



# Trends in Highly Effective Contraceptive Prescription Patterns in the Canadian Armed Forces

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Canadian Forces  
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## Disclaimers

Ma | Rossi | Yu -> nothing to disclose

Ma | Rossi | Yu -> no off-label medication usage

Rossi -> presentation does not reflect endorsement by the Canadian Armed Forces (CAF) or the Canadian Forces Health Services (CFHS)

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# Background

## Why care about contraceptive use?

Reproductive autonomy

Ineffective / inaccessible family planning -> readiness impact

17% of DoD ADSW: menstrual cycles typically interfere with jobs (RAND)

DoD ADSW deployed in the past 24 months who sought contraception prior to deployment, 57% received their preferred birth control method, 37% did not receive any form of birth control through the MHS, and 6% received a nonpreferred method.

*Note: contraceptive use / choice not to use are important, and personal, health care decisions for service women; ideally, these choices align with their desires regarding reproductive health and family planning. It is important to recognize that not every service woman wants or needs to use contraception.*



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# The Women's Reproductive Health Survey (WRHS) of Active-Duty Service Members



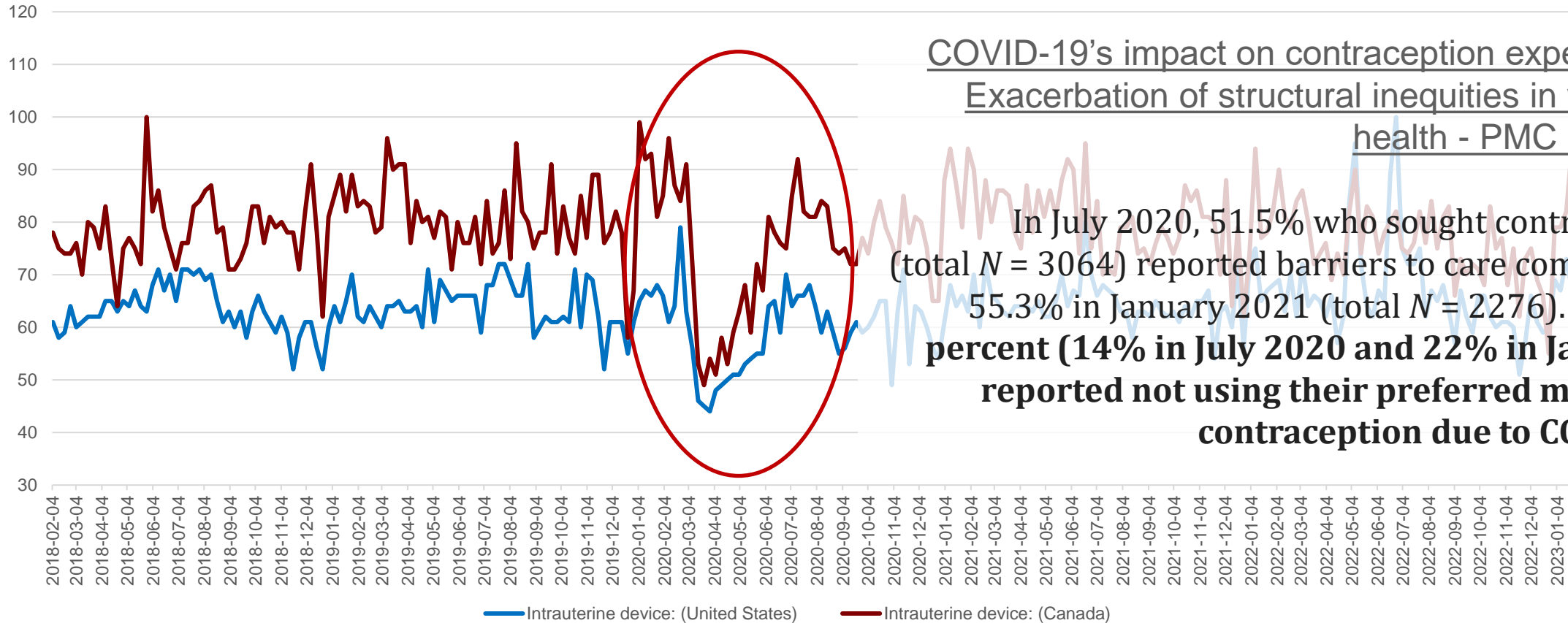
TABLE 5.6A

## Difficulty Accessing Preferred Birth Control Through the MHS Since Joining the Military, by Service Branch

	DoD Total	Air Force	Army	Marine Corps	Navy	Coast Guard
Ever unable to get preferred birth control through the MHS	18.3% (17.5–19.0)	17.7% <sup>d, e</sup> (16.9–18.5)	17.6% <sup>e</sup> (16.2–19.0)	15.3% <sup>d, e</sup> (13.1–17.5)	20.4% <sup>a, c</sup> (18.8–22.0)	21.0% <sup>a, b, c</sup> (19.2–22.8)
Preferred method of birth control unable to obtain						
Birth control pills	41.6% (39.4–43.7)	43.2% <sup>c</sup> (40.7–45.8)	40.6% <sup>e</sup> (36.4–44.9)	31.6% <sup>a, e</sup> (24.4–38.7)	42.9% (38.6–47.1)	50.7% <sup>b, c</sup> (45.9–55.5)
Condoms <sup>z</sup>	0.7% (0.4–1.0)	0.8% (0.4–1.3)	0.4% (0.1–0.7)	1.0% (0.0–2.6)	0.7% (0.1–1.4)	0.7% (0.0–1.4)
IUD <sup>z</sup>	15.5% (14.0–16.9)	15.6% (13.8–17.4)	15.1% (12.4–17.7)	16.7% (11.6–21.9)	15.5% (12.5–18.6)	20.4% (16.7–24.0)
Birth control implant <sup>z</sup>	6.1% (5.1–7.1)	5.2% (4.0–6.4)	6.8% (4.6–9.0)	9.1% (5.0–13.2)	5.7% (4.0–7.5)	5.2% (2.5–8.0)
Birth control shot, patch, or ring <sup>z</sup>	16.9% (15.2–18.6)	15.5% (13.6–17.4)	17.9% (14.5–21.2)	18.4% (12.6–24.2)	16.8% (13.2–20.4)	11.7% (8.5–14.9)
Hysterectomy <sup>z</sup>	4.4% (3.5–5.3)	4.8% (3.7–5.8)	5.2% (3.0–7.3)	3.2% (0.8–5.6)	3.6% (2.2–4.9)	3.5% (1.8–5.1)
Emergency contraceptive <sup>z</sup>	4.8% (3.7–5.8)	4.0% (3.0–5.1)	4.6% (2.5–6.6)	8.9% (4.2–13.6)	5.0% (2.8–7.1)	2.9% (1.4–4.3)
Other <sup>z</sup>	10.1% (8.7–11.4)	10.8% (9.2–12.4)	9.5% (6.8–12.2)	11.2% (5.9–16.4)	9.8% (7.3–12.2)	5.1% (2.8–7.3)



# Google trend data extract (29JAN23) search topic: intrauterine device, 5 years, CAN vs USA



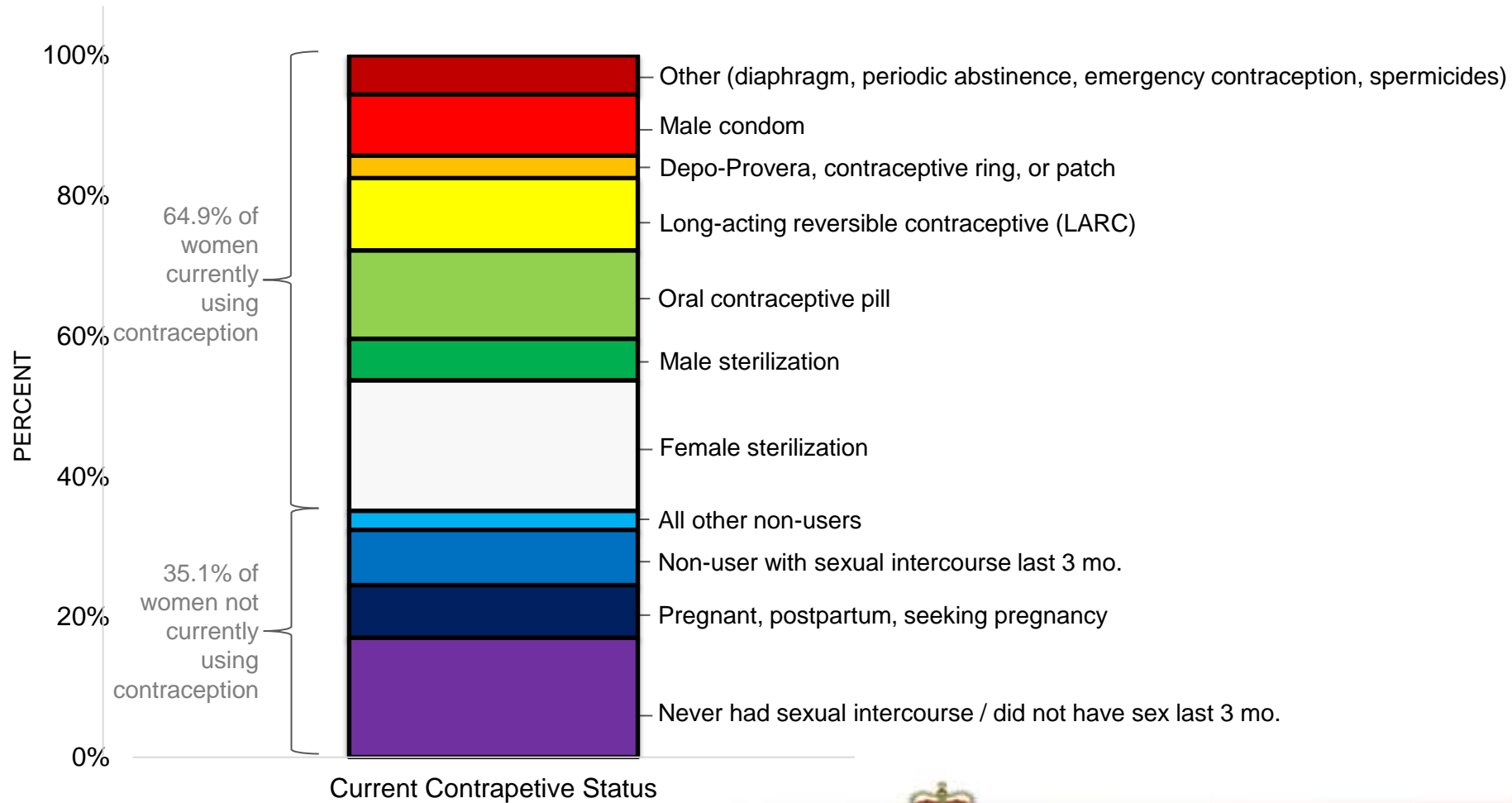
COVID-19's impact on contraception experiences:  
Exacerbation of structural inequities in women's  
health - PMC (nih.gov)

In July 2020, 51.5% who sought contraception (total N = 3064) reported barriers to care compared to 55.3% in January 2021 (total N = 2276). **A larger percent (14% in July 2020 and 22% in Jan 2021) reported not using their preferred method of contraception due to COVID-19.**

Birth control - Explore - Google Trends



# US National Center for Health Statistics

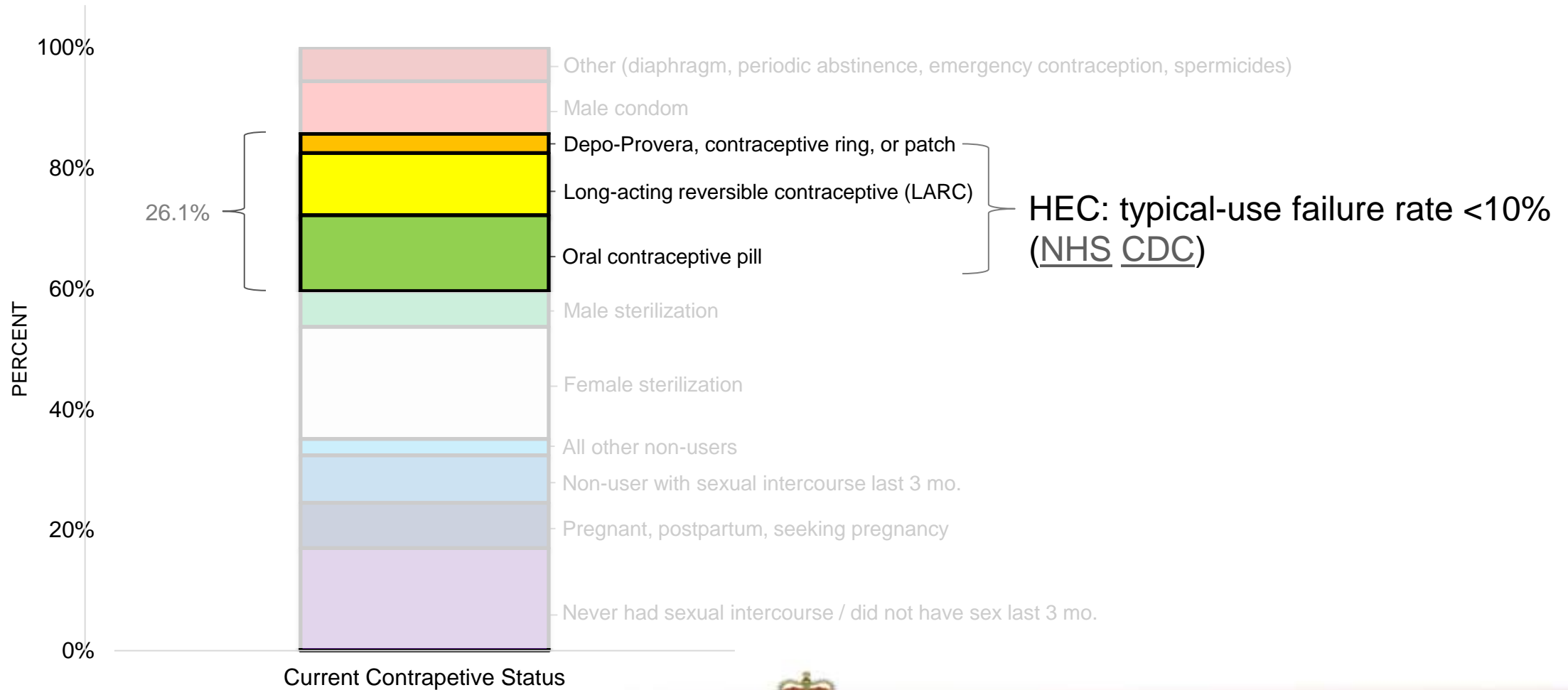


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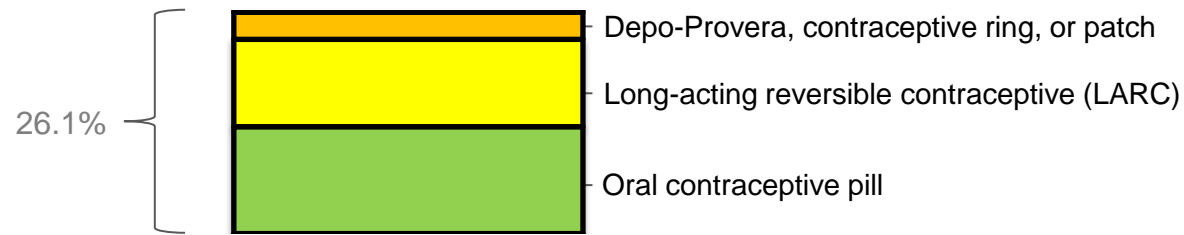


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# US National Center for Health Statistics



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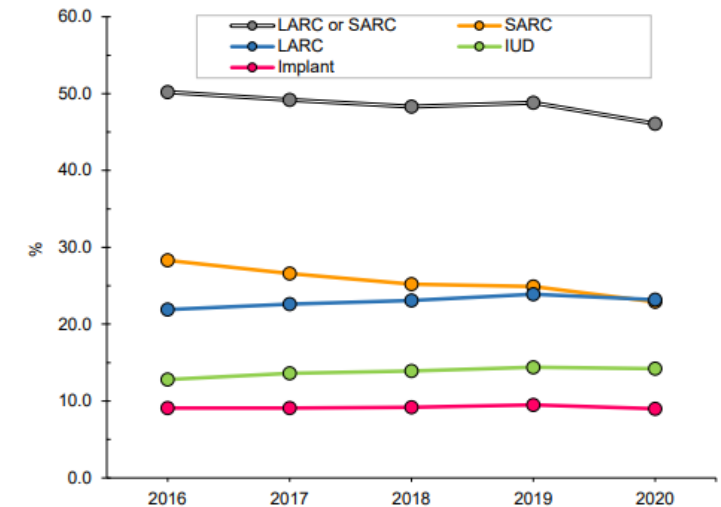


## RAND study

23.5% of respondents reported discussing LARCs with their PHA provider in the last 12 months. Definition / study differences make other comparisons difficult.



**FIGURE 1.** Annual prevalence of LARC, SARC, IUD, and implant use, female service members, active component, U.S. Armed Forces, 2016–2020



SARC, short-acting reversible contraceptive; LARC, long-acting reversible contraceptive; IUD, intrauterine device.





# CAF approach -> 2011-2022

TYPE ANALYZED	UNIQUE Rx PER GROUP
Emergency contraceptive	7
Implant	1
Injectable	2
IUD - Copper	4
IUD - Hormonal	3
IUD - Unknown	1
Oral - Biphasic	1
Oral - Cyclic	34
Oral - Extended Cycle	3
Oral - Progestin only	4
Oral - Triphasic	5
Patch	1
Vaginal Ring	2
<b>Total Rx Products</b>	<b>68</b>

Indayo
Seasonale
Seasonique
Jencycla
Micronor
Movisse
Slynd
Tri-Cira
Tri-Cyclen
Tri-Cyclen Lo
Tri-Jordyna
Triquilar
Evra
Haloette
Nuvaring
Marvelon

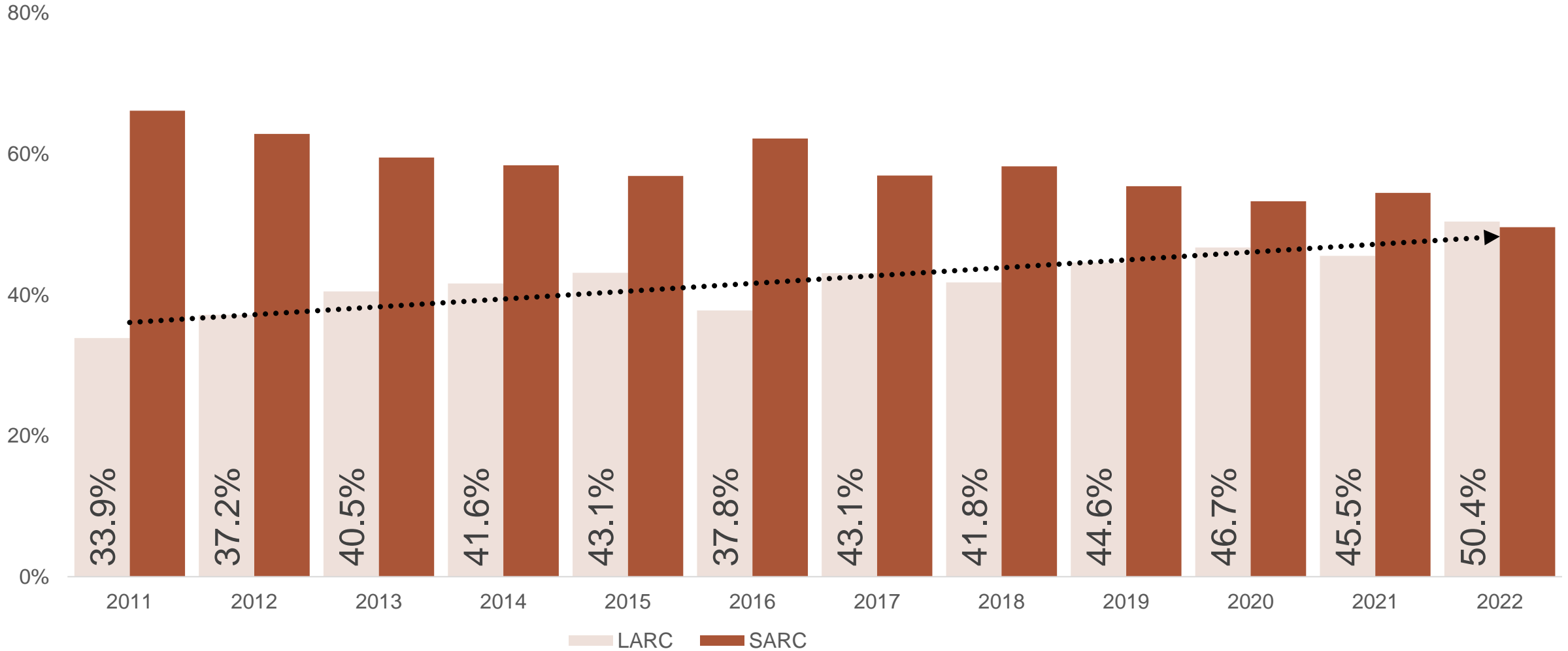
Backup Plan Onestep
Contingency One
Ella
Next Choice
Norlevo
Option 2
Plan B
Nexplanon
Depo-Provera
Medroxyprogesterone
Flexi-T IUD
Liberte
Mona Lisa
Nova-T
Jaydess
Kyleena
Mirena

Unspecified IUD
Synphasic
Alesse
Alysenia
Apri
Aviane
Brevicon 0.5/35
Brevicon 1/35
Cleo-35
Cyclen
Demulen
Diane-35
Esme
Freya
Generic Diane-35
Linessa
Loestrin
Lolo

Minestrin
Min-Ovral
Mirvala
Mya
Ortho 0.5/35
Ortho 1/35
Ortho 7/7/7
Ortho-Cept
Ovima
Ovral
Portia
Select 1/35
Yasmin
Yaz
Yaz Plus
Zamine
Zarah



# CAF Reg F HEC Rx Trends for “new” users - 2011-2022



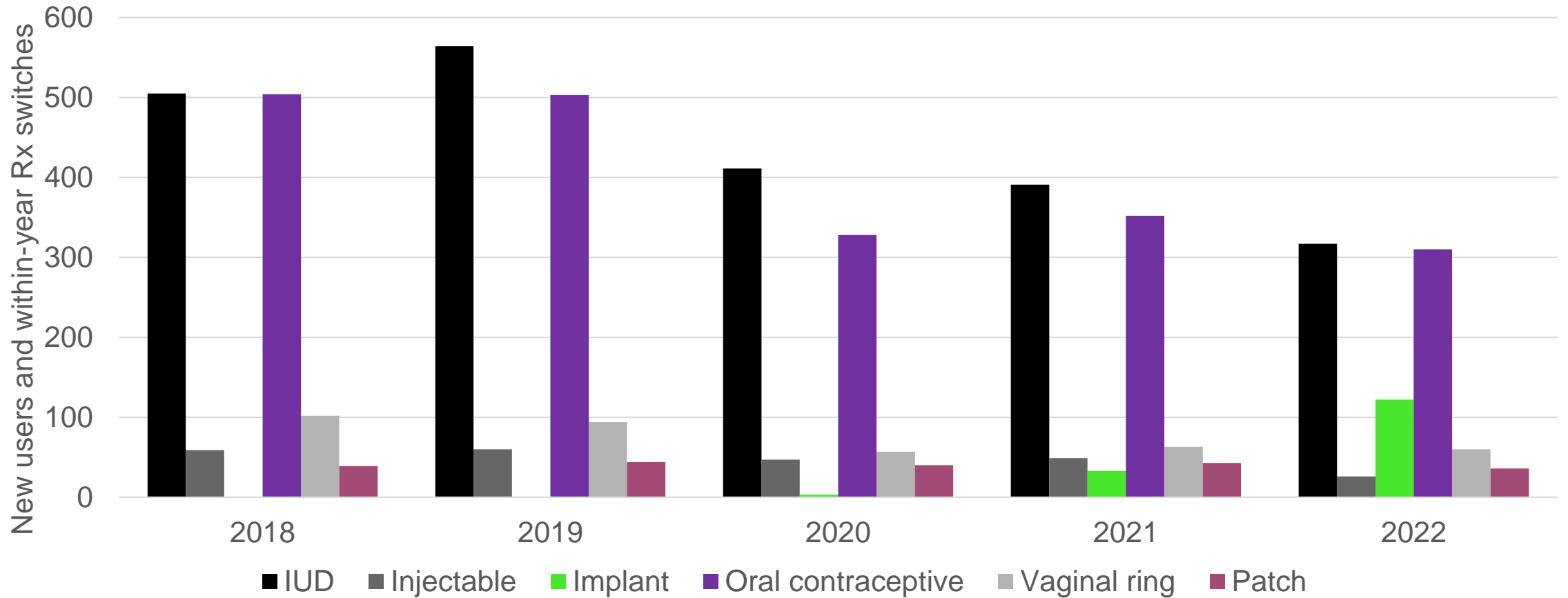
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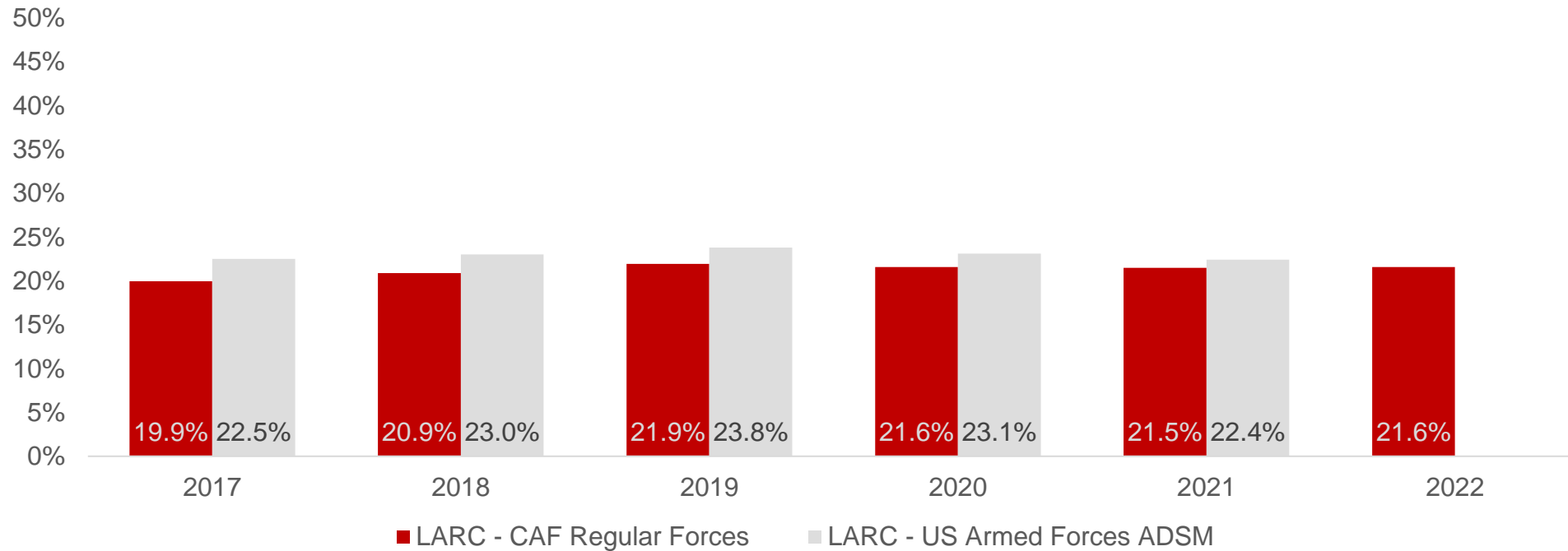
## Counts CAF Reg F HEC Rx Trends by CLASS - 2011-2022

\*new to MHS users\* and “switches”



# Externally generalizable?

Comparison (CAF / U.S. Armed Forces) annual prevalence of LARC utilization 2017-2022



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## Discussion

- Universal coverage of active-duty service members does not guarantee access within patient-desired timelines (LARCs)
- Reasonable to consider sub-group analyses conducted/planned in larger population partner nations to CAF
- LARC use (hypothesis generating) -> similar between CAF / US ADSM  
CAF LARC use only -> 21.4% last 2018-2022 inclusive  
Increasing proportion of HEC starts are LARC  
Decreasing number of new HEC starts since 2020
  - ? Pandemic
  - ? Social
  - ? Access component given LARC preference



## Limitations

- Administrative data source without correlation to primary indication
- Estimated LARC prevalence calculated via combination of licensing length and published probability of continuation for IUD/implants in DoD (AFHSD)
- Impact of no/low-cost public health services within CANADA in the 18-24 ADASM population
  - > Incomplete capture

