

# Shingles Vaccination: It's Time to Tame the Beast Lurking Within

Ruth Carrico PhD, DNP, FNP-C, CIC, FSHEA, FNAP  
Audrey Stevenson PhD, MPH, MSN, FNP-BC

## INTRODUCTION

In the United States, there are an estimated 1 million cases of shingles annually, with an individual lifetime risk of developing shingles of 30%. Despite the evidence for the benefits associated with the shingles vaccine, vaccination rates remain suboptimal, and the incidence of shingles continues to rise. According to 2018 National Center for Health Statistics, only 34.5% of adults 60 years or older had ever received a shingles vaccination, and vaccination rates decline with increasing age.

This educational intervention, which included a monograph, podcast and educational tool, was designed to positively affect clinician practice patterns by providing learners with evidence-based knowledge and strategies for translating and applying new information regarding shingles burden of disease and shingles vaccination to daily clinical practice.

Start and End Date 11/15/2022-11/30/2023

## OBJECTIVES

- Summarize the CDC recommendations regarding shingles vaccination in US adults
- Identify candidates for shingles vaccination
- Summarize recombinant zoster vaccine (RZV) trial outcomes and safety data
- Discuss the prevalence and disease burden of shingles
- Explain the barriers that may be encountered surrounding shingles vaccination
- Summarize effective communication techniques to utilize when addressing barriers to vaccination

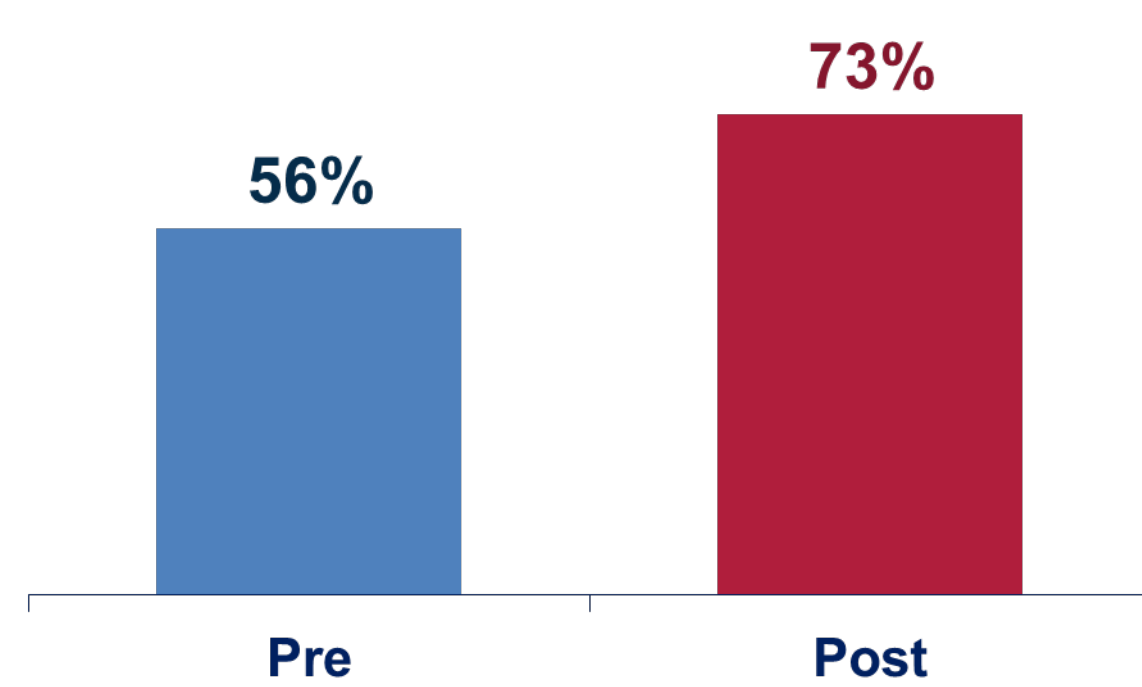
## OUTCOME METHODS

Educational outcomes data assessing learners' knowledge, confidence and competence were obtained pre/post activity as well as 60-days after activity completion.

- Total records = 8,201 (pre/post/eval) and 79 (follow-up)
- Follow-up results also reported using descriptive statistics (n=79). 68 of the 79 follow-up respondents currently work or volunteer as an NP providing direct patient care.
- A paired analysis of pre/post results was conducted. These data were filtered to include only learners who self-reported seeing patients each week (n=5,821).
- Demographics (pre) and evaluation (post) results shown here use descriptive statistics.

## OVERALL MEAN PERCENT CORRECT PRE TO POST FOR 10 MULTIPLE-CHOICE QUESTIONS

A statistically significant 17% absolute increase in mean percent correct answers from pre to post,  $P < 0.001$ ,  $ES = 0.87$  (large),  $n = 5,820$ , paired data.



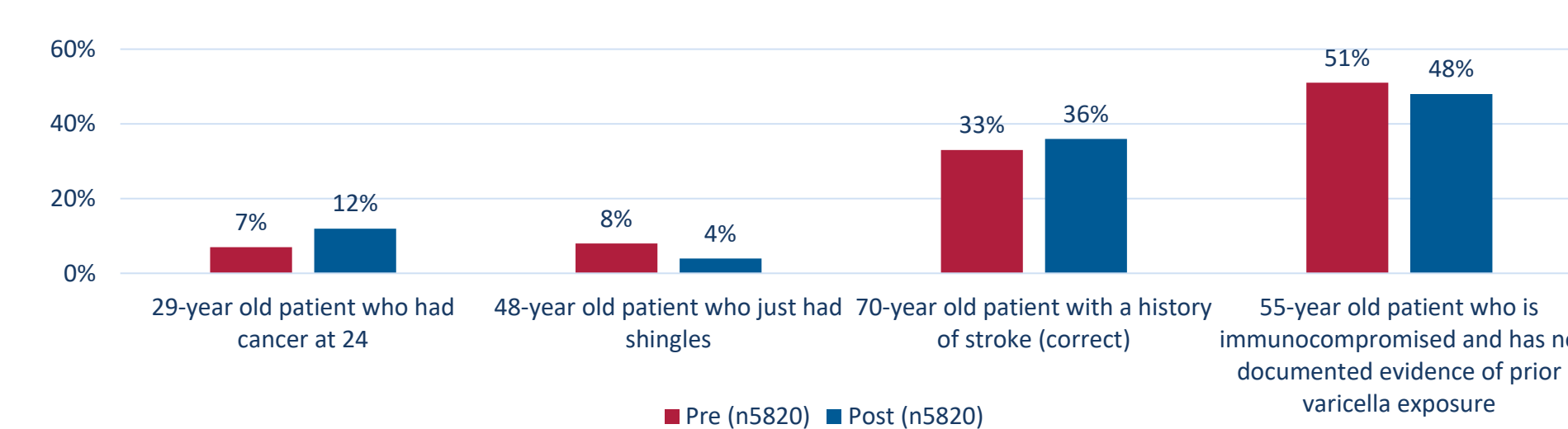
## EXECUTIVE SUMMARY

Audience reached

- 10,123 participants (253% of grant target); 8,201 completions
- 97% are nurse practitioners
- NP certification: 77% Family medicine, 13% Adult/Gerontology
- Clinical focus (Top 4): 41% Primary care, 8% Urgent care, 5% Internal medicine, 4% Geriatrics
- 35% administer shingles vaccination in their care setting, while 65% refer to a pharmacy or other vaccination provider
- Podcast had over 5700 downloads
- Patient tool continues to be accessed on AANP website at this link: [Shingles-Patient-Tool.pdf \(aanp.org\)](#)
- Overall 17% absolute increase in percent correct answers to 10 knowledge/case questions from pre (56%) to post (73%) with a large effect size (Cohen's  $d = 0.87$ ).
- There was a 22% absolute increase in mean confidence rating out of 5, from pre (3.13) to post (4.22), with a large effect size (Cohen's  $d = 1.15$ ) for "Identify appropriate candidates for shingles vaccination."
- There was a 20% absolute increase in mean confidence rating out of 5, from pre (3.23) to post (4.24), with a large effect size (Cohen's  $d = 1.06$ ) for "Discuss shingles disease burden with your patients."

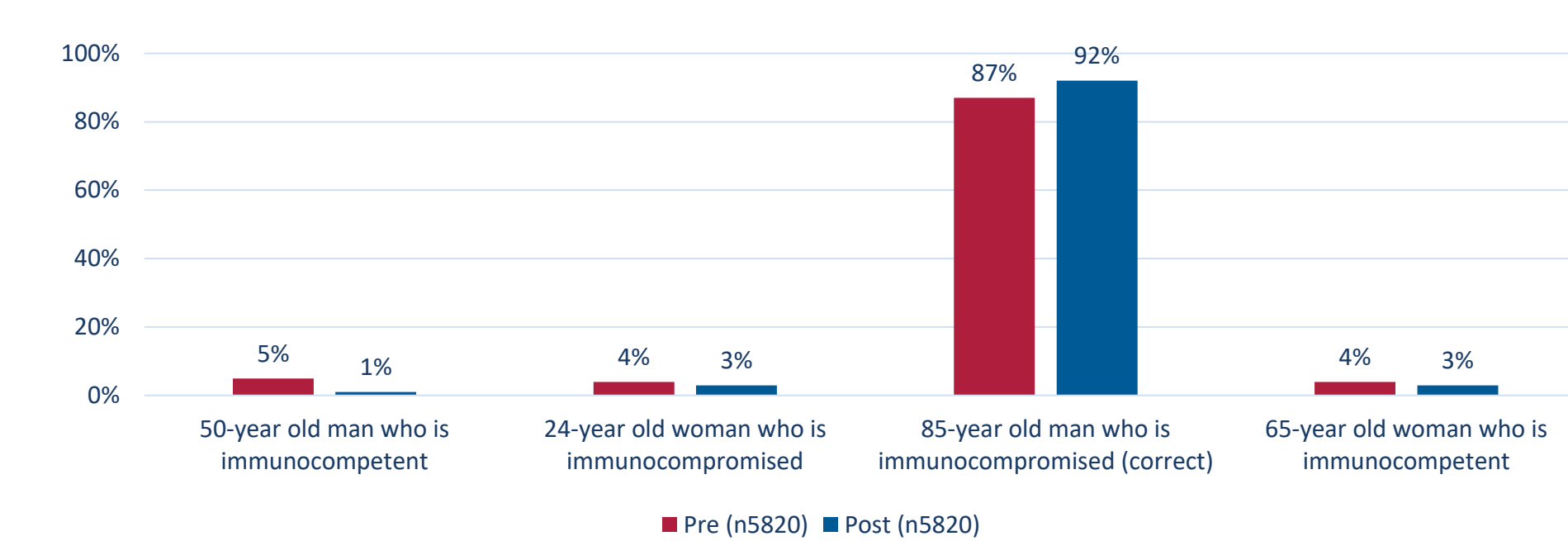
## PRE/POST KNOWLEDGE & COMPETENCE

Who among the following patients is a candidate for shingles vaccination?

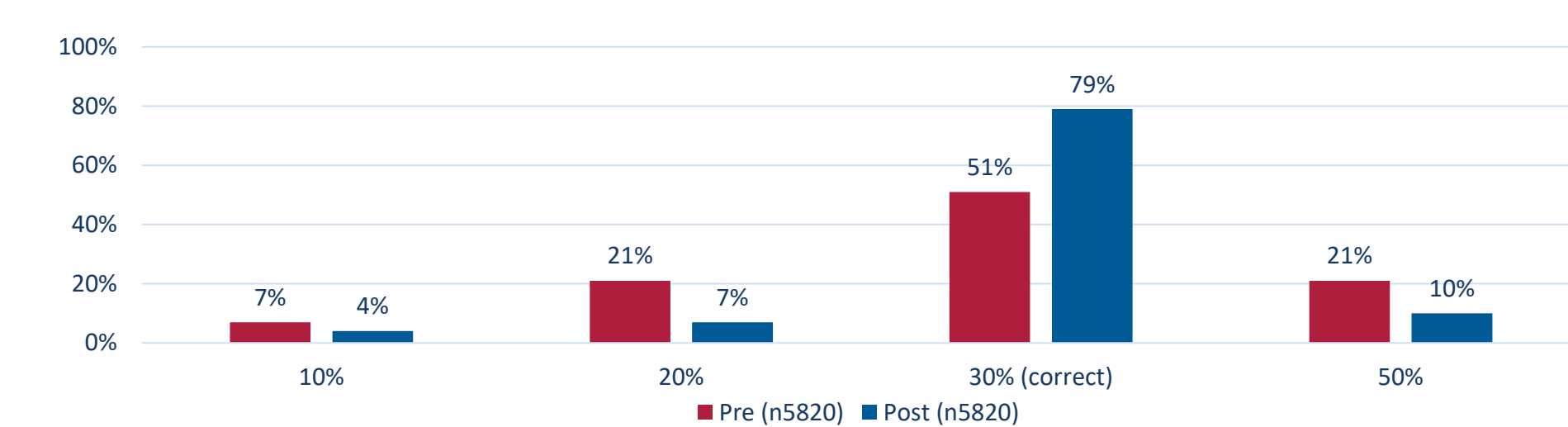


**Faculty insight: "The responses to the 4<sup>th</sup> option are likely influenced by outdated knowledge about the previously available shingles vaccine, Zostavax."**

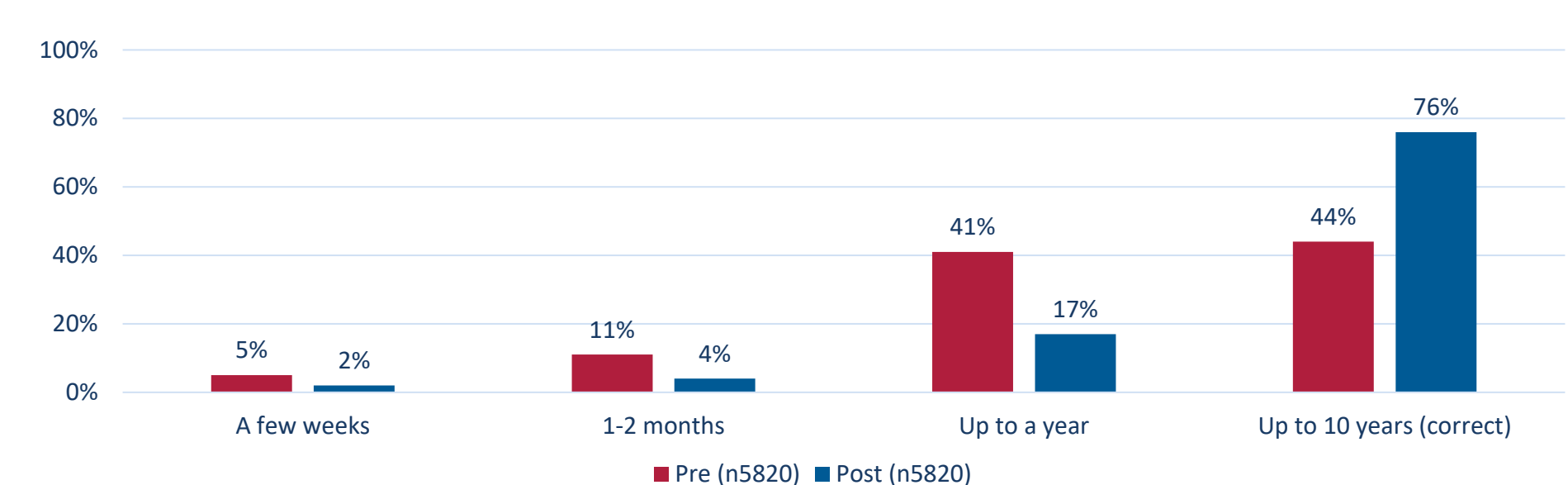
Who among the following patients is at greatest risk of hospitalization for shingles complications?



What is the likelihood of having shingles in the average American lifetime?

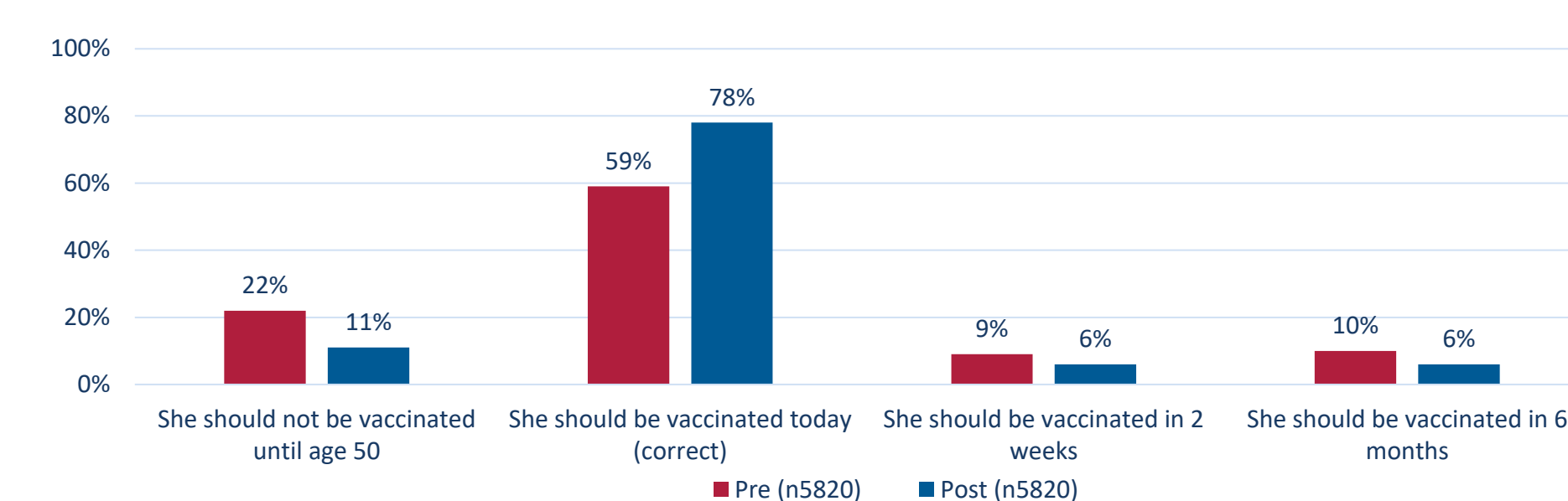


How long can postherpetic neuralgia (PHN) symptoms last?

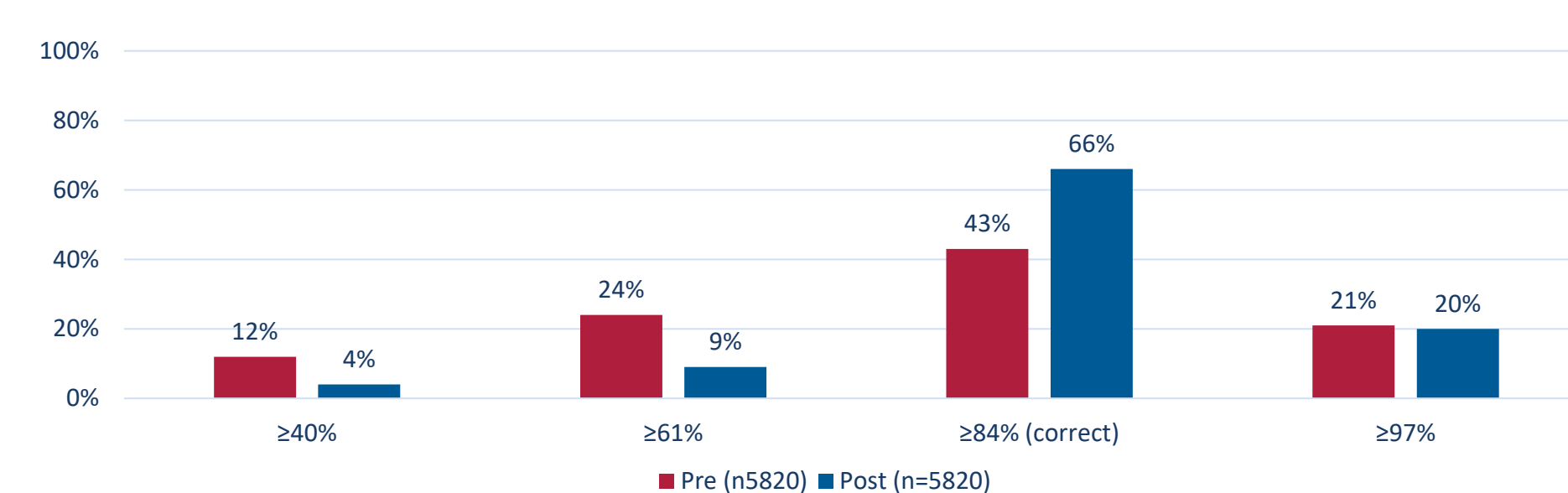


## PRE/POST KNOWLEDGE & COMPETENCE

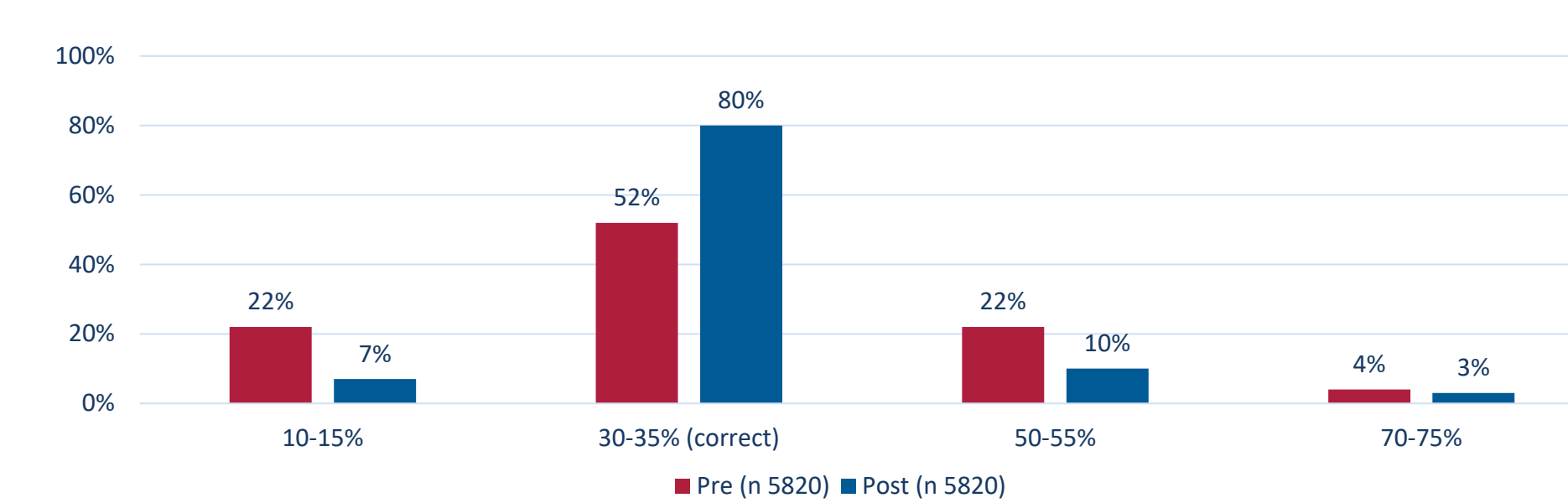
A 45-year-old woman is scheduled to receive her first dose of rituximab (anti B cell therapy) for rheumatoid arthritis in 4 weeks. She has documented history of infection with wild-type varicella when she was 10 years old. What recommendation do you make regarding vaccination for shingles?



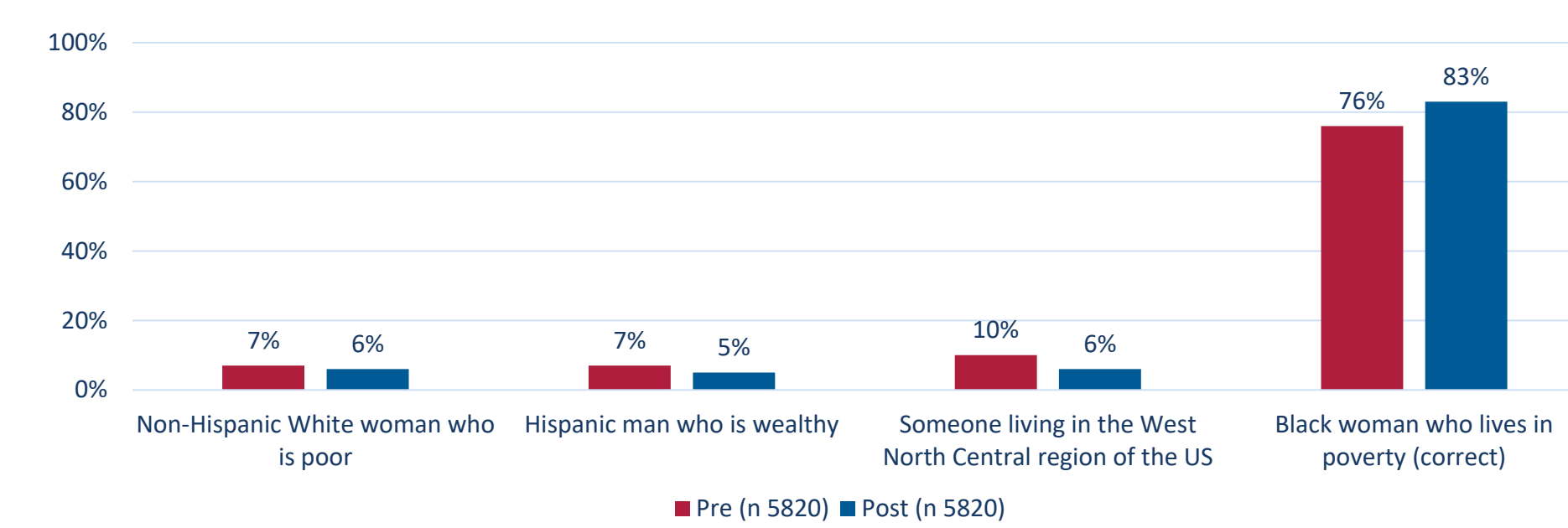
After a 7-year follow-up of immunocompetent adults ages 70 and older, what was the vaccine efficacy of Shingrix?



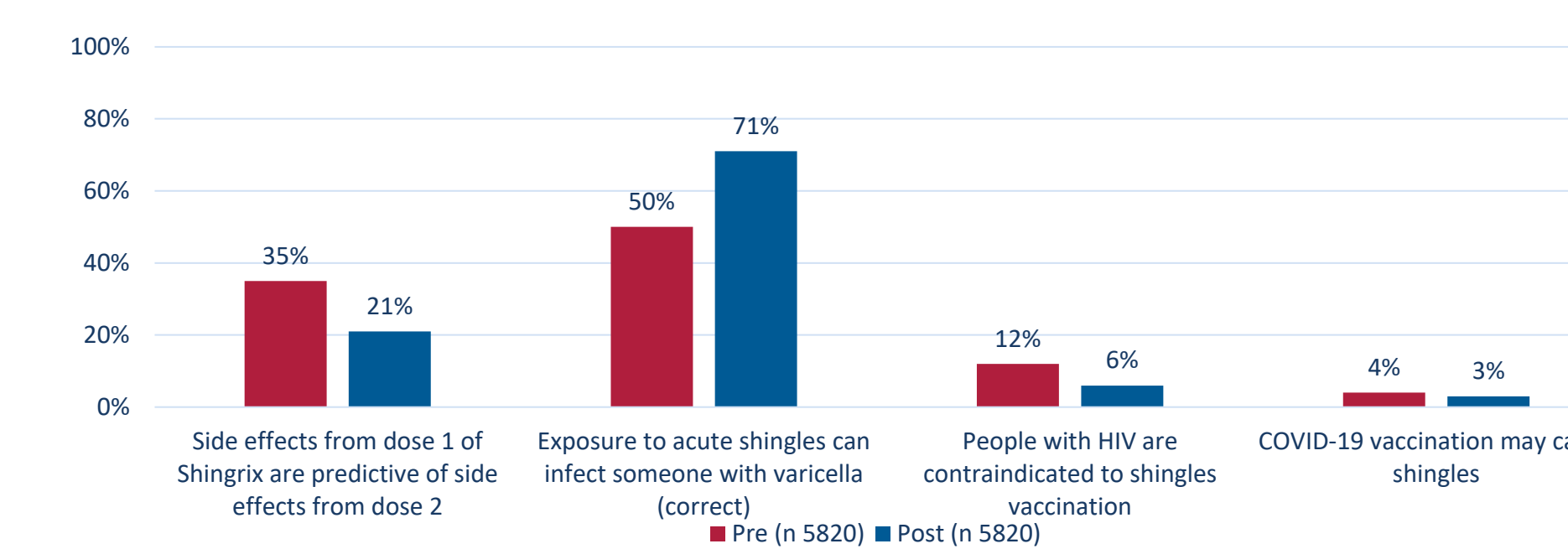
According to data from 2018, what percentage of the American population who are candidates for shingles vaccination have ever been vaccinated for shingles?



Who among the following patients would be at the lowest odds of being vaccinated for shingles?

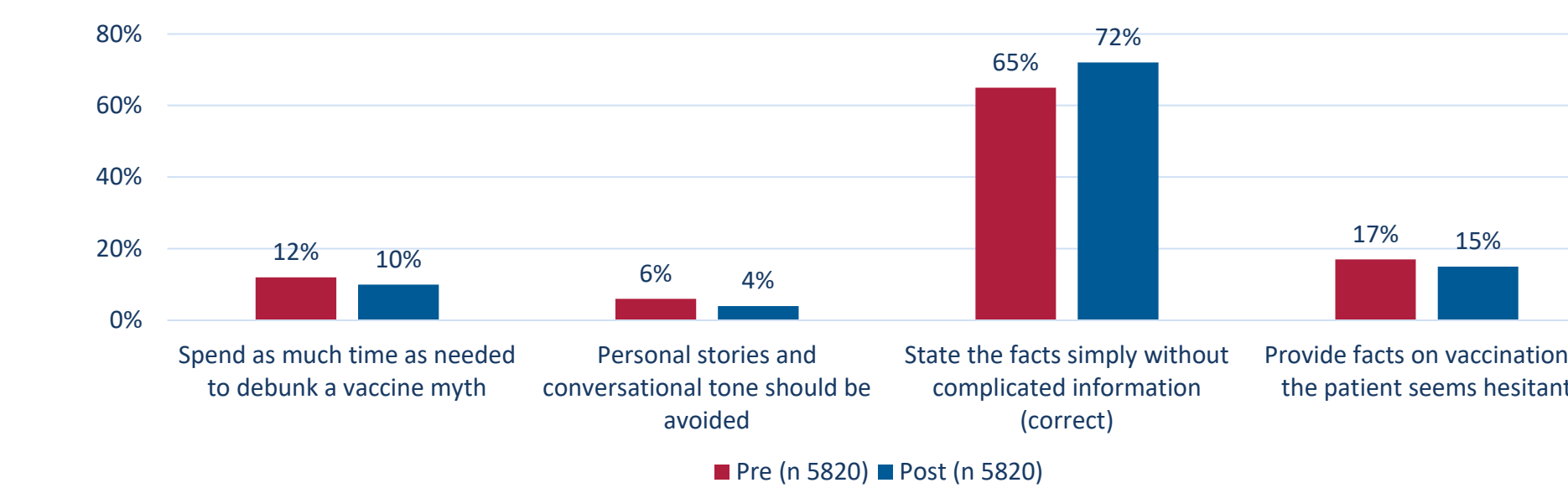


Which of the following statements is correct?



**Faculty insight: "The responses to the 1<sup>st</sup> option are likely anecdotal and based on personal clinical experience"**

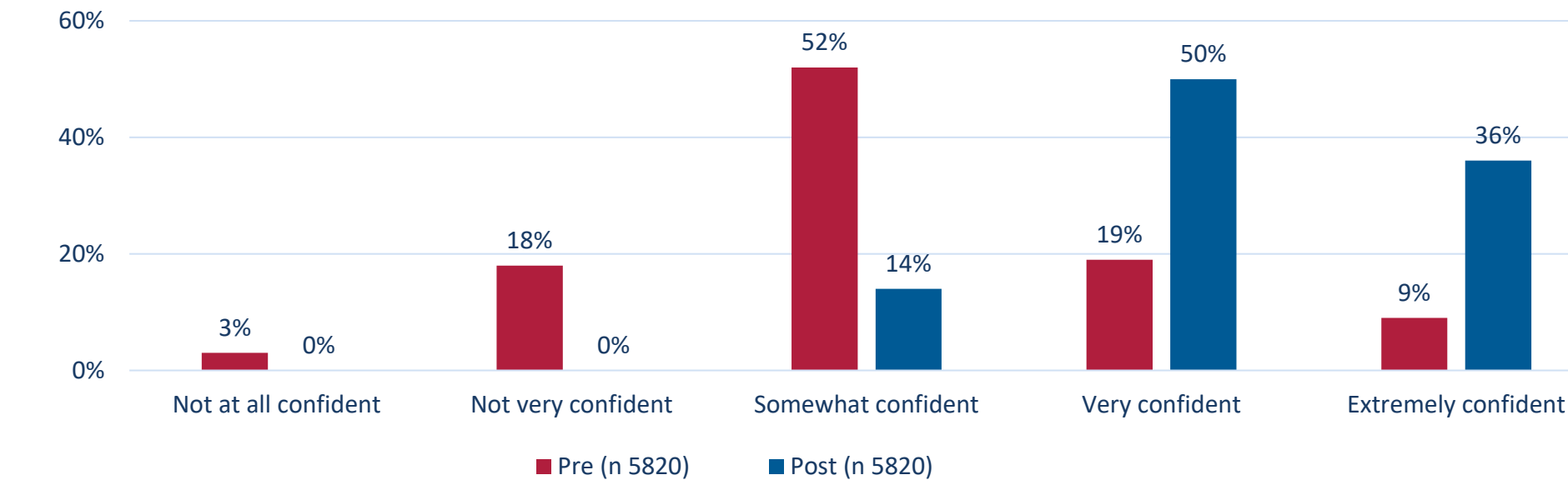
Which of the following is an important strategy for communicating with patients about vaccines?



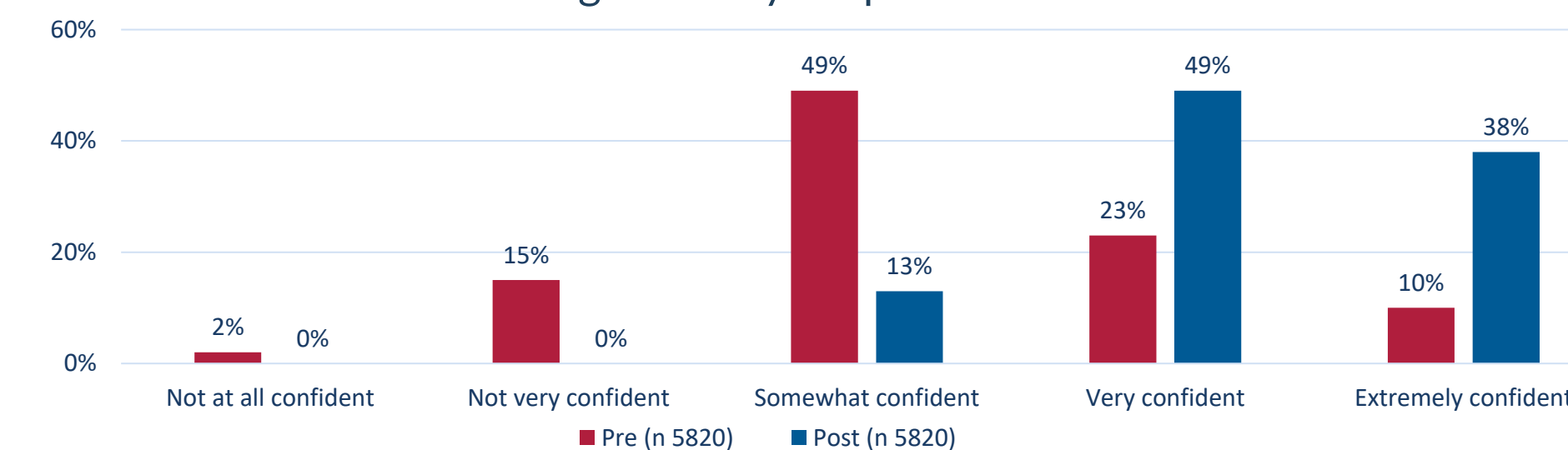
**Faculty insight: "With the new approaches for addressing vaccine hesitancy, other choices than the 3<sup>rd</sup> option may now be acceptable. Research is still ongoing to identify the most effective and evidenced-based strategies "**

## CONFIDENCE & FREQUENCY OF USE INCREASES

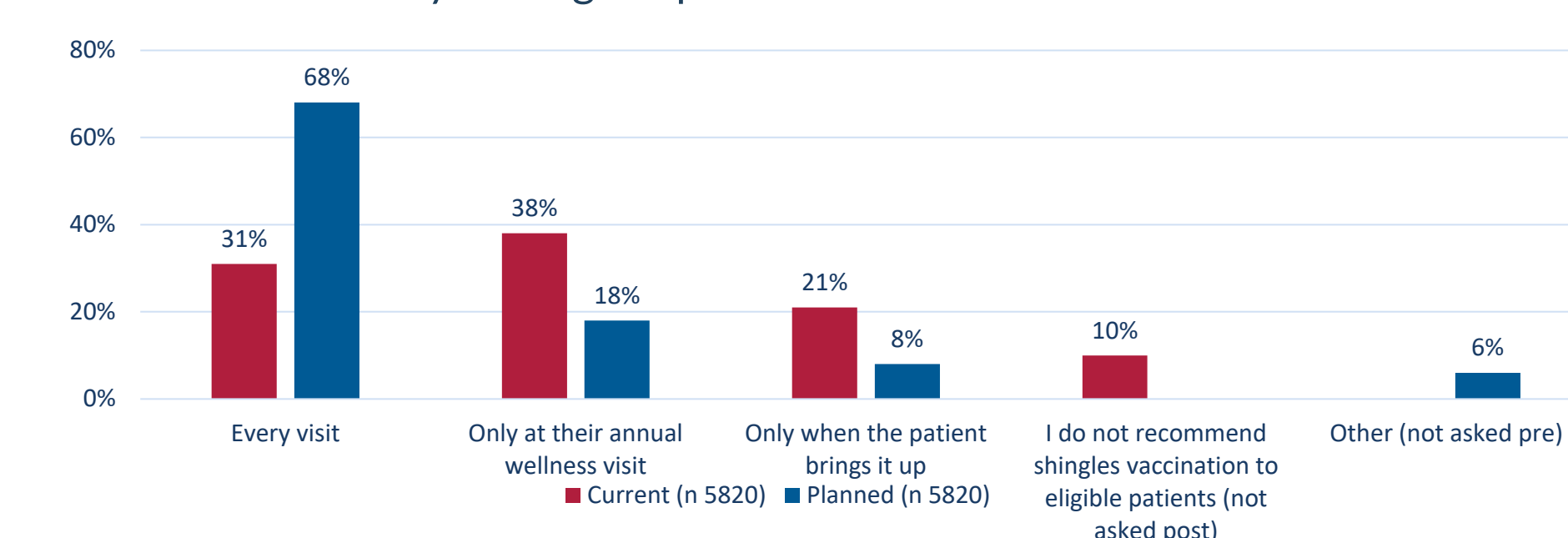
Please rate your level of confidence in your ability to: Identify who is an appropriate candidate for shingles vaccination.



Please rate your level of confidence in your ability to: Discuss the disease burden of shingles with your patients.



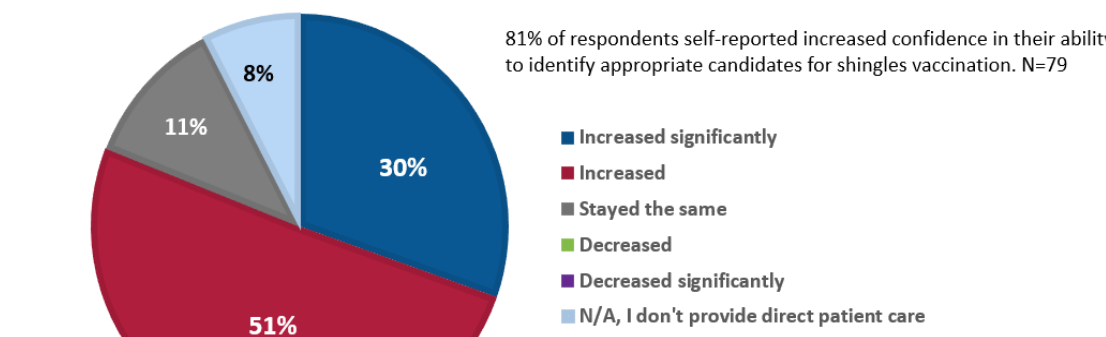
How often do you (currently/now plan to) recommend shingles vaccination to your eligible patients?



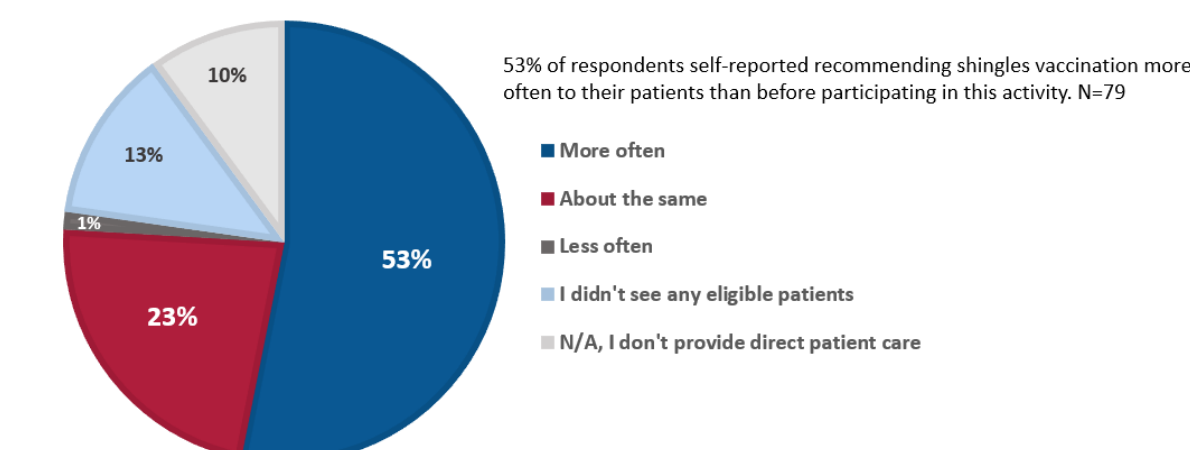
## FOLLOW-UP SURVEY

### FOLLOW-UP: CONFIDENCE IN IDENTIFYING VACCINATION CANDIDATES

As a result of this activity, how has your level of confidence changed in your ability to identify who is an appropriate candidate for shingles vaccination?



### FOLLOW-UP: AS A RESULT OF THIS ACTIVITY, I HAVE RECOMMENDED SHINGLES VACCINATION TO MY PATIENTS:



Insights for Future Programs:

- Delve deeper into vaccine hesitancy and fatigue (including how to address side effect realities/misperceptions), and model ideal interaction using one or more patient/NP communication videos.
- Identify strategies to increase the use of the patient educational handout—consider modeling its use with a video of a patient interacting with their NP.
- Survey NPs to see how many who are eligible for vaccination have had a shingles vaccine and then share these results in a future CE activity about this topic.

## ACKNOWLEDGEMENT

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