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Preventing Adolescent Pregnancy

Christine M. Forke, Cynthia Mollen, Sarah Zlotnik, Jane E. Kavanagh, Katherine Sell, Kathleen Noonan

EXECUTIVE SUMMARY

Adolescent pregnancy continues to be one of our nation's most challenging issues. In 2009, nearly half of all high school students reported having had sexual intercourse at least once, 7.4 percent reported having sexual intercourse before the age of 13 years, and, by the end of high school, nearly two-thirds of students identified themselves as sexually active.[1] Sexual activity exposes adolescents to a number of risks, including HIV/AIDS and other sexually transmitted infections (STIs). For female adolescents, sexual activity also carries the risk of unplanned pregnancy. In 2009, there were more than 400,000 births to adolescents between the ages of 15 and 19 years and 5,000 births to adolescents between the ages of 10 and 14 years.[2] The majority of these births resulted from pregnancies that were unintended.[3,4] Childbearing during adolescence increases the mother's risk of lower educational attainment, poor mental health, and poverty, as well as health complications during pregnancy.[5-9] Similarly, children of adolescent mothers are at increased risk of adverse health, educational, and social outcomes both in the short- and long-term[10,11] including cognitive deficits, behavioral problems, school dropout, and incarceration.[5,6,12-16]

There is a large body of evidence showing the ability of pregnancy prevention efforts to reduce rates of unplanned pregnancies. At the adolescent level, these averted pregnancies carry significant benefits including improved health and well-being outcomes and reduced healthcare utilization related to lower rates of pregnancy, abortion, and birth.[17-22] With the recent allocation of more than $150 million to develop and implement teen pregnancy prevention programs under the Consolidated Appropriations Act[23] and the Patient Protection and Affordable Care Act (ACA),[24] it is an opportune time to identify components that contribute to a successful pregnancy prevention effort in order to maximize the beneficial impact of these funds. This PolicyLab *Evidence to Action* brief reviews the evidence related to adolescent pregnancy prevention and suggests practical, data-driven actions for reducing pregnancy during adolescence.

EVIDENCE	ACTION
The most promising pregnancy prevention efforts provide comprehensive reproductive health education and services in locations that are accessible to adolescents.	States, healthcare providers, and institutions should take advantage of recent legislation to expand adolescents' access to comprehensive pregnancy prevention education and reproductive health services and increase provider knowledge in this area.
Providing access to confidential reproductive health services increases the likelihood that adolescents seek care.	States should expand and standardize their confidentiality protections for adolescents seeking reproductive healthcare.
Increasing Medicaid eligibility levels for family planning services and expanding Medicaid coverage of contraceptive options improves adolescents' access to these services.	State Medicaid plans should cover family planning services at the same eligibility levels as pregnancy-related care and should increase the contraceptive options covered by Medicaid.

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BACKGROUND

The high prevalence of adolescent pregnancy and its associated risks for both adolescent mothers and their children has remained unabated in recent years. This issue was highlighted in the U.S. Department of Health and Human Service (HHS)'s Healthy People goals for 2010 and again recently for 2020, emphasizing the continued challenge of decreasing unintended pregnancies and, in particular, reducing the number of adolescent pregnancies.[25-28] Though numbers vary by year, estimates indicate that more than 700,000 adolescents become pregnant annually.[14,29] In 2009, pregnancies among 10 to 19 year olds resulted in approximately 415,000 births.[2]

Childbearing during adolescence carries significant risks for both mother and child. While pregnant, adolescents are at particular risk for anemia and pregnancy-induced hypertension.[10] Adolescent mothers are less likely to complete high school or graduate from college and have an increased chance of living in poverty compared to women who delay childbearing.[5-8,16,30-32] Economic and educational outcomes are even poorer for the nearly 25 percent of adolescents who give birth to a second child within 24 months of the first.[9,33] Children of adolescent mothers are more likely to be born at a low birth weight or prematurely, are more likely to experience intrauterine growth retardation,[10,11] and are at increased risk for cognitive deficits, behavioral problems, school dropout, and incarceration.[5,6,12-16]

When a pregnancy is unintended, risk to mother and child may be compounded. Because many women in such circumstances are more likely to discover the pregnancy later than those with intended pregnancies,[34] they may be less likely to start prenatal care at the beginning of pregnancy and slower to adopt healthy behaviors, further increasing risk. With 82 percent of adolescent pregnancies reported as unintended,[4,30] there is a clear need to focus on prevention.

EVIDENCE TO ACTION FINDINGS

1 EVIDENCE: The most promising pregnancy prevention efforts provide comprehensive reproductive health education and services in locations that are accessible to adolescents.

Increasing Adolescent Awareness

The factors influencing the success of pregnancy prevention efforts are complex and include personal beliefs, relationship dynamics, societal realities such as family and community influences, information about contraception and reproductive physiology, and the range of reproductive health technologies available.[35-37] In the presence of so many contributing factors, providing comprehensive education involving a range of pregnancy prevention options in addition to abstinence education is an important component of efforts aimed at decreasing adolescent pregnancies.[19,38] While there is great variation in curricula, implementation, and, therefore, effectiveness across comprehensive pregnancy prevention programs,[39-41] evidence shows the ability of many models to effectively postpone first sexual intercourse, promote the use of contraception among sexually active adolescents, and reduce teen pregnancy and STI rates. Furthermore, there is evidence that many effective models are replicable.[17,42-44]

While a recent study of urban middle-school students who received a theory-based abstinence-only curriculum reported decreased rates of sexual intercourse among the students,[45] highlighting the important role of abstinence education in these efforts, abstinence-only models are generally less effective than comprehensive models.[17-19]

Despite efforts to increase adolescents' knowledge of reproductive health through comprehensive pregnancy prevention programs, awareness of available contraceptive options remains low in this group.[46-52] In a qualitative study, few adolescents reported being aware of highly-effective contraceptive methods such as the vaginal ring or intrauterine device (IUD), and 40 percent reported never hearing about emergency contraception.[47] Among female adolescents using contraception, the most widely used form currently is oral contraceptives.[53] While oral contraceptives, when used correctly, are very effective at preventing pregnancy, the need to take a pill at the same time every day and the side effects of certain formulations result in a fairly high failure rate for this method among adolescents.[54-56] In fact, adolescents are more than twice as likely as women older than 30 to experience birth control pill failure.[57]

There are several less commonly used pregnancy prevention methods that have been proven effective and appropriate for adolescents. Options include longer-acting hormonal methods, such as depot medroxyprogesterone acetate (DMPA), subdermal implants, and IUDs as well as extended release methods that require weekly or monthly administration, such as the transdermal patch and vaginal ring. Effectiveness rates for these methods are higher than 99 percent[58] and studies have documented their appropriateness for adolescents.[54-56,59-62] In addition, emergency contraception is a pregnancy prevention option that can be used when there has been unprotected sexual activity or a birth control method failure, such as a broken condom, missed or forgotten pills, or a delay in starting the next dose of a routine contraceptive. Notably, "ella," an emergency contraceptive pill with a high safety and efficacy profile, was approved by the Food and Drug Administration in August 2010 for pregnancy prevention up to 120 hours following contraceptive failure or unprotected intercourse.[63]

Increasing Adolescent Access

Increasing the effectiveness of pregnancy prevention efforts also requires providing comprehensive services and information in sites that are easily accessible to and frequented by adolescents. The importance of having this information available is highlighted by the finding that adolescents are more likely to use protection if they learn about their pregnancy prevention options before having sex for the first time[64,65] and that 90 percent of sexually active adolescents who were not using contraception became pregnant within a year.[66]

As one of the most common sites of adolescent contact with healthcare providers,[67-69] the primary care clinic has the potential to play an important role in the provision of reproductive health services. Primary care guidelines recommend that adolescents receive an annual preventive healthcare visit that includes reproductive healthcare and counseling.[70] Despite this recommendation, national data from the Youth Risk Behavior Surveillance System show that only 60 percent of adolescent females report having a primary care visit in the last year;[71] among those who obtained primary care, only 40 percent report that their provider asked them about sexual activity or contraceptive management.[71] Other studies have similarly found that reproductive health discussions are absent from the majority of primary care visits.[62-64,72-74]

While primary care clinics provide important healthcare services for a large number of adolescents, studies show that 1.5 million adolescents use hospital emergency departments (EDs) as their regular source of healthcare.[75] Many of these adolescents do not have a primary care provider, and instead use the ED for non-urgent issues.[76] Given the frequent use of the ED by adolescents and evidence suggesting that the risk of unintended pregnancy is higher in the ED population than in the general population,[77,78] the ED is likely an important location for pregnancy prevention efforts. One study conducted in Baltimore, Maryland found that 47 percent of sexually active adolescents presenting to a local ED reported that they used no form of birth control even though they were not trying to become pregnant.[78] More recently, a study found that 14 percent of all sexually active females who presented to a local ED, regardless of presenting complaint, reported having unprotected sexual intercourse within the preceding five days, and 34 percent of adolescents wanted to learn about pregnancy prevention strategies in the ED.[79] This finding is similar to that of another study that found 44 percent of adolescents seeking care in two urban EDs thought the ED was an appropriate site to obtain contraception or related information.[80] In addition, it has been reported that patients in the ED are likely to experience a "teachable moment," meaning they may be more receptive to counseling immediately after an injury is sustained or an infection is diagnosed.[81]

Another potentially promising strategy for reaching out to adolescents is through school-based health clinics, for which $50 million has been allocated under the ACA.[82] Given the amount of time spent in school, school-based health clinics increase access to services and give adolescents the opportunity to receive reproductive healthcare and discuss pregnancy prevention options in a familiar context. Students with access to reproductive health services through school-based health programs demonstrate increased awareness and use of effective contraceptive methods.[83,84] Some school-based health clinics have also been shown to reduce the number of adolescent pregnancies. A study in Denver, Colorado

found that pregnancy rates for African-American adolescents in schools with onsite health clinics declined by 77 percent over a five-year period, compared to a smaller 56 percent decline among Denver schools without such clinics.[85] An evaluation of a school-based clinic in Baltimore, Maryland yielded similarly promising results. Over a 20-month period, the percentage of sexually active adolescents who experienced a pregnancy fell from 23 to 17 percent, while in the comparison group, the percentage of sexually active adolescents experiencing a pregnancy increased from 27 to 37 percent.[86]

Increasing Provider Knowledge

Improving the information provided for adolescents at these and other sites of care requires having providers who are knowledgeable about and comfortable with providing these services. However, many pediatricians believe they are inadequately prepared to treat their adolescent patients. In a 2006 study, only 17 percent of general pediatricians reported feeling prepared to care for adolescents, whereas 65 percent indicated that they felt very well prepared to care for infants.[87] While training around adolescent health is housed in pediatric programs, current Accreditation Council for Graduate Medical Education guidelines only require the equivalent of one month of training and education in adolescent medicine and one month in developmental and behavioral pediatrics during three years of pediatric residency training.[88] As a result, pediatric healthcare providers have few training opportunities in adolescent reproductive healthcare.

Based on an evaluation of the subspecialty board exam content outlines, pediatric specialists, in particular, receive little exposure to reproductive health issues about contraception and pregnancy.[89] This is particularly problematic for pediatric emergency medicine specialists due to the large number of adolescents using emergency services as their first line of treatment.[90] While the majority of studies relating to provider knowledge of adolescent reproductive health issues have been conducted with physicians, it is important to note that improving the information adolescents receive requires all providers who interact with adolescents to have sufficient training in this area.

ACTION: States, healthcare providers, and institutions should take advantage of recent legislation to expand adolescents' access to comprehensive pregnancy prevention education and reproductive health services and increase provider knowledge in this area.

HHS recently announced $155 million in grant money awarded to states, non-profit organizations, school districts, universities, and others to implement and develop evidence-based teen pregnancy prevention programs.[91] One hundred million dollars comes from the Teen Pregnancy Prevention Program, funded by the Consolidated Appropriations Act of 2010, and $55 million comes from the Personal Responsibility Education Program (PREP). Of the $100 million available from the Teen Pregnancy Prevention Program, $75 million is dedicated to replicating medically accurate, age-appropriate pregnancy prevention programs that have been rigorously evaluated and proven effective. The remaining $25 million is intended to fund research and demonstrations to develop, replicate, refine, and test additional models and innovative strategies for adolescent pregnancy prevention.[23] PREP, which was created as part of the ACA, supports programs that educate adolescents on both abstinence and contraception to prevent pregnancy and STIs, including HIV/AIDS. Programs funded through PREP must also incorporate other subjects related to preparing adolescents for adulthood, such as maintaining healthy relationships.[92]

In developing and implementing pregnancy prevention strategies with these grant funds, emphasis should be placed on components that have been proven effective – namely comprehensive education and improved availability of services using traditional and non-traditional access points. It is essential that professionals provide adolescents with a full range of pregnancy prevention methods and prioritize access to reproductive health services in key settings frequented by adolescents, such as primary care clinics, hospital EDs, and school-based health centers. Integral to the success of these efforts is ensuring providers at these locations have adequate and comprehensive education and training in adolescent reproductive health. Funds available through the ACA for provider training and workforce capacity-building should be explored as potential funding streams for improving healthcare providers' competency and comfort in this area.

2 EVIDENCE: Providing access to confidential reproductive health services increases the likelihood that adolescents seek care.

Confidentiality is a critical factor in adolescents' decisions to seek health services, particularly reproductive healthcare.[93-95] Adolescents regularly cite privacy concerns and, in particular, parental notification as a reason for forgoing care.[47,96,97] In one study, 47 percent of adolescents reported that they would stop using all reproductive health services if parental notification were required, yet 99 percent reported that they would remain sexually active. In the same study, even though they were informed that their parents would only be notified if they were seeking prescription contraceptives, 11 percent of adolescent girls reported that mandatory parental notification would lead them to discontinue or delay testing or treatment for a STI.[93] Delaying treatment for STIs can result in long-term complications such as pelvic inflammatory disease and sterility and can lead to further transmission in the community.[98-100] Further highlighting the potential impact of confidentiality policies on adolescent behavior, when McHenry County, Illinois changed a policy to require parental consent for reproductive health services, the adolescent pregnancy rate and birth rate in the county increased, while the rate in neighboring counties declined over the same time period.[101]

ACTION: States should expand and standardize their confidentiality protections for adolescents seeking reproductive healthcare.

Given adolescents' reluctance to seek care that is not confidential, states should guarantee confidentiality in the provision of all pregnancy prevention and reproductive health services for adolescents. Already, all family planning and related preventive health services including contraceptive services funded under Title X of the Public Health Service Act are required to be supplied independent of parent knowledge or approval. While some states have expanded these confidentiality standards to services funded from other sources, variations in state parental notification and consent laws and insurance billing practices fail to ensure that all adolescents have confidential access to reproductive health services.

3 EVIDENCE: Increasing Medicaid eligibility levels for family planning services and expanding Medicaid coverage of contraceptive options improves adolescents' access to these services.

The ACA gave states the option to expand eligibility levels for family planning services in their Medicaid plans to the same levels used to determine eligibility for pregnancy-related care, generally at or near 200 percent of the poverty level.[102] This expansion would enable a greater number of adolescents to access Medicaid's family planning services at no out-of-pocket cost.

Prior to the passage of the ACA, 27 states were operating under Medicaid waivers that expanded their family planning services to the same eligibility level as pregnancy-related care. Many of these states have seen great success in delaying the age of first births and preventing tens of thousands of adolescent births.[103,104] A national evaluation of six state waiver programs found that each eligibility expansion produced cost savings for both the state and federal government. The evaluation also found that some waiver programs increased women's access to family planning services.[105,106] In one year, the Arkansas expansion program averted an estimated 4,500 pregnancies and saved more than $29 million.[105] In California, the Family Planning, Access, Care, and Treatment Program expanded family planning services for women up to 200 percent of the federal poverty level, providing free contraception to nearly a million clients and averting an estimated 296,200 pregnancies and 122,200 abortions. This program resulted in an estimated government savings of more than $4.30 for each dollar spent in 2007, and a total savings of $1.9 billion.[21]

In addition to increasing Medicaid eligibility levels, numerous state Medicaid plans have expanded coverage over the last several years to include a broad range of contraceptive options. However, many state plans continue to restrict the options available to women. Though the federal government requires state Medicaid plans to provide family planning benefits at no out-of-pocket costs to women, states can determine which contraceptive methods are part of these benefits. For example, not all states cover injectable methods, and some states cover IUD insertion but do not always consider IUD removal to be a family planning service.[107] A survey of state Medicaid-

covered family planning benefits found that of the 44 states surveyed, 26 covered emergency contraception, 31 covered condoms, 32 covered spermicides, and 31 covered sponges.[107]

Providing the full range of pregnancy prevention options not only improves access, but also has the potential to achieve better continuation rates, especially in adolescents. Discontinuation of contraceptive methods among adolescents is often related to side effects,[55,56] which can be reduced or eliminated by switching to a different formulation.[108] Without sufficient coverage for alternative formulations and contraceptives, especially oral contraceptives, adolescents experiencing side effects may discontinue contraception altogether rather than trying another contraceptive option.

ACTION: State Medicaid plans should cover family planning services at the same eligibility levels as pregnancy-related care and should increase the contraceptive options covered by Medicaid.

All state Medicaid plans should expand their family planning services to the eligibility levels for pregnancy-related care, as provided in the ACA. This option is currently available, and states should model their expansions on the states where Medicaid expansions have already demonstrated success, such as Alabama, Arkansas, California, New Mexico, Oregon, and South Carolina. Such expansions could improve health outcomes for adolescents and reduce healthcare costs, which is especially critical in a time of Medicaid funding shortfalls.

Finally, state Medicaid programs should ensure that health plans retain flexibility in their formularies for family planning services to allow adolescents and other women maximum choice and protection. These formularies should include the full range of oral contraceptives, emergency contraception, and over-the-counter contraceptive options including condoms, sponges, and spermicides.

CONCLUSION

On the heels of the ACA, it is an opportune moment for states and the federal government to redouble their efforts related to adolescent pregnancy prevention. The data suggest a number of actions to improve success in this area, including: (1) expanding access to comprehensive pregnancy prevention education and reproductive health services; (2) improving confidentiality protections; and (3) expanding Medicaid eligibility for family planning services and the contraceptive options covered by Medicaid. During a time of scarce resources, it is of particular importance to direct funding toward efforts that have proven effective. As discussed in this brief, several comprehensive strategies have achieved positive outcomes while containing cost and should serve as models for expanding and improving our efforts to reduce adolescent pregnancies.

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THE AUTHORS

CHRISTINE M. FORKE, M.S.N., R.N., C.R.N.P., is a pediatric nurse practitioner specializing in adolescent and reproductive health, a research scientist with PolicyLab at The Children's Hospital of Philadelphia Research Institute, and a doctoral candidate in the Center for Clinical Epidemiology in the University of Pennsylvania School of Medicine.

CYNTHIA MOLLEN, M.D., M.S.C.E., is scientific co-director with PolicyLab at The Children's Hospital of Philadelphia Research Institute, an assistant professor of pediatrics at the University of Pennsylvania, and an attending physician in emergency medicine at The Children's Hospital of Philadelphia.

SARAH ZLOTNIK, M.S.W., M.S.P.H., is a senior strategist with PolicyLab at The Children's Hospital of Philadelphia Research Institute.

JANE E. KAVANAGH is a senior strategist with PolicyLab at The Children's Hospital of Philadelphia Research Institute.

KATHERINE SELL, M.S.S.P., is a research associate with PolicyLab at The Children's Hospital of Philadelphia Research Institute.

KATHLEEN NOONAN, J.D., is senior advisor with PolicyLab at The Children's Hospital of Philadelphia Research Institute and clinical associate professor of law at University of Wisconsin Law School.

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PolicyLab
The Children's Hospital of Philadelphia
34th Street and Civic Center Boulevard
CHOP North, Room 1528
Philadelphia, PA 19104
Phone: 267-426-5300
Fax: 267-426-0380
PolicyLab@email.chop.edu

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