



Assessing Self-reported Vaccination Status, Combined with Immunization Education and Promotion at Annual African-American Community Health Fairs

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Background & Setting

- Creighton University APhA-ASP Operation Immunization (OI) works in concert with the Immunization Task Force-Metro Omaha (ITF) by providing free immunization status screenings, education and promotion for adult attendees during the annual Black Family Health Fair (BFHF) in north Omaha, NE.
- The current project expands previous work aimed to guide local immunization advocacy efforts through analysis of immunization status data.
- This report adds data collected on an annual basis, and assesses the consistency of results obtained through repeated use of the “snapshot” screening survey tool.

Project Description

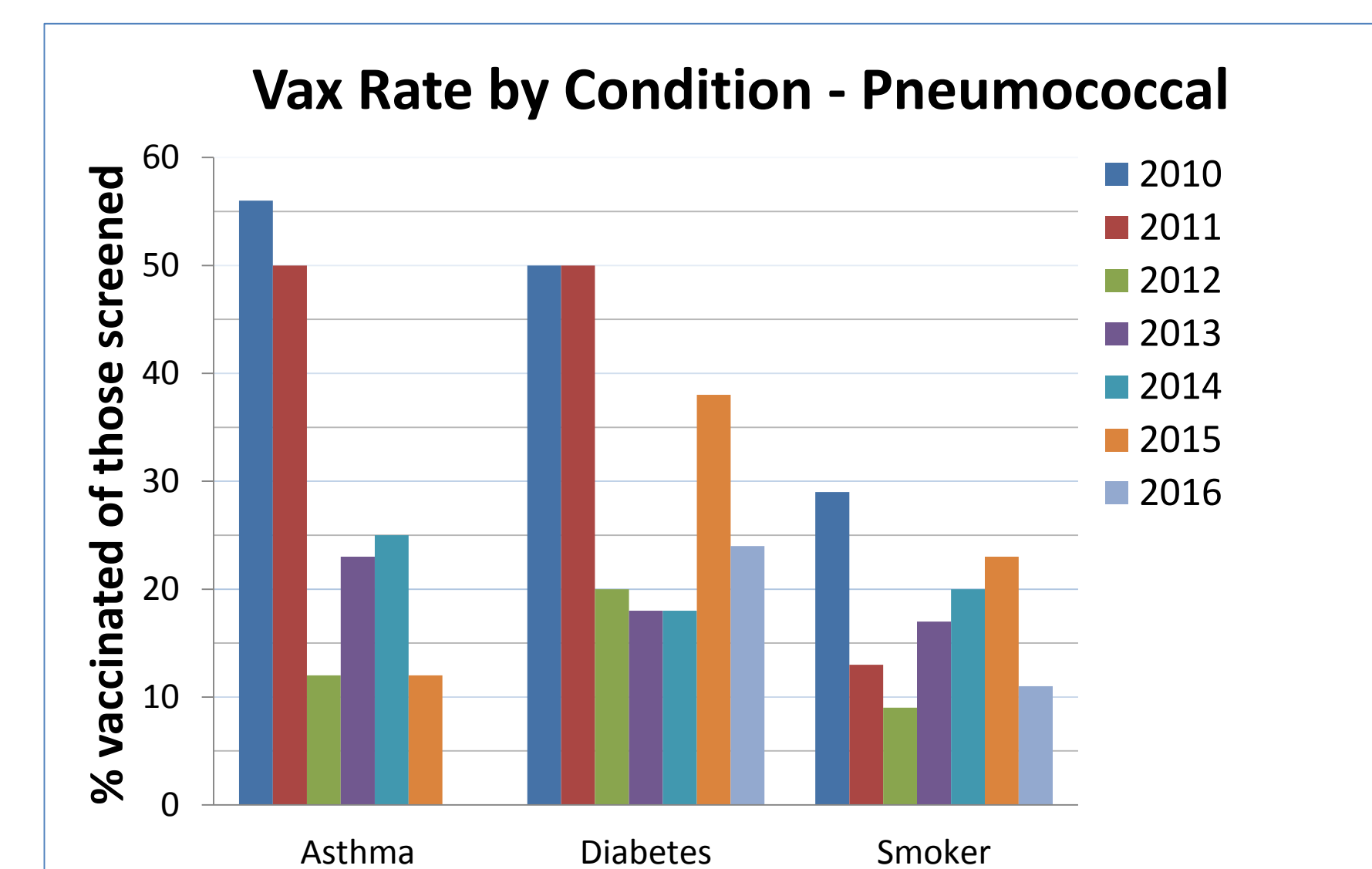
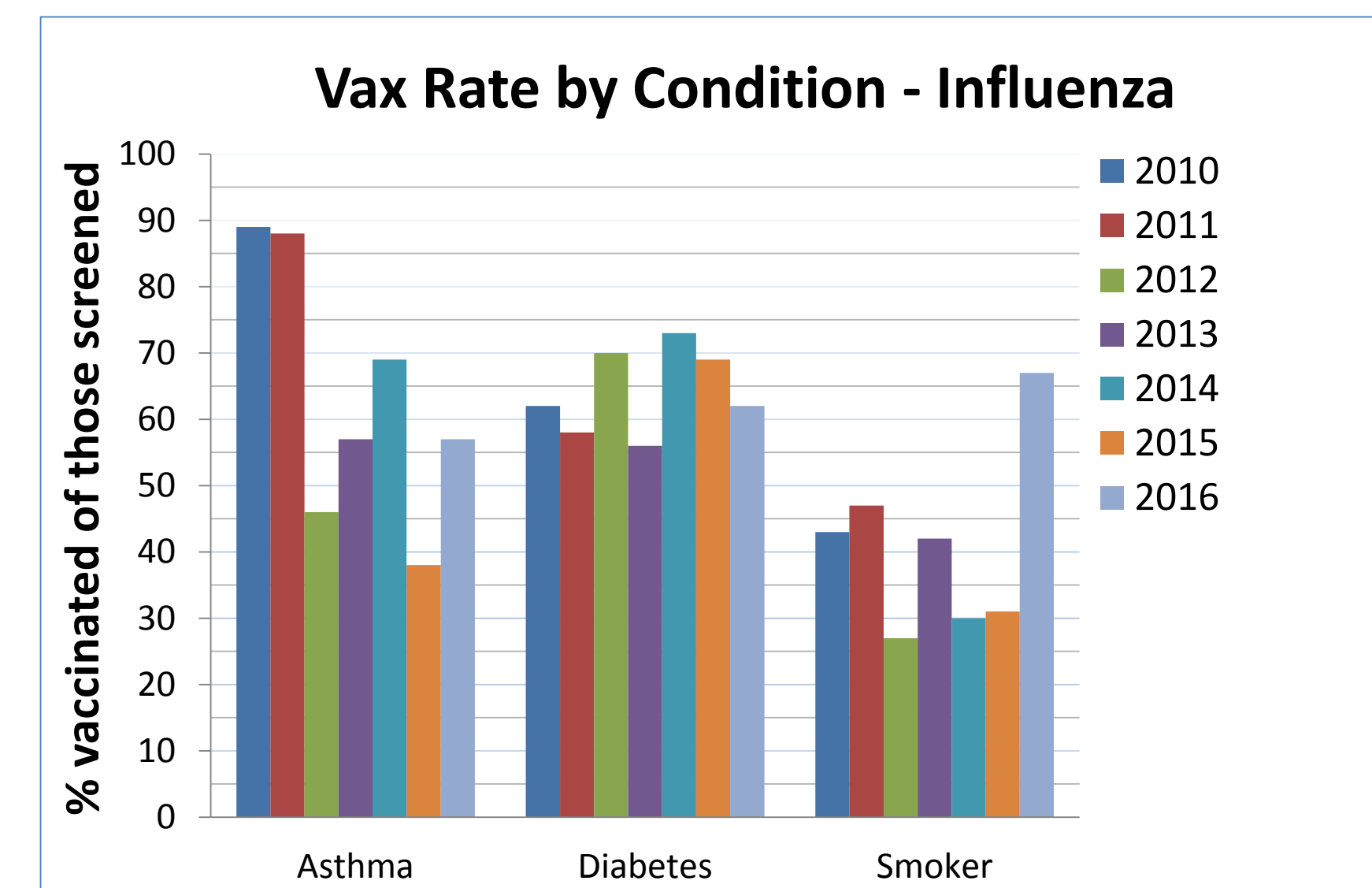
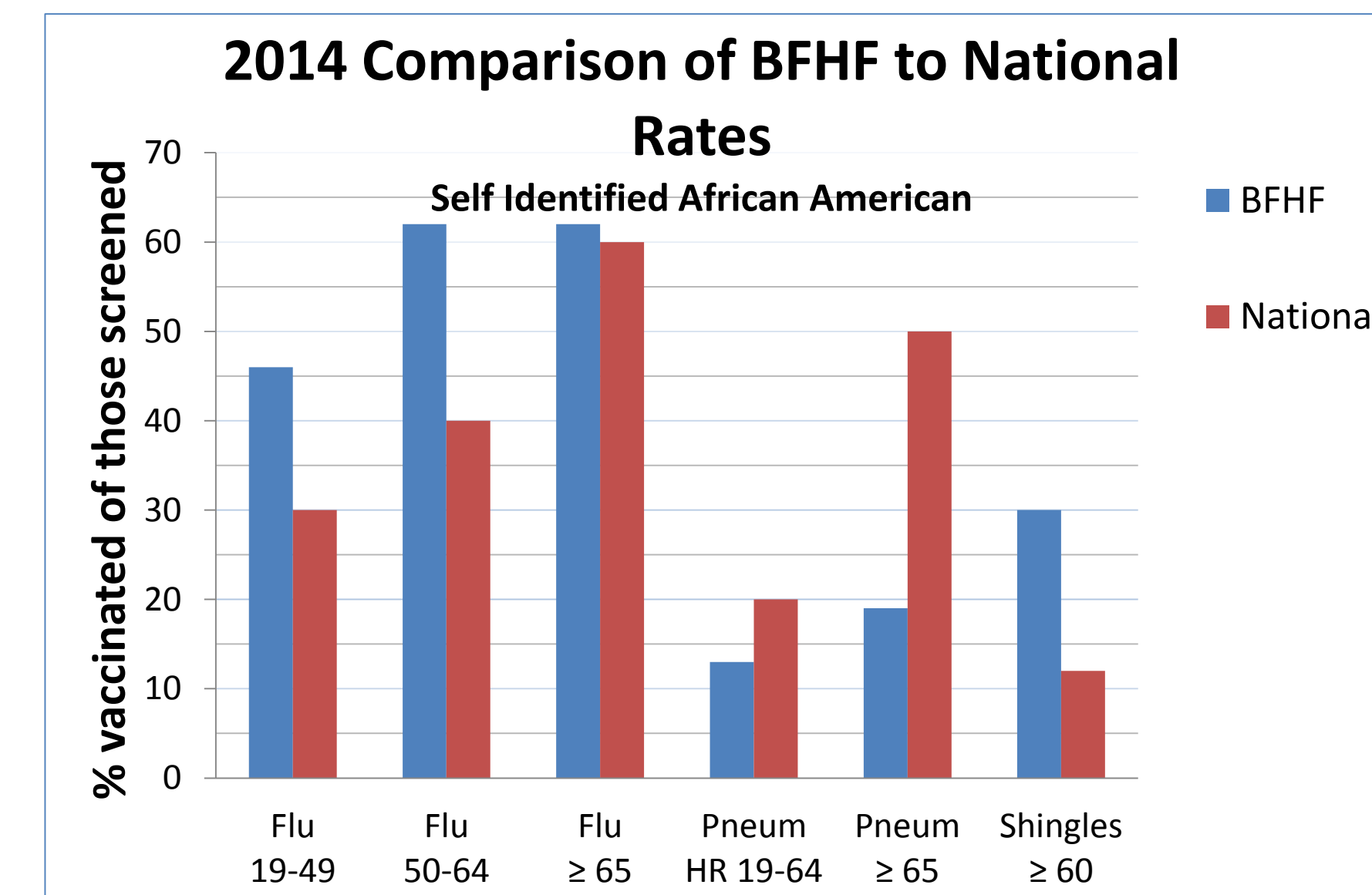
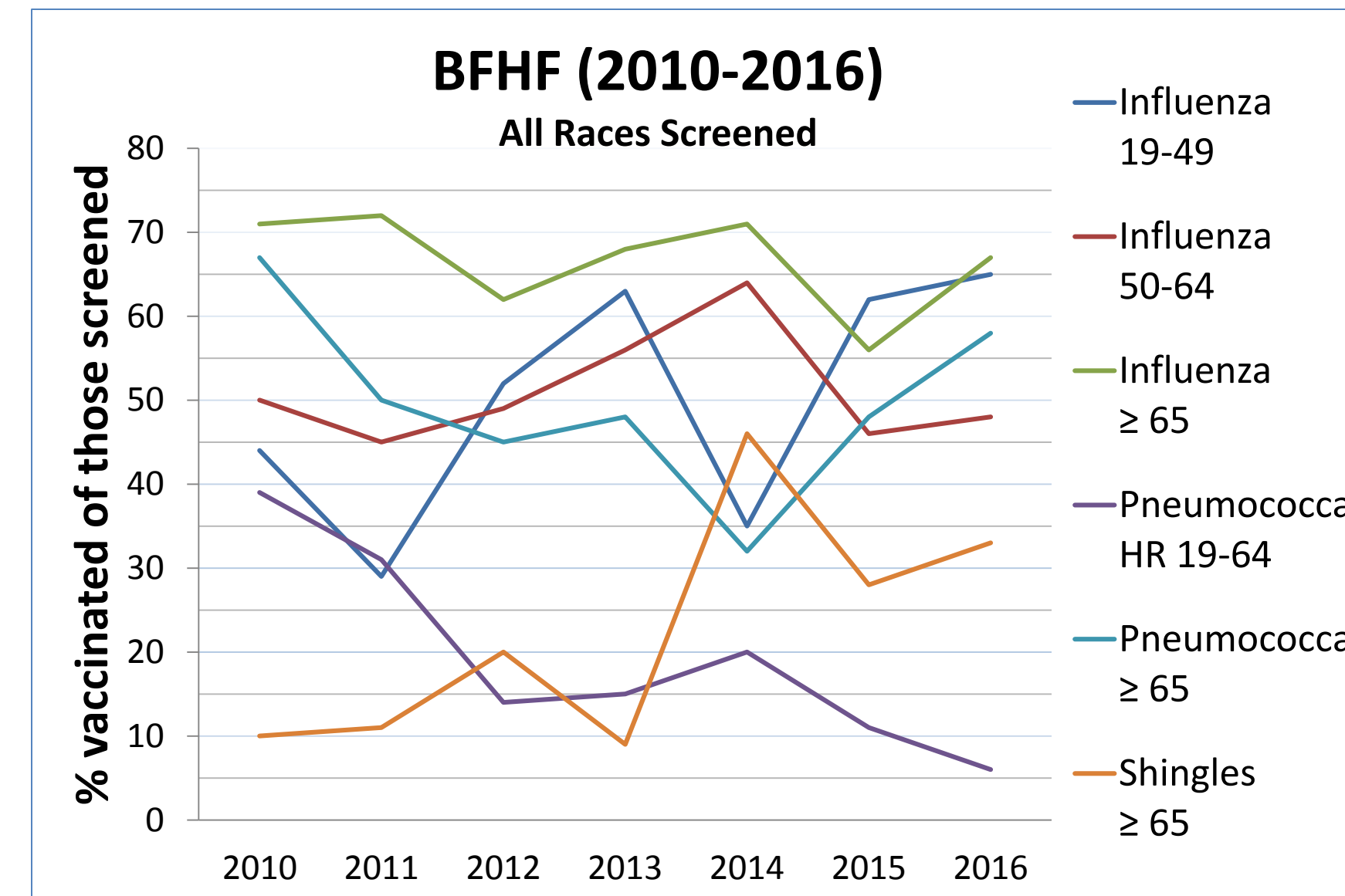
- Data was collected by pharmacy and nursing volunteers, using a standardized screening survey tool, during the BFHF 2010 through 2016 annual events, based on self-report from those screened. (See handout for sample screening form.)
- The survey identified gender, age group, selected high-risk conditions and vaccination status. Self-report of racial group was requested from 2014 on.
- Participants were screened for influenza, pneumococcal, Td/Tdap, Hepatitis A and B, HPV, MMR, Varicella, Shingles and Meningococcal immunization status.
- BFHF 2014 data for self-identified African Americans was compared to published national 2014 data for the same targeted population group. Influenza, Pneumococcal and Shingles vaccination data is reported.
- BFHF data was analyzed using IBM-SPSS-v24 software.

Demographics

* Totals may not equal 100% due to unreported data / rounding.	2010	2011	2012	2013	2014	2015	2016
Total BFHF Attendees, #	670	560	620	670	670	700	NA
Screened – Vax Status, # (%)	101 (15)	77 (14)	183 (30)	119 (18)	100 (15)	89 (13)	73
Female (% of those screened)	60%	65%	71%	58%	69%	72%	59%
< 19 yoa, # (%)	9 (9)	2 (3)	8 (4)	6 (5)	5 (5)	2 (2)	1 (1)
19-49 yoa, # (%)	39 (39)	24 (31)	62 (34)	44 (37)	20 (20)	27 (30)	20 (27)
50-64 yoa, # (%)	32 (32)	33 (43)	69 (38)	43 (36)	47 (47)	35 (39)	33 (45)
≥ 65 yoa, # (%)	21 (21)	18 (23)	40 (22)	22 (18)	28 (28)	25 (28)	19 (26)
Self-described Afr Amer, # (%)	NA	NA	NA	NA	73 (73)	66 (74)	54 (74)
Asthma, #	9	10	14	14	16	8	7
Diabetes, #	16	16	11	11	11	16	17
Smokers, #	14	20	12	12	10	13	9
Total High Risk 19-64 yoa, # (%)							
-Some had multiple conditions	23 (25)	23 (31)	48 (27)	25 (22)	22 (23)	19 (22)	17 (24)

- 2010-2015, African Americans constituted 76-85% of total BFHF participants.
- Females constituted 63-70% of total HF participants.
- From 42-56% of all HF participants fell in an age range of 45-64 years of age.
- Typically 13-18% of HF participants were screened for immunization status, and received education. In 2012, 30% received this service.

Results



Results Summary

- Influenza vaccination rates over six year observation period:
 - 19-49 yoa: Fluctuating trend line, between 2010-2016, with low rates in 2011 (29%) and 2014 (35%), and a peak in 2013 (63%).
 - 50-64 yoa: Rates fluctuated between 45%-64%, based on collated participant report data, with a dip in 2015 (46%).
 - ≥ 65 yoa: Rates fluctuated between 56%-72%, with a dip in 2015 (56%) and rebound in 2016 (67%)
- Influenza vaccination for those with Asthma (38-89%) and Smokers (27-67%) varied substantially, while there was less variation over the six year period for those with Diabetes: 56-73%. There were few subjects in these categories for most years.
- Healthcare Worker participant influenza immunization rate were: 69%, 50%, 78%, 74%, 58%, 80% and 69% respectively, over the six years.
- In 2014, of self identified African Americans, all three age groups had higher immunization rates compared to national rates (National Health Interview Survey, NHIS, 2014).
- Pneumococcal vaccination rates fluctuated, and trended down over the six years for high risk groups, except for those ≥ 65 yoa.
- Shingles vaccination rates were low over the first 4 years (10-20%), but trended higher after 2014 (28-46%). National rates in 2014 were 14%.
- Low subject counts, and wide fluctuations made other vaccination measures less useful.

Discussion

- While subject numbers varied from year to year, there were useful trends noted across the observation period for commonly used vaccines with stable clear measurements available.
- Overall, 2014 immunization rates for this population appeared similar or higher compared to national trends for Influenza and Shingles immunization. They were lower versus national rates for Pneumococcal. This may have been impacted in the face of evolving recommendations for use of two vaccines.
- Shingles vaccination rates remain low; however there has been an increase in rates based on reports in 2014 and beyond.
- For vaccines with changing CDC recommendations, or those that were primarily administered in childhood, subjects often did not know their status
- Limitations
 - Selection bias was possible due to convenience sampling
 - The data collected was self reported by participants
 - Some individuals may have been surveyed ≥1 times over the 6 years.
 - Small subgroups limited some data analysis.

Conclusions

- This standardized screening survey tool appears effective in providing relatively consistent “snap shots” of immunization rates, over repeated samples from our target population.
- 2014 Immunization rates for Influenza and Shingles vaccines among African American participants in the annual BFHF were similar or higher compared to African Americans nationally; rates for pneumococcal vaccination were lower.
- It is hoped that continued screening, education and promotion efforts will positively impact immunization rates for this population.
- This screening tool is easy to use, and has also proven beneficial in training student health professionals in patient interview, education and promotion techniques; on CDC vaccination recommendations for various population groups; and in basic Community-Based Participatory Research (CBPR) skills.
- Further assessment of the validity and consistency of our survey tool, as well as continued comparisons to national data may allow better assessment of immunization improvement progress for our targeted populations.

References

- Surveillance of vaccination coverage among adult populations – United states, 2014. Centers for Disease Control and Prevention (CDC). *Morbidity and Mortality Weekly Report* 65.1 (2016): 66-72. *Center for Disease Control and Prevention*. Web. 5 February 2016.

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