

The **SHARE** Approach Communicating Numbers to Your Patients

Workshop Curriculum: Tool 5

The SHARE Approach is a five-step model, curriculum, and toolkit for shared decision making developed by the Agency for Healthcare Research and Quality. The SHARE Approach aims to help healthcare professionals work with patients to explore and compare healthcare options through meaningful dialogue about what matters most to the patient and to make the best possible healthcare decisions.

Numeracy is key to shared decision making.

Numbers are all around us, especially in the healthcare setting. Yet many Americans, even those with college degrees, have trouble using and making sense of numbers.¹

Low health numeracy makes it hard to read, listen to, talk about, and evaluate quantitative information. Thus, people with low health numeracy may be less likely to make the choices and take the actions needed to stay well.^{2,3}

For example, people with low health numeracy may have trouble understanding risks and benefits and therefore may not understand their options—an integral part of shared decision making. If they do get treatment, they may have trouble following their treatment plan, which may result in worse medical outcomes.⁴

This handout offers tips to help your patients make sense of numbers so they can be as informed as possible. Use these techniques with all your patients, not just those who you think have limited health literacy. When it comes to shared decision making, clearer is better.



Use Numbers Clearly

Try these tips:

- **Elaborate by providing estimated numbers.** Avoid explaining risks in purely descriptive terms (such as “low risk”).⁵ For example, say, “Studies show that out of every 100 people who have a stent, 1 to 2 people may develop a blood clot at the stent site.” (These numbers are illustrative and may not reflect the actual rate of clotting.)
- **Use frequencies instead of decimals or percentages.**^{6,7} For example, say, “Thirteen out of 100” instead of “.13” or “13 percent.”
- **Keep denominators and timeframes the same when you compare numbers.**¹ For example, say, “About 6 out of 10 women like you who do not take this medicine will break a bone in the next 10 years. About 3 out of 10 women like you who take this medicine will break a bone in the next 10 years. Taking the medicine can lower the chances of breaking a bone by about half.”
- **Give absolute risk instead of relative risk.**¹ Absolute risk estimates the number of health events among individuals in a group and gives a better sense of personal or individual risk. For example, say, “Three out of 1,000 nonsmokers may have a stroke in their lifetime, and 6 out of 1,000 smokers may have a stroke in their lifetime” instead of “Smokers have 2 times the risk of having a stroke in their lifetime.”
- **Frame outcomes in both positive and negative terms.** For example, say, “With this treatment, 2 out of 10 people get side effects, and 8 out of 10 people do not get side effects.”
- **Find out which measurement system your patient uses—standard or metric.** For example, say, “Would you like me to explain using ounces or grams?”

Make numbers meaningful.

Many people have trouble connecting with numbers. The way you present numbers to your patients can help them connect.⁸

Try these strategies to maximize understanding:

- **Limit numbers.** Focus on just a few concepts at a time and highlight key information when you discuss numbers and their significance. Use numbers when precision is needed, such as for risk and benefit statistics, healthy blood sugar numbers, and dosing instructions.⁹
- **Use everyday words.**¹⁰ For example, say, “about half” instead of “49 percent.”
- **Do the math.** Perform calculations for your patients.⁹ For example, tell them what their risk is over a 10-year period rather than expecting them to calculate it from an annual risk rate.
- **Use analogies and compare with familiar objects.**¹⁰ For example, say, “A gallstone can be as small as a grain of sand or as large as a golf ball. Your gallstone was about half of a centimeter big, or about the size of a small green pea.”

- **Show pictures.**⁵ For example, use the Wong-Baker FACES pain scale rating to help patients communicate their level of pain.
- **Use the teach-back technique.** Refer to [Using the Teach-Back Technique: A Reference Guide for Healthcare Providers](#) (Tool 6). Ask your patients to explain the numbers you just presented in their own words. This approach lets you make sure your patient understands. Check for understanding when you explain visuals (graphs, charts, and tables) that have numbers.

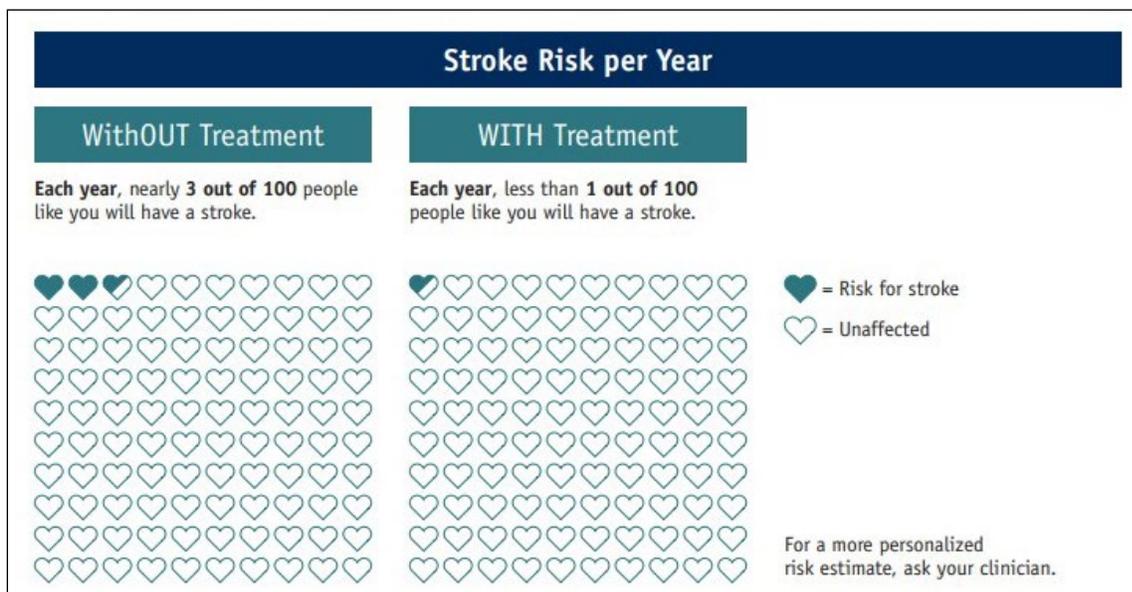
Communicate risk with visual aids.

Visual aids are simple graphical representations of numerical expressions of probability. They include icon arrays, bar graphs, and line charts, among others. Supplementing good visual aids with text can help patients see the risk numbers in context, thus providing information and not just data.^{1,5}

Several types of graphs can be used to show different information:

- Icon arrays (also called pictographs) show ratios.
- Pie graphs show ratios.
- Bar graphs compare numbers.
- Line graphs show change over time.

Sample Icon Array

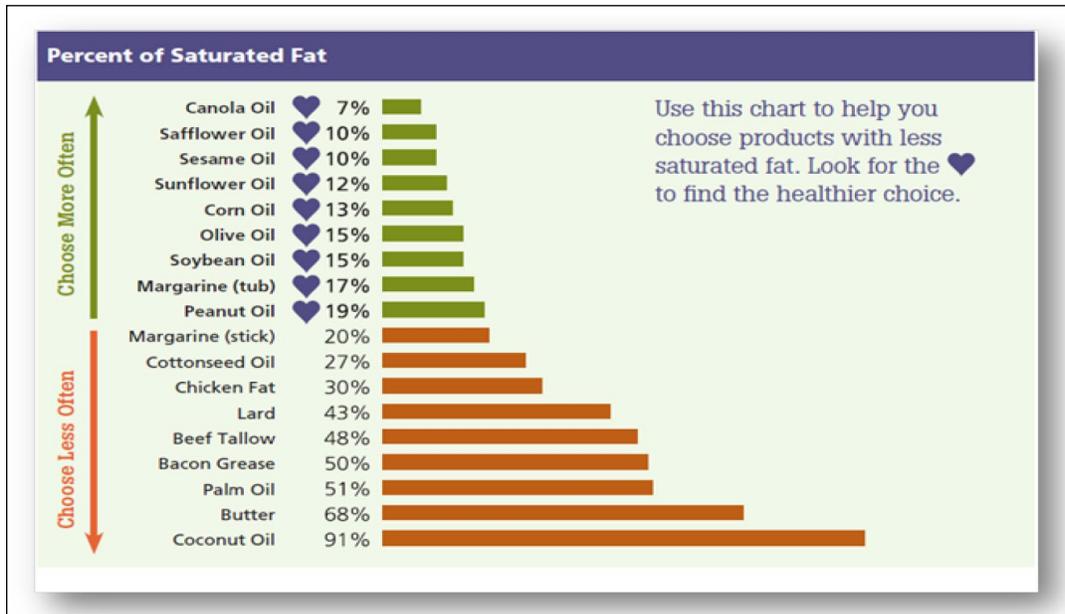


Source: www.cardiosmart.org/assets/decision-aid/afib-and-high-risk-for-stroke.

This array shows that:

- Each year, nearly 3 out of 100 people who do not get the treatment have a stroke.
- Each year, less than 1 out of 100 people who do get the treatment have a stroke.
- In other words, this treatment reduces the number of people who have a stroke by about 2 out of 100 people, or 2 percent per year.

Sample Bar Chart



Source: NIH We Can! Campaign: Cooking With Healthier Fats and Oils. Available at <http://www.nhlbi.nih.gov/health/public/heart/obesity/wecan/downloads/tip-fats-and-oils.pdf>.

More Information About Risk Communication and Health Numeracy

Information on Presenting Probabilities

Trevena L, Zikmund-Fisher B, Edwards A, Gaissmaier W, Galesic M, Han P, King J, Lawson M, Linder S, Lipkus I, Ozanne E, Peters E, Timmermans D, Woloshin S. Presenting probabilities. In: Volk R, Llewellyn-Thomas H, eds. 2012 Update of the IPDAS Collaboration Background Document. Chapter C. Ottawa, ON: Ottawa Health Research Institute; 2012. <http://ipdas.ohri.ca/IPDAS-Chapter-C.pdf>. Accessed February 18, 2021. IPDAS stands for International Patient Decision Aids Standards.

Information on Tables, Charts, and Diagrams

Toolkit for Making Written Material Clear and Effective. Section 2, Part 5, Chapter 7: Guidelines for Tables, Charts, and Diagrams. Baltimore, MD: Centers for Medicare & Medicaid Services; 2010. <http://www.cms.gov/Outreach-and-Education/Outreach/WrittenMaterialsToolkit/Downloads/ToolkitPart05Chapter07.pdf>. Accessed February 18, 2021.

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10. The Patient Education Materials Assessment Tool (PEMAT) and User's Guide. An Instrument To Assess the Understandability and Actionability of Print and Audiovisual Patient Education Materials. Rockville, MD: Agency for Healthcare Research and Quality; 2013. AHRQ Publication No. 14-0002-EF. <https://www.ahrq.gov/health-literacy/patient-education/pemat.html>. Accessed February 18, 2021.

This tool is to be used in conjunction with the Agency for Healthcare Research and Quality's SHARE Approach workshop. To learn more about this workshop, visit www.ahrq.gov/shareddecisionmaking.



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