experience adverse effects similar to those of other hormonal contraceptive methods, including menstrual changes (e.g.,

spotting or bleeding during the first 6 months), amenorrhea, weight gain, and potential decrease in bone mineral density (BMD). Although BMD loss from depot medroxyprogesterone has been a known concern for many years, in fall 2004, the Food and Drug Administration (FDA) issued a black-box warning to encourage women to limit use of injectable contraceptives to 2 years, when possible, because of their long-term effects on BMD.^{5,6}

Depot medroxyprogesterone has largely contributed to the decline in rates of unintended pregnancy and abortions among women in the United States, including adolescents, since its approval in 1992.⁷ Health care providers who continue to prescribe depot medroxyprogesterone understand that its benefits as a reliable contraceptive method far outweigh the relative short-term risk of BMD loss. These prescriptive actions are supported by a World Health Organization statement that recommends no restriction on depot medroxyprogesterone use, including duration of treatment in women 18 to 45 years of age.⁸

A new version of the injectable hormonal contraceptive was recently developed for subcutaneous injection. Research indicates that self-administration of this preparation could potentially reduce the need for routine visits to a provider and could enhance usability.⁹ Access barriers currently exist because depot medroxyprogesterone requires administration by a health professional. For example, some women do not return quarterly for reinjection because it is difficult to visit the clinic during office hours and many experience a long delay waiting to see a provider.¹⁰

Pharmacists are increasingly providing injections, and schools of pharmacy generally require that graduates be trained to administer injections. Pharmacists across the country provide immunizations more than any other clinical service (other than diabetes management services), and California pharmacists in the community setting provide immunization services second only to pharmacy access to emergency contraception.¹¹ Pharmacies are often open in the evening and on weekends and can offer highly convenient and accessible services. Pharmacists can therefore perform a resupply function for women on injectable contraceptives in much the same way that they resupply women on oral contraceptives.

Practice innovation

In spring 2003, Pharmacy Access Partnership, a nonprofit center of the Public Health Institute, launched a 2-year demonstration program in California through which established users of depot medroxyprogesterone at participating clinics were given the option of returning to their regular clinic for reinjection or going to a participating pharmacist trained in injection technique and contraceptive management. The injectable contraception program, also known as Health Step, facilitated partnerships between physicians/clinicians and pharmacists to better meet the needs of women using injectable contraception.

At a Glance

Synopsis: This 2-year program effectively demonstrated the feasibility and acceptability of an injectable contraceptive, depot medroxyprogesterone acetate (e.g., Depo-Provera—Pfizer), program in 26 community pharmacies throughout California. Women who used the pharmacy as an access point for contraception reinjection spanned a broad range of ethnicities and ages (range 19–45 years). Women 20 years of age or older, however, were more likely to use the reinjection service than younger women, possibly as a result of greater degree of familiarity with contraception use. Successful program promotion was observed to be contingent on provider support, integration, and involvement at the clinic. Pharmacy-based contraception reinjection is a convenient option for women wishing to manage their injection cycle without the ongoing attention and appointment supervision provided by a clinic.

Analysis: Clinicians who supported using pharmacies as an additional contraception reinjection access point were in strong favor of enrolling all local pharmacies. This view translates to the necessity for improved relationships between clinics and pharmacies. Beyond the initial buy in from partnering pharmacists and their staff, promoting the pharmacy as an alternative means for contraception reinjection can provide women greater access to care and foster a financially prosperous collaboration in which pharmacies and clinics provide complementary referrals.

Pharmacists were required to complete contraception management training in administration technique for injectable contraception and the incorporation of a new clinical service into the pharmacy practice. Participating pharmacists also were required to create a private or semiprivate area in the pharmacy to provide injections. Clinicians were asked to incorporate an additional line of discussion with depot medroxyprogesterone patients and provide instruction and direction for those who were interested in seeking reinjection at participating pharmacies. For this, women were required to manage their injection cycle and return for reinjection—to the clinic or pharmacy—four times a year.

The feasibility and acceptability of the program by patients, pharmacists, and clinicians were evaluated. For each reinjection administered in the pharmacy throughout the 2-year demonstration program, demographic and patient-specific data were maintained by participating pharmacists for each injection. Analysis of intake forms collected during the pharmacy reinjection visits, coupled with germane data from interviews with pharmacists and clinicians and evaluations with patients (completed near the end of the demonstration program), offer insights into the success of pharmacist-administered depot medroxyprogesterone injections.

Throughout California, 27 pharmacists practicing in 26 community independent and chain pharmacies completed the injectable contraception training requirements and partnered with 19 clinics/physician offices. While the small sample size of the project did not permit a robust statistical evaluation, the results revealed important lessons for the expansion of contraceptive access options for women.

Results

Patient characteristics

During the 2-year demonstration period, 69 women received 143 injections in pharmacies participating in the Health Step program. Depot medroxyprogesterone patients were ethnically and racially diverse and spanned a wide age range (19–45 years) (Table 1). Women 20 years of age or older more frequently selected the pharmacy for reinjections. An explanation for this trend is that women in this age group might be more familiar with contraception use (because of number of years used) than younger women and therefore may feel more comfortable getting their reinjection beyond the clinic setting. Of course, contraception method ease of use and convenience is important for many women, particularly working women.¹²

Although the majority of the depot medroxyprogesterone patients who participated in the evaluation were not familiar with the Health Step program or the option to get reinjections in the pharmacy, upon hearing about it, nearly one-half considered it to be a valuable access option (Table 2). Almost one-half of the women who participated in the evaluation had been using depot medroxyprogesterone for more than 1 year, and 60% had their injections paid for by state-funded health insurance programs

Table 1. Characteristics of patients receiving depot medroxyprogesterone in injectable contraception program

	Injection at clinic (n = 77)^a	Injection at pharmacy (n = 69)^b
Age	No. (%)	No. (%)
<20	20 (26)	5 (7)
20–24	26 (34)	19 (28)
25–29	6 (8)	19 (28)
>29	25 (32)	19 (28)
Unknown		7 (9)

Patients receiving injection in pharmacy and clinic (n = 81)

Ethnicity/race	No. (%)
Caucasian	40 (49)
Hispanic	20 (24)
Asian	11 (14)
African American	8 (10)
Native American	2 (3)

^aNumber of patients who received injection at clinic per completion of program evaluation.

^bNumber of unique patients who received injection at pharmacy per patient intake form.

(Medicaid and Family PACT). The private areas established by participating pharmacists gave women the option of receiving the injection in either the deltoid or gluteus (52% deltoid, 41% gluteus, and 1% injection site unknown)

Patients certainly appear willing to pay for pharmacist services. When asked in the evaluation, approximately 50% of depot medroxyprogesterone patients responded that they would be willing to pay a set fee, up to \$10, for the pharmacy reinjection service.

One-half of the women who used the pharmacy for reinjection went more than one time, and several women returned as many as five and six times. Most of these repeat patients were patients at one particular pharmacy. A couple of pharmacists were able to successfully integrate ongoing injectable contraceptive clinical services into their pharmacy practice and provide a valuable community resource, and their experiences are recounted below.

The Medicine Chest, Hayward, Calif.

Forty-eight percent of all injections given in Health Step pharmacies were administered by one pharmacist: Jim Cohen at The Medicine Chest in Hayward, Calif., who partnered with Planned Parenthood Golden Gate, Hayward Health Center. According to Cohen, his repeat patients found it much more

Table 2. Patient acceptability of injectable contraception program (n = 81)^a

Evaluation measures	Yes No. (%)	No No. (%)
Had used depot medroxyprogesterone for >1 year	48 (59)	33 (41)
Familiar with Health Step program	27 (33)	54 (67)
Thought pharmacy reinjection option important	36 (44)	45 (56)
Willing to pay pharmacist for injectable contraception service, if necessary	36 (44)	45 (56)

^aThese 81 patients included 4 women who completed the evaluation at the time of their pharmacy-based injections and 77 who completed the evaluation at the clinic.

convenient to visit the pharmacy than to return to the clinic for quarterly reinjections. The program momentum that Cohen established was made possible by a consistent patient flow, whereas other pharmacists noted that not enough women came to the pharmacy for reinjection to successfully provide an ongoing service. Additionally, Cohen emphasized the importance of confidentiality and identified the private area in the pharmacy as a key feature for providing injections in a professional setting.

Consistent with the professional service established in the pharmacy, Cohen established a rapport with the clinic staff who referred patients to him for reinjection. He and others identified interaction with patients, expanded scope of work, and learning/using a new skill as very important aspects for pharmacist participation in the program. Cohen said that the most enjoyable aspect of offering injections in the pharmacy was the ongoing interaction with patients and noted, "I felt like I was providing a needed service." He discovered that word of mouth was the most successful tactic for program promotion and awareness. Cohen mentioned how valuable it was to work in collaboration with the clinic staff in the event a patient expressed a need to obtain additional clinical services, such as sexually transmitted infection testing. In return, he received a multitude of referrals for the emergency contraceptive Plan B. He indicated that the close proximity of his pharmacy and the clinic was very helpful. Patients who frequented the Hayward Health Center could just as easily access the pharmacy.

Cohen's injectable contraception pharmacy service demonstrates the creation of a unique and successful relationship between a pharmacist and a clinic.

Health Plus Pharmacy, San Luis Obispo, Calif.

Another accomplished pharmacist who offered injectable

contraception in the pharmacy was Dana Nelson of Health Plus Pharmacy in San Luis Obispo, Calif. Nelson provided an average of two injections per week for more than 4 years (independent of the Health Step program) and fostered thriving relationships with local medical providers to increase access to myriad services in the pharmacy setting. In fact, Nelson found that initially, his contraception reinjection services were sought by local physicians who did not want to stock the product needed for administering the shots. These physicians also considered the process of picking up the medication at the pharmacy and returning with it to the clinic for administration to be a time-consuming burden for their patients.

Like the physicians who worked closely with Nelson, clinicians at the participating injectable contraception program clinics agreed that offering depot medroxyprogesterone reinjections at local pharmacies is important. They recognized that offering the pharmacy as an additional point of service increased patient access to injectable contraception. Moreover, the clinicians agreed that offering the pharmacy option helped to ensure patients' ongoing persistence with their contraception method.

The biggest hurdle Nelson faced in offering reinjections was securing reimbursement from insurance companies for the injection service. Although health insurance programs provide coverage to the pharmacist for the medication cost, no billing codes or regulations existed to facilitate payment to pharmacists for costs associated with this injection administration. Nelson therefore charged patients \$5 to cover the cost of the syringes and gloves. If women selecting depot medroxyprogesterone reinjection in pharmacies demonstrated increased persistence, the savings from a decrease in unwanted pregnancies might serve as an incentive for insurance reimbursement.¹³

Health Plus Pharmacy did not report any instances in which contraception reinjections were discontinued because of patient discomfort with receiving injections in the pharmacy; instead, women who stopped receiving injections did so to facilitate pregnancy. Nelson's success was due in large part to his pioneering spirit and practice and to his perspective on integrating health services and improving access to care. He said, "Pharmacy in and of itself is pharmacy. But really, pharmacy is a division of public health."

Clinician perspectives

Pharmacy-based contraception reinjection was offered to streamline and maintain contraception adherence and avoid unintended pregnancy, which is a major objective in improving public health. While many clinicians agreed that the pharmacy reinjection option could mitigate access barriers with regard to busy schedules and time constraints for some women, other clinicians attested that they or the clinic should be the sole provider of patient injections. Such views may have limited women's opportunities to seek reinjection at local pharmacies. Concern for perceived loss of revenue for the clinic and that some patients

might not remember to get their reinjection in time (without a reminder from the clinic) were also complicating factors.

As reported by both clinicians and women themselves, about one-quarter of patients using depot medroxyprogesterone were Latina, which is similar to the proportion of Latinas in California. Interestingly, among women who received reinjections in pharmacies, only 5% of encounter forms for pharmacy reinjection were completed in Spanish. Based on feedback from clinicians and pharmacists, not having Spanish-speaking staff in some of the pharmacies was a major barrier to promoting the pharmacy as a viable location for reinjection among the Latina population.

Clinicians who supported promoting the pharmacy as an additional point of access resoundingly suggested enrolling all local pharmacies as a way to promote a smooth-running pharmacy access injectable contraception program. This suggestion is tantamount to a call to action to forge better partnerships between clinics and pharmacies. Beyond the initial support and buy in from clinic management, involving all levels of staff who interact with patients in the implementation of the injectable contraception program may translate to better promotion and use of the pharmacy reinjection option. Although all levels of clinic staff were oriented to program participation protocol, some may have continued to have, in their view, conflicting priorities (i.e., maintaining clinic revenue streams and high patient count while referring patients to additional sources of care for patient convenience and adherence). Buy in from partnering pharmacists and their staff also requires a greater level of training to communicate that offering the pharmacy as another point of access for contraception not only provides women greater access to care but also can stimulate a financially successful partnership that leads to reciprocal referrals between pharmacies and clinics.

Conclusion

Our experience, based on administration and feedback from participants, suggests that successful injectable contraceptive program promotion requires provider support, integration, and involvement at the clinic level. When those key factors are aligned, success stories such as those highlighted above become possible. The lessons learned in the 2-year demonstration program described here clearly show that the pharmacy

option for reinjection is most viable for women who can comfortably manage their injection cycle, prefer not to have to schedule a clinic appointment quarterly, and do not require the ongoing attention and appointment supervision of the clinic. Sustainability of an injectable contraception program would also depend on pharmacist reimbursement for this useful service. Pharmacies are an ideal location to include in options available to women to promote consistent and improved access to regular contraception, thereby improving the public's health.

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