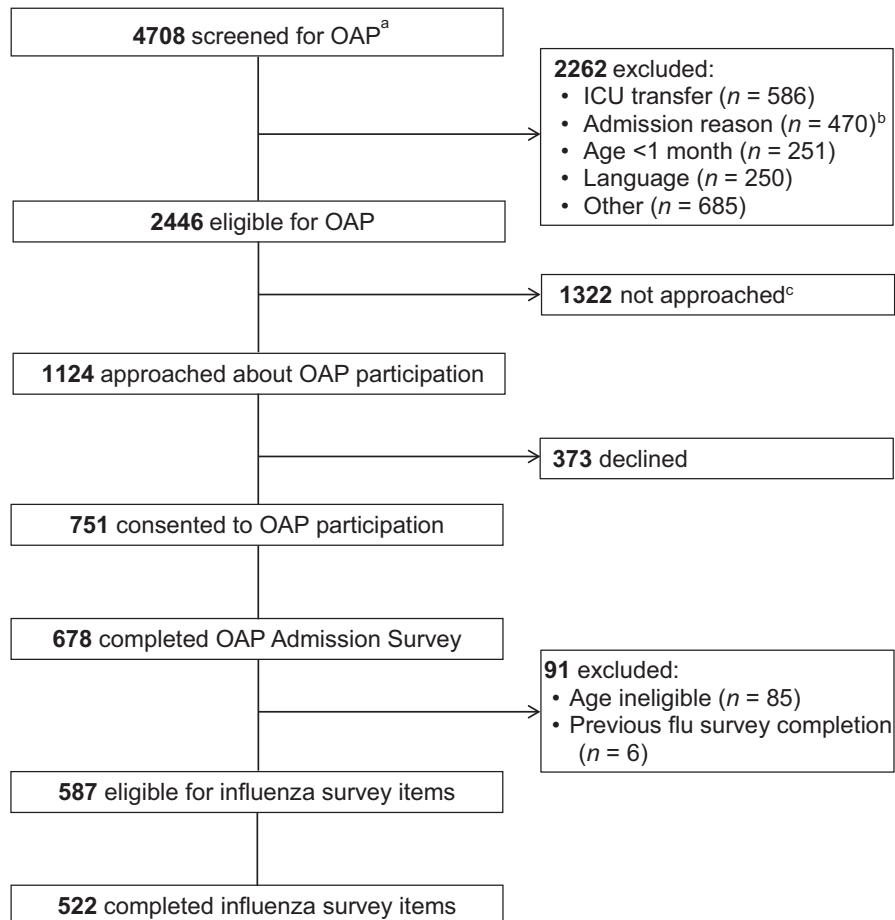


## Supplemental Materials



**SUPPLEMENTAL FIGURE 2** Accrual of study population. <sup>a</sup> There were 5867 inpatients during the study period. Screenings for the OAP were conducted on the medicine, surgery, rehabilitation, and psychiatry units Monday to Friday. <sup>b</sup> Children admitted for suspicion of child abuse or 24-hour video EEG or in protective isolation. <sup>c</sup> Eligible families were approached Monday to Friday. Some eligible families were discharged before they could be approached. Also, some eligible families were unavailable at the time of being approached.

**SUPPLEMENTAL TABLE 4** Influenza Vaccination Survey Instrument

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Q.1 Children in general are at risk for getting the flu.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.2 Children can get very sick or even die of the flu.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.3 I am worried about the flu.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.4 It is important for everyone's health that children get the flu shot

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.5 The flu shot does a good job of preventing the flu.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.6 The flu shot is safe for children.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.7 A child who has a mild illness (without high fever) should wait to get the flu shot.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.8 Compared with other children [CHILD's] age, [CHILD] is more likely to get the flu.

- Strongly agree
- Agree
- Disagree
- Strongly disagree

Q.9 Has [CHILD] ever had the flu?

- Yes
- No
- Not sure

Q.10 Getting the flu shot is important for [CHILD]'s health.

- Strongly agree
  - Agree
-

---

Disagree

Strongly disagree

Q.11 The flu shot is the best way to protect [CHILD] from the flu.

Strongly agree

Agree

Disagree

Strongly disagree

Q.12 I worry that [CHILD] would get the flu from the flu shot.

Strongly agree

Agree

Disagree

Strongly disagree

Q.13 Has [CHILD] ever had a serious reaction after getting a shot?

Yes, after getting a flu shot

Yes, after getting another shot (not flu shot)

No

Not sure

Q.14 The flu shot is recommended for [CHILD].

Yes

No

Not sure

Q.15 [CHILD's] primary care provider strongly recommends that [CHILD] get a flu shot. By "primary care provider," we mean the main doctor, physician assistant, or nurse practitioner who sees [CHILD] for [his or her] regular checkups and general sick care as needed.

Strongly agree

Agree

Disagree

Strongly disagree

Q.16 If [CHILD] were to get a flu shot, how important is it to you that [he/she] gets it at [his or her] primary care provider's office?

Very important

Somewhat important

A little important

Not at all important

Q.17 I worry that [CHILD's] primary care provider won't know if [he or she] gets the flu shot somewhere else.

Strongly agree

Agree

Disagree

Strongly disagree

Q.18 It is inconvenient to get a flu shot for [CHILD].

Strongly agree

Agree

Disagree

Strongly disagree

Q.19 Has [CHILD] ever gotten a flu shot?

Yes

No

Not sure

Q.20 Have you ever gotten a flu shot?

Yes

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---

No

Not sure

Q.21 What information do you think would be useful during this hospitalization to help you make a decision about whether to give [CHILD] the flu shot? *Please select ALL that apply.*

Why [CHILD] should get the flu shot

Where [CHILD] can get the flu shot

When [CHILD] can get the flu shot

Information about the flu (for example, [CHILD's] risk of getting the flu)

Information about the flu shot (for example, how safe it is for [CHILD])

Other: \_\_\_\_\_

Q.22 How would you prefer to get information during this hospitalization to help you make a decision about whether to give [CHILD] the flu shot? *Please select ALL that apply.*

Discussion with a nurse

Discussion with a doctor

Paper handout

Link to online information

Other: \_\_\_\_\_

Q.23 Have you ever delayed having [CHILD] get a shot for reasons other than illness or allergy?

Yes

No

Q.24 Have you ever decided not to have [CHILD] get a shot for reasons other than illness or allergy?

Yes

No

Q.25 How sure are you that following the recommended shot schedule is a good idea for [CHILD]? *Please answer on a scale of 0 to 10, where 0 is Not At All Sure and 10 is Completely Sure.*

0  1  2  3  4  5  6  7  8  9  10

Q.26 Children get more shots than are good for them.

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

Q.27 It is better for [CHILD] to develop immunity by getting sick than to get a shot.

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

Q.28 It is better for children to get fewer vaccines at the same time.

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

Q.29 How concerned are you that [CHILD] might have a serious side effect from a shot?

Very concerned

Somewhat concerned

Not sure

Not too concerned

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Not at all concerned

Q.30 How concerned are you that any one of the childhood shots might not be safe?

Very concerned

Somewhat concerned

Not sure

Not too concerned

Not at all concerned

Q.31 How concerned are you that a shot might not prevent the disease?

Very concerned

Somewhat concerned

Not sure

Not too concerned

Not at all concerned

Q.32 If you had another infant today, would you want him or her to get all the recommended shots?

Yes

No

Do not know

Q.33 Overall, how hesitant about childhood shots would you consider yourself to be?

Very hesitant

Somewhat hesitant

Not sure

Not too hesitant

Not at all hesitant

Q.34 I trust the information I receive about shots.

Strongly agree

Agree

Not sure

Disagree

Strongly disagree

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**SUPPLEMENTAL TABLE 5** Influenza Vaccination Outcomes, by Study Population Characteristics

	Child Influenza Vaccination Status At Admission ( <i>n</i> = 508) <sup>a</sup>			Caregiver Acceptance of Influenza Vaccine for Child During Hospitalization ( <i>n</i> = 171) <sup>b</sup>		
	Already Vaccinated This Season, % ( <i>n</i> )	Not Yet Vaccinated This Season, % ( <i>n</i> )	<i>P</i> value	Yes % ( <i>n</i> )	No % ( <i>n</i> )	<i>P</i> value
Respondent relation to child <sup>c</sup>			.17			.09
Mother	63.1 (244)	36.9 (143)		28.6 (40)	71.4 (100)	
Father	69.4 (75)	30.6 (33)		41.4 (12)	58.6 (17)	
Other (eg, grandparent)	88.9 (8)	11.1 (1)		100.0 (1)	0 (0)	
Respondent age, y <sup>c</sup>			.01			.39
18–34	56.0 (94)	44.0 (74)		35.6 (26)	64.4 (47)	
35–44	68.9 (162)	31.1 (73)		31.9 (22)	68.1 (47)	
≥45	69.4 (68)	30.6 (30)		21.4 (6)	78.6 (22)	
Respondent preferred language			.55			.03
English	64.7 (321)	35.3 (175)		30.4 (51)	69.6 (117)	
Spanish	75.0 (9)	25.0 (3)		100.0 (3)	0.0 (0)	
Respondent race and/or ethnicity <sup>c</sup>			.01			.12
White	65.2 (215)	34.8 (115)		26.1 (29)	73.9 (82)	
Hispanic	58.9 (33)	41.1 (23)		47.8 (11)	52.2 (12)	
Asian American	84.4 (38)	15.6 (7)		42.9 (3)	57.1 (4)	
Black	41.2 (7)	58.8 (10)		22.2 (2)	77.8 (7)	
Multiracial or other	62.2 (28)	37.8 (17)		47.1 (8)	52.9 (9)	
Respondent education <sup>c</sup>			.007			.02
>4-year college degree	72.8 (91)	27.2 (34)		28.1 (9)	71.9 (23)	
4-year college degree	71.1 (91)	28.9 (37)		20.6 (7)	79.4 (27)	
Some college or 2-year degree	55.2 (85)	44.8 (69)		26.9 (18)	73.1 (49)	
High school-equivalent or less	62.2 (56)	37.8 (34)		52.9 (18)	47.1 (16)	
Child sex			.50			.28
Male	63.6 (164)	36.4 (94)		35.2 (32)	64.8 (59)	
Female	66.4 (166)	33.6 (84)		27.5 (22)	72.5 (58)	
Child age			.01			.18
6–11 mo	53.6 (30)	46.4 (26)		44.0 (11)	56.0 (14)	
12–23 mo	74.6 (47)	25.4 (16)		43.8 (7)	56.2 (9)	
2–4 y	73.5 (83)	26.5 (30)		35.7 (10)	64.3 (18)	
5–17 y	61.6 (170)	38.4 (106)		25.5 (26)	74.5 (76)	
Child insurance			.05			.60
Private	68.0 (225)	32.0 (106)		30.0 (30)	70.0 (70)	
Public or uninsured	59.3 (105)	40.7 (72)		33.8 (24)	66.2 (47)	
Child CD status			.03			.37
Complex CD	71.4 (150)	28.6 (60)		29.3 (17)	70.7 (41)	
Noncomplex CD	58.4 (90)	41.6 (64)		27.4 (17)	72.6 (45)	
No CD	62.5 (90)	37.5 (54)		39.2 (20)	60.8 (31)	
Hospital service <sup>d</sup>						.08
Medicine	N/A	N/A		35.5 (38)	64.5 (69)	
Surgery	N/A	N/A		23.0 (14)	77.0 (47)	
Psychiatry	N/A	N/A		66.7 (2)	33.3 (1)	

SUPPLEMENTAL TABLE 5 Continued

	Child Influenza Vaccination Status At Admission ( <i>n</i> = 508) <sup>a</sup>			Caregiver Acceptance of Influenza Vaccine for Child During Hospitalization ( <i>n</i> = 171) <sup>b</sup>		
	Already Vaccinated This Season, % ( <i>n</i> )	Not Yet Vaccinated This Season, % ( <i>n</i> )	<i>P</i> value	Yes % ( <i>n</i> )	No % ( <i>n</i> )	<i>P</i> value
Rehabilitation	N/A	N/A		N/A	N/A	
Timing of hospitalization			.005			.006
Late Fall (November 29 to January 14)	56.2 (82)	43.8 (64)		39.3 (24)	60.7 (37)	
Winter (January 15 to February 28)	73.2 (139)	26.8 (51)		40.8 (20)	59.2 (29)	
Spring (March 1 to April 29)	63.4 (109)	36.6 (63)		16.4 (10)	83.6 (51)	
Length of stay <sup>d</sup>						.30
<36 h	N/A	N/A		24.5 (13)	75.5 (40)	
36–71 h	N/A	N/A		30.6 (15)	69.4 (34)	
≥72 h	N/A	N/A		37.7 (26)	62.3 (43)	

CD, chronic disease; N/A, not applicable.

<sup>a</sup> Per hospital-wide screening responses or, if unavailable, EHR or state vaccine registry documentation of influenza vaccination before hospitalization; 3 patients with unknown vaccination status at hospital admission and 11 patients with contraindications were excluded.

<sup>b</sup> Per hospital-wide screening responses; 7 patients with unknown influenza vaccine decision during hospitalization were excluded.

<sup>c</sup> Data were missing or unknown for respondent relation to child (*n* = 4), age (*n* = 7), race and/or ethnicity (*n* = 15), and education (*n* = 11).

<sup>d</sup> Hospital service and length of stay were not applicable to the child's influenza vaccination status at the time of hospital admission. Additionally, no patients on the rehabilitation service were eligible for influenza vaccination during hospitalization.

**SUPPLEMENTAL TABLE 6** Child Influenza Vaccination Status by End of 2017–2018 Influenza Season Among Those Whose Caregiver Declined Influenza Vaccine During Hospitalization, by Declination Reason (*N* = 117)

Declination Reason During Hospitalization <sup>a</sup>	Caregivers, % ( <i>n</i> ) <sup>b</sup>	Child Influenza Vaccination, % ( <i>n</i> ) <sup>c</sup>
Wish to wait, discuss, or receive elsewhere	31.6 (37)	30.3 (10)
Vaccine not effective, offers little benefit	17.1 (20)	5.6 (1)
Vaccine safety concerns or needle-phobia	14.5 (17)	0 (0)
Child not at risk	12.8 (15)	0 (0)
Not interested	11.1 (13)	7.7 (1)
Previous influenza infection	2.6 (3)	0 (0)
Other	2.6 (3)	33.3 (1)
No reason provided	7.7 (9)	22.2 (2)

<sup>a</sup> Per hospital-wide screening performed by bedside nurse and documented in child's EHR.

<sup>b</sup> Percentage and number of caregivers who declined influenza vaccine for their vaccine-eligible child during hospitalization for the listed reason.

<sup>c</sup> Percentage and number of vaccine-eligible children who were vaccinated by the end of the 2017–2018 season among those whose caregiver declined influenza vaccine during hospitalization for the listed reason. Influenza vaccination status at the end of the season remained unknown for 7 patients (4: wish to wait, discuss, or receive elsewhere; 2: vaccine not effective, offers little benefit; and 1: child not at risk).