

# Review of Publicly Available State Reimbursement Policies for Removal and Reinsertion of Long-Acting Reversible Contraception

Ekwutosi M Okoroh<sup>1</sup>, Charlan D Kroelinger<sup>1</sup>, Olivia R Sappenfield<sup>2</sup>, Julia F Howland<sup>2</sup>, Lisa M Romero<sup>1</sup>, Keriann Uesugi<sup>2</sup>, Shanna Cox<sup>1</sup>

<sup>1</sup>Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, Atlanta, GA, USA; <sup>2</sup>Division of Epidemiology and Biostatistics, School of Public Health, University of Illinois at Chicago, Chicago, IL, USA

Correspondence: Charlan D Kroelinger, Chief, Maternal and Infant Health Branch, Division of Reproductive Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention, 4770 Buford Hwy, NE, MS S107-2, Atlanta, GA, 30341, USA, Tel +1 (770) 488-6545, Email ckroelinger@cdc.gov

**Purpose:** We examined reimbursement policies for the removal and reinsertion of long-acting reversible contraception (LARC).

**Patients and Methods:** We conducted a standardized, web-based review of publicly available state policies for language on reimbursement of LARC removal and reinsertion. We also summarized policy language on barriers to reimbursement for LARC removal and reinsertion.

**Results:** Twenty-six (52%) of the 50 states had publicly available policies that addressed reimbursement for LARC removal. Of these 26 states, 14 (28%) included language on reimbursement for LARC reinsertion. Eleven (42%) of 26 states included language on additional requirements for reimbursement for removal and/or reinsertion: five state policies included language with other requirements for removal only, three policies included language with additional requirements for reinsertion only, and three included language with additional requirements for both. Three state policies specified no restrictions be placed on reimbursement for removal and one specified no restrictions be placed on reimbursement for reinsertion.

**Conclusion:** Half of the states in the US do not have publicly available policies on reimbursement for the removal and reinsertion of LARC devices. Inclusion of unrestricted access to these services is important for contraceptive choice and reproductive autonomy.

**Plain Language Summary:** This review was done to understand how state policies reimburse providers who remove and then may reinsert a woman's long-acting, reversible contraception (LARC) device. In this policy review, we found that more than half of all states reimburse providers for removing a LARC device. Of those states, half reimburse providers for reinserting a LARC device if a woman chooses it. Some states also identify reasons why state policies may or may not reimburse for LARC device removal or reinsertion. If women do not have the option to remove a LARC, they may not choose it, and this affects how they decide on the options to prevent a pregnancy.

**Keywords:** contraception policy, LARC reimbursement, LARC removal, LARC reinsertion

## Introduction

Reproductive autonomy includes the right to decide and control contraceptive use.<sup>1,2</sup> Long-acting reversible contraception (LARC) methods (ie defined as intrauterine devices (IUD) and contraceptive implants) are safe, highly effective, and satisfactory options available to women who have been appropriately counseled.<sup>3</sup> Yet, multiple barriers to utilization have been identified<sup>4-6</sup> including hesitation from providers on "early" LARC removal,<sup>7-9</sup> delay in placement,<sup>10</sup> and variations in available individual health coverage.<sup>11,12</sup> LARC removal may also be impacted by restrictive state policies, which can limit the number of devices allowable per patient per year or may require a number of years between insertion

and removal.<sup>13</sup> Restrictive state policies can impact availability of the full range of contraceptive options, particularly for women who reside in underserved communities,<sup>14</sup> affecting access, autonomy, and patient contraceptive choice.<sup>15</sup>

As of September 2010, the Affordable Care Act (ACA) requires many insurance plans to provide in-network coverage without cost sharing of certain clinical preventive services including all FDA-approved contraceptive methods.<sup>16</sup> However, additional requirements for reimbursement of services in individual state-level policies exist. For instance, health plans or issuers of plans may use reasonable medical management techniques to control cost by imposing cost sharing when equivalent branded drugs are used.<sup>16</sup> Barriers to LARC removal and reinsertion access may also occur when requirements for prior authorization, step therapy, approval for medically necessary procedures,<sup>9</sup> or other non-medical reasons<sup>11</sup> are imposed. Therefore, it is important to understand how reimbursement policies for LARC devices vary, specifically for removal and reinsertion, as policies may affect health service delivery at the population level. This review summarizes language in state-level reimbursement policies on LARC removal and reinsertion, and language on reimbursement requirements. Understanding reimbursement language offers further insight into logistical and administrative barriers at the provider level that impacts contraceptive options and availability for patients.

## Materials and Methods

Study authors conducted a systematic, web-based review of publicly available state-level documents from October 2017 to May 2018. Detailed search terms, data abstraction process, and methodology are described elsewhere.<sup>17,18</sup> Briefly, we developed a standardized search strategy and algorithm to identify reimbursement policies within each state using web-based search engines like google or bing (Table 1). Two abstractors independently reviewed policies identified for half of the United States then validated the other abstractor's identified

**Table 1** Summary of Standardized Algorithm Used for Data Collection and Abstraction of All Long-Acting Reversible Contraception Policies, 2017–2018<sup>a</sup>

Individual Search Terms <sup>b</sup>
<state> AND <department of public health> AND (LARC OR IUD OR IMPLANT)
<state>, <department of public health>, (LARC OR IUD OR IMPLANT)
<state> AND (medicaid OR (title x)) AND (LARC OR IUD OR IMPLANT)
<state>, (medicaid OR (title x)), (LARC OR IUD OR IMPLANT)
<state> AND ((CMCS waiver) OR (family planning waiver) OR (1115 waiver)) AND (LARC OR IUD OR IMPLANT)
<state>, ((CMCS waiver) OR (family planning waiver) OR (1115 waiver)), (LARC OR IUD OR IMPLANT)
<state> AND ((community health center) OR (rural health center)) AND (LARC OR IUD OR IMPLANT)
<state>, ((community health center) OR (rural health center)), (LARC OR IUD OR IMPLANT)
<state> AND ((federally qualified health center) OR FQHC) AND (LARC OR IUD OR IMPLANT)
<state>, ((federally qualified health center) OR FQHC), (LARC OR IUD OR IMPLANT)
<state> AND ((health insurance exchange) OR regulatory agency) AND (LARC OR IUD OR IMPLANT)
<state>, ((health insurance exchange) OR (regulatory agency)), (LARC OR IUD OR IMPLANT)
<state> AND (Federal health exchange) AND (LARC OR IUD OR IMPLANT)
<state>, (Federal health exchange), (LARC OR IUD OR IMPLANT)
<state> AND ACOG AND (LARC OR IUD OR implant) <sup>c</sup>
<state>, ACOG, (LARC OR IUD OR implant)

(Continued)

Table 1 (Continued).

Individual Search Terms <sup>b</sup>
<state> AND AWHONN AND (LARC OR IUD OR implant)
<state>, AWHONN, (LARC OR IUD OR implant)
<state> AND AAP AND (LARC OR IUD OR implant)
<state>, AAP, (LARC OR IUD OR implant)
<state> AND AAFP AND (LARC OR IUD OR implant)
<state>, AAFP, (LARC OR IUD OR implant)
<state> AND <PQC> AND (LARC OR IUD OR implant)
<state>, <PQC>, (LARC OR IUD OR implant)
<state> AND <Private Insurer> AND (LARC OR IUD OR implant)
<state>, <Private Insurer>, (LARC OR IUD OR implant)
<state> AND <state coalition/foundation> AND (LARC OR IUD OR implant)
<state>, <state coalition/foundation>, (LARC OR IUD OR implant)
<state> AND NFPRHA AND (LARC OR IUD OR implant)
<state>, NFPRHA, (LARC OR IUD OR implant)
<state> AND (National Family Planning Training) AND (LARC OR IUD OR implant)
<state>, (National Family Planning Training), (LARC OR IUD OR implant)
<state> AND Guttmacher AND (LARC OR IUD OR implant)
<state>, Guttmacher, (LARC OR IUD OR implant)
<state> AND (KFF OR (Kaiser Family Foundation)) AND (LARC OR IUD OR implant)
<state>, (KFF OR (Kaiser Family Foundation)), (LARC OR IUD OR implant)
<state> AND NARAL AND (LARC OR IUD OR implant)
<state>, NARAL, (LARC OR IUD OR implant)
<state> AND (paragard OR mirena OR skyla OR liletta)
<state>, (paragard OR mirena OR skyla OR liletta)

**Notes:** <sup>a</sup>Previously published in, Kroelinger, Charlan D., Ekwutosi M. Okoroh, Keriann Uesugi, Lisa M. Romero, Olivia R. Sappenfield, Julia F. Howland, and Shanna Cox. Immediate Postpartum Long-Acting Reversible Contraception: Review of Insertion and Device Reimbursement Policies. *Women's Health Issues*. 2021; 31.6:523–531. <sup>b</sup>The individual "State" name and abbreviation/s were included in subsequent searches and variations of search phrases were subsequently searched including acronyms, abbreviations, singular and plural terms, and common misspellings. <sup>c</sup>Professional membership and independent research organizations were added to search terms as these organizations routinely develop guidelines, guidances, and policies for clinical and non-clinical members, or routinely conduct individual policy review of contraception use and access.

policies. Study authors then further validated identified policies by randomly selecting nine states and contacting the state health departments to verify the policies identified.

We grouped reimbursement policies (eg, Medicaid Bulletin, Family Planning Waiver, State Plan Amendment) authored by the state or an entity with authority to create billing policies, as "State issued". We used the term "Health Plan", to categorize policies (eg, Provider Manual and Insurance Manual) authored from a health plan with authority from the state to bill for services. Study authors developed a database of policies including relevant excerpts for further review and analysis.

When developing the definition of state-based reimbursement policies for LARC removal or reinsertion, study authors reviewed language in all documents that referred to or detailed reimbursement for LARC. If the word “removal” or “reinsertion” was included in the policy language or if the policy contained International Classification of Diseases codes (eg, Z30.46, Z30.433) or Current Procedural Terminology (eg, 11982, 11983, 58301) representing removal or reinsertion of a LARC device or Healthcare Common Procedure Coding System codes (eg, J7296, J7297, J7300, J7307),<sup>19</sup> the state was categorized as having reimbursement policies for LARC removal or reinsertion. Likewise, a state was categorized as having reimbursement language for reinsertion if the language included words such as “replacement” “maintain” and/or “re-implanted” when describing LARC services or reimbursement policies.

We categorized reimbursement requirements for removal or reinsertion into “not specified” if policies did not specify reimbursement requirements for LARC removal or reinsertion, “no restriction for provision of services” if the language prohibited limitations on removal or reinsertion services, and “specified” if specific requirements were mentioned. Among policies with specific language, we categorized requirements into the following groupings: *Coverage-related requirements*—represented policy language that limits reimbursement to preferred in-network providers or by other stipulations in the members’ benefit. *Step-therapy related requirements*—allowed for reimbursement only after a therapeutic equivalency device has been used. *Time-related requirements*—limited reimbursement to mandated periods of effectiveness (e.g., 3 years), or required minimum time allotment prior to a devices removal or reinsertion (eg, 6 months). *Diagnosis-related requirements*—limited reimbursement to when the removal or reinsertion was needed secondary to the presence of a medical condition (eg, bleeding issues, infection) or when the patient was treated for an unrelated diagnosis or for a visit not coded as a family planning visit. Lastly, *same-day related requirements*—represented language that limits reimbursement to same day visits.

We used descriptive statistics such as counts and percentages to analyze the abstracted information. At least one policy was identified per state, though not all health plans may have been publicly available. This study was determined to be public health practice and, therefore, did not require Institutional Review Board approval at the Centers for Disease Control and Prevention or the University of Illinois at Chicago.

Results

Twenty-six (52%) of the 50 states had publicly available policies that addressed reimbursement for LARC removal or reinsertion (Table 2). Eighteen of 26 states (69%) had publicly available reimbursement policies, and 14 of 26 (54%) had policies with language for billing of services.

**Table 2** Publicly Available Reimbursement Policies on LARC Removal or Reinsertion by Policy Type and Source for All States, 2017–2018. (N=50)

States	Policy Characteristics			
	Publicly Available Policy <sup>a</sup>	Policy Types		Policy Source
		State Issued <sup>b</sup>	Health plan <sup>c</sup>	
Alabama	Yes	Yes	Yes	Medicaid Guidance & Health Plan Benefit Guide
Alaska	—	—	—	—
Arizona	—	—	—	—
Arkansas	Yes	Not available <sup>d</sup>	Yes	Health Plan Benefit Guide
California	Yes	Not available	Yes	Health Plan Benefit Guide
Colorado	—	—	—	—
Connecticut	—	—	—	—

(Continued)

Table 2 (Continued).

States	Policy Characteristics			
	Publicly Available Policy <sup>a</sup>	Policy Types		Policy Source
		State Issued <sup>b</sup>	Health plan <sup>c</sup>	
Delaware	—	—	—	—
Florida	—	—	—	—
Georgia	—	—	—	—
Hawaii	Yes	Not available	Yes	Health Plan Benefit Guide
Idaho	Yes	Yes	Not available	Medicaid Guidance
Illinois	Yes	Yes	Yes	Statutory Provision & Health Plan Benefit Guide
Indiana	—	—	—	—
Iowa	—	—	—	—
Kansas	Yes	Yes	Yes	State Plan Amendment & Health Plan Benefit Guide
Kentucky	Yes	Not available	Yes	Health Plan Benefit Guide
Louisiana	—	—	—	—
Maine	Yes	Yes	Not available	Medicaid Guidance
Maryland	—	—	—	—
Massachusetts	Yes	Yes	Not available	Medicaid Guidance
Michigan	—	—	—	—
Minnesota	Yes	Not available	Yes	Health Plan Benefit Guide
Mississippi	—	—	—	—
Missouri	Yes	Yes	Not available	Medicaid Guidance
Montana	Yes	Yes	Not available	Medicaid Guidance
Nebraska	Yes	Yes	Not available	Medicaid Guidance & Title X
Nevada	Yes	Yes	Not available	Medicaid Guidance
New Hampshire	Yes	Yes	Not available	Medicaid Guidance
New Jersey	Yes	Not available	Yes	Health Plan Benefit Guide
New Mexico	Yes	Yes	Not available	Medicaid Guidance
New York	—	—	—	—
North Carolina	Yes	Yes	Yes	Statutory Provision & Health Plan Benefit Guide
North Dakota	Yes	Yes	Not available	Medicaid Guidance
Ohio	—	—	—	—
Oklahoma	Yes	Yes	Not available	State Plan Amendment
Oregon	—	—	—	—
Pennsylvania	—	—	—	—

(Continued)

**Table 2** (Continued).

States	Policy Characteristics			
	Publicly Available Policy <sup>a</sup>	Policy Types		Policy Source
		State Issued <sup>b</sup>	Health plan <sup>c</sup>	
Rhode Island	—	—	—	—
South Carolina	—	—	—	—
South Dakota	Yes	Yes	Not available	Medicaid Guidance
Tennessee	—	—	—	—
Texas	—	—	—	—
Utah	Yes	Not available	Yes	Health Plan Benefit Guide
Vermont	—	—	—	—
Virginia	—	—	—	—
Washington	Yes	Yes	Yes	Medicaid Guidance & Health Plan Benefit Guide
West Virginia	Yes	Not available	Yes	Health Plan Benefit Guide
Wisconsin	Yes	Yes	Yes	Statutory Provision & Health Plan Benefit Guide
Wyoming	—	—	—	—

**Notes:** LARC, Long-acting reversible contraception. <sup>a</sup>The dashes in these columns represent states that **did not** have a publicly available policy. <sup>b</sup>State issued policy type represents reimbursement policies authored by the state or an entity with authority to create billing policies such as Medicaid, a Statute, or a State Plan Amendment. <sup>c</sup>Health plan policy type represents reimbursement policies authored by a health plan, with authority from the state, to bill for services within the state. <sup>d</sup>“Not available” represents policies that did not specify a statewide or a health plan policy type.

All 26 states (100%) included language on reimbursement for removal in policies (Table 3 and Figure 1a). Of those states, 15 state policies (58%) did not specify any additional requirements for removal, and an additional three states included language in policy that specified no restrictions for provision of services be placed on reimbursement. Two states included language on coverage-related requirements, two on diagnosis-related requirements, two had time-related requirements, two had step-therapy related requirements, and one had a same-day related requirement (Table 3).

**Table 3** Summary of Reimbursement Policies and Requirements on LARC Removal or Reinsertion Among States with Publicly Available Policies, 2017–2018 (N=26)

State with Publicly Available Policies	Reimbursement Policy for LARC Removal	Requirement for Reimbursing LARC Removal <sup>a</sup>	Reimbursement Policy for LARC Reinsertion	Requirement for Reimbursing LARC Reinsertion
Alabama	Yes	Not specified	— <sup>b</sup>	—
Arkansas	Yes	Not specified	—	—
California	Yes	Coverage-related requirements; and Step-therapy related requirements	—	—
Hawaii	Yes	Time-related requirements	—	—

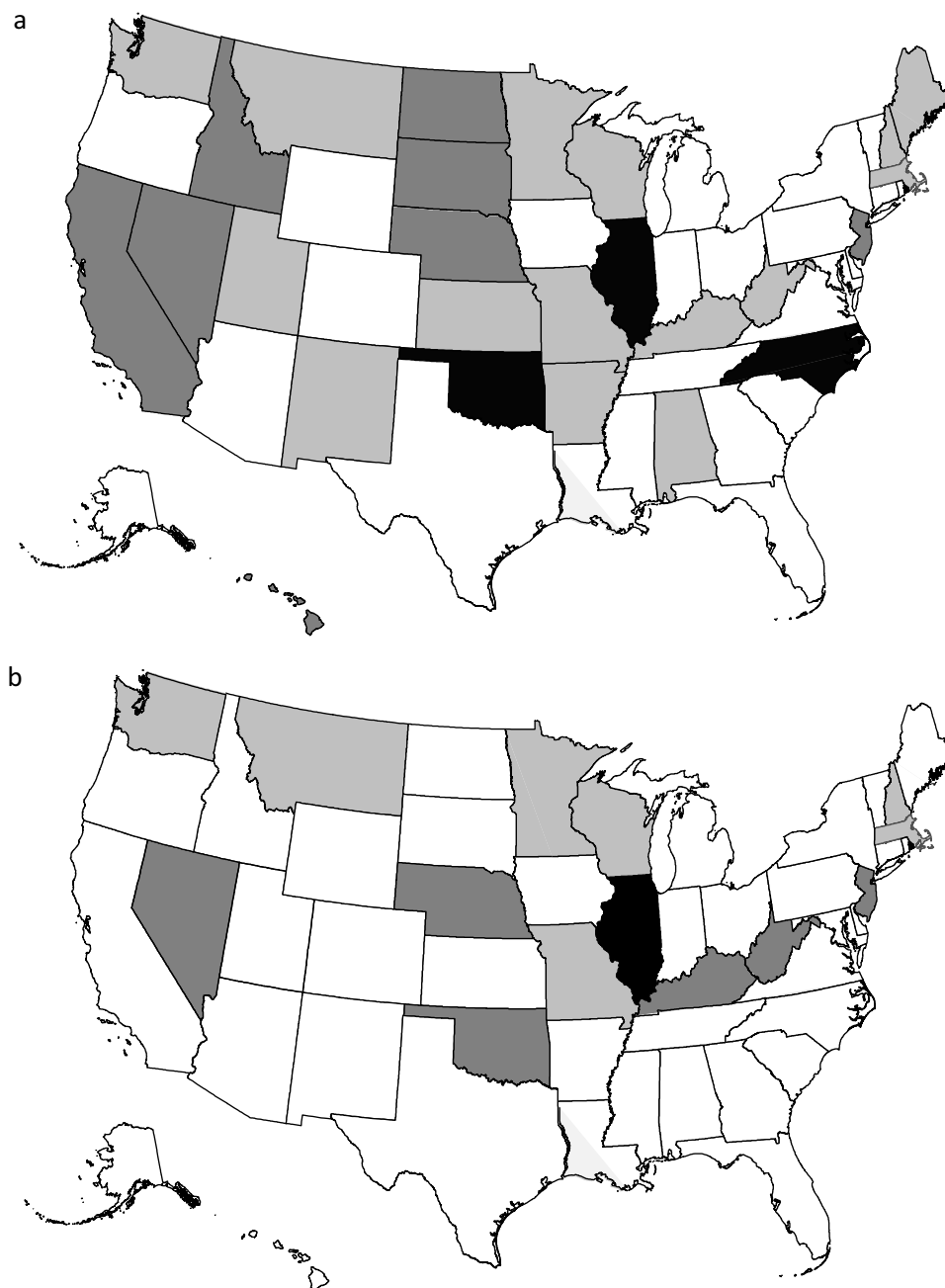
(Continued)

Table 3 (Continued).

State with Publicly Available Policies	Reimbursement Policy for LARC Removal	Requirement for Reimbursing LARC Removal <sup>a</sup>	Reimbursement Policy for LARC Reinsertion	Requirement for Reimbursing LARC Reinsertion
Idaho	Yes	Diagnosis-related requirements	—	—
Illinois	Yes	No restriction for provision of services	Yes	No restriction for provision of services
Kansas	Yes	Not specified	—	—
Kentucky	Yes	Not specified	Yes	Time-related requirements
Maine	Yes	Not specified	—	—
Massachusetts	Yes	Not specified	Yes	Not specified
Minnesota	Yes	Not specified	Yes	Not specified
Missouri	Yes	Not specified	Yes	Not specified
Montana	Yes	Not specified	Yes	Not specified
Nebraska	Yes	Same-day related requirements	Yes	Same-day related requirements
Nevada	Yes	Step-therapy related requirements	Yes	Step-therapy related requirements
New Hampshire	Yes	Not specified	Yes	Not specified
New Jersey	Yes	Coverage-related requirements	Yes	Coverage-related requirements
New Mexico	Yes	Not specified	—	—
North Carolina	Yes	No restriction for provision of services	—	—
North Dakota	Yes	Diagnosis-related requirements	—	—
Oklahoma	Yes	No restriction for provision of services	Yes	Time-related requirements
South Dakota	Yes	Time-related requirements	—	—
Utah	Yes	Not specified	—	—
Washington	Yes	Not specified	Yes	Not specified
West Virginia	Yes	Not specified	Yes	Time-related requirements
Wisconsin	Yes	Not specified	Yes	Not specified

**Notes:** LARC, Long-acting reversible contraception. <sup>a</sup>*Not specified* represents policies that did not specify reimbursement requirements for LARC removal or reinsertion. *Coverage-related requirements* represent policy language that limits the reimbursement of LARC removal or reinsertion to preferred in-network providers or by other stipulations in the members' benefit coverage. *Step-therapy related requirements* represent policy language that allows for removal or reinsertion of LARC reimbursement only after a therapeutic equivalency device has been used. *Time-related requirements* represent policy language that limits the reimbursement of LARC removal or reinsertion to mandated periods of effectiveness (eg, 3 years), or requires minimum time allotment prior to a device's removal or reinsertion (eg, 6 months). *Diagnosis-related requirements* represent policy language that limits the reimbursement of LARC removal or reinsertion to when the removal or reinsertion was needed secondary to the presence of a medical condition (eg, bleeding issues, infection) or when the patient was treated for an unrelated diagnosis or for a visit not coded as a family planning visit. *Same-day related requirements* represent policy language that limits reimbursement and no cost sharing for the removal or reinsertion of LARC, to same day visits. *No restriction for provision of services* represents policies where the provided language specifically prohibits restrictions on removal or reinsertion services. <sup>b</sup>The dashes in these columns represent policies that **did not** include language on reinsertion or its reimbursement.

While all 26 states included language in policies that addressed reimbursement for LARC removal, only 14 policies (28%) included language to address reinsertion (Table 3 and Figure 1b). Seven of 14 policies (50%) did not specify any additional requirements, and one additional policy included language that specified no restrictions for provision of services be placed on reimbursement for reinsertion. One state included policy language on coverage-related



**Figure 1 (a and b).** Map of States with Reimbursement Language in Policies for Long-Acting Reversible Contraception (LARC) Removal and Reinsertion, United States 2017–2018 Legend (a) White represents states with no reimbursement language included in policy for removal of Long-Acting Reversible Contraception (LARC). Light grey represents states with reimbursement language included in policy for removal of LARC and no specified additional requirements. Dark grey represents states with reimbursement language included in policy for removal of LARC and additional requirements (ie, coverage-related requirements, step-therapy related requirements, time-related requirements, diagnosis-related requirements, and same-day related requirements). Black represents states with reimbursement language included in policy and additional language that specifies no restrictions for provision of services for LARC removal. Legend (b) White represents states with no reimbursement language included in policy for reinsertion of Long-Acting Reversible Contraception (LARC). Light grey represents states with reimbursement language included in policy for reinsertion of LARC and no specified additional requirements. Dark grey represents states with reimbursement language included in policy for reinsertion of LARC and additional requirements (ie, coverage-related requirements, step-therapy related requirements, time-related requirements, and same-day related requirements). Black represents a state with reimbursement language included in policy and additional language that specifies no restrictions for provision of services for LARC reinsertion.



requirements, three on time-related requirements, one had step-therapy related requirements, and one had same-day related requirements (Table 3).

In total, 11 states included language on additional requirements for removal or reinsertion of LARC. The most common type of reimbursement requirement language was time-related (n=5), and the least common was same-day related requirements (n=1; Table 3).

## Discussion

We found that more than a quarter of states had policy language on reimbursement for LARC removal, while fewer addressed reimbursement for reinsertion. Only three states had policy language specifying no reimbursement restrictions for provision of services, aligning with clinical membership organization guidance.<sup>20,21</sup> Most states with a publicly available reimbursement policy for LARC removal or reinsertion were Medicaid policies, with few state Health Plan policies publicly available for review. The public availability of more Medicaid policies likely reflects the efforts undertaken by the Centers for Medicare and Medicaid Services (CMS)/Center for Medicaid and Children's Health Insurance Program Services (CMCS) who, in 2014, launched the Maternal and Infant Health Initiative with the primary goal of increasing access and use of effective contraceptives including LARC.<sup>22</sup> The CMS/CMCS also released the state Medicaid payment approaches to improve access to LARC Bulletin that provides specific guidance for coverage of LARC removal.<sup>22</sup> Language on additional requirements in some state policies included in this review may not align with this guidance.

Additional requirements included in policy language can impact LARC uptake and create barriers to care. Our findings identify language on requirements related to coverage, diagnosis, time, step-therapy, and same-day authorization. Barriers identified in reviewed policies include policy language that limits the reimbursement of LARC removal or reinsertion to preferred in-network providers or by other stipulations in the members' benefit coverage (coverage-related), and language that allows for removal or reinsertion of LARC reimbursement only after a therapeutic equivalency device has been used (step-therapy). Additional barriers identified in policy include language that limits the reimbursement of LARC removal or reinsertion to mandated periods of effectiveness (eg, 3 years), or requires minimum time allotment prior to a device's removal or reinsertion (eg, 6 months; time-related) and language that limits the reimbursement of LARC removal or reinsertion to when the removal or reinsertion was needed secondary to the presence of a medical condition (eg, bleeding issues, infection) or when the patient was treated for an unrelated diagnosis or for a visit not coded as a family planning visit (diagnosis-related). Finally, same-day related requirements represent policy language that limits reimbursement for providers for the removal or reinsertion of LARC at same day visits, contrary to quick start guidance.<sup>23,24</sup> Though many policy studies focus on the barriers to obtaining LARC,<sup>17,18</sup> few if any, focus on the barriers to removal of devices.<sup>13</sup>

One potential reason for requirements for reimbursement could be concerns that "early" removal would be costly.<sup>25,26</sup> However, LARC devices are cost neutral as early as three months post insertion, prior to full duration of effectiveness, when compared with short-acting reversible contraception options (ie, patches, rings, oral contraceptive pills and injections) or no method use at all.<sup>27</sup> This finding of cost neutrality is still present even when the cost implications of removing the device before the end of its effective date is included.<sup>27</sup>

Our findings of state-level variation in LARC removal and reinsertion reimbursement policies is consistent with existing literature demonstrating variation in LARC access policies.<sup>9,11,17,18,28,29</sup> Specific reimbursement practices may present barriers for LARC removal or reinsertion. For women in states with policies that include reimbursement requirements, such as diagnosis and time-related requirements, preferences for LARC maybe impacted if women lack assurance that removal will be covered.<sup>9,30</sup> Moreover, access to LARC removal or reinsertion without restrictions is vitally important, particularly for populations who have experienced restraint of reproductive autonomy (eg, American Indian/Alaskan Native people, Black people, people with disabilities, people experiencing poverty and people who are incarcerated or detained),<sup>31–37</sup> or may be disproportionately affected by social determinants of health.<sup>38</sup> States could review language in reimbursement policies and consider impacts of additional requirements on underserved or disproportionately impacted populations including patient contraceptive choice and autonomy.

Recognizing these concerns, national clinical organizations encourage patient-centered counseling based on individual patient contraceptive preferences, needs, and values, thus ensuring that patient values guide all clinical decisions.<sup>39</sup>

Similarly, the American College of Obstetricians and Gynecologists recommends a reproductive justice framework be employed during contraceptive counseling which entails shared decision-making with the patient and provision of information on the benefits and risks of all contraceptive methods with the avoidance of potential coercion.<sup>40</sup> Recently, a multidisciplinary group of experts developed a Reproductive and Sexual Health Equity framework; a key principle is the concept of honoring bodily autonomy, emphasizing ongoing difficulties women have accessing LARC removal.<sup>41</sup> For example, a study of community health centers concluded that providers can normalize LARC removal and switching of methods to improve equitable access to the full range of contraceptives among all women regardless of race, ethnicity, age, or income.<sup>42</sup> Results from this study indicate that removal of LARC for another contraceptive method was highest among younger Hispanic and Black women and women experiencing poverty compared with non-Hispanic white women and those above 151% of the federal poverty level.<sup>42</sup>

Several limitations exist in interpreting our findings. First, we did not contact all states to verify their reimbursement policies on removal or reinsertion of LARC. Second, we only included publicly available policies, potentially missing any new, non-publicly available or unpublished policies. Third, while our reviewed focused on reimbursement policies and its effect on LARC access, numerous other barriers such as lack of provider knowledge,<sup>43</sup> blocked time for provider training,<sup>44</sup> credentialing or limited scope of practice gaps among other specialties,<sup>45</sup> and myths and misinformation from patients<sup>40</sup> may contribute to the ability of women to access LARC removal and/or reinsertion. Fourth, since the data collection timeframe, some state policies may have been reviewed or amended, potentially affecting our categorization of policy language. However, amendment of state policies may require multiple annual policy cycles depending on whether the policy is a law, regulation, standard, or protocol.<sup>20</sup> Future research could update this policy review and compare LARC uptake in states with language on additional requirements to states with no additional requirements.

Given that reimbursement policies can influence service delivery,<sup>13</sup> review of language may identify administrative, financial, or medical barriers to reimbursement for LARC removal or reinsertion.<sup>9,37,46</sup> For example, states could consider including reimbursement language that allows providers to bill per-service rather than per-visit, allowing insertion, removal, or reinsertion of a LARC during a single clinical encounter,<sup>47</sup> if desired by the woman.

Additional to language review in reimbursement policies, improving training of family medicine<sup>44</sup> or primary care residents<sup>45</sup> on insertion and removal while addressing scope of practice issues among these other medical specialties, can increase timely patient access to LARC and LARC removal.

## Conclusion

LARC removal and reinsertion are important aspects of contraception access, and our study findings indicate that only 52% of states include language in policy on reimbursement for removal and only 28% of states include language on reinsertion. Further, of those states with language included in policy, 42% include language outlining additional requirements. Reimbursement requirements may restrict contraceptive access. Removal of barriers to these services supports both the ability of providers to offer comprehensive contraceptive services and patient reproductive autonomy.

## Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

## Disclosure

All authors report no conflict of or competing financial interest.

The findings and conclusions of this report are those of the authors and do not represent the official position of the Centers for Disease Control and Prevention. This paper has been uploaded to Medrxiv as a preprint manuscript: <https://www.medrxiv.org/content/10.1101/2024.05.10.24307204v1>.

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