

Surveys of Healthcare Providers and General Adult Population on the Implementation of Adult Immunization Practice Standards

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Disclaimer

The opinions expressed in this presentation are solely those of the presenter and do not necessarily represent the official positions of the Centers for Disease Control and Prevention

Disclosure

The presenter has no conflict of interest to disclose

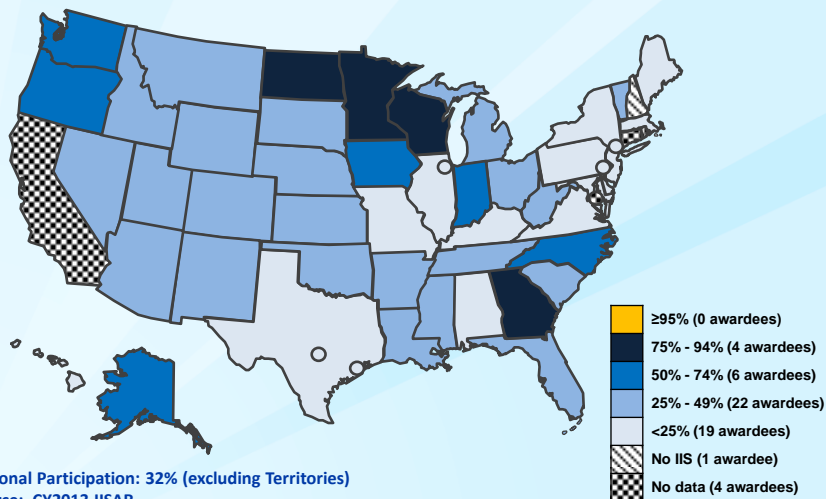
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Introduction

- ❑ **Vaccination coverage rates among adults low**
- ❑ **Adult Immunization Practice Standards updated 2014**
 - Assess vaccination status of adult patients at every visit
 - Make strong recommendation for needed vaccines
 - Administer needed vaccines or refer to vaccine provider
 - Document vaccination, including vaccine registry if available
- ❑ **Status of documentation in IIS: Are we ready for implementation?**
 - “The Value of IIS for Adult Immunization” by Alison Chi, AIRA
 - “Capture” of adults in IIS
 - AIRA survey on IIS and adult immunization
- ❑ **Status of Adult Immunization Practice Standards**
 - CDC surveys: General adult population and healthcare providers

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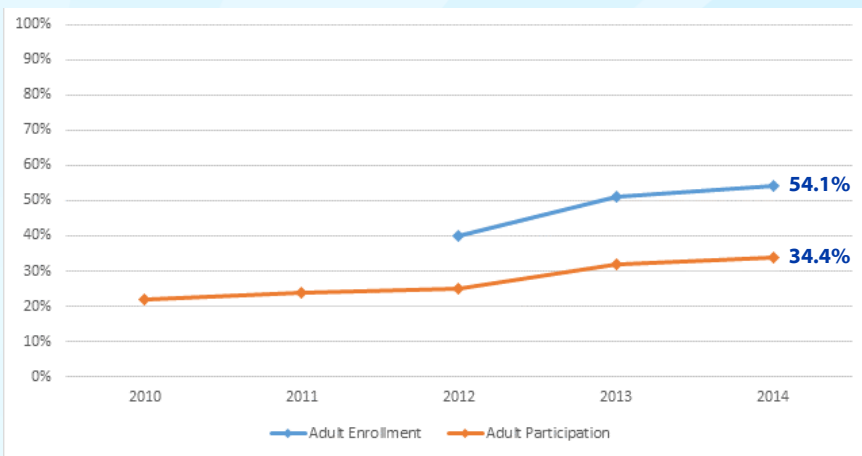
Percentage of adults aged ≥19 years participating in an immunization information system, United States, five cities*, and DC, 2013



*Chicago, IL; Houston, TX; New York City, NY; Philadelphia, PA; San Antonio, TX

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Percentage of adults aged ≥19 years enrolled and participating in an immunization information system, United States, 49 states and 5 cities¹, 2010–2014² (preliminary)



1. Chicago, IL; Houston, TX; New York City, NY; Philadelphia, PA; San Antonio, TX. Excludes data from CA and DC.

2. Source of data: IISAR. Of 55 awardees (excluding New Hampshire, which does not have an IIS), 53 (96.4%) accept data for individuals of all ages. One (1.8%) awardee only accepts data from birth through 59 months of age, and 1 (1.8%) awardee accepts data from birth through 17 years of age. Participation in IIS is defined as having at least one adult immunization documented in IIS. IIS adult enrollment data were not collected in 2010 and 2011. 2013 Census figures used as the denominator for all calculations.

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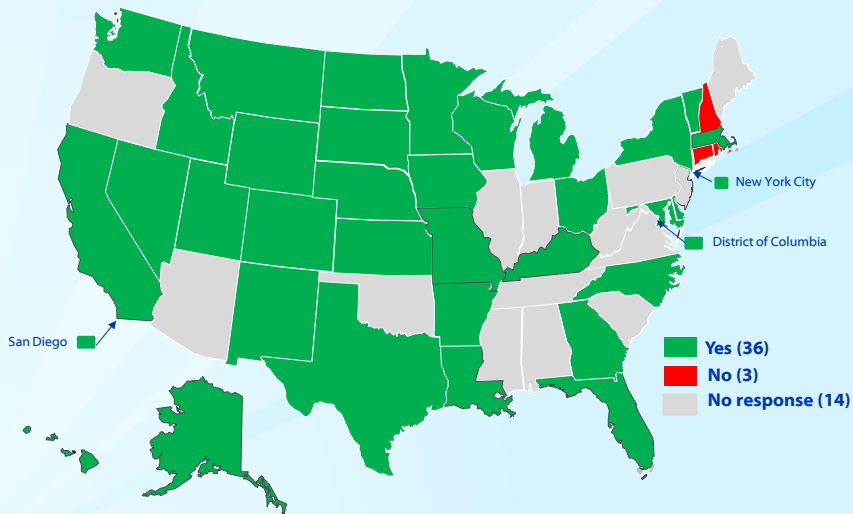
AIRA Survey: Adult Immunization and IIS

- ❑ **Background: 47 of 50 states and DC have lifespan IIS, of which 42 and DC are opt-out IIS for adults***
- ❑ **AIRA, CDC, IDSA, NAIIS collaborative to determine status adult immunization and IIS**
- ❑ **Internet-based survey developed by NAIIS Access and Collaborations Working Group**
- ❑ **Sent to AIRA members in March 2015**
- ❑ **Responses from 39 jurisdictions (36 states, NYC, DC, San Diego)**
- ❑ **Results preliminary**

*IIS: A Decade of Progress in Law and Policy. Accessed at http://journals.lww.com/jphmp/Citation/2015/05000/Immunization_Information_Systems__A_Decade_of.10.aspx

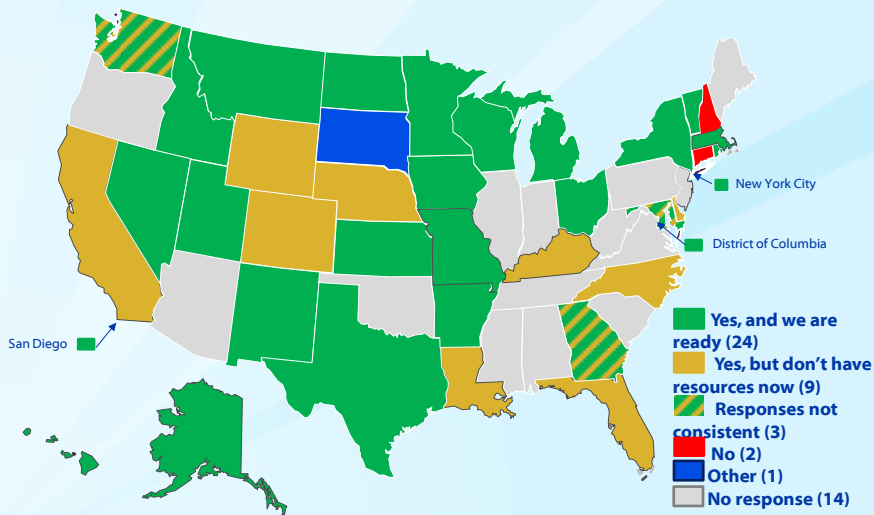
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Assuming state/jurisdiction law and policy permit reporting of adult immunizations to the IIS, does your IIS currently accept reporting from adult immunization providers?



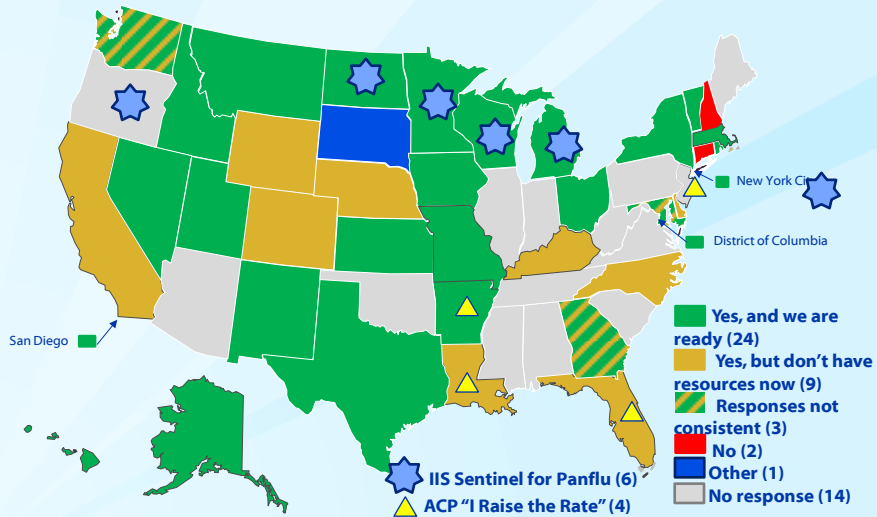
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Is your state/jurisdiction interested in working with medical associations and other partners to expand the number of providers that report adult immunizations to the IIS?



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Where are we with assessment, recommendation, and administer or referral?

- ❑ **“Call to action” for adult healthcare providers to implement adult immunization practice standards**
- ❑ **Surveys to evaluate implementation of standards**
 - Healthcare providers
 - General adult population

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Methods: Healthcare Provider Survey

- ❑ **Mail- and Internet-based survey of sample of**
 - Physicians (Internal Medicine, Family Medicine, Ob/Gyn, other specialties), PAs, NPs who see adults in outpatient settings
 - Pharmacists
- ❑ **Adult Immunization Practice Standards**
 - Knowledge
 - Practices and procedures
 - Worksite policies
- ❑ **Knowledge, attitudes, beliefs about adult immunization**

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Methods: General Adult Population Survey

- ❑ **Internet panel survey, February 27 – March 23, 2015**
- ❑ **Experience at most recent visit to healthcare provider¹ or pharmacy² in past 12 months**
- ❑ **Up to two different encounters with healthcare provider or pharmacist per respondent**
- ❑ **Receipt of immunization assessment, recommendation, and offer or referral**
- ❑ **Vaccines received**
- ❑ **Knowledge, attitudes, beliefs about adult immunization**
- ❑ **Weighted for representativeness**

1. Primary care: Visited one or more doctor's office or community health center to see a primary care provider for any type of medical care for themselves, and that the primary care provider was a general internal medicine provider, family medicine provider, or another primary care provider. Internal medicine: Visited one or more doctor's office or community health center to see a primary care provider for any type of medical care for themselves, and that the primary care provider was a general internal medicine provider. Family medicine: Visited one or more doctor's office or community health center to see a primary care provider for any type of medical care for themselves, and that the primary care provider was a family medicine provider. Obstetrician/gynecologist: Visited one or more doctor's office or community health center to see a primary care provider for any type of medical care for themselves, and that the primary care provider was an obstetrician-gynecologist, and/or reported that they had visited one or more doctor's office to see an obstetrician-gynecologist for any type of medical care for themselves. Other specialties: Visited one or more doctor's office to see a medical or surgical subspecialist provider for any type of medical care, other than ob/gyn for themselves.
2. Pharmacy: Visited a pharmacy to fill a prescription for themselves.

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Results: Healthcare Provider Survey

- ❑ Data collection in progress
- ❑ Will update Summit when results available

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Results: General Adult Survey

- ❑ Sample of 4,016 notified
 - 2,760 confirmed contacts
 - 2,683 provider or pharmacy visits
- ❑ Results preliminary, not for distribution

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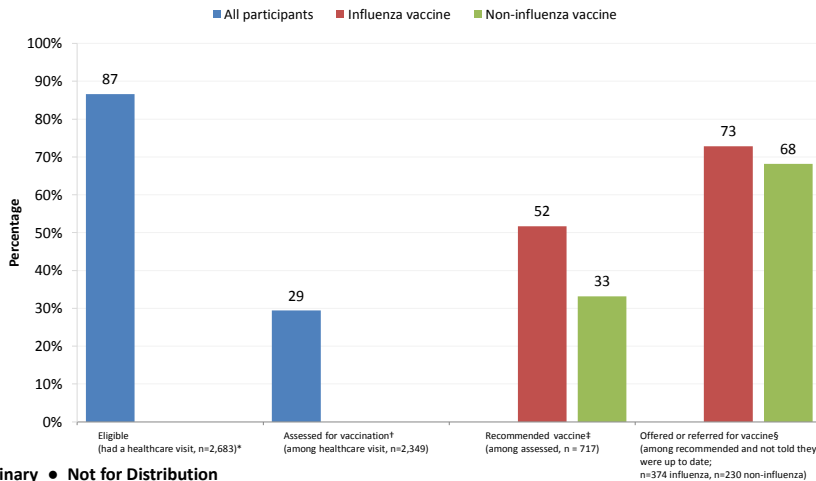
Percentage of visits made by adults to healthcare location or pharmacy in past 12 months, Internet Panel Survey, February–March 2015, United States (N=2,683)

	Any	Primary Care	Internal Med	Family Med	Ob/Gyn ¹	Other Specialties	Pharmacy ²
Total	86.6	70.2	30.3	35.4	19.5	27.6	71.3
Age							
19-49 years	82.0	59.9	23.2	32.3	24.6	16.4	63.8
50-64 years	89.5	77.2	34.9	37.8	18.1	37.1	77.0
≥65 years	95.8	90.5	44.8	41.4	6.4	46.9	85.2
Race/ethnicity							
Non-Hispanic white	88.8	72.6	31.3	37.2	19.4	31.3	74.2
Non-Hispanic black	85.4	68.3	33.0	28.9	21.3	20.3	72.7
Hispanic	78.5	62.4	23.5	34.1	17.9	18.6	60.3
Other	85.4	68.2	31.4	32.5	20.4	24.4	66.7
Medical condition³							
No	82.6	64.2	26.0	34.2	19.5	20.3	64.8
Yes	95.9	84.3	40.5	38.4	19.4	44.5	86.6

1. Percentage shown is of all adults, i.e., not limited to women.
2. Visited pharmacy to fill prescription for themselves.
3. Underlying medical condition is defined as currently have one or more chronic medical condition lung or breathing problem (e.g., asthma or other chronic lung problem), any kind of liver condition, any kind of kidney condition, or any kind of heart condition (other than high blood pressure), diabetes (other than during pregnancy) OR currently have weakened immune system OR was pregnant at any time during the past 12 months.

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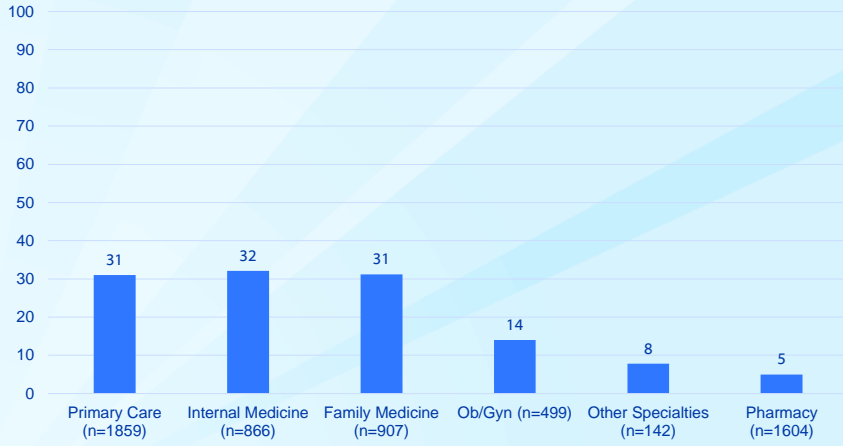
General adult population survey response on Adult Immunization Practice Standards, February–March 2015, Internet panel survey, United States



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*Healthcare visit defined as at least one visit to any of 11 locations for any type of medical care for themselves, or to fill a prescription during the past 12 months. Respondents were allowed to indicate that they visited more than one place, and were asked about the four components of the Adult Immunization Practice Standards at up to two locations.
 †Receipt of vaccination assessment based on answer to question: "During your most recent visit to [location], did any staff talk to you about shot or vaccines you might need or have received in the past?" (Q12). The percentage of adults reporting receipt of vaccination assessment is shown for all healthcare or pharmacy locations.
 ‡Receipt of vaccination recommendation based on answer to question: "During your most recent visit to [location], did someone tell you that you needed to get any shots or vaccines?" (Q15). Respondents were asked to select any of flu (influenza), Tetanus (this could include pertussis and could be either "Tid" or "Tdap"), Pneumococcal (pneumonia), Herpes zoster (shingles), HPV (human papillomavirus), Hepatitis B, or Other shots or vaccines required for travel. The percentage of adults reporting receipt of vaccination recommendation is shown for all healthcare or pharmacy locations, among adults who were not told they were up to date on their vaccinations.
 §Receipt of vaccination offer or referral based on answer to questions: "During your most recent visit to [location], did any staff offer to give you any shots or vaccines during the visit?" (Q22) and "During your most recent visit to [location], did any staff suggest that you go somewhere else to get any shots or vaccines?" (Q23; respondents were asked to indicate if any staff suggested that they go somewhere else to get any vaccine that they were not offered). The percentages of adults reporting receipt of offer or referral is shown for all healthcare or pharmacy locations, among adults who received a recommendation and were not told they were up to date on their vaccinations.
 ¶ Documentation in IIS was not captured in this survey.

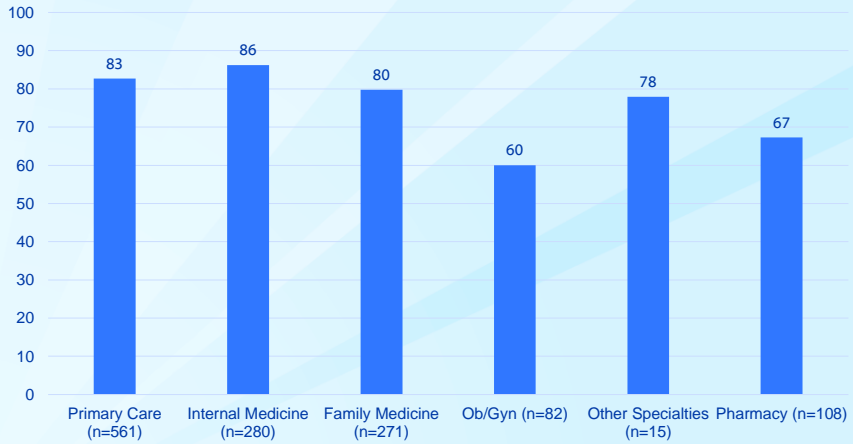
Percentage of most recent visit(s) to healthcare location or pharmacy* in past 12 months during which adults reported receiving vaccination assessment, Internet Panel Survey, February–March 2015, United States (N=2,349)



*Visited pharmacy to fill prescription for themselves.

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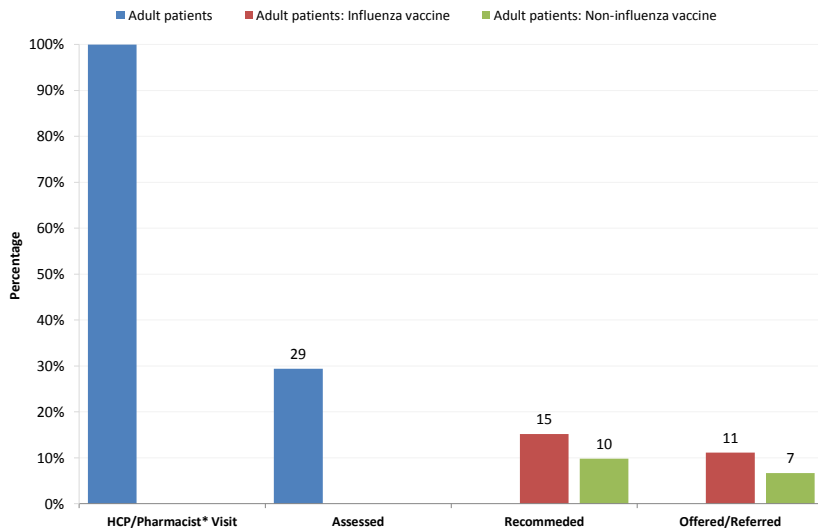
Percentage of most recent visit(s) to healthcare location or pharmacy* in past 12 months during which adults reported they were told not current on vaccination and received recommendation for vaccination, Internet Panel Survey, February–March 2015, United States (N=717)



*Visited pharmacy to fill prescription for themselves.

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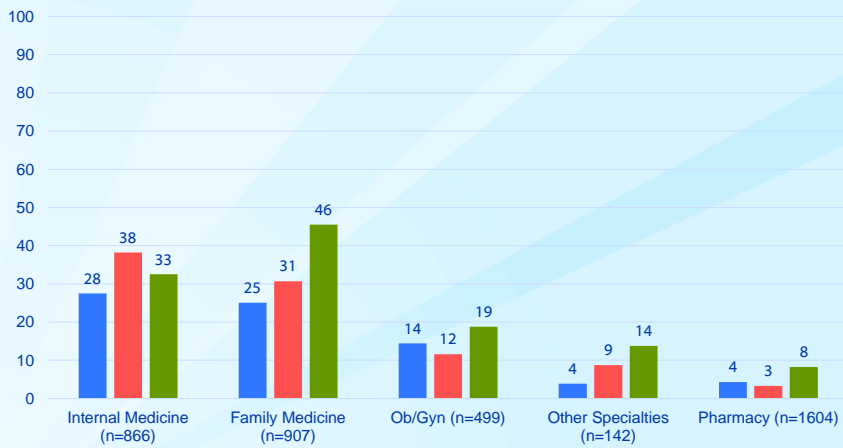
**Adult Immunization Practice Standards “Cascade”
based on Internet panel survey of adults, February–March 2015, United States**



*To fill prescription for themselves.

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Percentage of most recent visit(s) to healthcare location or pharmacy* in past 12 months during which adults reported receiving vaccination assessment, by age, Internet Panel Survey, February–March 2015, United States (N=2,349)

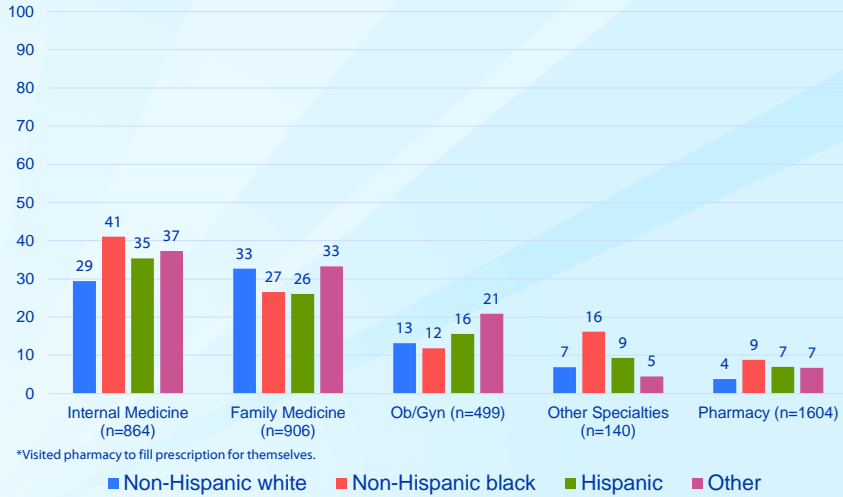


*Visited pharmacy to fill prescription for themselves.

■ 19-49 years ■ 50-64 years ■ ≥65 years

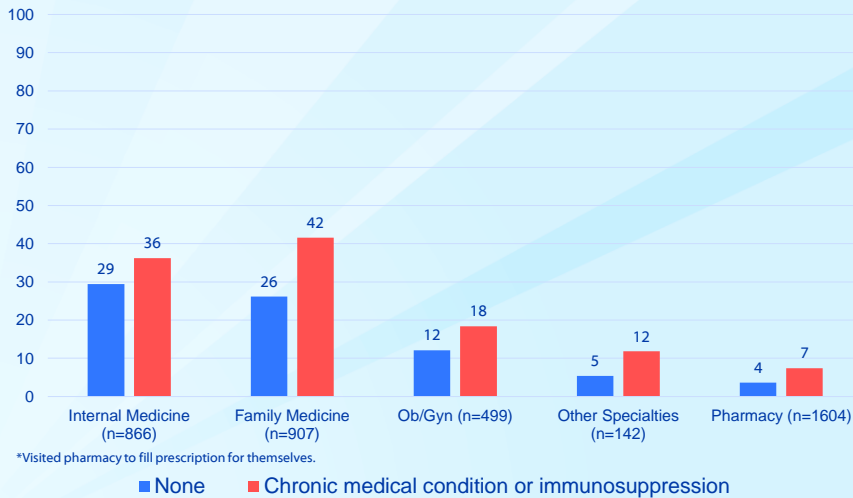
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Percentage of most recent visit(s) to healthcare location or pharmacy* in past 12 months during which adults reported receiving vaccination assessment, by race/ethnicity, Internet Panel Survey, February–March 2015, United States (N=2,349)



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Percentage of most recent visit(s) to healthcare location or pharmacy* in past 12 months during which adults reported receiving vaccination assessment, by medical condition, Internet Panel Survey, February–March 2015, United States (N=2,349)



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Limitations: General Adult Survey

- ❑ **Sampling bias, Internet panel sample**
- ❑ **Recall bias**
- ❑ **Assessment may not have been apparent to respondent**
- ❑ **Survey tool cannot determine if receipt of vaccine is result of recommendation/offer/referral**
- ❑ **No medical record verification**
- ❑ **Further analyses planned to look at association between provider or pharmacy visits with assessment and reported receipt of vaccination**

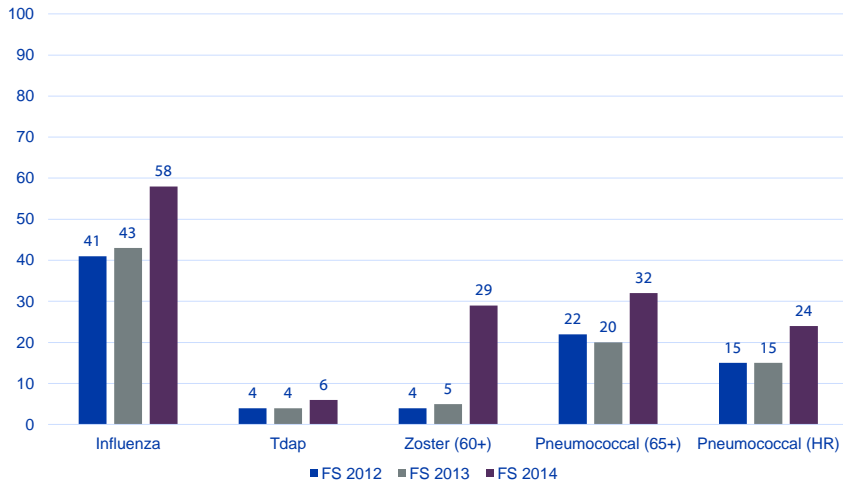
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Summary: General Adult Survey (Preliminary)

- ❑ **Adult immunization assessment done ~30% outpatient visits to healthcare provider or pharmacy**
 - Primary care > Ob/Gyn > Specialty Care > Pharmacy
- ❑ **Limited assessment even for those ≥65 years or with chronic health conditions**
- ❑ **Among visits assessed, if not current on immunization, 60%–86% reported receiving recommendation or offer**
 - Primary care > Pharmacy > Ob/Gyn
 - Recommendation for flu vaccine > non-flu vaccines
- ❑ **If recommended, reported receiving offer/referral majority of time**
 - 73% for influenza vaccination
 - 68% for non-influenza vaccination

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In the past year, has this vaccine been recommended to you by a medical professional?



*All percentages are weighted

SOURCE: Porter Novelli. 2012-14. *ConsumerStyles (Fall)*. Unpublished.

Courtesy of Aparna Ramakrishnan, NCIRD Health Communication Science Office

Which, if any, of the following issues have made it difficult or prevented you from getting a vaccination *other than the flu vaccine* as an adult?

	2014	2012
None of these.	51.3	51.0
I'm healthy and I don't need vaccines.	13.1*	11.0
I'm not worried about the diseases.	13.3*	11.6
I was not aware the vaccine was recommended for me.	11.6*	18.6
I didn't know which vaccines to get.	9.2*	14.7
Other issues not listed.	8.0	7.1
I couldn't afford the vaccine(s).	7.0*	10.0
I was not aware adults needed vaccines.	4.7*	7.2
I didn't know where to go to get vaccines.	1.5*	2.7
I wasn't able to take off from work to get to appointment.	1.4	1.9
The diseases are not serious.	1.2	1.6
I didn't have transportation to my vaccine appointment.	0.8	0.8
I could not get an appointment.	0.3*	1.1

*All percentages are weighted & * indicates statistical significance.

SOURCE: Porter Novelli. 2012 and 2014. *ConsumerStyles (Fall)*. Unpublished.

Courtesy of Aparna Ramakrishnan, NCIRD Health Communication Science Office

Discussion: General Adult Survey

- ❑ Assessment is first critical step in adult immunization
- ❑ Assessments done most often in primary care settings
- ❑ Room for improvement in adult immunization assessment in all healthcare provider settings
- ❑ Adult immunization recommendations often followed by offer/referral
- ❑ Flu vaccination good platform to recommend other adult vaccines

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Thank you

For patients and providers

800-CDC-INFO (800-232-4636)

www.cdc.gov/vaccines

@CDCizlearn

For providers

NIPInfo@cdc.gov

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