



# Limited health insurance coverage of injectable neurotoxins and fillers for gender affirmation: a cross-sectional study of Affordable Care Act silver and Medicaid plans

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#### **ABSTRACT**

**Background:** Injectable neurotoxins and fillers are potential options for facial gender affirmation for transgender/nonbinary patients. However, the largest barrier to access is cost/insurance coverage.

**Objective:** The purpose of this article is to assess the extent to which Affordable Care Act (ACA) silver plans and Medicaid policies cover gender-affirming injectable neurotoxin and filler procedures.

**Methods:** A cross-sectional study of all ACA silver plans and Medicaid policies was performed from June 22 to August 15, 2021. Plan-specific certificates of coverage, clinical policies of insurance providers, and Medicaid documents were evaluated.

**Results:** A total of 915 plans were reviewed (864 ACA silver plans and all 51 Medicaid policies). None potentially covered neurotoxins. Only 72 (71 ACA and 1 Medicaid) potentially covered fillers, specifically collagen injections and lipofilling. Coverage required demonstration of medical necessity or significant variation of physical appearance from the patient's experienced gender. However, of the 71 ACA plans, 69 outlined cosmetic exclusions, possibly nullifying this coverage.

**Limitations:** Data were sourced from publicly available online information in 2021. Additionally, we were unable to confirm explicit coverage of these procedures with insurance companies.

**Conclusion:** The majority of ACA silver and Medicaid plans did not cover gender-affirming neurotoxin or filler procedures, limiting access to this gender-affirming care.

Keywords: filler, gender-affirmation, insurance, LGBTQ, neurotoxin, transgender

# Introduction

All major health organizations have endorsed gender-affirming care as medically necessary, including the World Professional Association for Transgender Health, which sets standards of care for transgender patients. Likewise, the American Academy of Dermatology recognizes that gender-affirming procedures are not "cosmetic" and supports evidence-based coverage of such procedures by private and public health insurance companies. <sup>2</sup>

Among gender-affirming procedures, facial contouring is highly prioritized by many transgender patients, in some cases more so than genital surgeries.<sup>3</sup> While recommendations by the World Professional Association for Transgender Health for insurance coverage of gender-affirming facial contouring

are currently limited to surgical techniques, some transgender patients may opt for less invasive methods, such as injectable

# What is known about this subject in regard to women and their families?

- Among gender-affirming procedures, facial contouring is highly prioritized by many transgender patients, including transgender women.
- Injectable neurotoxins and dermal fillers can be used to achieve a more feminine or masculine facial appearance and may be options for transgender women who seek minimally invasive procedures for gender affirmation.
- As cost remains one of the most significant barriers to these gender-affirming facial procedures, coverage by health insurance plays a critical role in improving their accessibility.

# What is new in this article as messages for women and their families?

- Most Affordable Care Act silver plans and Medicaid policies in 2021 did not explicitly cover injectable neurotoxin or dermal filler procedures for genderaffirming care.
- As such, access to minimally invasive gender-affirming facial procedures appears to be restrictive for transgender patients, including transgender women, who are unable to afford more comprehensive insurance plans or out-of-pocket expenses.

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neurotoxins and fillers.<sup>5</sup> Injected neurotoxins can feminize facial features, including the forehead, eyebrows, and periorbital skin, and injections into the masseter muscle can soften the jawline to create a more feminine contour.<sup>3,5</sup> Injectable fillers can augment the lip, cheeks, and chin to achieve a more feminine or masculine appearance.<sup>3,5</sup>

Despite these potential indications, there remains a paucity of research and guidelines regarding the use of neurotoxins and fillers for gender affirmation. Some data suggest that they significantly improve quality of life for transgender patients and are ideal for those seeking nonpermanent changes or those who are not surgical candidates.<sup>3</sup> However, these procedures remain cost-prohibitive for many patients.<sup>3,6</sup> Limited access may not only negatively affect patients' mental health but can also lead to devastating physical health outcomes. For instance, there are reports of patients, particularly those facing socioeconomic or political barriers to gender-affirming care, resorting to unlicensed providers and injection of nonmedical grade substances, including unsafe filler materials, to relieve gender dysphoria.<sup>7,8</sup> The consequences include chronic, debilitating, and life-threatening conditions, such as infection, scarring, inflammatory reactions, and embolization.<sup>7,8</sup>

As cost remains a significant barrier to safe gender-affirming facial procedures,<sup>3</sup> coverage by health insurance plays a critical role in improving their accessibility and health outcomes.<sup>9</sup> Although research supports the cost-effectiveness,<sup>10</sup> efficacy, and medical necessity of gender-affirming treatments,<sup>4</sup> coverage of certain aspects of gender-affirming care remains limited.<sup>3,11</sup> Importantly, to our knowledge, no studies have assessed coverage of minimally invasive injectable neurotoxin and filler procedures. We evaluated such coverage by Affordable Care Act (ACA) silver and state-based Medicaid plans.<sup>11</sup>

#### **Materials and methods**

This study did not require approval by the institutional review board. The methods were based upon those used by Thoreson et al.<sup>11</sup> and utilized publicly available information.

## **ACA** plans

As silver plans are the most commonly selected ACA plans, <sup>12,13</sup> we reviewed the certificate of coverage for all silver plans from June 22 to August 15, 2021. The certificate of coverage outlines a specific plan's covered benefits, including medical services. Each certificate of coverage was found on the Out2Enroll website and assessed for coverage of gender-affirming injectable neurotoxin and filler procedures. <sup>14</sup>

Additionally, if available online, we reviewed the plan's clinical policy as put forth by the insurance provider. Also referred to as clinical policy bulletins or clinical guidelines, these policies provide overarching guidelines for coverage decisions made by insurance companies. If the certificate of coverage for a specific plan conflicted with the clinical policy, we defaulted to information in the certificate of coverage, as it contained information more specific to a particular plan. <sup>11</sup> For example, if a certificate of coverage excluded gender-affirming care, we categorized the plan as broadly excluding gender-affirming care, even if the clinical policy indicated coverage.

When the certificate of coverage and clinical policy did not conflict, we relied on the clinical policy for categorization, given that it typically contained a specific list of covered procedures not available in the certificate of coverage. For example, certificates of coverage may not specifically mention or broadly endorse coverage of gender-affirming care, but their corresponding clinical policies may list gender-affirming injectable fillers as a covered benefit. In these cases, if the clinical policy specified coverage of injectable fillers for medically necessary gender affirmation, we categorized the plan as potentially covering gender-affirming filler procedures.

## Medicaid plans

State-based Medicaid policies were found on the Movement Advancement Project website, a research-driven, nonprofit think tank compiling current Medicaid policies that cover gender-affirming treatments. Subsequently, governmental websites of states with coverage of gender-affirming care were searched for provider manuals or similar documentation containing further details on coverage.

## Search terms

When evaluating certificates of coverage and clinical policies, search terms included "gender," "sex," "dysphoria," "reassignment," "neurotoxin," "filler," "injection," "contour," and "augment."

## Categorization

Each ACA silver plan and Medicaid plan was categorized as follows:

- (1) Potential coverage of neurotoxins
- (2) Potential coverage of injectable fillers
- (3) No mention of neurotoxins
- (4) No mention of injectable fillers
- (5) Excludes coverage of neurotoxins
- (6) Excludes coverage of injectable fillers
- (7) Broadly excludes gender-affirming care

For categories 1 and 2, we used the term "potential coverage," as all plans offering coverage for these procedures required demonstration/documentation of medical necessity or significant variation of physical appearance from experienced gender. Included in the categories of "not mentioning" neurotoxins or fillers (categories 3 and 4, respectively) were plans indicating coverage of gender-affirming care on a case-by-case basis or plans potentially covering procedures that might utilize neurotoxins or fillers, such as "lip enhancement," "brow lift," or "facial contouring." Additionally, plans stating that the procedures "may" be considered cosmetic were presumed to exclude coverage (categories 5 and 6).

## Results

We reviewed 915 plans. The results are summarized in Table 1.

## **ACA** silver plans

We reviewed 864 silver plans from the 36 states participating in the ACA marketplace. We encountered 793 without broad exclusions for gender-affirming care. Of these, 226 (28.5%) did not have accessible clinical policies; therefore, the certificate of coverage was assessed in isolation.

Overall, 0 (0.0%) plans mentioned potential coverage of neurotoxins and 71 (8.2%) mentioned potential coverage of injectable fillers (Table 1, Fig. 1). Of the latter, 69 (97.2%) had certificate of coverage documents outlining cosmetic exclusions, potentially nullifying true coverage of injectable fillers. For example, plans did not cover alteration of facial/body features or cosmetic services, except to correct conditions resulting from an accident, injury, or congenital defect. Furthermore, plans listed only collagen injections and/or lipofilling as potentially covered procedures.

Among the 864 plans, 664 (76.9%) did not mention coverage of neurotoxins and 319 (36.9%) did not mention injectable fillers. Of note, 15 (1.7%) did not mention coverage of injectable neurotoxins or fillers but stated that they did not exclude coverage for cosmetic procedures; may provide coverage for facial contouring or lip enhancement; or would consider the

Table 1

# Coverage of gender-affirming injectable neurotoxins and dermal fillers by Affordable Care Act (ACA) silver and Medicaid plans in 2021

	Neurotoxins			Fillers		
	Affordable Act plans (silver)	Medicaid plans	Total	Affordable Act plans (silver)	Medicaid plans	Total
Potential coverage	0	0	0	71ª	1	72
No mention of coverage <sup>b</sup>	664	38	702	319	33	352
Excludes coverage	129	3	132	403	7	410
Broadly excludes gender-affirming care	71	10	81	71	10	81

A total of 915 plans were categorized as indicated.

<sup>a</sup>Of the 71 ACA silver plans with potential coverage of gender-affirming filler, 69 had certificate of coverage documents that outlined cosmetic exclusions, potentially nullifying actual coverage of injectable fillers.

"Of the plans not specifically mentioning coverage of neurotoxins or fillers, we found that 19 (15 ACA, 4 Medicaid) stated that they did not exclude coverage for cosmetic procedures, potentially provided coverage for facial contouring or lip enhancement, would consider the beautification and enhancement of features to exaggerate feminine or masculine traits on a case-by-case basis, covered gender-affirming treatments on a "case-by-case basis," or covered cosmetic procedures if "medically necessary."

enhancement of features to exaggerate feminine or masculine traits on a case-by-case basis.

A total of 129 (14.9%) plans excluded coverage of neurotoxins, 403 (46.6%) excluded injectable fillers, and 71 (8.2%) broadly excluded gender-affirming care.

## **Medicaid policies**

We reviewed 51 policies from the 50 states and District of Columbia. Overall, 0 (0.0%) plans mentioned potential coverage of neurotoxins and 1 (2.0%) mentioned potential coverage of injectable fillers (Table 1, Fig. 2). Additionally, 38 (74.5%) did not mention coverage of neurotoxins and 33 (64.7%) did not mention coverage of injectable fillers.

While not specifically mentioning neurotoxin or injectable filler procedures, 4 (7.8%) polices indicated that they may cover these procedures, as they covered gender-affirming treatments on a "case-by-case basis" or covered cosmetic procedures if "medically necessary."

A total of 3 (5.9%) plans excluded coverage of neurotoxins, 7 (13.7%) excluded coverage of injectable fillers, and 10 (19.6%) broadly excluded coverage of gender-affirming care. We found that the states with Medicaid exclusions of genderaffirming care offered ACA silver plans that provided coverage for gender-affirming procedures.

## **Discussion**

Gender-affirming facial procedures are often prioritized by transgender patients, more so than genital surgeries.<sup>3,15</sup> For some patients who have contraindications to invasive surgery or prefer nonpermanent procedures, minimally invasive injectable neurotoxins and fillers may be the preferred approach for facial feminization or masculinization.<sup>3,16</sup>

Given these observations, we investigated the extent to which the most widely selected ACA plans (silver) and all state-based Medicaid plans cover minimally invasive, gender-affirming facial procedures. Our study was cross-sectional.

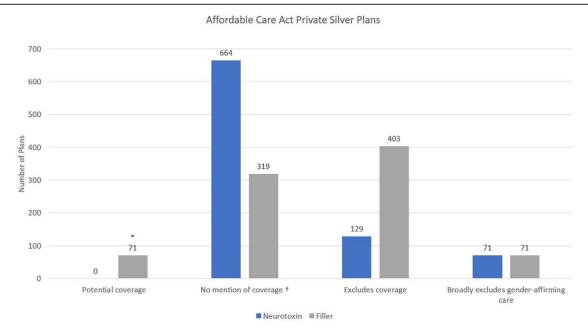


Fig. 1. Coverage of gender-affirming injectable neurotoxins and fillers by Affordable Care Act silver plans in 2021. A total of 864 plans were categorized as indicated, with neurotoxins indicated by the blue bars and fillers by the gray bars. \*Of these 71 plans, 69 had certificate of coverage documents that outlined cosmetic exclusions, potentially nullifying actual coverage of injectable fillers. †Of the 864 plans, 15 did not specifically mention coverage of injectable neurotoxins or fillers but stated that they did not exclude coverage for cosmetic procedures; may provide coverage for facial contouring or lip enhancement; or would consider the beautification and enhancement of features to exaggerate feminine or masculine traits on a case-by-case basis.

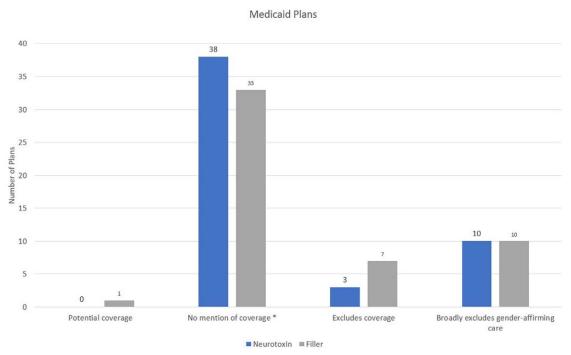


Fig. 2. Coverage of gender-affirming injectable neurotoxins and fillers by Medicaid plans in 2021. A total of 51 plans, including the 50 states and District of Columbia, were categorized as indicated, with neurotoxins indicated by the blue bars and fillers by the gray bars. \*Of the 51 plans, 4 did not specifically mention coverage of injectable neurotoxins or fillers but indicated that they may cover these procedures, as they covered gender-affirming treatments on a "case-by-case basis" or covered cosmetic procedures, if "medically necessary."

We observed that most ACA silver plans and Medicaid policies do not explicitly cover injectable neurotoxin or filler procedures for gender-affirming care. No plans mentioned potential coverage of neurotoxins, while only a small fraction mentioned potential coverage of injectable fillers. Notably, coverage required demonstration of medical necessity or significant variation of physical appearance from experienced gender. Additionally, plans listed only collagen injections and/or lipofilling (autologous fat transfer) as potentially covered benefits and did not list the most widely used injectable dermal filler, cross-linked hyaluronic acid.

Importantly, nearly all (97.2%) of the 71 silver plans that potentially covered injectable fillers had certificate of coverage documents outlining cosmetic exclusions, which we interpreted as potentially nullifying true coverage. These exclusions applied to coverage of any alteration of facial/body features or cosmetic services, aside from correcting conditions resulting from an accident, injury, or congenital defect.

Compared with silver plans, far fewer Medicaid policies potentially covered injectable fillers. In general, Medicaid plans had more restrictions on coverage of gender-affirming procedures, compared with ACA silver plans. Furthermore, states with Medicaid exclusions of gender-affirming care offered ACA silver plans that may provide coverage for gender affirmation. Together, these findings suggest that Medicaid patients have disparate or decreased access to gender-affirming care including injectable fillers, particularly if they are unable to afford private or ACA health care insurance in their state.

Finally, many ACA silver and Medicaid plans did not mention injectable neurotoxins or fillers for gender affirmation. This observation does not necessarily mean that the procedures are excluded but suggests that some insurance providers have not yet developed formal coverage policies for their use, which we anticipate will be needed in the future as patients continue seeking such gender-affirming procedures.

# **Limitations**

We sourced information from publicly available online information in 2021. We could not confirm explicit coverage, as most insurance companies would not answer our questions by phone. For this reason, and given the cosmetic exclusions outlined by certificates of coverage, we could only categorize plans as "potentially" covering neurotoxin or filler procedures. Finally, it is unclear whether our findings are applicable to bronze or gold ACA plans, or other nationally available private insurance plans.

## **Conclusions**

Dermatologists have an important role in providing injectable neurotoxin and filler procedures for gender affirmation. However, as these procedures are often cost-prohibitive, coverage by health insurance plays a critical role in improving their accessibility and associated physical and mental health outcomes.

We found that a large majority of ACA silver plans and Medicaid policies do not cover gender-affirming neurotoxin procedures. Silver plans offered more coverage of injectable fillers than Medicaid plans; however, general cosmetic exclusions likely limit true coverage of injectable fillers. As such, access to minimally invasive gender-affirming facial procedures appears to be restrictive for patients unable to afford more comprehensive insurance plans or out-of-pocket expenses.

Further research into the outcomes of injectable neurotoxins and fillers for gender affirmation may lead to expansion of coverage of these procedures, particularly if there are more data supporting their medical necessity. To be successful, these efforts must include the collaboration of transgender and gender-diverse populations, clinicians, policymakers, and insurers.

## **Conflicts of interest**

None.

## **Funding**

None.

# Study approval

N/A

## **Author contributions**

KR: Participated in research design, writing of the paper, performance of the research, and data analysis. DS: Participated in supervision of writing, and review and editing of the manuscript. JO: Participated in supervision of writing, and review and editing of the manuscript. FW: Participated in research design, writing of the paper, and performance of the research.

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