

The Impacts of Pharmacist-Prescribed Hormonal Contraception in the Medicaid Population

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Question:

What is the impact of policy allowing pharmacists to independently prescribe hormonal contraception in the Medicaid population?

In 2016, Oregon became the first state to pass legislation allowing pharmacists to prescribe hormonal contraception without a collaborative practice agreement, opening the door to increased access of hormonal contraception.¹ While there are many reasons to use hormonal contraception, decreasing unintended pregnancies by increasing access to contraception is a cost-effective priority for Medicaid.² With Medicaid policies differing between states, there is not a lot of information on the impacts of pharmacist-prescribed hormonal contraception in Medicaid populations. Currently, Oregon is the only state with studies that discuss the impacts of pharmacist-prescribed hormonal contraception on reducing unintended pregnancies and cost savings in the Medicaid population.

Across the United States, approximately 90% of individuals live within five miles of a community pharmacy.³ Community pharmacies are often among the most accessible places for health care, because they have more locations available, have extended hours in the evening and on weekends, and in many cases do not require an appointment for a pharmacist-provided service.⁴ Preliminary data from the Oregon Medicaid population during the first two years of implementation has shown that 10% of new prescriptions for hormonal contraception were prescribed by pharmacists. Since 2016, 12 states and the

District of Columbia have passed legislation that allows pharmacists to independently prescribe hormonal contraception.⁵ In Wisconsin, AB304/SB286 was introduced in the 2019-2020 legislative session to expand access to hormonal contraception. Passage of this bill would allow Wisconsin pharmacists to prescribe hormonal contraception without a collaborative practice agreement.⁶ During the Assembly session, legislators added an amendment to the bill that guaranteed Medicaid coverage and reimbursement for contraception prescribed by pharmacists.⁷ While the bill has not been passed, guaranteed Medicaid coverage and reimbursement could incentivize pharmacists to provide the service, which would increase the number of locations where the Medicaid population could access hormonal contraception.

Pharmacists have a unique role where they have direct access to patients. In general, 65% of pharmacists have expressed interest in prescribing of hormonal contraception.⁸ Pharmacists' stated reasons for wanting to prescribe hormonal contraception include: enjoying their one-on-one interactions with patients; expanding the scope of the pharmacist; providing a service for patients; assisting with public health efforts to improve reproductive health; and increasing patients' adherence to contraception use.^{8,9} While many pharmacists would like to provide this service, the current lack of legislation is not the only barrier they might face. Lack of or low reimbursement rates for pharmacist-provided services continue to be a major barrier for implementing services across the United States. If pharmacist-prescribed hormonal contraception services are shown to be cost-effective in the Medicaid population, this could open the door for other payors and stakeholders to invest in further expansion

of pharmacist-prescribed hormonal contraception.

Evidence Summary

A 2019 retrospective study used a decision-analytic model to review the effect of a new policy allowing pharmacists to prescribe hormonal contraception.¹ The primary outcome was unintended pregnancies, and secondary outcomes included costs and quality-adjusted life years (QALYs). There were 198,110 women included based on their risk of having an unintended pregnancy and their need to use Medicaid for family planning services. Data on women who were prescribed hormonal contraception were obtained from Oregon Medicaid claims data over a 24-month period after the policy was implemented. In addition to Medicaid claims data, data from literature was used to provide variables for multiple analyses with univariate and bivariate sensitivities and entered in a Monte Carlo simulation. The Monte Carlo simulation generated the probability of different outcomes based on the variables that were inputted. This allowed for simultaneous probability estimates. Univariate and multivariate sensitivity analyses were used to assess how the variation of one or more variables would impact the result.

The analysis found that 367 women out of 3,614 women who received hormonal contraception received it from a pharmacist.¹ The analysis estimated that having a pharmacist-prescribing policy prevented 51 unintended pregnancies, compared to if the policy had not been implemented. During the first two years, the Medicaid cost savings were estimated to be \$1.6 million, and the quality of life for women would be 158 QALYs gained per 198,110 women. These results represent an economically dominant strategy indicating

that the intervention improved health outcomes and reduced health costs. Within the Monte Carlo simulation, the univariate analysis demonstrated that pharmacist-prescribed hormonal contraception decreased unintended pregnancies and costs. The multivariate analysis found that pharmacist-prescribed hormonal contraception was the dominant result, indicating it was the preferred outcome even when variables changed.

A strength of the study was that the authors ran 10,000 trials, using multiple variables, through a Monte Carlo simulation.¹ These variables included contraceptive continuation rates, cost of the pharmacist's time for service, and the cost of a provider's visit. This is a strength because it allowed for 10,000 different scenarios to occur simultaneously and predict the probability of how the different variables would impact unintended pregnancies, healthcare costs, and quality of life. The results suggest that pharmacist-prescribed hormonal contraception is a service being used by the Medicaid population, and is contributing to increased access to hormonal contraception and prevention of unintended pregnancies.

A weakness of the study is that the data was limited to the Oregon Medicaid population and only the first 24 months after the legislation was implemented.¹ Medicaid reimbursement varies from state to state, which limits the generalizability of this study to other Medicaid populations. With time, more pharmacies might implement the service and more women might use the service. Data from an extended time frame would provide stronger long-term evidence as to whether pharmacist-prescribed hormonal contraception makes a difference in reducing healthcare costs and preventing unintended pregnancies within the Medicaid population.

Recommendations from Others

In 2019, the American College of Obstetricians and Gynecologists (ACOG) updated its Committee Opinion on increasing access to over-the-counter hormonal contraception.¹⁰ ACOG's recommendations do not have a grading

system and are based on the expert opinions of members of the Committee on Gynecologic Practice. ACOG recommends pharmacist-prescribed hormonal contraception as a strategy to increase access to hormonal contraception. To ultimately decrease unintended pregnancies, ACOG recommends that hormonal contraception be available over the counter without any prescriptions or restrictions.

Evidence-Based Answer

A policy allowing pharmacists to independently prescribe hormonal contraception may be a cost-effective strategy to reduce unintended pregnancies among the Medicaid population. (Strength of recommendation = B based on limited evidence from a retrospective study with patient-oriented outcomes).

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References

1. Rodriguez MI, Hersh A, Anderson LB, Hartung DM, Edelman AB. Association of pharmacist prescription of hormonal contraception with unintended pregnancies and Medicaid costs. *Obstet Gynecol.* 2019;133(6):1238-1246. doi:10.1097/AOG.0000000000003265
2. Medicaid. Contraception in Medicaid: improving maternal and infant health. Accessed October 28, 2020. <https://www.medicaid.gov/medicaid/quality-of-care/quality-improvement-initiatives/maternal-infant-health-care-quality/contraception-medicaid-improving-maternal-and-infant-health/index.html>
3. National Association of Chain Drug Stores. Re: health care workshop, project no. p131207. Accessed December 30, 2020. https://www.nacds.org/ceo/2014/0508/supplemental_comments.pdf
4. Anderson L, Hartung DM, Middleton L, Rodriguez MI. Pharmacist provision of hormonal contraception in the Oregon Medicaid

- population [published correction appears in *Obstet Gynecol.* 2020 Jan;135(1):222]. *Obstet Gynecol.* 2019;133(6):1231-1237. doi:10.1097/AOG.0000000000003286
5. National Alliance of State Pharmacy Associations. Pharmacist prescribing: hormonal contraceptives. August 20, 2020. Accessed October 28, 2020. <https://naspa.us/resource/contraceptives/>
 6. AB 304. 2019-2020 Session (WI 2019). Accessed October 28, 2020. <https://docs.legis.wisconsin.gov/2019/proposals/ab304>
 7. Wisconsin Legislative Council. 2019 assembly bill 304 amendment memo. November 6, 2019. Accessed October 29, 2020. <https://docs.legis.wisconsin.gov/2019/related/lcamendmemo/ab304.pdf>
 8. Rafie S, Cieri-Hutcherson NE, Frame TR, et al. Pharmacists' perspectives on prescribing and expanding access to hormonal contraception in pharmacies in the United States. *J Pharm Pract.* Published online August 7, 2019. doi:10.1177/0897190019867601
 9. Rodriguez MI, Biel FM, Swartz JJ, Anderson L, Edelman AB. Pharmacists' experience with prescribing hormonal contraception in Oregon. *J Am Pharm Assoc* (2003). 2018;58(6):608-613. doi:10.1016/j.japh.2018.06.020
 10. American College of Obstetricians and Gynecologists. Over-the-counter access to hormonal contraception: ACOG committee opinion summary, number 788. *Obstet Gynecol.* 2019;134(4):e96-e105. doi:10.1097/AOG.0000000000003473