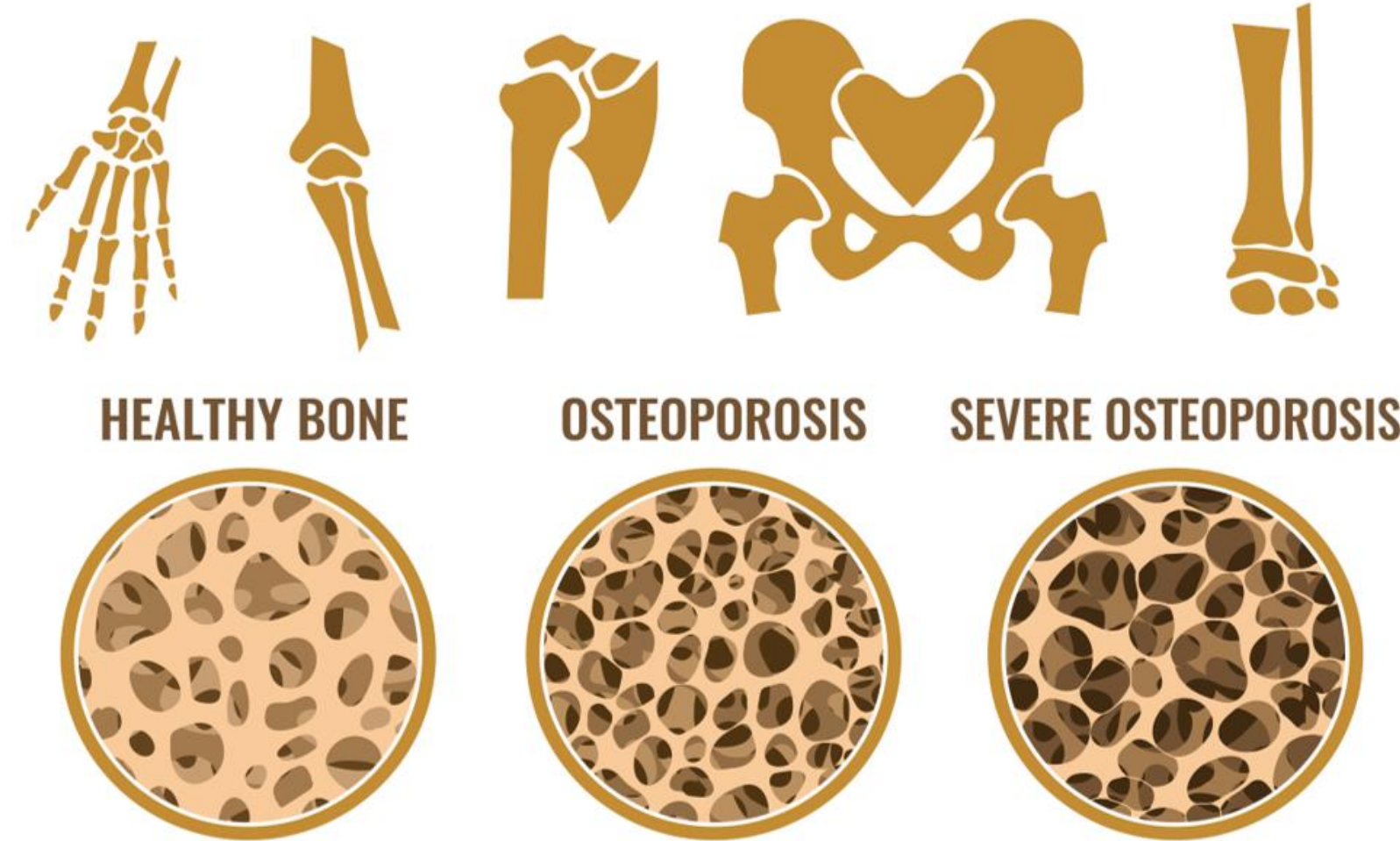


Background

The geriatric population has historically been poorly educated on how to navigate the medical system in the United States. (1) The aim of this study is to educate the geriatric population in rural Utah about osteoporosis by discussing risk factors, how the diagnosis is made and possible treatments available. Reliable resources available for managing the disease will also be provided.



Picture 1. Bone composition based on osteoporosis disease stage. (2)

Methods

Under the supervision of a board-certified Geriatrician, a curriculum for osteoporosis education was created and is currently being presented to geriatric populations in Utah County, Wasatch County, and Summit County during group-based education sessions. Rural populations often do not have access to geriatricians thus, emphasis is placed on personal prevention. (3)

This curriculum includes general information about osteoporosis and covers associated risk factors, diagnosis, treatment, and prevention of the disease. An emphasis is placed on prevention including incorporating weight bearing exercises, medication, and lifestyle changes. To assess the effectiveness of the curriculum and educational sessions, participants are asked to complete a survey that will evaluate their understanding of osteoporosis. Pre-education and post-education survey scores will be compared to determine the efficacy of the osteoporosis curriculum. Statistical significance will be evaluated using a Chi-squared test.

Acknowledgments

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Results

We expect the results from the initial quiz to show a lack of understanding and comprehension regarding osteoporosis. After the osteoporosis education session, we expect to see a significant increase in knowledge of osteoporosis. This will be reflected in higher post-education participant quiz scores.

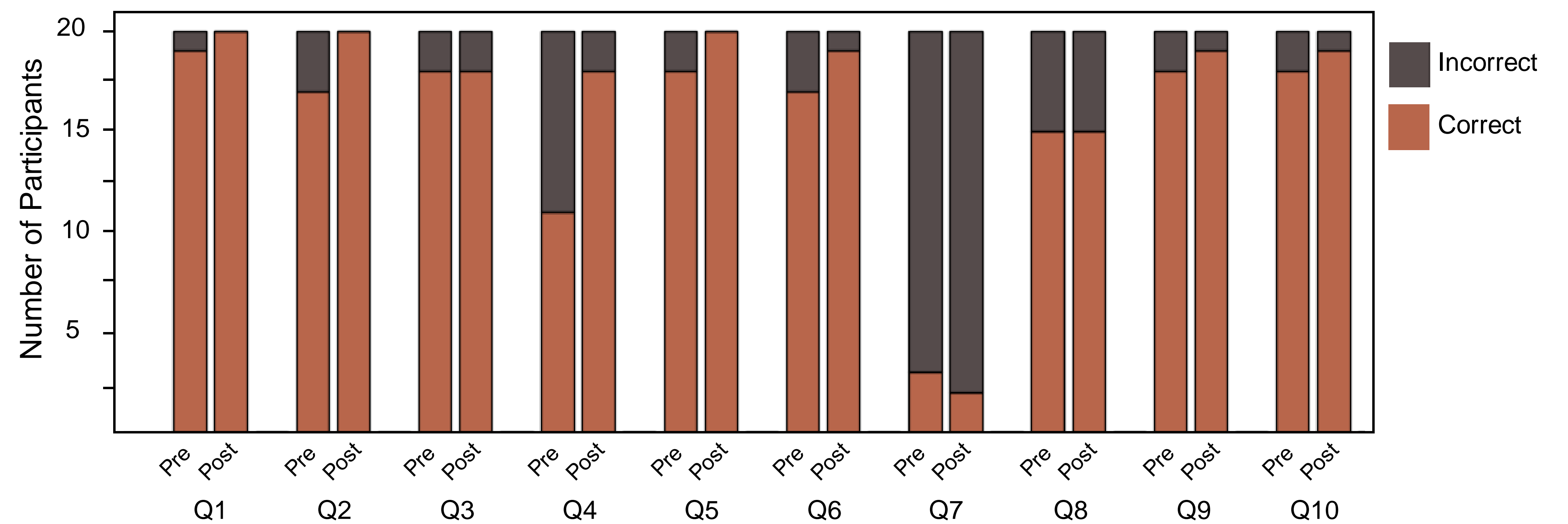


Figure I: Osteoporosis Survey Questions

Osteoporosis survey questions before and after the first four education sessions were compared.

- Q1. T or F: Osteoporosis is a disease that causes weak Bones
- Q2. Who is more frequently affected by osteoporosis (M or F)?
- Q3. Which of the following age groups is most frequently affected by osteoporosis?
- Q4. Which of the following ethnicities is most frequently affected by osteoporosis?
- Q5. Which of the following is the screening test you should receive for osteoporosis?
- Q6. Which of the following can help to prevent osteoporosis?
- Q7. Which of the following is a good source of vitamin D?
- Q8. Which of the following is a risk factor for osteoporosis?
- Q9. What is a good strategy to minimize the risk of falls?
- Q10. Which of the following food items does not help reduce your risk of osteoporosis?

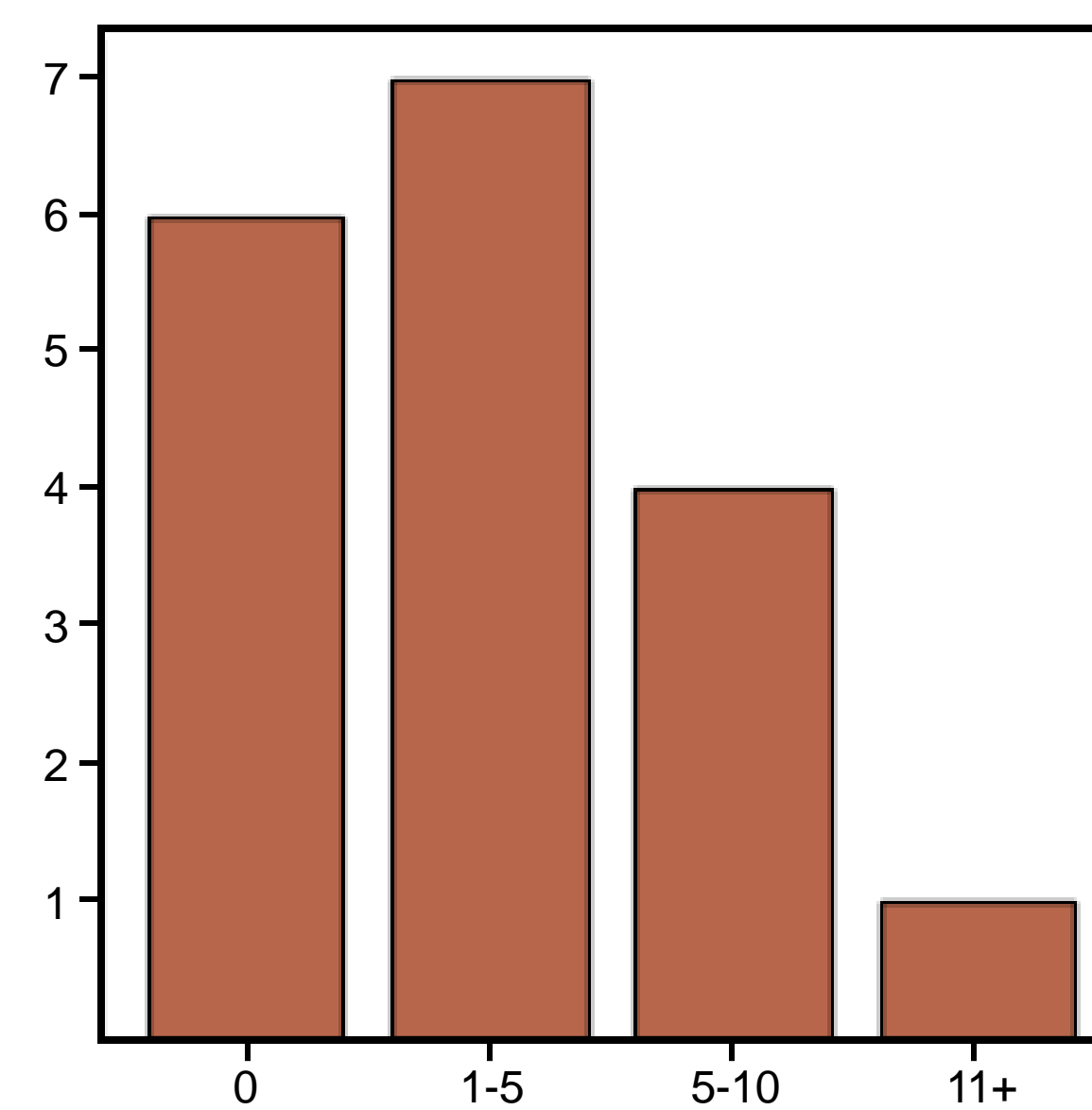


Figure II: Web Resource Usage Per Week

Prior to the education session we asked, "How often do you use online resources to look up information?". The most common answer so far is 1-5 times per week, and 33% of participants responded with 0 times.

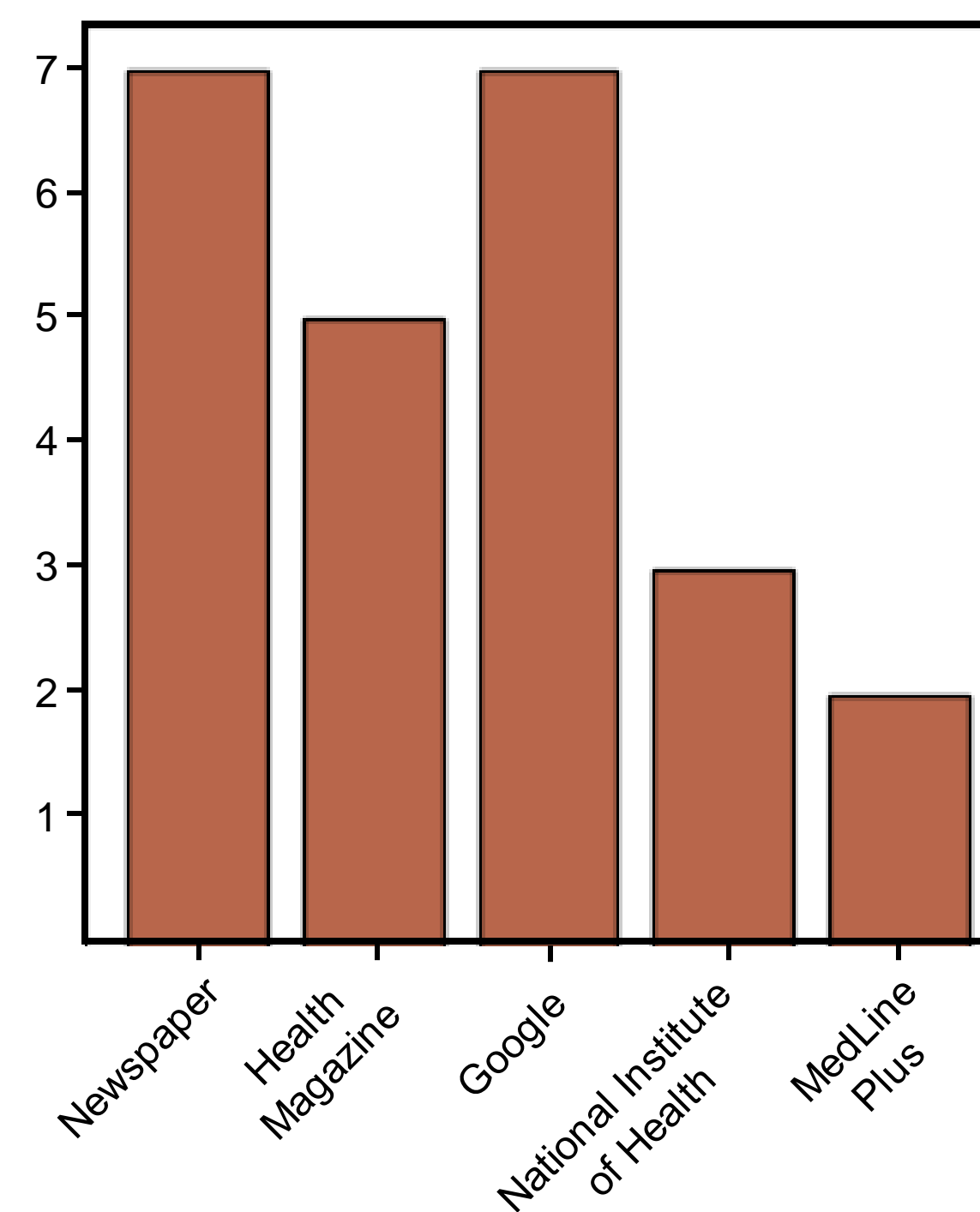


Figure III: Current Source of Health Information

Participants responded that the Newspaper and Google were their current top places to gather health related information.

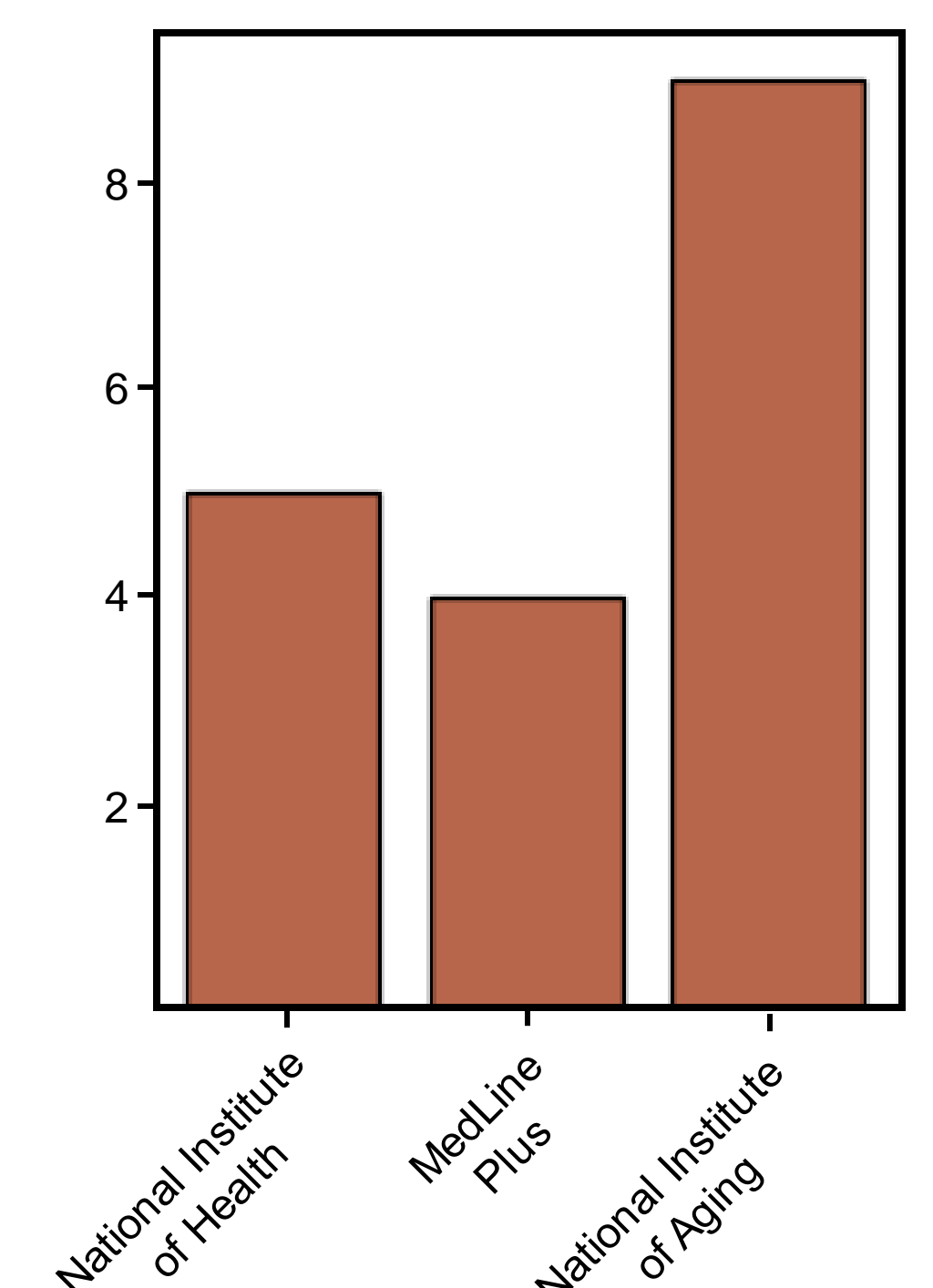


Figure IV: New Source of Health Information

After the education session, 9 out of 18 participants responded that they are most likely to use the National Institute on Aging to get future health related information.

Conclusion

Health education is important in preventing or delaying the onset of disease. Educating geriatric populations about risk factors, diagnosis, treatment, and prevention of osteoporosis and use of reliable online medical resources will help these individuals take proactive steps to maintain and improve their bone health. Aiding older adults in gaining the knowledge and tools to maintain their bone health will allow them to lead active and independent lives, reduce the physical and financial burden associated with osteoporosis, and to make informed health decisions.

This is an ongoing project. One month following the education session, participants will fill out a final quiz assessing how much information they retained, how their online medical resource usage has changed, and overall, how efficacious the osteoporosis curriculum was.