David Geffen School of Medicine

The First Two Seasons of Maternal RSV Immunization: Patients' Acceptance, Satisfaction, and Costs

Audra Fain, MD; Tina Nguyen, MD; Neil Silverman, MD
Division of Maternal-Fetal Medicine, Department of Obstetrics and Gynecology, University of California, Los Angeles

UCLA Health

Background

- The respiratory syncytial virus (RSV) vaccine has shown significant reductions in severe neonatal and infant morbidities in large trials, and was FDA approved for use in pregnancy in Fall 2023
- Low national rates of prenatal RSV vaccination were reported in the U.S, in the first 2 seasons of vaccine availability: 18% in 2023-24 and 38% in 2024-25

Objective

- Explore acceptance rates and barriers, differences in patients' attitudes, and costs during the first 2 seasons of prenatal RSV vaccine availability in a large academic health system

Study Design

- Prospective, observational cohort study
- Eligibility: received prenatal RSV vaccine during 2023-2024 and 2024-2025 seasons, spoke English or Spanish, and 18 years or older
- Primary outcome: satisfaction with RSV vaccination.
- Secondary outcomes: gestational age at vaccination and interval between vaccine and delivery, infant RSV infection status, prenatal co-vaccinations, satisfaction metrics, billing and payment requests
- Mann-Whitney U, Fisher's exact and chi-square as appropriate to compare groups. P-value significance was set at <0.05

Results

- **Vaccine acceptance rates increased from 54% to 86% across seasons, and surpassed reported national rates in the U.S. during both RSV seasons**
- High satisfaction with on-site vaccine availability
- Low and stable preterm delivery rates
- 5-12% of patients received a bill for their vaccine; required payment decreased between seasons

Conclusions

- **On site vaccination should be encouraged as a method of increasing patient vaccination**
- **Billing barriers need to be explored to minimize patients' out of pocket costs**

High patient satisfaction with **on site RSV vaccination** despite **billing challenges** highlights future uptake strategy

Questions?
Email Dr. Fain at afain@mednet.ucla.edu

Table 1: Demographics and Pregnancy Outcomes

Demographics	2023-2024 (n = 260)	2024-2025 (n = 242)	p-value
Age (mean +/- SD)	36.7 +/- 3.8	35.2 +/- 4.7	**0.004**
Age >35	172 (65.6%)	140 (57.6%)	0.06
Racial/Ethnic Group			
White	165 (63.5%)	167 (69.0%)	0.57
Black or African American	13 (0.05%)	12 (5.0%)	
Asian	51 (19.6%)	45 (18.6%)	
Hispanic or Latino	30 (11.5%)	34 (14.0%)	
American Indian or Alaskan Native	1 (0.4%)	1 (0.4%)	
Middle Eastern or North African	1 (0.4%)	6 (2.5%)	
Native Hawaiian or Pacific Islander	1 (0.4%)	3 (1.2%)	
Other	1 (0.4%)	6 (2.5%)	
Prefer Not to State	1 (0.4%)	0 (0%)	
Highest level of Education			
Middle School	1 (0.4%)	0 (0%)	0.14
High School	6 (2.3%)	9 (3.7%)	
2 year college	5 (1.9%)	10 (4.1%)	
4 year college	99 (38.1%)	92 (38.0%)	
Graduate degree	85 (32.7%)	81 (33.5%)	
Doctoral degree	65 (25.0%)	50 (20.7%)	
Additional children at home	108 (41.5%)	86 (36.0%)	0.17
Preterm delivery (<37 weeks)	15 (5.8%)	17 (7.0%)	0.57
Nulliparous	161 (61.9%)	158 (65.3%)	0.43
Gestational age at vaccination (mean +/- SD)	33w6d +/- 10 days	34w0d +/- 10 days	0.91
Child developed RSV after delivery?	31 (11.9%)	16 (6.6%)	0.04
If yes, was your infant hospitalized?	3 (9.7%)	7 (43.8%)	**0.02**
If yes, at what age did they get RSV?			
0-1 month	3 (9.7%)	4 (25.0%)	**<0.001**
1-3 months	0 (0%)	9 (56.3%)	
3-6 months	2 (6.5%)	3 (18.8%)	
6-12 months	26 (83.9%)	0 (0%)	

Table 2: Survey Outcomes

Survey Outcomes	2023-2024 (n = 260)	2024-2025 (n = 242)	p-value
What additional vaccines did you receive during pregnancy?			
Tdap	214 (82.3%)	221 (91.3%)	**0.003**
Influenza	226 (86.9%)	210 (86.8%)	0.94
COVID	163 (62.7%)	147 (60.7%)	0.72
How satisfied were you with receiving the RSV vaccine the same day as the office visit?	4.7 +/- 1.0	4.5 +/- 1.1	0.18
% of patients vaccinated	54.0%	85.9%	**<0.0001**
Did you have any side effects from the RSV vaccine?			
Yes	17 (6.5%)	20 (8.3%)	0.46
No	243 (93.5%)	222 (91.7)	
How bothersome were the side effects? (1-5 Likert scale)	2.8 +/- 1.0	2.65 +/- 1.1	0.74
Did you get a bill for the RSV vaccine after the office visit?			
Yes	14 (5.4%)	28 (11.6%)	**0.01**
No	246 (94.6%)	214 (88.4%)	
If yes, did you have to pay a bill?			
Yes	11 (78.6%)	13 (46.4%)	0.06
No	3 (21.4%)	15 (53.6%)	
If so, how much?			
$0-49	3 (27.3%)	3 (23.1%)	0.47
$50-99	2 (18.2%)	3 (23.1%)	
$100-199	4 (36.4%)	1 (7.7%)	
$200+	2 (18.2%)	6 (46.2%)	
If so, what type of insurance coverage do you have?			
Government funded	0 (0%)	0 (0%)	0.12
Commercial HMO	2 (18.2%)	0 (0%)	
Commercial PPO	9 (81.8%)	13 (100%)	
How likely would you be to get the RSV vaccine in the future?	4.8 +/- 0.6	4.8 +/- 0.6	0.68
How likely are you to recommend the RSV vaccine to friends or family?	3.7 +/- 0.8	3.7 +/- 0.7	0.59