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## INTRODUCTION

- Access to single-visit long-acting reversible contraception (LARC) is key to allowing reproductive autonomy.
- Approaches to LARC for adolescents may have changed during the COVID-19 pandemic.
- Objectives:
  - To describe adolescent and physician factors associated with single-visit LARC insertion
  - To identify pandemic effects on single-visit LARC provision among adolescents

## METHODS

- Retrospective chart review using EHR data for a single large health system in North Carolina
- Inclusion criteria: 10–19-year-olds who had a LARC insertion during an outpatient visit between 3/15/19 and 3/14/21 and had not received a LARC in the 6 months prior to the index visit
- Logistic regression models for pre and post COVID (to examine differences in characteristics by time periods) and time series analysis to account for changes over time.

## RESULTS

- Similar monthly single-visit LARC prior to and during COVID (Fig 1)
- Most LARC-initiating adolescents were white, non-Hispanic, had no previous history of births, received a subdermal implant, and received LARC from an OBGYN (Table 1)
- County concordance was associated with increased odds of single-visit LARC both before and during the pandemic (Table 2)
- Factors associated with decreased odds of single-visit LARC during the pandemic were (Table 2):
  - Having public insurance
  - Receiving care from non-OBGYN provider (Peds, Family Med, Internal Med) or Advanced practice practitioners

## DISCUSSION

- Adolescents who were nearer to providers may have been able to wait for single-visit appointments, or more easily attend referral visits
- Expansion of public transportation or reimbursement of private transportation by public insurance may improve access for low-income populations
- Increasing provider knowledge and skills, and clinical workflows and support, for single-visit LARC is important for increasing access for adolescents in primary care

Certain subgroups of adolescents had fewer single-visit LARC during COVID, which may indicate limited reproductive autonomy.

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Figure 1: Monthly Average Predicted Probability of Single-Visit LARC Placement

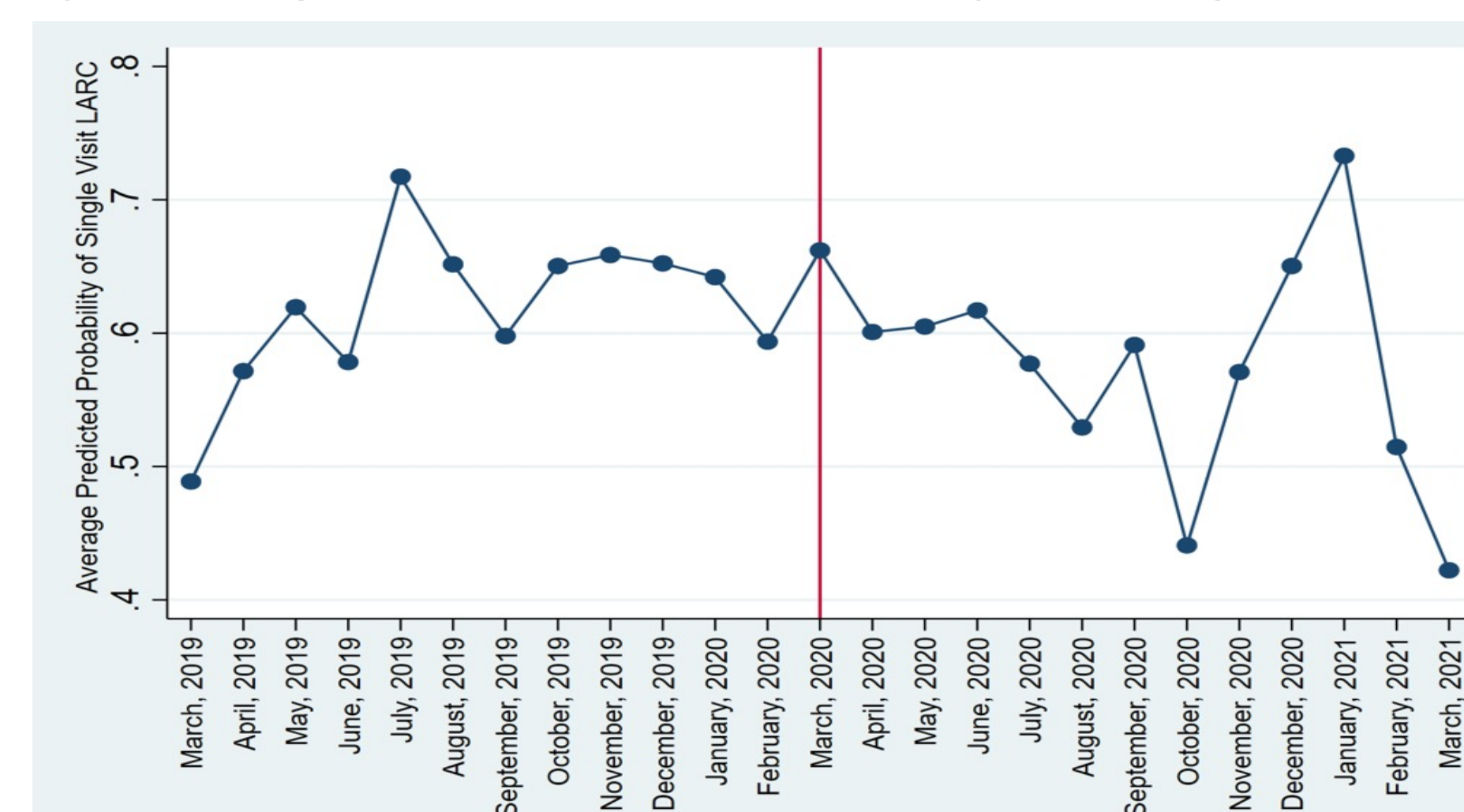


Table 1: Characteristics of adolescents, by single-visit or non-single visit insertion (N=954)

	Pre-COVID-19 N=474		During COVID-19 N=480	
	Non-Single Visit (N=173)	Single Visit (N=301)	Non-Single Visit (N=203)	Single Visit (N=277)
<b>Race, N (%)<sup>a</sup></b>				
Asian	2 (1)	4 (1)	5 (3)	3 (1)
Black or African American	30 (17)	63 (21)	32 (16)	46 (17)
White	120 (69)	173 (58)	130 (64)	156 (56)
Other Race	14 (8)	46 (15)	25 (12)	45 (16)
Unknown/Missing	7 (4)	15 (5)	11 (5)	26 (9)
<b>Ethnicity, N (%)</b>				
Hispanic/Latino	14 (8)	35 (12)	20 (10)	42 (15)
Not Hispanic/Latino	153 (88)	243 (81)	172 (85)	209 (76)
Unknown/Missing	6 (4)	23 (8)	11 (5)	26 (9)
<b>Number of previous births, N (%)</b>				
No	158 (91)	265 (88.0)	189 (93)	242 (87)
1-2 Previous Births	15 (9)	36 (12)	13 (6)	34 (12)
<b>Type of LARC, N (%)</b>				
Subdermal implant	97 (56)	178 (59)	106 (52)	146 (53)
Intrauterine device	76 (44)	123 (41)	97 (48)	131 (47)
<b>Provider Specialty, N (%)</b>				
OBGYN	108 (62)	192 (64)	118 (58)	201 (73)
Pediatrics	12 (7)	29 (10)	21 (10)	19 (7)
Family Medicine	50 (29)	78 (26)	59 (29)	55 (20)
Internal Medicine	3 (2)	2 (1)	5 (3)	2 (1)
<b>Provider Type, N (%)<sup>d</sup></b>				
Physician	77 (45)	155 (52)	83 (41)	152 (55)
APP	96 (56)	146 (49)	120 (59)	125 (45)

Table 2: Adjusted odds of adolescents receiving single-visit insertion of a LARC during the 12 months prior and first 12 months of the pandemic

	Pre-COVID-19 N=474	During COVID-19 N=480
	Adjusted Odds Ratio <sup>^</sup>	Adjusted Odds Ratio <sup>^</sup>
<b>County concordant</b> (non-concordant ref)	<b>2.305*** [1.495,3.555]</b>	<b>1.829* [1.134,2.949]</b>
<b>Insurance</b> (private insurance ref)		
Public	0.950 [0.608, 1.484]	<b>0.516** [0.329,0.811]</b>
Self-Pay	<b>5.256* [1.107,24.96]</b>	1.525 [0.411,5.657]
<b>Provider</b> (OBGYN ref)		
Pediatrics	1.066 [0.476,2.387]	<b>0.340** [0.160,0.722]</b>
Family Medicine	0.845 [0.524,1.362]	<b>0.532** [0.333,0.851]</b>
Internal Medicine	0.338 [0.0536,2.127]	<b>0.129* [0.0230, 0.719]</b>
APP (physician ref)	0.794 [0.522,1.209]	<b>0.463*** [0.307,0.700]</b>

Note. Odds ratio and 95% confidence intervals in brackets; \*p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001  
<sup>^</sup>Adjusted for all other variables: age, sex, race, ethnicity, parity, contraceptive and insurance type

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