

# Trend of Increase in the Use of Hormonal Intrauterine Devices in Women From a Health Insurance Company in Brazil: What is the Explanation?

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## INTRODUCTION

Long-acting reversible contraception (LARC), including intrauterine devices (IUDs) and the etonogestrel implant, are some of the most effective contraceptive methods. In mandatory coverage by health insurers for family planning began in 2009, including contraception [1]. In the same year, the 375 and 380 mg copper IUDs was made available through the insurance a private health insurance company in Brazil (Unimed Campinas), in 2014 the 52 mg levonorgestrel IUD and in 2020 the 19.5 mg levonorgestrel IUD. The 52 mg levonorgestrel IUD is the only LARC method that is approved for 5 years for indications as the treatment of heavy menstrual bleeding and endometrial hyperplasia [2]. The 375/380 mg copper IUD and the 19.5 mg levonorgestrel IUD are indicated only to prevent pregnancy, approved for 10 years and 5 years, respectively [3,4]. Long-term use of LARC, in the context of balanced counseling, promotes patient-centered care. Some patients may face barriers to accessing family planning services (cost, lapses in insurance coverage, desire to reduce in-person office visits) or may have medical comorbidities that make removal and replacement challenging [5]. Others may simply want to continue using a device that continues to be effective in preventing pregnancy. Long-term use of LARC can bring individual and public health benefits [6].

#### **OBJECTIVE**

This study aims to investigate the factors contributing to the increased use of intrauterine devices (IUDs) between 2014 and 2023 within a Brazilian private health insurance provider.

#### **METHODS**

The entire cohort of beneficiaries receiving L-IUD 19.5mg, L-IUD 52mg, and Cu-IUD (375mg and 380mg) devices from Aug/2014 to Jul/2023 was analyzed. Stratification based on age and device type was performed, and annual data assessments were conducted.

### RESULTS

A total of 51,667 IUDs were inserted, with 33,258 (L-IUD 52), 10,790 (L-IUD 19.5), and 7,619 (Cu-IUD). L-IUD 52 showed an upward trend, surpassing 4/5 (16,036) in the last three years (Figure 1). In 2020, 68.30% of 5,322 insertions were L-IUD 52, 18.19% L-IUD 19.5, and 13.51% Cu-IUD. Between 2021 and 2023, L-IUDs constituted almost 90% (24,776). L-IUD 19.5 reached 38.67% in 2020 and 70% between 2021 and 2023 (Figure 2). Predominance of L-IUD 52 among adolescents (13-19) until 2020 shifted to L-IUD 19.5 from 2021 to 2023, exceeding 70%. L-IUD 19.5 and Cu-IUD were more inserted in the 20-33 age group (2020 and 2023). In the 27-40 age group, L-IUD 52 predominated from 2015 to 2019 and remained above 48% between 2020 and 2022. In 2014 and 2023, the 34-47 age group was predominant, with variations of 80.87% and 66.92%, respectively (Figure 3, 4 e 5).



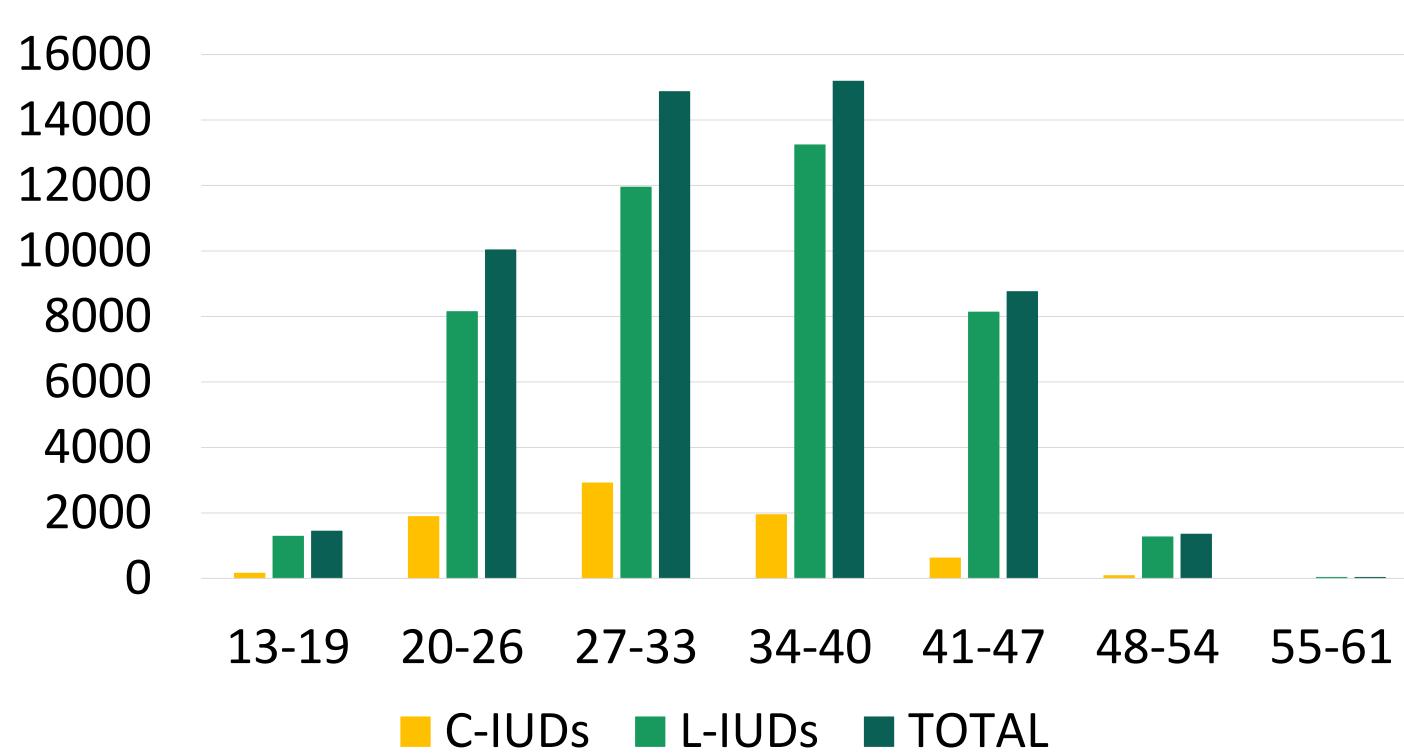


FIGURE 2: PREVALENCE TREND AMONG DIFERENTE
INTRAUTERINE DEVICES BETWEEN 2014 AND 2019 (L-IUD 52 MG
AND CU-IUD) AND 2020 TO 2023 (L-IUD 52 AND 19.5 MG AND
CU-IUD)

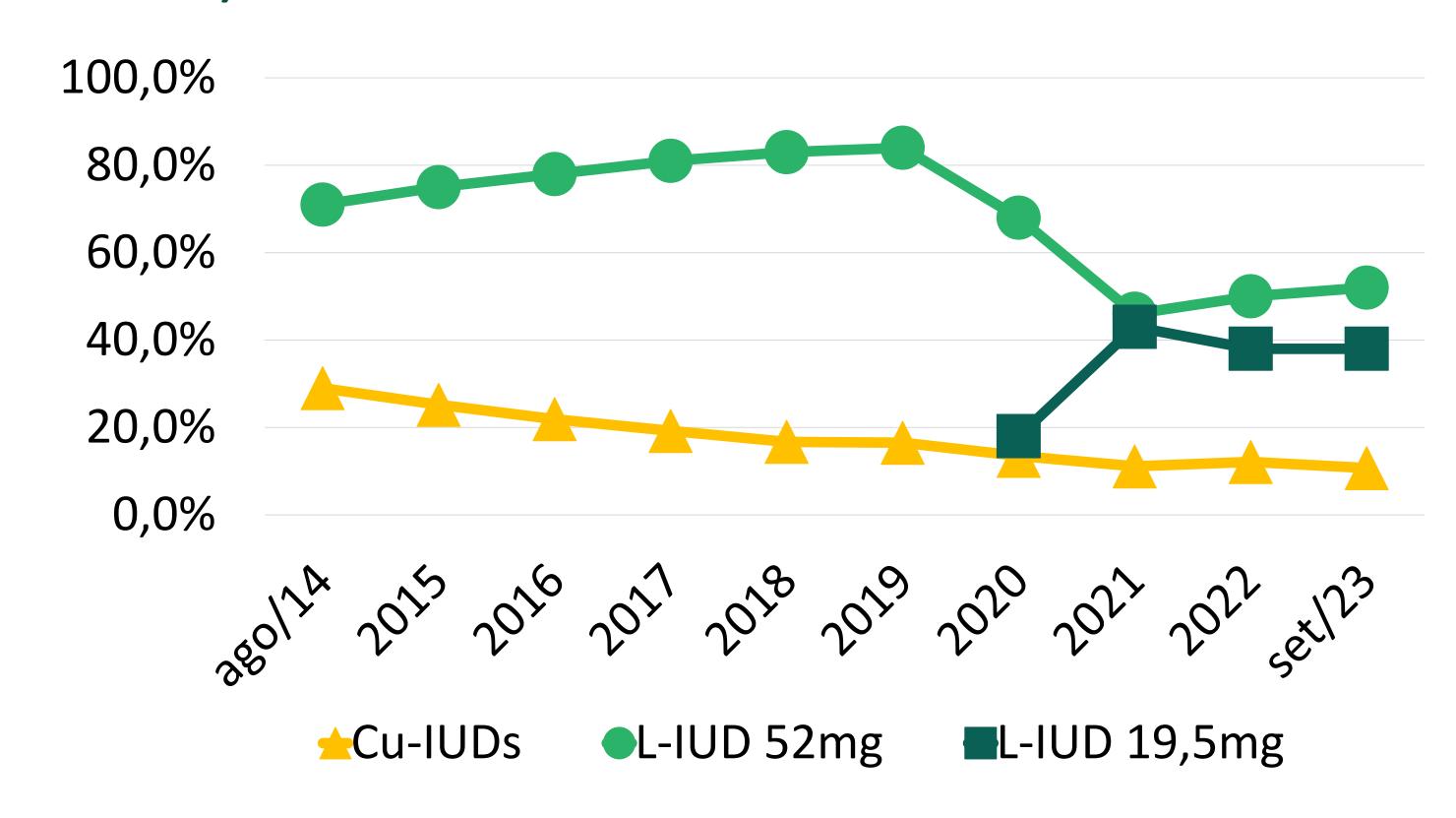


FIGURE 3: TREND OF USE OF <u>CU-IUD</u> IN DIFFERENT AGE GROUPS BETWEEN 2014 AND 2023

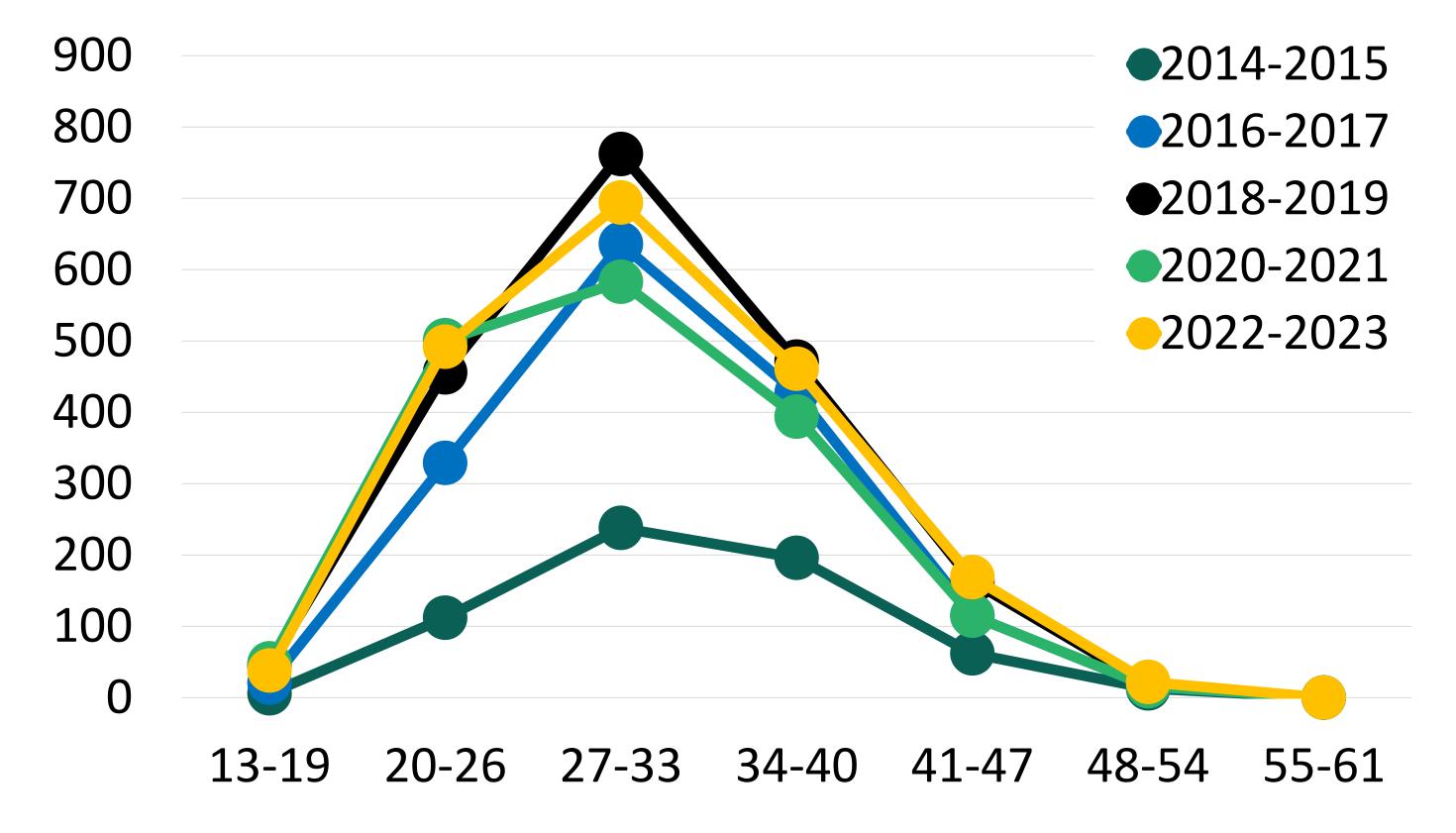


FIGURE 4: TREND OF USE OF <u>L-IUD 52 MG</u> IN DIFFERENT AGE GROUPS BETWEEN 2014 AND 2023

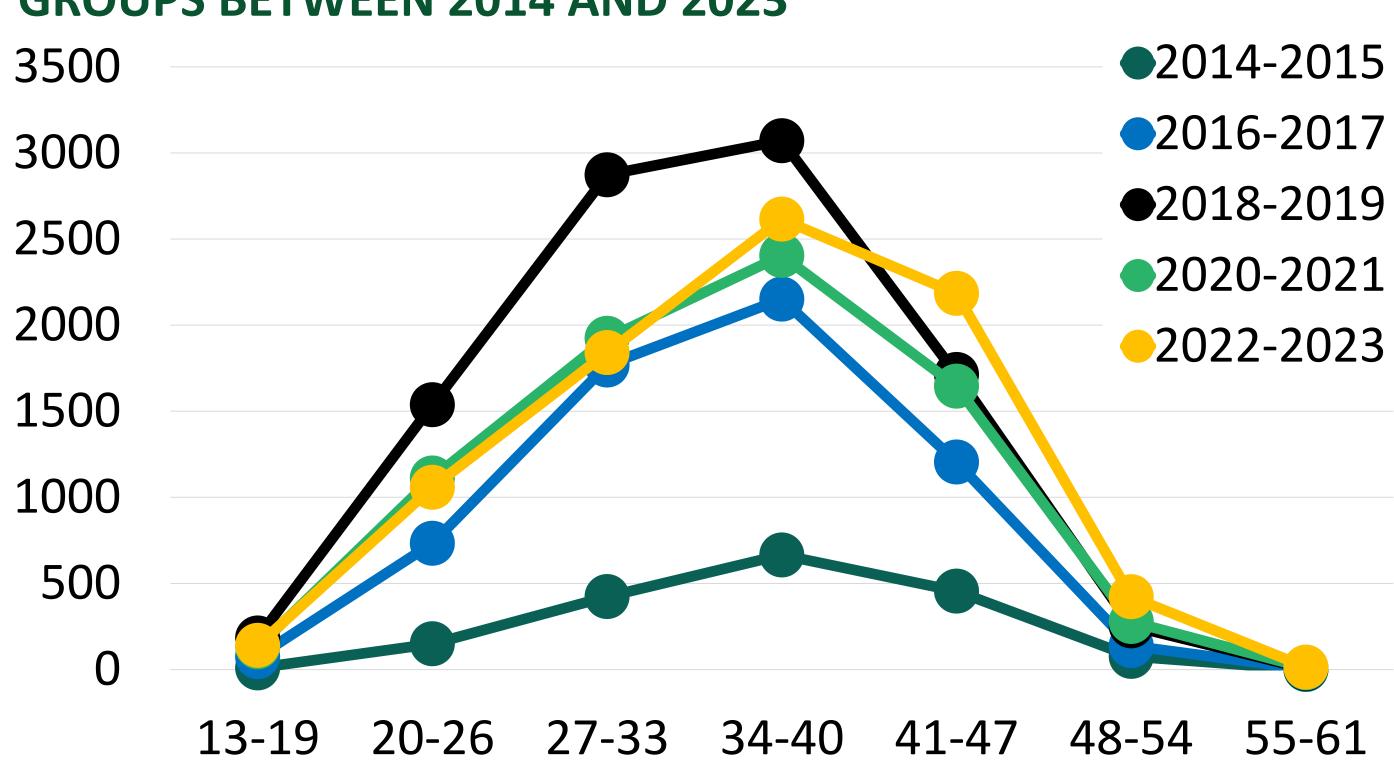
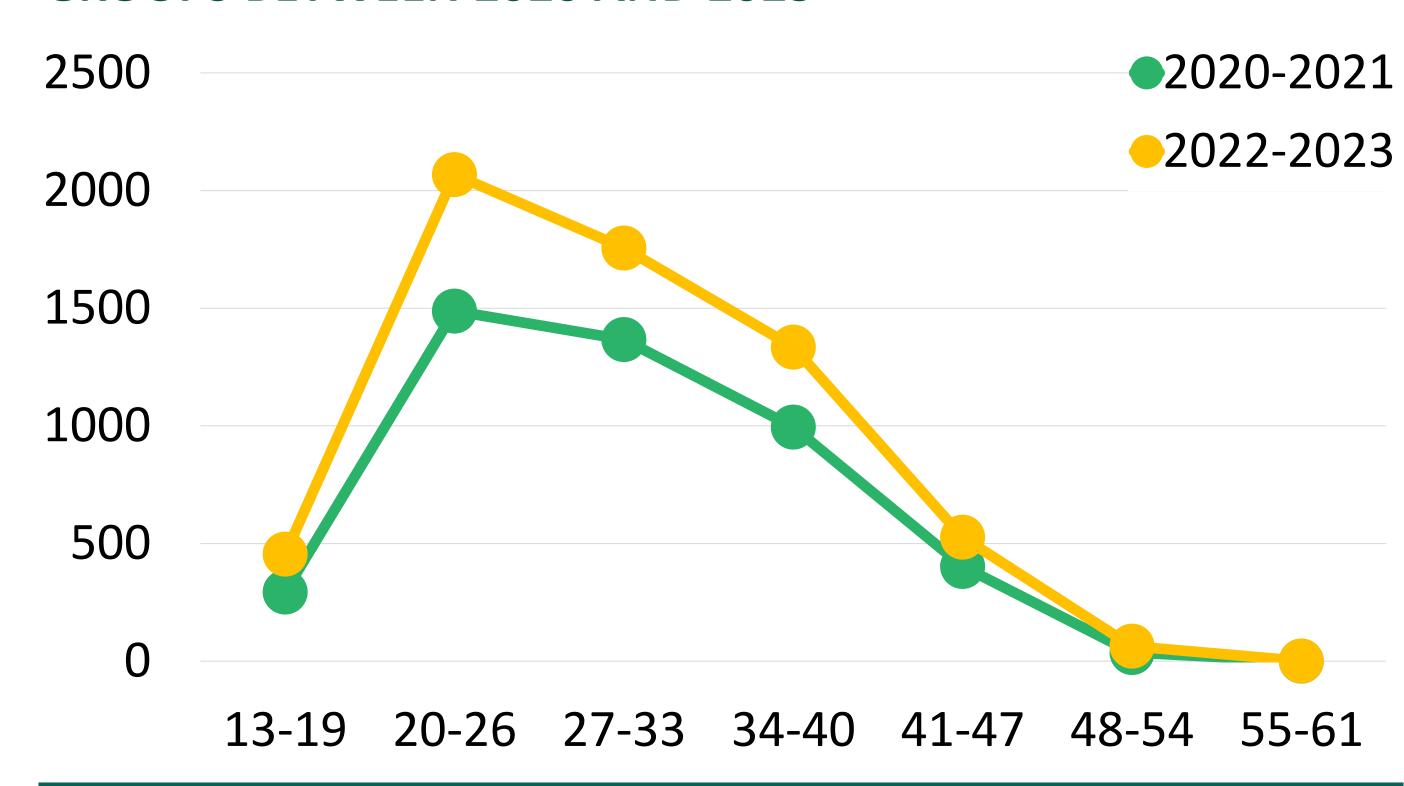


FIGURE 5: TREND OF USE OF <u>L-IUD 19.5 MG</u> IN DIFFERENT AGE GROUPS BETWEEN 2020 AND 2023



# CONCLUSION

The study reveals an increase in L-IUD insertions, suggesting a decline in Cu-IUD use. Beyond contraception, this trend may be attributed to desires for reduced menstrual flow and challenges with pill adherence. The age-specific preferences indicate nuanced considerations, such as L-IUD 52 for abnormal uterine bleeding treatment and L-IUD 19.5 for younger age groups, driven by early sexual activity and amenorrhea preferences, highlighting the significant rise in L-IUD usage.

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