

Using Conceptual Models to Tailor Programming on Adulthood Preparation Subjects to Pregnant and Parenting Youth

Purpose of this brief

The Personal Responsibility Education Program (PREP) was authorized by Congress in 2010 and is one of the largest federally funded programs designed to address adolescent pregnancy. PREP grantees have flexibility in designing and implementing programs, provided they adhere to certain requirements specified in the legislation, including educating youth on at least three of six adulthood preparation subjects (APSs):*

- Adolescent development
- Educational and career success
- Financial literacy
- Healthy life skills
- Parent-child communication
- Healthy relationships

Conceptual models have been developed to support grantees in implementing each APS, as well as a unified framework that cuts across subjects (Clary et al. 2021).

Incorporating the APSs into PREP programming is important for pregnant and parenting youth, who might need supports in areas beyond, but related to, preventing repeat pregnancies. This brief explores how APS programming might be tailored to meet the needs of pregnant and parenting youth participating in PREP. First, it discusses the precursors and outcomes that programs might target in their APS programming with pregnant and parenting youth. Recommendations follow on the relevant topics, by APS. The brief concludes by discussing specific program design and implementation considerations presented across the APS conceptual models that are relevant to pregnant and parenting youth, including teaching strategies and implementation considerations related to staffing and partnerships.

*U.S. Congress, Social Security Act, Section 513. Available at https://www.ssa.gov/OP_Home/ssact/title05/0513.htm.

Despite declines in teen pregnancy nationwide, almost 180,000 young women ages 15-19 gave birth in 2018 (Martin et al. 2019). Many of these youth and their families may benefit from support to create a healthy and productive environment for themselves and their families. For example, pregnant and parenting youth may value specialized services to address their physical, social, or psychological needs as they raise a child. These needs may go beyond those addressed in traditional pregnancy prevention programming and require supplemental services to address such topics as financial literacy, life skills, or parent-child communication. Almost a third of grantees receiving funding from the Personal Responsibility Education Program (PREP) have included pregnant and parenting youth as a target population, including through their adulthood preparation subjects (APSs) programming (Mathematica 2019).

Using APS conceptual models to support pregnant and parenting youth

Conceptual models can help grantees implement APSs in their programs, (Clary et al. 2021). The conceptual models can help grantees define each APS, develop content, and understand how including APSs in PREP programming might affect youth outcomes. Programs might find the following four components of the models useful in tailoring their program to specific populations (such as pregnant and parenting youth):

1. Precursors: factors that influence youth before or as they enter programs
2. Outcomes: the knowledge, attitudes, skills, and behaviors programs intend to influence

3. Topics: the content or material programs offer
4. Design and implementation considerations: program features and delivery mechanisms

These components may vary, depending on programs' context (such as setting or available resources). The APS definition and theory of change, however, will likely remain unchanged, regardless of program context.

What precursors are relevant to pregnant and parenting youth?

To tailor programming to meet participants' needs, grantees serving pregnant and parenting youth must assess and consider the backgrounds, characteristics, and experiences that youth bring to programs. Like other groups of youth, pregnant and parenting youth might have characteristics that can help or hinder improving outcomes. However, for pregnant and parenting youth these characteristics also may affect the kind of care they are able to provide for their children. For example, PREP grantees may serve highly vulnerable pregnant and parenting youth who are in foster care or juvenile justice settings, or who are experiencing homelessness. These youth might have increased risk factors, such as prior trauma or substance use issues, which are noted in the educational and career success and parent-child communication models. These risk factors could affect their personal development and the care they give to their children. As noted in all the conceptual models (except financial literacy), however, strong social and emotional skills can be protective factors for youth. Pregnant and parenting youth who come to programming with a support network of trusted adults and peers might be in a better position to reach positive outcomes. Although participants' backgrounds, characteristics, and past experiences are important for grantees to be aware of, these factors are unable to be changed. Programs should acknowledge that youth are resilient and can be empowered to make healthy decisions moving forward to support a successful transition to adulthood.

What outcomes might programs serving pregnant and parenting youth aim to affect?

To support pregnant and parenting youth, PREP programs should focus on improving broad outcomes such as physical health, emotional and social well-being, and academic achievement, as well as reducing negative risk-taking behaviors. Many of these outcomes are reflected in all the APS conceptual models and are relevant to pregnant and parenting youth. Outcomes found in the models that might be most pertinent to this population include:

- **Preventing repeat adolescent pregnancy and birth.** Adolescent pregnancy prevention is an outcome in the models for adolescent development, educational and career success, healthy relationships, and parent-child communication. Caring for more than one child during adolescence can compound negative outcomes associated with adolescent childbearing such as lower educational attainment and poor economic outcomes. Preventing repeat adolescent pregnancy and birth can improve healthy development for both mother and child (Klerman 2004; Corcoran and Pillai 2007; Harding et al. 2020).
- **Increasing educational attainment.** Academic achievement is an outcome in all models except financial literacy. Completing school can put pregnant and parenting youth in a better position to get a stable job to support themselves and their family (Harding et al. 2020; Steinka-Fry et al. 2013).
- **Improving health outcomes related to the prevention of pregnancy and sexually transmitted infections (STIs).** Health outcomes are included in all models except financial literacy. For example, the healthy relationship model shows implementing healthy relationship programming may lead to decreased risky sexual behaviors, increased abstinence, and decreased cases of STIs and HIV. For pregnant and parenting youth, it is important to prevent or treat STIs as early as possible (Meade and Ickovics 2005). STIs can have negative health effects on both the mother and child, including premature birth, birth defects, or stillbirth (Division of STD Prevention CDC 2016).
- **Fostering emotional and social well-being.** Emotional and social well-being is an outcome in all the models except financial literacy. For pregnant and parenting youth, positive relationships with partners, family, and their children can foster a support network and stable living environment for youth and their child (Hodgkinson et al. 2014; Sieger and Renk 2007).
- **Improving financial capability.** Financial capability, which combines financial knowledge, access to mainstream financial institutions, and accumulation of assets, is only an outcome in the financial literacy model. Raising children in the United States is very expensive. Using data from 2011-2015, annual child-rearing expense estimates in the U.S. ranged between \$12,350 and \$13,900 for a child in a two-child, married-couple family in the middle-income group (Lino et al 2017). Pregnant and parenting youth with financial capability will be in a better position to financially support their children.

Grantees may not be able to address each of these outcomes. Therefore, grantees should assess which outcomes are feasible and realistic to address based on the needs of the youth they serve. After grantees have identified their target outcome(s),

they can reference the APS conceptual models to see which APSs include that outcome. For example, grantees interested in increasing parent engagement could reference the parent-child communication model, which includes relevant outcomes. When choosing outcomes, grantees should also assess available resources (such as staffing). For example, a program might be interested in taking a holistic approach by including content on healthy relationships, financial stability, and access to health care in programming; however, it may have the staff resources to focus on only one of these outcomes.

What topics might programs serving pregnant and parenting youth address?

By mapping the needs of pregnant and parenting youth with the topics in each APS conceptual model, grantees can identify those topics that are relevant for this population. In this section, we discuss the topics within each APS model that programs may incorporate into programming for pregnant and parenting youth. The APS models do not focus specifically on pregnant and parenting youth. Therefore, the recommendations draw from the topics in each of the APS models and apply these to the distinct needs of pregnant and parenting youth.

Adolescent development

Adolescent development is the physical, cognitive, social, and emotional maturation that occurs for youth roughly between ages 10 and 19. Age-appropriate programs and education can support the development of positive social behaviors and relationships; emotional well-being; academic achievement; healthy attitudes and values about adolescent growth and development, body image, and racial and ethnic diversity; and related subjects.

During adolescence, pregnant and parenting youth, like all youth, are developing physically, cognitively, socially, and emotionally. However, this development is happening while youth are pregnant or actively caring for a baby, making their personal development potentially more difficult to focus on. Grantees can consider the following recommendations to incorporate adolescent development into programming for pregnant and parenting youth:

- **Provide education on healthy habits.** Programs can help educate youth on the importance of routine health care for themselves and their baby. In the prenatal period, this education could include information on the importance of prenatal care, healthy eating habits, stress relief, and exercise during pregnancy to achieve optimal outcomes for mother and child.

- **Encourage emotional development.** Programs might consider working with youth to develop self-esteem and coping skills that could help new parents build their confidence. These skills could make it easier for youth to cope with parenting stresses. Coping skills could include self-care techniques such as journaling or talking to a friend. Programs could also refer youth to mental health counseling and support groups to encourage emotional development.
- **Help youth build a support system for social development.** Programs could help youth develop skills to identify a social network that can make them feel connected and valued. This network might include trusted adults and peers (especially other pregnant and parenting youth) who could provide support and friendship.

Educational and career success

Educational and career success means obtaining at least a high school diploma or the equivalent as a starting point for long-term career success. Long-term success can involve multiple paths to completing postsecondary education or training and finding stable and well-paying employment.

Grantees can enhance school-based learning for pregnant and parenting youth to facilitate academic achievement and career success. Grantees can consider the following recommendations to incorporate educational and career success into programming for pregnant and parenting youth:

- **Help youth meet academic needs.** Pregnant and parenting youth might need additional support to achieve their academic goals. For example, they need child care during traditional school hours, or they might need tutoring to catch up on work missed during the postpartum period. Pregnant and parenting youth might also benefit from alternative educational experiences to help balance school with parenting, such as online learning or flexible hours. Programs can work with school districts to advocate for offering youth flexible options to attend school or provide school-based child care. They can also teach students how to advocate for themselves in the school setting.
- **Provide information and support for post-secondary education planning.** Attending college or receiving vocational training is a goal of many pregnant and parenting youth but can be a difficult process, particularly if they lack knowledge about the application and financial aid process. Parenting responsibilities compound these challenges. Programs can help youth apply to and attend higher education and skills training by helping with school and financial

aid applications, providing opportunities to complete college coursework, or organizing visits to college campuses and vocational programs. These experiences can make post-secondary education and training opportunities seem more possible and less intimidating.

- **Advise youth on career planning to help them identify a suitable job.** Pregnant and parenting youth might feel pressure to obtain a stable job to support their child, including while they are attending school. Programs can help youth determine how to balance these competing responsibilities. They could also work with employers or educational institutions to create mentoring or internship opportunities for pregnant and parenting youth to facilitate exposure to different professions to help youth obtain a sustainable job. These experiences should consider the flexibility young parents might require to balance family and professional responsibilities.

Financial literacy

Financial literacy is having the knowledge and skills needed to understand terminology and concepts about money and savings that enable adolescents to acquire and manage financial resources successfully.

Gaining financial literacy is an important step for any youth. Programs can help pregnant and parenting youth learn financial best practices, so they are prepared to provide for themselves and their child. Grantees can consider the following recommendations to incorporate financial literacy into programming for pregnant and parenting youth:

- **Teach youth how to create a budget and save for the future.** Teaching youth how to develop and track expenses can help ensure they have enough money each month to pay for necessities such as rent, food, and clothing. Pregnant and parenting youth also need to consider the costs of raising their child as part of their budget. This education should also include strategies for applying for financial aid and scholarships if youth want to attend college or receive additional training.
- **Teach youth about borrowing, credit, and debt.** Pregnant and parenting youth might need to borrow money, such as student loans for higher education or credit cards to purchase items for their family. They may also need credit to cover necessities for their child if they are not yet financially stable. Programs can help youth do this in a responsible way by teaching them how credit works, how to build good credit, and how to minimize debt.
- **Help youth obtain insurance.** Programs can educate youth about the insurance options available to them, including

health, life, and car insurance. Pregnant and parenting youth may need to obtain disability insurance during maternity leave and health insurance to cover pregnancy and birth-related expenses. After the baby is born, health insurance will be necessary to cover postpartum care for the mother and baby and regular check-ups for the baby.

- **Teach youth about consumer financial protections.** As youth gain financial independence, they should be equipped with the tools to protect themselves and their child from identity theft and financial fraud. This knowledge will lower the risk of financial harm, such as damaged credit scores, that could prevent them from receiving a loan in the future. Youth should also be aware of how damaged credit scores of a co-parent may affect the financial stability of the household.
- **Provide information on additional support services.** Social safety net programs such as Temporary Assistance for Needy Families, the Supplemental Nutrition Assistance Program, child support services, transportation assistance, and subsidized child care can help pregnant and parenting youth keep themselves and their family healthy as they build self-sufficiency. Pregnant and parenting youth may especially benefit from the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) to provide adequate nutrition to themselves and their baby from pregnancy until their child is age 5. Grantees can help youth navigate these programs, identify eligibility, and help them with the potentially daunting application process.

Healthy life skills

Healthy life skills are the competencies that enable people to solve problems and deal in positive ways with challenges they face in their everyday lives. These skills include social, emotional, and cognitive skills, as well as health-related skills.

Pregnant and parenting youth could benefit from life skills programming that aims to help them solve problems and overcome obstacles. Examples of these life skills include learning how to be resilient, setting and reaching goals, and increasing self-confidence. Such programming would focus on building skills that enable youth to solve problems and deal with challenges in positive ways. Grantees can consider the following recommendations to incorporate healthy life skills into programming for pregnant and parenting youth:

- **Teach youth how to prioritize their physical health.** Programming related to physical health skills can reinforce key social, emotional coping, and cognitive skills. Physical health skills can encourage youth to make healthy choices for

themselves and their child with respect to nutrition and healthy eating, body image, tobacco use, and physical fitness. Strategies for incorporating a healthy diet and regular exercise may also help pregnant and parenting youth relieve stress.

- **Teach youth stress reduction strategies for emotional coping.** Strategies could include deep-breathing techniques or exercising to release stress. Teaching youth how to cope in stressful situations will improve their health and create a healthier environment for their child. Pregnant and parenting youth could also be encouraged to teach stress reduction strategies to their co-parent to improve family well-being.
- **Improve knowledge and skills related to the prevention of pregnancy and STIs through education on abstinence and contraceptives.** Teaching youth how to abstain from sex and how to protect themselves against unintended pregnancy and STIs can increase youth's social and emotional well-being and bolster their decision-making and problem-solving skills, resulting in reduced levels of risky behavior and improved academic achievement. Pregnant and parenting youth may particularly benefit from skills related to communicating with a partner and accessing health services.
- **Help youth set goals and develop ways to meet them.** Many pregnant and parenting youth want to be a good parent, go to college or do vocational training, or get a stable job to support their family. Because their lives are busy, programs could help youth prioritize goals and discuss steps to reach their goals. Improving emotional coping skills, such as building self-confidence and self-awareness, could help youth realize they can reach their goals.
- **Foster critical thinking and decision-making skills.** Programs can work with youth to help them develop the skills to make informed decisions. For example, programs can help youth learn how to assess child care options and choose a provider or decide whether a post-secondary education opportunity is feasible for them.

Healthy relationships

Healthy relationships are based on trust, honesty, listening, and respect and allow adolescents to feel supported, connected, and independent. In healthy relationships, adolescents must communicate and establish boundaries. They can learn to demonstrate empathy, manage conflict, and resist peer pressure.

Distinguishing between healthy and unhealthy relationships is important for all youth. Pregnant and parenting youth need healthy relationships to support their personal development, as well as the development of their child and family. These

relationships might include those with current romantic partners, past romantic partners and their families, their own families, or their peers. Grantees can consider the following recommendations to incorporate healthy relationships into programming for pregnant and parenting youth:

- **Teach youth successful strategies for healthy relationships with a co-parent.** Young parents may or may not still be in a romantic relationship with their co-parent. Regardless, they would benefit from learning successful strategies for co-parenting. For example, programs could teach youth how to keep lines of communication open between parents and establish common ground about how to raise the child. These efforts would help establish consistent childrearing, no matter which parent is caring for the child. Programs could also discuss the role of nonparent romantic partners in the child's life. Issues to consider might include deciding on the best time for a child to meet a romantic partner and the extent to which the partner will play a parenting role.
- **Strengthen familial relationships.** Many pregnant and parenting youth still live with their parents, so programs could help youth find ways to strengthen relationships with their parents (the child's grandparents), as well as build a healthy relationship with their own child. Teaching youth communication and conflict resolution skills would help them navigate conflict that might develop when caring for their baby in their parents' home, especially if parents are not supportive of the pregnancy or new baby. These skills might also benefit youth during interactions with the family of their co-parent. Programs can work with pregnant teens to learn these skills before they give birth, to encourage a responsive and nurturing environment for the child after he or she is born.
- **Teach youth how to communicate with their partners.** Being able to talk about abstinence and contraception with partners is important for healthy relationships and to promote the physical health of all youth. Pregnant and parenting youth should develop comfort discussing their boundaries, understand consent, and be able to discuss abstinence and contraceptive use. Lack of communication with a partner might have led some youth to becoming pregnant. Programs could teach youth the skills to assertively discuss consent and decision making related to abstinence and contraception.
- **Encourage positive relationships with peers.** Programs could help youth build relationships with pregnant or parenting peers by providing opportunities for youth to interact with and support one another both within and outside of the classroom. Examples include providing time for a quick check-in at the start of each class or incorporating a social activity, such as having a meal together. This could be especially important for pregnant or parenting youth who have faced stigma or discrimination in school or at home. Programs can encourage youth to develop relationships with

other pregnant and parenting youth. These relationships could provide understanding, opportunities to learn from one another, and support to overcome challenges.

Parent–child communication

Parent–child communication is exchanges between parents (or caregivers) and children of information, opinions, concerns, or advice, either verbal or nonverbal (such as hugging, sharing quality time, and parental modeling).

Parent–child communication is an important topic for pregnant and parenting youth, because they will be or are raising a child. As with healthy relationships, this topic is twofold for pregnant and parenting youth. It can reflect their communication with their parents (the child’s grandparents), as well as with their own children as they grow. Grantees can consider the following recommendations to incorporate parent–child communication into programming for pregnant and parenting youth:

- **Teach youth how to communicate expectations.** This might involve teaching youth how to set expectations with their co-parent or family members regarding child care, feeding, sleep schedules, and financial support. In some cases, pregnant and parenting youth might have a strained relationship with their parents. In these situations, programs can help youth identify other trusted adults where they can go for advice or support, which could include relatives, program staff, or school staff.
- **Encourage proactive communication between parent and child.** Teaching youth how to establish positive communication with their children from an early age will help pregnant and parenting youth improve their parenting skills and enhance bonding with their baby. Programs could encourage this by providing classes for parents to learn about the importance of early communication and how to effectively interact with their growing child. This could also include providing space for youth to have fun with their child, such as a parent–child play group. A play group for pregnant and parenting youth and their children may offer a safe space where they can learn from their peers and feel comfortable.

Design and implementation considerations

The conceptual models include program design and implementation considerations that identify program features and strategies for program implementation. The APS models often include related and complementary recommendations, so this section presents combined considerations relevant to pregnant and parenting youth. As with the previous section, the design

and implementation considerations in the APS models are not specific to pregnant and parenting youth, so this section draws across APS models but applies them to the needs of pregnant and parenting youth.

What features should programs consider when serving pregnant and parenting youth?

Teaching strategies. Grantees should give youth opportunities to apply learned skills by incorporating role playing and interactive skill practice in programming, as noted in the financial literacy and parent–child communication models. For example, youth could practice scenarios like how to open a bank account or how to interact in a developmentally appropriate way with their baby. Pregnant and parenting youth might also benefit from individualized programming to help navigate personal situations. This could involve case management where youth are assigned to one staff with whom they can build trust.

Programs should also integrate trauma-informed care approaches to acknowledge and address histories of trauma such as sexual assault, abuse, or homelessness. The adolescent development model notes the importance of providing physical and psychological safety in programming, which a trauma-informed approach would address. Program staff should be trained on how to work with pregnant and parenting youth who might have experienced trauma and how best to support healing. For example, staff can let youth know it is okay to not participate in an activity that makes them uncomfortable. Program staff can also discuss ways to break cycles of abuse so that they do not continue into the child’s life. Staff should have a plan for how to deal with disclosures of trauma, such as abuse or assault, by youth. This might involve partnering with mental health organizations for training or supplemental support services for youth, as needed.

Service delivery. Initial assessment of youth’s needs will help programs identify services that would be most beneficial to individual youth. For example, the adolescent development model notes the importance of providing opportunities for youth to belong. This could be accomplished by providing opportunities for pregnant and parenting youth to connect with other youth like themselves to prevent social isolation among program participants. In other cases, providing home-based programming might be most comfortable for youth because they can interact freely with their child. The healthy relationship model mentions the importance of providing programming in diverse settings, such as in the home or using video conferencing. These options would also lessen the amount of time pregnant and parenting youth need to travel. Although travel is difficult for all parents, pregnant and parenting youth might have less access to child care or transportation, making program attendance more challenging. To make program participa-

tion easier, programs could provide supplemental services like transportation, food, or child care for pregnant and parenting youth. For example, a program could provide bus passes or serve dinner before programming activities.

The healthy life skills, healthy relationships, and parent–child communication models mention integrating program topics as much as possible to help make programming efficient. For pregnant and parenting youth, who have especially limited time and complicated schedules due to their competing responsibilities, this may be beneficial and increase attendance. For example, teaching young parents how to balance parenting responsibilities between partners addresses healthy relationships and healthy life skills, or discussions about future goals can incorporate lessons on financial literacy and educational and career success topics. Grantees should think about the needs of their specific population of pregnant and parenting youth and combine programming topics, as appropriate, to best address those needs.

How can the implementation system support pregnant and parenting youth?

Staffing. The adolescent development, healthy life skills, and healthy relationships models all include considerations about staffing. For example, skilled and supportive facilitators are a focus of the healthy life skills model. Grantees should hire skilled and knowledgeable staff with experience working with pregnant and parenting youth. Programs might find it beneficial to have adults on staff who were young parents themselves or bring in pregnant and parenting youth guest speakers to share their perspectives. Pregnant and parenting youth might benefit from learning how other young parents balanced school or a career and parenting, including how to deal with common parenting stressors. Program staff should also be expected to model healthy relationships and respectful communication with one another and with program participants, as noted in the healthy relationships model. Staff should receive ongoing training and professional development opportunities to strengthen their skills. For example, they might benefit from training on healthy pregnancy and child development.

Partnerships. Grantees should develop community partnerships, as noted in the educational and career success model, to create resource and referral networks for pregnant and parenting youth. Partnerships could include employers, schools, child care providers, health clinics, or home visiting programs. These providers could also help programs identify and recruit youth into programming. For example, a health clinic could provide a referral when a pregnant youth is looking for supportive services. The healthy life skills model also mentions the importance of making community connections. Organizations offering social services (such as housing support) or material resources (such as car seats, baby monitors, or maternity

clothes) can help pregnant and parenting youth who might have limited resources. Grantees could also explore partnerships with businesses that are supportive of hiring pregnant and parenting youth to support career development and employment opportunities.

Conclusion

PREP grantees can provide supports to pregnant and parenting youth to help them grow into successful adults and parents. Tailoring APS programming to pregnant and parenting youth can help them navigate adult responsibilities and establish a healthy family. Skill building in such topics as life skills, healthy relationships, and parent–child communication can help youth with making decisions, establishing a healthy environment for their child, and meeting financial, educational, or career goals. By using the APS conceptual models, grantees can build a framework to develop APS programming that can best meet the needs of the pregnant and parenting youth they serve.

Endnotes

¹ For more information on these components, please review the full report at [Conceptual Models for Adulthood Preparation Subjects within the Personal Responsibility Education Program \(PREP\)](#).

² For more on implementing trauma-informed care principles in PREP programs see Azur and Zaveri 2020.

References

Azur, Melissa and Heather Zaveri. (2020). “Trauma Informed Care in Adolescent Pregnancy Prevention Programs: Significance and Resources for Grantees.” OPRE Report Number 2020-125. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Centers for Disease Control and Prevention. Births: Final data for 2017. National Vital Statistics Reports, 67(8). https://www.cdc.gov/nchs/data/nvsr/nvsr67/nvsr67_08-508.pdf - PDF. Accessed on April 20, 2020.

Clary, Elizabeth, Heather Zaveri, Kristin A. Moore, Mindy E. Scott, Christopher Jones, Katie Eddins, Katie Adamek, Deana Around Him, Monica Arkin, and Isabel Griffith. “Conceptual Models for Adulthood Preparation Subjects in PREP.” OPRE Report #2021-21. Washington, DC: U.S. Department of Health and Human Services, Administration for Children and Families, Office of Planning, Research, and Evaluation, 2021.

Corcoran, Jacqueline, and V.K. Pillai. “Effectiveness of Secondary Pregnancy Prevention Programs: A Meta-Analysis.” *Research on Social Work Practice*, vol. 17, no. 1, 2007, pp. 5–18.

Division of STD Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention, Centers for Disease Control and Prevention. STDs and Pregnancy CDC Fact Sheet, 2016. <https://www.cdc.gov/std/pregnancy/STD-Pregnancy-April-2016.pdf> Accessed on April 9, 2020.

Harding, Jessica F., J. Knab, S. Zief, K. Kelly, and D. McCallum. "A Systematic Review of Programs to Promote Aspects of Teen Parents' Self-Sufficiency: Supporting Educational Outcomes and Healthy Birth Spacing." *Maternal and Child Health Journal*, 2020.

Hodgkinson, Stacy, L. Beers, C. Southammakosane, and A. Lewin. "Addressing the Mental Health Needs of Pregnant and Parenting Adolescents." *Pediatrics*, vol. 133, no. 1, 2014, pp. 144–122.

Klerman, Lorraine V. (2004). *Another Chance: Preventing Additional Births to Teen Mothers*. Washington, D. C. The National Campaign to Prevent Teen Pregnancy.

Lino, M., Kuczynski, K., Rodriguez, N., and Schap, T. (2017). *Expenditures on Children by Families, 2015*. Miscellaneous Publication No. 1528-2015. U.S. Department of Agriculture, Center for Nutrition Policy and Promotion.

Martin, J.A., B.E. Hamilton, M.J.K. Osterman, and A.K. Driscoll. "Births: Final Data for 2018." *National Vital Statistics Reports*, vol. 68, no. 13. Hyattsville, MD: National Center for Health Statistics, 2019.

Mathematica. "PREP Performance Measures 2017-2018." Memo submitted by Mathematica to the U.S. Department of Health and Human Services, Office of Planning, Research, and Evaluation, Washington D.C.: February 2019.

Meade, Christina, and J. Ickovics. "Systematic Review of Sexual Risk Among Pregnant and Mothering Teens in the USA: Pregnancy as an Opportunity for Integrated Prevention of STD and Repeat Pregnancy." *Social Science and Medicine*, vol. 60, no. 4, 2005, pp. 661–678.

Sieger, Karin, and K. Renk. "Pregnant and Parenting Adolescents: A Study of Ethnic Identity, Emotional and Behavioral Functioning, Child Characteristics, and Social Support." *Journal of Youth and Adolescence*, vol. 36, 2007, pp. 567–581.

Steinka-Fry, Katarzyna T., S.J. Wilson, and E.E. Tanner-Smith. "Effects of School Dropout Prevention Programs for Pregnant and Parenting Adolescents: A Meta-Analytic Review." *Journal of the Society for Social Work and Research*, vol. 4, no. 4, 2013, pp. 373–389.



[Sign up for the OPRE Newsletter](#)



Follow OPRE
on Twitter
[@OPRE_ACF](#)



Like OPRE's page
on Facebook
[OPRE.ACF](#)



Follow OPRE
on Instagram
[@opre_acf](#)



Connect on
LinkedIn
[company/opreacf](#)

Contract number: HHSP23337009T

Mathematica reference number: 50273

Submitted to:

Tia Brown, Project Officer

Christine Zakhour, Project Officer

Caryn Blitz

Office of Planning, Research, and Evaluation

Administration for Children and Families

U.S. Department of Health and Human Services

Submitted by:

Heather Zaveri, Project Director

Mathematica Policy Research

1100 1st Street, NE, 12th Floor

Washington, DC 20002-4221

Telephone: (202) 484-9220

This report is in the public domain. Permission to reproduce is not necessary. Suggested citation: Crowley, Jacqueline, Katie Adamek, and Heather Zaveri. Using Conceptual Models to Tailor Programming on Adulthood Preparation Subjects to Pregnant and Parenting Youth. OPRE Report # 2021-18. Washington, DC: Office of Planning, Research, and Evaluation, Administration for Children and Families, U.S. Department of Health and Human Services.

Disclaimer: The views expressed in this publication do not necessarily reflect the views or policies of the Office of Planning, Research, and Evaluation, the Administration for Children and Families, or the U.S. Department of Health and Human Services.

This report and other reports sponsored by the Office of Planning, Research, and Evaluation are available at www.acf.hhs.gov/opre.