HHS Public Access

Author manuscript

*J Public Health Manag Pract*. Author manuscript; available in PMC 2022 February 03.

Published in final edited form as:

*J Public Health Manag Pract*. 2022 ; 28(2): E506–E517. doi:10.1097/PHH.0000000000001342.

# Access to Contraceptive Services in Puerto Rico: An Analysis of Policy and Practice Change Strategies, 2015-2018

**Lisa Romero, DrPH, MPH**,
Division of Reproductive Health, Centers for Disease Control and Prevention, Atlanta, Georgia

**Rosa M. Corrada-Rivera, PhD**,
Third Mission Institute, Carlos Albizu University, San Juan, Puerto Rico

**Xavier Huertas-Pagan, MA**,
Third Mission Institute, Carlos Albizu University, San Juan, Puerto Rico

**Francisco V. Aquino-Serrano, JD**,
Third Mission Institute, Carlos Albizu University, San Juan, Puerto Rico

**Ana M. Morales-Boscio, BA**,
Third Mission Institute, Carlos Albizu University, San Juan, Puerto Rico

**Marizaida Sanchez-Cesareo, PhD**,
Graduate School of Public Health, Medical Science Campus, University of Puerto Rico, San Juan, Puerto Rico

Third Mission Institute, Carlos Albizu University, San Juan, Puerto Rico

**Edna Acosta-Perez, PhD, MSc**,
Graduate School of Public Health, Medical Science Campus, University of Puerto Rico, San Juan, Puerto Rico

Third Mission Institute, Carlos Albizu University, San Juan, Puerto Rico

**Zipatly Mendoza, MPH**,
Department of Noninfectious Disease, National Foundation for the Centers for Disease Control and Prevention, Atlanta, Georgia

**Eva Lathrop, MD, MPH**
Department of Gynecology and Obstetrics, Emory University School of Medicine, Atlanta, Georgia

## Abstract

**Correspondence**: Lisa Romero, DrPH, MPH, Division of Reproductive Health, Centers for Disease Control and Prevention, 4770 Buford Hwy NE, Mailstop S107-2 Chamblee, GA 30341 (lmromero@cdc.gov).

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the US Centers for Disease Control and Prevention or the opinions or policies of the CDC Foundation.

The authors declare no conflicts of interest.

Supplemental digital content is available for this article. Direct URL citation appears in the printed text and is provided in the HTML and PDF versions of this article on the journal's Web site (http://www.JPHMP.com).

**Context:** During the 2016–2017 Zika virus outbreak in Puerto Rico, preventing unintended pregnancy was a primary strategy to reduce Zika-related adverse birth outcomes. The Zika Contraception Access Network (Z-CAN) was a short-term emergency response intervention that used contraception to prevent unintended pregnancy among women who chose to delay or avoid pregnancy.

**Objective:** This analysis reports on the identified policy and practice change strategies to increase access to or provision of contraceptive services in Puerto Rico between 2015 and 2018.

**Methods:** A policy review was conducted to document federal- and territorial-level programs with contraceptive coverage and payment policies in Puerto Rico and to identify policy and practice change. Semistructured interviews with key stakeholders in Puerto Rico were also conducted to understand perceptions of policy and practice change efforts following the Zika virus outbreak, including emergency response, local, and policy efforts to improve contraception access in Puerto Rico.

**Results:** Publicly available information on federal and territorial programs with policies that facilitate access, delivery, and utilization of contraceptive coverage and family planning services in Puerto Rico to support contraceptive access was documented; however, interview results indicated that the implementation of the policies was often limited by barriers and that policy and practice changes as the result of the Zika virus outbreak were short-term.

**Conclusion:** Consideration of long-term policy and practice changes related to contraceptive access is warranted. Similar analyses can be used to identify policies, practices, and perceptions in other settings in which the goal is to increase access to contraception or reduce unintended pregnancy.

## Keywords

contraceptive services; emergency response; health policy; health systems change; policy and practice; Zika

During the 2016–2017 Zika virus outbreak, Puerto Rico reported the highest number of Zika cases in the United States and its territories.[1] Among 28 219 nonpregnant persons infected with Zika virus in Puerto Rico, incidence was highest (61%) among women aged 20 to 49 years.[1] Zika infection during pregnancy can cause severe brain abnormalities, including microcephaly, and eye defects.[2] Preventing unintended pregnancy was a primary strategy to reduce Zika-related adverse birth outcomes.[3]

Before the Zika virus outbreak, an estimated 65% of pregnancies in Puerto Rico were unintended (ie, pregnancy that occurred when no children or no more children were desired, or the pregnancy occurred earlier than desired).[4] Furthermore, women in Puerto Rico faced long-standing barriers to access contraception. Administrative barriers, including prior authorization requirement and unnecessary tests and examinations for contraceptive initiation, are not medically justified and can limit access to contraception.[4] Logistical barriers, including requiring women to return for a separate appointment on another day to initiate contraception, limited availability of the full range of reversible contraceptive methods, and methods not readily available on-site can make it difficult for women to

get to their contraception method.[4] Financial barriers, including high out-of-pocket costs, deductibles, and copayments, can create challenges to paying for contraception.[4] Women in Puerto Rico could access contraception at various sites, including community health centers, private practice clinics, academic clinics, public health clinics, and Title X family planning clinics. However, for the 56% of women of reproductive age who were Medicaid recipients,[5] a referral was required to 1 of 13 family planning clinics contracted to provide contraceptive services from the Medicaid-managed care organizations (MCO) (Sandra Pena, Puerto Rico Health Insurance Administration [also known as Administracion de Seguros de Salus (ASES)]; oral communication, 2016). In addition, long-standing barriers to access contraception also impacted women with private health insurance, in particular, high out-of-pocket costs and limited access to long-acting reversible contraception (LARC).[4,6]

To increase access to contraceptive services for women in Puerto Rico during the Zika virus outbreak, the National Foundation for the Centers for Disease Control and Prevention (CDC Foundation), with technical assistance from CDC, established the Zika Contraception Access Network (Z-CAN). The Z-CAN was a short-term emergency response intervention that used contraception to prevent unintended pregnancy to reduce Zika-related adverse birth outcomes during the Zika outbreak.[7,8] Between May 2016 and September 2017, a total of 29 221 women received Z-CAN services.[9]

The purpose of this analysis is to identify policy and practice change strategies used by federal and territorial-level programs to increase access to or provision of contraceptive services during and after the Zika virus outbreak in Puerto Rico and examine implementation of such policies and practices. A systematic review was conducted to assess federal and territorial-level programs with contraceptive coverage and payment policies that facilitate access, provision, and utilization of contraception in Puerto Rico between 2015 and 2018, a time frame that covers the outbreak years as well as the preceding and following calendar years. Semistructured interviews were also conducted with key stakeholder groups in Puerto Rico to understand perceptions on policy and practice change efforts following the Zika virus outbreak, including emergency response, local, and policy efforts to improve contraception access in Puerto Rico.

## Methods

### Review of policy data

A systematic, Web-based review of publicly available information on federal and territorial programs with policies that facilitate access, delivery, and utilization of contraceptive coverage and family planning services in Puerto Rico between 2015 and 2018 was conducted from March to June 2019. Available legislation, statute and regulations, reports, and other territorial health or other agency-published documents were identified for data extraction using Google and examined for inclusion. We applied a standardized search strategy of multiple search terms based on contraception and family planning relevant themes related to territorial health or other agencies, government funding sources, entitlement programs, and Zika virus emergency response efforts, as well as professional associations or research/policy organizations that may describe relevant programs on their Web site (see Table, Supplemental Digital Content 1, summary of search terms, available

at http://links.lww.com/JPHMP/A774). All identified documents published by federal or territorial agencies or government were examined for inclusion in the study. Documents that did not specifically address territorial contraceptive coverage and family planning services policies were excluded. All documents addressing territorial policies contraceptive coverage and family planning services were abstracted for in-depth review and summarization.

The abstracted data were reviewed to identify language that included contraceptive coverage and payment policy. Information was searched separately and simultaneously by 2 abstractors (F.V.A and L.R.). Each abstractor then independently cross-referenced the search findings of the other, completing double-data entry of source information. Discrepancies were reconciled among the abstractors to ensure consistency in search strategy, data entry, data coding, and variable definitions. Information abstracted included (1) policy source(s) (eg, Medicaid State Plan Amendment, regulations governing federal programs), (2) verbatim text of the policy, (3) summary of the policy text, and (4) date the policy was enacted. Variables were coded as not specified when there was no specific language in the policy text that clearly met the defined variable category. Following the validation, study authors (F.V.A and L.R.) reviewed and created a summary of abstracted data related to contraceptive coverage and payment policy and contraceptive access policy and practice change during the Zika virus outbreak. Programs with identified policies were reported and variations described.

### Semistructured Interviews

Semistructured interviews were conducted with key stakeholder groups in Puerto Rico to understand perceptions of policy and practice change efforts to improve contraception access in Puerto Rico following the Zika virus outbreak. An interview guide was developed and individuals from key stakeholder groups were identified to participate in a phone or in-person semistructured interview between May and August 2018.

A convenience sample was used to identify individuals from key stakeholder groups that represented decision makers, implementers, and end users of federal and territorial programs with policies that facilitate access, delivery, and utilization of contraceptive coverage and family planning services. A total of 9 semistructured interviews were conducted among the 3 key stakeholder groups. Decision makers (n = 3) were defined as individuals who held, or recently held, a position in a local government agency that could effect change to contraceptive coverage and family planning services in Puerto Rico. Implementers (n = 3) were identified as individuals in leadership positions within local government agencies, nongovernmental organizations or community health clinics tasked with putting into practice the mandates, or the requirements of policies related to the provision of contraceptive services. The end users (n = 3) were local physicians who provided contraceptive services and family planning patients. Prior to the interview, participants consented to participation and were informed that they could cease participation at any time. The semistructured interview was not recorded to protect confidentiality; however, detailed notes were taken by the interviewer. The notes were transcribed in Spanish and later translated into English.

The semistructured interview questions were organized into 3 domains: (1) emergency response efforts to improve contraception access; (2) local efforts to improve contraception

access; and (3) policy efforts to improve contraception access. Each domain included questions to document key stakeholders' perceptions of barriers and facilitators specific to health systems change efforts during and after the end of the Zika virus outbreak in Puerto. Interview notes were systematically coded to identify barriers and facilitators for contraception access and provision of contraceptive services in Puerto Rico. Thematic analysis was used to organize the information into the 3 domains. The CDC determined the review of policy data and the semistructured interviews to be nonresearch public health practice.

## Results

### Contraceptive coverage and payment policies

Our review identified that between 2015 and 2018, federal and territorial programs with publicly available policies related to contraceptive services in Puerto Rico included the following: Medicaid,[10] National Title X Family Planning program (Title X),[11] Health Resources & Services Administration (HRSA) Bureau of Primary Health Care's Health Center Program,[12] and the Z-CAN program [13] (Table 1).

Medicaid, Title X, and the Health Center Program policy documents described that federal funding was used for family planning services in Puerto Rico (Table 1). The Z-CAN did not use federal funding for the provision of family planning services; philanthropic and private sector partnerships were mobilized to secure resources to make contraceptive services, including client-centered contraception counseling and contraception methods, available at no cost across the territory during the Zika virus outbreak.[14] All programs had policies that described providing the full range of Food and Drug Administration–approved contraceptive methods; however, the provision of LARC methods was limited among Medicaid, Title X, and the Health Center Program (Table 1). In 2015, the Puerto Rico Medicaid State Plan Amendment expanded services to include at least one of every class and category of Food and Drug Administration–approved contraceptive methods[10]; however the copper intrauterine device (IUD) was the only LARC method on the Medicaid formulary.[15] Title X required grantees to offer a broad range of acceptable and effective medically approved contraceptive methods[11]; however, prior to the Zika outbreak, the Title X grantees in Puerto Rico provided limited LARC methods (mainly copper IUD and no contraceptive implant).[16] The Health Center Program provided obstetrics, gynecology, and voluntary family planning services,[12] including counseling on available family planning options and management/treatment as appropriate for a patient's chosen method.[12] The Z-CAN provided the full range of reversible contraceptive methods for nonsterilized women of reproductive age during the Zika virus outbreak in Puerto Rico (Table 1).[13]

Logistical or administrative approval, including referral, prior authorization, or cost sharing, was required by Medicaid (Table 1). Medicaid required a referral to 1 of 13 family planning clinics contracted to provide contraceptive services from the Medicaid-managed care organizations.[17] In addition, prior to the Medicaid referral for contraceptive services, prerequisite diagnostic testing for first visit, including pregnancy, sexually transmitted disease, human immunodeficiency virus, and Papanicolaou (Pap) test, was required.[18]

Title X, the Health Center Program, and Z-CAN did not report any required logistical or administrative approval for contraceptive services (Table 1).

All programs reported a policy that covered screening for pregnancy intention and provision of contraceptive counseling (Table 1). In addition, all programs reported a policy that LARC methods were reimbursed at the actual cost of the device; however, Medicaid reported reimbursement for the only LARC device (copper IUD) on the Medicaid formulary (Table 1). Title X reported a schedule of fees designed to recover the reasonable cost of providing services,[16] and the Health Center Program reported that care was provided on the basis of a sliding fee scale and ability of patients to pay for services.[12] The Z-CAN provided all LARC methods (levonorgestrel-releasing IUD, copper IUD, contraceptive implant) at no cost to patients who participated in the program. All payors reported a policy that covered LARC supplies, insertion and removal procedures, and follow-up care (Table 1). Furthermore, Z-CAN reported a policy that covered postpartum LARC supplies, procedure, and follow-up; Title X did not have a policy as Title X services include outpatient services only and the Health Center Program did not specify. Finally, Title X, Health Center Program, and Z-CAN all had policies that provided provider training (eg, client-centered contraceptive counseling, LARC insertion, removal, and management)[11,13]; Medicaid did not specify[10] (Table 1).

## Policy and practice change as result of Zika virus outbreak

All programs reported policy and practice change strategies to increase access to or provide contraceptive services following the Zika virus outbreak (Table 2). The Puerto Rico Secretary of Health issued Administrative Order 350 to broaden access to contraceptive methods during the Zika virus outbreak by acknowledging that Zika virus is a cause of serious birth defects in infants resulting from Zika infection during pregnancy; educating providers about the prevention of adverse outcomes associated with Zika and training providers on the insertion, removal, and management of LARC; establishing a plan to expand access and coverage to effective contraceptive methods, including implant, IUDs, oral contraceptive pills, injectable, vaginal ring, patch, and condoms; and requiring all public and private insurers under the jurisdiction of the Insurance Commissioner and the Puerto Rico Health Insurance Administration (ASES) to disclose and issue plans for execution of the order.[19] In addition, the Commissioner of Insurance issued a letter to support Administrative Order 350 and request compliance by health insurers to broaden their contraceptive methods coverage during the Zika virus outbreak.[20] As a result of the identification of administrative and logistical barriers, the National Title X Family Planning program expanded coverage of LARC methods and trained Title X physicians and staff on client-centered contraceptive counselling and LARC insertion and removal, both of which continued after the Zika outbreak (Table 2). The Health Center Program, in partnership with Z-CAN, trained physicians and staff on client-centered contraceptive counseling and LARC insertion, removal, and management. Forty community health centers participated in Z-CAN to increase contraceptive access points across Puerto Rico. Finally, the Z-CAN program provided the full range of reversible methods to women at no cost, trained physicians and staff from private practices, community health centers, academic clinics, and public health clinics across all 5 public health regions in Puerto Rico on client-centered contraceptive counseling and LARC insertion, removal, and management and proctored Z-

CAN physicians posttraining to ensure competency in delivering high-quality contraceptive services.[13] The Z-CAN also increased public and private contraceptive access points from 13 publicly funded sites to 139 public and private sites, provided bundled reimbursement for LARC insertion and removal to ensure no-cost LARC removal after program ended, and educated women about the safety and efficacy of the full range of contraceptive methods and offered women the choice of methods that best met their reproductive health needs.[7,8] Furthermore, Z-CAN worked with federal and territorial partners to sustain high-quality contraceptive services after the program ended (Table 2).[7,8]

### Perceptions of decision makers, implementers, and end users

Perceptions of decision makers, implementers, and end users about health systems change efforts following the Zika virus outbreak were reported (Table 3). All key stakeholders reported that Puerto Rico had policies prior to the Zika virus outbreak that supported public and private health insurance coverage of contraceptive services; however, implementers perceived limited implementation of the policies specific to the availability of the full range of reversible contraceptive methods and dissemination of information to the end users. Key stakeholders reported that the emergency response to the Zika virus outbreak supported an environment to develop and implement, through Z-CAN, a series of short-term policy and practice changes to improve contraceptive services in Puerto Rico (Table 3). The identified policy and practice changes included forming a multisector collaboration between federal agencies, territorial government agencies, private corporations, and domestic philanthropic and nonprofit organizations to expand access to full range of reversible contraceptive methods, including methods not readily available to women in Puerto Rico, at no cost to women of reproductive age, regardless of age, income, or insurance status. Among local efforts, decision makers and implementers identified facilitators through the Administrative Order 350, which recommended that insurers and health insurance organizations broaden access to contraceptive methods during the Zika virus outbreak emergency (Table 3). Furthermore, the 2004 Puerto Rico Pharmacy Act[21] and a subsequent amendment (Public Law 95–2014) in 2014[22] require all physicians to obtain a medical office drug cabinet license to purchase, store, and administer medications in their respective offices but only for immediate use by patients at the physician’s office and not for future use by the patients. Given this requirement impacts the stocking and dispensing of contraceptive methods, including oral contraceptive pills, patch, and ring, the territorial government agency provided a temporary waiver to Z-CAN physicians to allow stocking and dispensing of all contraceptive methods in their clinics, hence facilitating same-day access. End users indicated that Z-CAN also addressed barriers, such as lack of trust and misinformation by patients about contraception, and training gaps in client-centered contraceptive counseling and LARC insertion, removal, and management (Table 3).

## Discussion

Results from the policy review and interviews with key stakeholders indicated that the implementation of policies that facilitate access, delivery, and utilization of contraceptive coverage and family planning services in Puerto Rico was often limited by administrative,

logistical, and financial barriers prior to the Zika virus outbreak and that policy and practice changes as the result of the Zika virus outbreak were short-term.

The policy review highlighted that although Puerto Rico programs had policies to support contraceptive coverage prior to the outbreak, Medicaid required preapproval to obtain services and referral to contracted family planning clinics to provide contraceptive services; the referral necessitated multiple appointments, prerequisite diagnostic testing, and patient cost-sharing, all of which can prevent or delay women from obtaining contraceptives or using them effectively and consistently.[23] Among Medicaid, Title X, and the Health Center Program, the full range of reversible contraceptive methods was limited (eg, LARC methods), and patients often incurred out-of-pocket fees based on method and procedure or sliding fee scale. Providing access to the full range of reversible contraceptive methods expands contraceptive options for women of reproductive age and allows them to choose a method that best meets their needs.[23] Previous studies have reported that requiring women of reproductive age who seek contraceptive services to obtain preapproval before obtaining a contraceptive method may result in women being lost to follow-up and placed at risk of an unintended pregnancy.[24,25] Same-day provision of the contraceptive method of choice without unnecessary delays can improve contraceptive access.[23] The CDC's evidence-based contraceptive guidance recommends providing immediate access to contraceptive methods at the same visit if a clinician can be reasonably certain that a woman is not pregnant; there is no medical reason to require clients to return for a follow-up visit or to initiate methods during menses.[26–28] This includes provider-dependent methods such as the IUD, implant, and injectable.[26–28] In addition, there is no medical or safety benefit to requiring routine pelvic examination or cervical cytology before initiating hormonal contraception.[26,27] The prospect of such an examination may deter a woman from having a clinical visit that could facilitate her use of a contraceptive method.[23] Although it has been a common practice to require multiple appointments for methods such as the IUD or implant, when women are required to return for a second visit for the insertion of a LARC method, the likelihood that they receive their method of choice decreases; up to 50% of clients will not return for a LARC insertion visit.[29] Furthermore, in the absence of contraindications, patient choice and efficacy should be the principal factors in choosing one method of contraception over another.[23]

Key stakeholders reported that during the Zika virus outbreak, strategies to increase access to contraceptive services through short-term policy and practice change were implemented by aligning efforts and leveraging resources among federal and territorial partners. Key stakeholders also reported that strategies for sustainability continue to need to be addressed; however, as others have reported, for long-term sustainability to be addressed, financing of health care services in Puerto Rico may be considered as an option, given that the Medicaid statutory ceiling for Puerto Rico may impact benefits.[30,31] Following the deactivation of the Zika-virus outbreak emergency response efforts in Puerto Rico, contraceptive coverage returned to the status quo prior to Z-CAN. Although the review indicated that there were no major health systems changes, practice changes as a result of the Z-CAN program were documented, including the implementation of evidence-based contraceptive guidelines to reduce unnecessary medical tests for referral for contraceptive services (eg, pregnancy test, Pap test and pelvic examination, sexually transmitted disease test), and continued

contraceptive service access points among some of the community health centers funded through the Health Center Program. These practice change efforts were implemented with minimum cost and may be feasible to sustain.

To our knowledge, this is the first review of publicly available information on federal and territorial program policies, practices, and perceptions related to contraceptive coverage and family planning services in Puerto Rico. Similar reviews can be used to identify policies, practices, and perceptions in which the goal is to increase access to contraception or reduce unintended pregnancy.

The findings in this report are subject to at least 3 limitations. First, although we reviewed publicly available data on contraceptive coverage and payment policies, there may be policy information or data that were required, approved, amended, or collected as part of required programmatic or funding requirements or data collection (eg, federal funding program plan, quality indicators, performance measures) but not publicly available. Second, information on key stakeholder perceptions was obtained from a small number of persons who represented decision makers, implementers, and end users and were limited to their perspectives and do not represent official territorial policies and are not generalizable. Finally, given the emergency response efforts were short-term, there may not have been enough time between implementation of Z-CAN and the analysis (1 year after the Zika virus outbreak emergency response efforts were deactivated) to see short- or long-term health systems change.

## Conclusion

The 2016–2017, Zika virus outbreak in Puerto Rico posed a serious risk to pregnant women as Zika infection during pregnancy can cause microcephaly and other severe fetal brain defects. Efforts to prevent pregnancy among women who chose to delay or avoid pregnancy during the Zika outbreak may have affected policy, practice change, and perceptions related to contraceptive coverage and family planning services over the short term. However, given that the results suggested that short-term policy and practice changes have limited sustainability, it may be beneficial to address long-term sustainability. Similar analyses can be used to identify policies, practices, and perceptions needs in which the goal is to increase access to contraception or reduce unintended pregnancy.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

## Acknowledgments

This work was supported by the US Centers for Disease Control and Prevention. The Z-CAN project was funded by the National Foundation for the Centers for Disease Control and Prevention, Inc.

## References

1. Lozier M, Adams L, Flores Febo M, et al. Incidence of Zika virus disease by age and sex—Puerto Rico, November 1, 2015-October 20, 2016. MMWR Morb Mortal Wkly Rep. 2016;65(44):1219–1223. [PubMed: 27832051]

2. Olson SM, Delaney A, Jones AM, et al. Updated baseline prevalence of birth defects potentially related to Zika virus infection. Birth Defects Res. 2019;111(13):938–940. [PubMed: 31264801]

3. Oduyebo T, Petersen EE, Rasmussen SA, et al. Update: interim guidelines for health care providers caring for pregnant women and women of reproductive age with possible Zika virus exposure—United States, 2016. MMWR Morb Mortal Wkly Rep. 2016;65(5): 122–127. [PubMed: 26866840]

4. Tepper NK, Goldberg HI, Vargas Bernal MI, et al. Estimating contraceptive needs and increasing access to contraception in response to the Zika virus disease outbreak—Puerto Rico, 2016. MMWR Morbidity Mortality Weekly Report. 2016;65:311–314. [PubMed: 27031817]

5. Henry J Kaiser Family Foundation. Distribution of nonelderly adults with Medicaid by gender. https://www.kff.org/medicaid/state-indicator/distribution-by-gender-4/?currentTimeframe=1&sortModel=%7B%22colId%22:%22Location%22,%22sort%22:%22asc%22%7D. Published 2016. Accessed April 28, 2019.

6. August EM, Rosenthal J, Torrez R, et al. Community understanding of contraception during the Zika virus outbreak in Puerto Rico. Health Promot Pract. 2020;21(1):133–141. [PubMed: 31142152]

7. Lathrop E, Romero L, Hurst S, et al. The Zika Contraception Access Network: a feasibility programme to increase access to contraception in Puerto Rico during the 2016–17 Zika virus outbreak. Lancet Public Health. 2018;3(2):e91–e99. [PubMed: 29371100]

8. Romero L, Koonin LM, Zapata LB, et al. Contraception as a medical countermeasure to reduce adverse outcomes associated with Zika virus infection in Puerto Rico: the Zika contraception access network program. Am J Public Health. 2018;108(S3): S227–S230. [PubMed: 30192658]

9. Lathrop E, Hurst S, Mendoza Z, et al. The Zika Contraception Access Network: final program data and factors associated with removal of long-acting reversible contraception, May 2016-September 2017. Obstet Gynecol. 2020;135(5):1095–1103. [PubMed: 32282596]

10. Centers for Medicare & Medicaid Services. Puerto Rico Medicaid State Plan Amendment. https://www.medicaid.gov/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/PR/PR-15-001.pdf. Published 2015. Accessed March 1, 2020.

11. National Title X Family Planning Program. National Title X Family Planning Program requirements. https://www.hhs.gov/opa/sites/default/files/Title-X-2014-Program-Requirements.pdf. Published 2019. Accessed March 1, 2020.

12. Health Resources & Services Administration. Family planning and related services in health centers. https://bphc.hrsa.gov/sites/default/files/bphc/qualityimprovement/pdf/familyplanningservices.pdf. Published 2016. Accessed March 1, 2020.

13. Zika Contraception Access Network. Zika contraception access network standard operating procedure: policy and procedure manual. https://zcantoolkit.cdcfoundation.org/themes/gavias_emon/images/sectiondocs/Section2/2.2a%20Z-CAN%20Procedure%20Manual.pdf. Published 2016. Accessed February 20, 2020.

14. Romero L, Mendoza ZV, Croft L, et al. The role of public-private partnerships to increase access to contraception in an emergency response setting: the Zika contraception access network program. J Womens Health (Larchmt). 2020;29(11):1372–1380. [PubMed: 33196331]

15. Commonwealth of Puerto Rico Health Insurance Administration. OBGYN Formulario de Medicamentos en Cubierta del PSG. San Juan, Puerto Rico: Commonwealth of Puerto Rico Health Insurance Administration; 2016.

16. National Title X Family Planning Program. Title X Family Planning Annual Report: 2016 National Summary. Washington, DC: Office of Population Affairs; 2016.

17. Clinica Preven Puerto Rico. Clinics. https://www.prevenpr.com/clinicas/. Published 2019. Accessed December 1, 2019.

18. Administración de Seguros de Salud (ASES). ASES Government Health Plan Referral Form #15–105-364 Family Planning Clinic. San Juan, Puerto Rico: Commonwealth of Puerto Rico Department of Health; 2016.

19. Commonwealth of Puerto Rico Department of Health. Administrative Order No. 350 of the Department of Health of Puerto Rico and Coverage of Contraceptives: Vol CC-2016–1882-D. San Juan, Puerto Rico: Commonwealth of Puerto Rico Department of Health; 2016.

20. Puerto Rico Commissioner of Insurance. In: Commonwealth of Puerto Rico Office of Commissioner of Insurance, Circular Letter No.: CC-2016–1882-D. Guaynabo, Puerto Rico: Puerto Rico Commissioner of Insurance; 2016.
21. Commonwealth of Puerto Rico. Puerto Rico Pharmacy Act, 247 (H.B. 4248) 2004.
22. Commonwealth of Puerto Rico. Pub L No. 95–2014, 2014.
23. ACOG Committee on Health Care for Underserved Women. Access to contraception: committee opinion no. 615. Obstet Gynecol. 2015;125:250–255. [PubMed: 25560140]
24. Kavanaugh ML, Douglas-Hall A, Finn S. Health insurance coverage and contraceptive use at the state level: findings from the 2017 behavioral risk factor surveillance system. Contraception X. 2019; 2:100014. [PubMed: 32550529]
25. Sobel L, Beamesderfer A, Salganicoff A. Private Insurance Coverage of Contraception. Menlo Park, CA: The Henry J. Kaiser Family Foundation; 2016.
26. Curtis KM, Jatlaoui TC, Tepper NK, et al. US selected practice recommendations for contraceptive use, 2016. MMWR Recomm Rep. 2016;65(4):1–66.
27. Curtis KM, Tepper NK, Jatlaoui TC, et al. US medical eligibility criteria for contraceptive use. MMWR Recomm Rep. 2016;65:1–103.
28. Gavin L, Moskosky S, Carter M, et al. Providing quality family planning services: recommendations of CDC and the US Office of Population Affairs. MMWR Recomm Rep. 2014;63(RR-04):1–54.
29. Bergin A, Tristan S, Terplan M, Gilliam ML, Whitaker AK. A missed opportunity for care: two-visit IUD insertion protocols inhibit placement. Contraception. 2012;86(6):694–697. [PubMed: 22770798]
30. Medicaid and CHIP Payment and Access Commission. Report to Congress on Medicaid and CHIP: Mandated Report—Medicaid in Puerto Rico. Washington, DC: Medicaid and CHIP Payment and Access Commission; 2019.
31. Gutierrez N Understanding health care disparities in the US territories. Arch Intern Med. 2011;171(17):1579–1581. [PubMed: 21709183]

### Implications for Policy & Practice

- The implementation of the policies that facilitate access, delivery, and utilization of contraceptive coverage and family planning services in Puerto Rico to support contraceptive access was often limited by administrative, logistical, and financial barriers prior to the Zika virus outbreak.
- Efforts to prevent pregnancy among women who chose to delay or avoid pregnancy during the Zika outbreak may have affected policy, practice change, and perceptions related to contraceptive coverage and family planning.
- Results from the policy review and interviews with key stakeholders indicated that the implementation of policy and practice changes as the result of the Zika virus outbreak was short term.
- Consideration of long-term policy and practice changes related to contraceptive access is warranted to address long-term sustainability.

**TABLE 1**

Inclusion of Federal and Territorial Programs With Policies That Facilitate Access, Provision, and Utilization of Contraception by Program, Puerto Rico (2015–2018)

| | Contraceptive Coverage and Payment Policy | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Does the Policy Indicate That: | | | Does the Policy Capture the Costs of: | | | | | | |
| Program | Federal Funding Leveraged for Family Planning Services? | The Full Range of FDA-Approved Contraceptive Methods Included? | Logistical or Administrative Approval[a] Required? | Screening for Pregnancy Intention? | Contraceptive Counseling? | LARC[b] Methods Reimbursed at the Actual Cost of the Device? | LARC Supplies, Insertion and Removal Procedures, and Follow-up? | Postpartum LARC Supplies, Procedure, and Follow-up? | Provider Training (eg, Client-Centered Contraceptive Counseling, LARC Insertion, and Removal)? | Source |
| Medicaid | Yes | Yes[c] | Yes[d] | Yes | Yes | Yes[e] | Yes | Not specified | Not specified | https://www.medicaid.gov/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/PR/PR-15-001.pdf |
| National Title X Family Planning Program (Title X) | Yes | Yes[f] | No | Yes | Yes[g] | Yes[h] | Yes | No[i] | Yes | https://www.hhs.gov/opa/sites/default/files/Title-X-2014-Program-Requirements.pdf |
| HRSA Bureau of Primary Heath Care Health Center Program | Yes | Yes | No | Yes | Yes | Yes[h] | Yes | Not specified | Yes | https://bphc.hrsa.gov/sites/default/files/bphc/qualityimprovement/pdf/familyplanningservices.pdf |
| Zika Contraception Access Network (Z-CAN) | No | Yes | No | Yes | Yes[g] | Yes[j] | Yes | Yes[k] | Yes | https://zcantoolkit.cdcfoundation.org/themes/gavias_emon/images/sectiondocs/Section2/2.2a%20Z-CAN%20Procedure%20Manual.pdf |

Abbreviations: FDA, Food and Drug Administration; HRSA, Health Resources & Services Administration; LARC, long-acting reversible contraception.

[a] Includes referral, prior authorization, and cost sharing.

[b] Long-acting reversible contraception (LARC) includes intrauterine devices (IUD) and contraceptive implants.

[c] State Plan Amendment PR-15-001 expanded services to include at least 1 of every class and category of FDA-approved contraceptive methods.

[d] Requires referral for contraceptive services.

[e] The only LARC device on the Puerto Rico Medicaid formulary is copper IUD.

[f] Requires offering a broad range of acceptable and effective medically approved contraceptive methods.

[g] Client-centered.

[h] Care is provided on the basis of a sliding fee scale based and ability of patients to pay for services.

[i] Title X services include outpatient services only.

[j] Device provided at no cost by Z-CAN program. Physician reimbursement commensurate with Medicaid reimbursement fee schedules in the continental United States provided as a bundled LARC insertion and removal fee to non–federally funded service sites.

[k] LARC methods and insertion and removal fees covered.



*J Public Health Manag Pract*. Author manuscript; available in PMC 2022 February 03.

**TABLE 2**

Federal and Territorial Programs With Contraception Access Policy and Practice Change as a Result of the Zika Virus Outbreak by Program, Puerto Rico (2015–2018)

| Program | Policy and Practice Changes Strategies to Increase Access to or Provision of Contraceptive Services |
|---|---|
| Puerto Rico Department of Health | Issued Administrative Order (AO) 350 from the Secretary of Health to public and private health care payors to broaden access to contraceptive methods during the Zika virus outbreak.<br>Issued a letter from the Commissioner of Insurance to support AO 350 and requested compliance by health insurers to broaden their contraceptive methods coverage.<br>Identified and recruited physicians (private, community health centers, university medical schools, and government clinics) to train and become part of Z-CAN network.<br>Provided waiver to Z-CAN physicians to allow on-site stocking of contraceptive methods, allowing same-day provision. |
| National Title X Family Planning Program (Title X) | Expanded coverage of LARC methods (hormonal IUD, implant).<br>Trained Title X physicians and staff on client-centered contraceptive counseling and LARC insertion and removal. |
| HRSA Bureau of Primary Heath Care Health Center Program | Trained physicians and staff on client-centered contraceptive counseling and LARC insertion and removal. Partnered with Z-CAN to increase contraceptive access points, including 40 community health centers. |
| Zika Contraception Access Network (Z-CAN) | Provided the full range of reversible contraceptive methods to women at no cost.<br>Trained physicians and staff from private practices, community health centers, academic clinics, and public health clinics across all 5 public health regions in Puerto Rico on client-centered contraceptive counseling and LARC insertion and removal.<br>Proctored Z-CAN physicians posttraining to ensure competency in delivering high-quality contraceptive services.<br>Increased contraceptive access points from these 13 publicly funded sites to 139 public and private sites.<br>Provided bundled reimbursement for LARC insertion and removal to ensure no cost LARC removal after program ended.<br>Increased patient demand for the most effective contraception methods (LARC) by educating women about the safety and efficacy of LARCs and offering women the choice of the full range of contraceptive methods, including methods that were not readily available in Puerto Rico (hormonal IUD and implant).<br>Worked with federal and territorial partners to sustain high-quality contraceptive services after the program ended. |

Abbreviations: HRSA, Health Resources & Services Administration; IUD, intrauterine device; LARC, long-acting reversible contraception.

**TABLE 3**

Perceptions of Decision Makers, Implementers, and End Users About Health System Change Efforts Following the Zika Virus Outbreak, Puerto Rico (2018)

| Domain | | Barrier | Facilitator |
|---|---|---|---|
| Emergency response efforts to improve contraception access | | | |
| How did contraception and family planning services in Puerto Rico improve as a result of the Zika virus outbreak? | Decision maker | Limited use of 340B program among eligible clinics for purchase of contraceptive methods.<br>Limited number of physicians trained on providing high-quality contraceptive services before the Zika Contraception Access Network (Z-CAN) program.<br>Limited utilization of trained physicians as general resource to share Zika-related pregnancy prevention knowledge.<br>Limited sustainability of improvements in access and availability of quality contraceptive services because the Zika virus outbreak efforts were viewed as a short-term emergency response. | Support from federal agencies and territorial government agencies that collaborated to improve contraceptive access.<br>Increased access to the full range of reversible contraceptive methods, including methods not readily available (ie, hormonal IUD, implant) through Z-CAN.<br>Improved physician reimbursement for contraceptive services (ie, client-centered contraceptive counseling, bundled reimbursement for long-acting reversible contraception [LARC] insertion and removal) commensurate with Medicaid reimbursement in the continental United States through Z-CAN.<br>Provided evidence-based contraception training to physicians and staff through Z-CAN.<br>Expanded the number of contraceptive service sites across the island through Z-CAN.<br>Increased awareness among women of reproductive age about the services and benefits of the Z-CAN program using effective social media strategies. |
| | Policy implementer | Noncompliance with implementation of Medicaid contraceptive coverage and payment polices before Z-CAN.<br>Limited availability and access to the most effective methods before Z-CAN.<br>Limited sexual and reproductive education before Z-CAN.<br>Limited supportfor sustainability of improvements in access and availability of quality contraceptive services because the Zika virus outbreak efforts were viewed as a short-term emergency response. | Provided the full range of reversible contraception methods at no cost to women of reproductive age, regardless of age, income, or insurance status through Z-CAN.<br>Prevention efforts may have reduced unintended pregnancies and reduced adverse pregnancy and birth outcomes associated with Zika virus infection.<br>Expanded service sites throughout Puerto Rico to reach more women through Z-CAN.<br>Educated women about the full-range of reversible contraception through Z-CAN.<br>Provided reimbursement commensurate with continental US Medicaid fee schedules through Z-CAN.<br>Trained Z-CAN physicians on client-centered counseling, CDC's contraception evidence-based guidelines, and LARC insertion and removal techniques. |
| | End user | Returned to the contraceptive method mix available in Puerto Rico before Z-CAN program, including limited LARC.<br>Limited sustainability of improvements in access and availability of quality contraceptive services because Z-CAN was a short-term emergency response. | Provided training to Z-CAN physicians and staff to provide high-quality contraceptive services.<br>Increased access and availability to the full range of reversible contraceptives through Z-CAN.<br>Increased knowledge among Z-CAN patients about effectiveness of LARC.<br>Implemented informal practice changes after the Z-CAN program ended. |
| Local efforts to improve contraception access | | | |
| What initiatives or activities at the local level facilitated or hindered the program implementation of Z-CAN? | Decision maker | Varied billing practices and mixed perceptions of what physicians could or could not charge for under current contraceptive policy in Puerto Rico.<br>Exempted institutions (ie, moral or religious objections) from the contraceptive mandate may limit beneficiaries with private health insurance. | Issued an Administrative Order 350 from the territorial government agency to insurers and health insurance organizations to broaden their contraceptive methods coverage during the Zika virus outbreak.<br>Issued a temporary waiver from the territorial government agency to Z-CAN physicians to allow stocking of contraceptive methods to facilitate same-day access.<br>Issued a letter of support from the Commissioner of Insurance for Administrative Order 350 requesting health insurers to broaden their contraceptive methods coverage during the Zika virus outbreak. |
| | Policy Implementer | Limited sustainability of improvements in access and availability of quality contraceptive services because the Zika | Issued an Administrative Order 350 from the territorial government agency to insurers and health insurance organizations to broaden their contraceptive methods coverage during the Zika virus outbreak. |

| | Domain | Barrier | Facilitator |
|---|---|---|---|
| | | virus outbreak efforts were viewed as a short-term emergency response. | |
| | End user | Lack of procedural manuals or specific guidelines that physicians followed before Z-CAN. | Provided training on client-centered counseling, CDC's contraception evidence-based guidelines, and LARC insertion and removal techniques through Z-CAN. |
| Policy efforts to improve contraception access | | | |
| Do policies in Puerto Rico support access to contraception and family planning–related services? | Decision maker | Lack of support to develop or sustain program(s) to improve access to contraception.<br>Limited progress to implement activities to increase access to contraception funded through the CMS Zika Health Care Services grant[a].<br>Limited long-term sustainability of contraception access initiatives or activities due to economic constraints and infrastructure devastated by recent hurricanes. | Declared a state of emergency in Puerto Rico due to the Zika virus outbreak that provided funding opportunities and support for policies and programs to increase access to contraception as a primary prevention strategy.<br>Requested, as per the territorial Commissioner of Insurance, that all health insurance plans comply with the Secretary of Health Administrative Order 350 to cover at least 1 method of each class and category of FDA-approved contraceptive methods. |
| | Policy implementer | Limited implementation of Puerto Rico's contraceptive access and payment policies.<br>Limited dissemination of information about contraception and family planning benefits, reducing patient's access to information. | Lunded family planning services through Medicaid, administered by the Puerto Rico Health Insurance Administration, in agreement with the Puerto Rico Department of Health.<br>Funded family planning services administered through HRSA Health center Program<br>Funded family planning services administered by territorial Title X grantees. |
| | End user | Limited support for policies and programs related to contraception and family planning services.<br>Limited number of physicians or clinic that provides high-quality health services, especially to underserved and rural populations.<br>Limited policies on sexual and reproductive health consent and autonomy.<br>Lack of sexual and reproductive health education, especially for youth. | Documented policy of family planning services benefits[b] that include education and counseling, at least 1 of every class and category of FDA-approved contraception medications,and cost and insertion/removal of nonoral products, such as LARC.<br>Policy states that all health insurance plans must cover contraception.<br>Trained Z-CAN physicians have the capacity to provide client-centered contraceptive counseling and LARC insertion, removal, and management.<br>Documented Z-CAN patient experience through follow-up questionnaires and interviews. |

Abbreviations: CDC, Centers for Disease Control and Prevention; FDA, Food and Drug Administration; HRSA, Health Resources & Services Administration; IUD, intrauterine device; LARC, long-acting reversible contraception; Z-CAN, Zika Contraception Access Network.

[a]The Centers for Medicare & Medicaid Services (CMS) Zika Health Care Services grant funded $60.6 million to the Puerto Rico Department of Health in January 2017 to support efforts in providing and expanding health care services to all pregnant women and of childbearing age, infants, and men adversely or potentially impacted by the Zika Virus infection. All strategies and outcomes are aligned within 4 critical components: (1) increasing access to contraceptive services for women and men, (2) reducing barriers to diagnostic testing, screening, and counseling for pregnant women and newborns, (3) increasing access to appropriate specialized health care services for pregnant women, children born to mothers with maternal Zika virus infection, and their families, and (4) improving provider capacity and capability.

[b]Puerto Rico State Plan Amendment PR-001 (2015): https://www.medicaid.gov/State-resource-center/Medicaid-State-Plan-Amendments/Downloads/PR/PR-15-001.pdf.