AACP REPORT

Maternal Health Services Set Toolkit for Pharmacists

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Why is Maternal Health Care Important?

The Association of American Medical Colleges (AAMC) has predicted a shortage of 55,000 primary care physicians by 2032.¹ 3.7 million births were registered in the U.S. in 2018. Over 6% of those women had late (beginning in the third trimester) or no prenatal care.² Preterm birth, defined as birth prior to 37 weeks gestation, account for over 10% of births in the U.S.² It is the most significant contributor to infant death (causing 20% of infant deaths) and disability. It costs \$14 billion annually, over 10 times that of term birth costs.³ Lifetime medical expenses for a baby born preterm are \$17 million more than a term birth.⁴ Risk factors include a history of preterm births, pregnancy with multiples, tobacco or substance use during pregnancy, and less than 18 months between pregnancies. Black, American Indian, and Alaskan native mothers are more likely to have preterm births as well.³ Figure 1 shows the geographical differences in preterm births.⁴

Unintended pregnancies are defined as unwanted or mistimed and account for 45% of all pregnancies. In women 20-24 years of age, 60% of pregnancies are unintended.⁵ Unintended pregnancies are more likely to have inadequate prenatal care, exposure to tobacco and alcohol, and premature or low birthweight infants. These mothers are less likely to breastfeed and are at an increased risk of maternal depression and physical violence. As these babies' progress, they are more likely to experience poor mental and physical health, behavioral issues, and lower educational attainment.⁶ Women using contraception account for only 5% of all unintended pregnancies.⁷

Figure 2 shows the maternal mortality rate in the U.S. is currently 16.9 deaths per 100,000 live births.⁸ For black women the rate is 42.4 deaths per 100,000 live births and for American Indian and Alaskan women the rate is 30.4 deaths per 100,000 live births.⁸ Women over 40 are 16

times more likely to die during childbirth.⁹ Most of these deaths are due to cardiovascular complications and chronic conditions. In 2016 the states with the highest maternal mortality rates were Louisiana, Georgia, Indiana, New Jersey, and Arkansas.⁹

The Office of Disease Prevention and Health Promotion identified objectives related to maternal health and family planning for Healthy People 2020.¹⁰ These include:

1. Improve access to comprehensive, quality health care services
2. Improve pregnancy planning and spacing, and prevent unintended pregnancy
3. Improve the health and well-being of women, infants, children, and families

Federal initiatives such as the Affordable Care Act in 2010 have allowed states to expand eligibility for family planning services. Figure 3 shows that 26 states have done this, and 8.9 million women received contraceptive services from public programs which prevented 2.2 million unintended pregnancies, saving \$10.5 billion.^{11,12}

State Medicaid covered 42.3% of births in 2018, including 65.3% of black women and 58.9% of Hispanic women.² Family planning is a mandatory benefit under Medicaid, but states vary in services covered. All states require contraceptives to be covered, but some cover OTC supplies, counseling, and STI screening and treatment as well.

How Can Pharmacists Play an Expanded Role in Maternal Health Care?

The Affordable Care Act requires health plans to cover preventative services such as prenatal care, contraception, counseling, STI screening, HIV, anxiety, gestational and postpartum diabetes, and lactation support. The Health Resources and Services Administration (HRSA) and Institutes of Medicine (IOM) have developed Women's preventative services guidelines and the American College of Obstetricians and Gynecologists (ACOG) has launched the Women's Preventative Services Initiative (WPSI) which if adopted by HRSA will allow women

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Figure 1. Geographical Differences in Preterm Births, 2018

to have full coverage of all of the included preventative services, aligning with the US Preventative Services Task Force (USPSTF). Table 1 shows the services included in WPSI that pharmacists can offer.¹⁷

For every dollar invested in family planning, \$7.09 is saved by preventing unplanned pregnancies as well as Pap and HPV testing and vaccines.¹² Several states allow for pharmacists to prescribe contraceptives via standing orders, protocols, collaborative practice agreements, or general prescriptive authority. The forms of contraception, required training, patient assessment and age, and documentation requirements vary between states.¹³ Pharmacists can be involved in every stage of family planning as seen in Figure 4. Women 13-49 should be receiving preventative services regardless of

pregnancy status. This includes screening for blood pressure, interpersonal violence, urinary incontinence, breast and skin cancer, depression (using the PHQ-9 tool), STI and STDs, treatment for diabetes and diet modifications, as well as immunizations, medication therapy management (MTM) and alcohol use disorder treatment (using the AUDIT tool for identification).¹⁸ Preconception and interconception services that pharmacists can get involved in can be found in Figure 5.

Women who are pregnant should be getting medication recommendations from pharmacists including prenatal vitamins, vitamin D supplementation, folic acid, and aspirin for preeclampsia prevention. Pharmacists can also administer the pertussis vaccine and progesterone to pregnant women. Postpartum women can benefit from

Figure 2. Maternal Mortality Per 100,000 Live Births

Figure 3. ACA Medicaid Expansion

breastfeeding services from pharmacists as well. Pharmacists who are treating women who are seeking contraceptive services can assess adherence and prescribe and dispense contraceptives (in some states).

Maternal substance use disorder assessment and treatment is another service that pharmacists can offer. 5% of pregnant women use one or more addictive substances, which leads to double the incidence of stillbirth. There is also a higher likelihood of preterm birth, low birthweight, birth defects, small head circumferences, neonatal abstinence syndrome (NAS), and sudden infant death syndrome (SIDS).¹⁹ Pharmacists can educate and prescribe smoking cessation therapy and medication assisted treatment for opioid use disorders in some states. All states allow pharmacists to dispense naloxone without a patient-specific prescription as well.²⁰

What is the Pharmacist eCare Plan Standard, and How Can Pharmacists Use the Pharmacist eCare Plan in Managing Maternal Health Care?

The Pharmacists' Patient Care Process (PPCP), developed by the Joint Commission of Pharmacy Practitioners (JCPP) and 11 national pharmacy organizations, recognizes

the need for consistent delivery of patient care across the profession.¹⁴ Using principles of evidence-based practice, pharmacists use a patient-centered approach in collaboration with other health care providers.¹⁵

The Pharmacist eCare Plan standard is an interoperable standard that provides a common method of exchanging information between pharmacy technology platforms, clinically integrated networks such as CPESN pharmacies, chain pharmacies, and electronic health records.¹⁶ This includes information related to care delivery, patient goals, health concerns, an active medication list, drug therapy problems, laboratory results, vitals, payer information, and billing for services.¹⁵ Pharmacists can use the Pharmacist eCare Plan standard to ensure that other providers on the patient's health care team have access to documented information related to the pharmacist's maternal health care interventions.

What is Included in the Maternal Health Services Set Toolkit for Pharmacists?²¹

The Maternal Health Services Set Toolkit for Pharmacists is designed to assist community-based pharmacists in implementing a maternal health services program at their practice sites. Thank you to the Community

Table 1. Women's Preventative Services Initiative Recommendations for Well-Women Care

Prevention Services Regardless of Pregnancy Status	
Alcohol screening & counseling	Aspirin to prevent cardiovascular disease (CVD) & colorectal cancer (CRC)
Blood pressure screening	Breast cancer risk assessment
Contraceptive counseling & methods	Depression screening
Diabetes screening	Folic acid supplementation
Healthful diet & activity counseling	Hepatitis B and C risk assessment
HIV risk assessment	Immunizations
Interpersonal violence screening	Lipid screening
Obesity screening	Osteoporosis screening
Prevention of falls	Skin cancer counseling
STI prevention counseling	Substance use screening & counseling
Tobacco screening & counseling	Urinary incontinence screening
Prevention Services During Pregnancy	
Aspirin therapy to prevent preeclampsia	Breastfeeding counseling, service & supplies
Contraceptive counseling & methods	Depression screening
Folic acid supplementation	Gestational diabetes screening
Interpersonal violence screening	Tobacco screening & Services Postpartum
Prevention Services Postpartum	
Breastfeeding counseling, service & supplies	Contraceptive counseling & methods
Depression screening	Diabetes screening
Folic acid supplementation	Interpersonal violence screening
Tobacco screening & counseling	

Pharmacy Foundation for their support in developing the toolkit. This toolkit includes the following information that will assist pharmacists to successfully implement a pharmacist-provided maternal health services program:

1. **Training:** Continuing Education training modules for a variety of topics offered on Pharmacy Times, Centers for Disease Control and Prevention (CDC), American Pharmacists Association (APhA), National Certification Corporation and The American College of Obstetricians and

Gynaecologists (ACOG). For example: women's health, pregnancy, reproductive health, sexually transmitted disease (STD), human immunodeficiency virus (HIV), acquired immunodeficiency syndrome (AIDS) and medication safety during pregnancy.

2. **Screening Tools:** Pharmacists can counsel patients on screenings that are recommended for maternal health such as alcohol screening, depression screening, diet/obesity, fall prevention,

Figure 4. Pharmacist-provided Maternal Health Services Program

Figure 5. Preconception and Interconception Services

substance use screening, urinary incontinence screening, cancer, breastfeeding, thyroid level monitoring, and STI screening. All of these screening tools are available in the toolkit and provide educational materials for pharmacists when counseling patients on maternal health care.

3. **State Regulation Information:** State prescribing regulations are important for pharmacists when implementing certain maternal health services set at their practice, such as tobacco cessation aid prescribing, birth control prescribing, and immunization prescribing and administration. Other state regulations and more in-depth information on a particular state can be found through respective state pharmacy associations and state boards of pharmacy.
4. **Marketing Materials:** Resources are available that can be used at practice sites to advertise maternal health services offered by pharmacists and ways for pharmacists to identify patients who may need maternal health care.
5. **Cases and Coding Resources:** Two clinical patient use cases - a patient case on pregnancy and lactation and a patient case on contraception - have been developed as examples to help practicing pharmacists understand utilization of eCare Plan standard in their practice with patient encounters and counseling on maternal health. These patient use cases can also be used within pharmacy education by faculty members who teach maternal health in their curriculum and the importance of PPCP and eCare Plan standard usability. There is also a maternal health services value set document containing SNOMED CT codes that can be used in eCare Plan documentation as a way to exchange clinical health information of patients between health care providers.

This toolkit provides a foundation for pharmacists to gain knowledge on maternal health through educational

resources, tools to implement the eCare Plan standard at their practice sites and most importantly, a way to advocate and expand the role of pharmacists and provide optimal patient care through interprofessional collaborations. The toolkit is dynamic and more materials will be added in the future, including resources such as talking points to promote the services to other health care providers in the community and additional resources related to payment for maternal health care services.

How Can You Get More Involved?

There are many ways for pharmacists and student pharmacists to get involved at their work settings and play a vital role in maternal health care. Some examples of how this service set and toolkit will be distributed across the profession are:

1. The Academia-CPESN Transformation (ACT) Pharmacy Collaborative includes 93 colleges and schools of pharmacy as of September 2021 who have joined the collaborative to transform community pharmacy practice together. It is an operational learning and ACTing collaborative between schools of pharmacy and established clinically integrated networks of community-based pharmacies. Through this collaborative, colleges and schools of pharmacy unite with pharmacy leaders nationwide to mobilize stakeholders to support community practice and amplify the implementation of these community services.²²
2. At the July 2021 ACT webinar, members of this workgroup had the opportunity to share our work around maternal health care, the toolkit, timeline of the project, and opportunities to get student pharmacists and pharmacists involved. This toolkit will be shared with ACT Champions at each of the institutions part of the collaborative as well as CPESN pharmacies to expand education on maternal health care and implement in patient care at practice sites.
3. AACP is a national organization representing pharmacy education in the United States. There are several AACP Disciplinary Sections and Special Interest Groups (SIG) where the maternal health care toolkit will be valuable for faculty members to incorporate within their curriculum and implement the eCare Plan standard for the patient use cases provided in the toolkit. Some of those groups are Curriculum SIG, Experiential Education Section, Interprofessional Education

Community, Laboratory Instructors SIG, and Women Faculty SIG.

4. This can also be distributed at local community outreach events or booths hosted by student

pharmacists at their institutions such as health fairs and women's health booths to provide knowledge on maternal health care.

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