PROJECT INFORMATION

September 2020

Identifying Health Outcomes that Matter to Patients Getting Imaging Tests

Principal investigator

Matthew Thompson, MBChB, MPH, DPhil

Organization

University of Washington

What was the project about?

Imaging tests, such as X-rays and MRIs, can help find health problems. When assessing how well the tests work, accuracy is important. But other benefits and harms, such as having pain from the test or relieving worry by knowing test results, may also matter to patients.

In this study, the research team wanted to learn what effects of imaging tests matter to patients.

What did the research team do?

First, the research team talked with people about their experiences with imaging tests. The team interviewed 77 patients, primary care providers, and imaging test providers. Of these, 77 percent were white, 8 percent were Asian, 5 percent were African American, 5 percent were Hispanic or Latino, and 1 percent each were American Indian or Alaska Native, mixed race, or another race. Also, 77 percent were under age 60, and 61 percent were women. All were receiving or providing care at clinics in Washington or Idaho.

Next, the research team reviewed 89 previous studies about imaging tests for adult patients. The team looked at the types of outcomes reported in these studies.

To identify groups, or domains, of outcomes that matter to patients, the research team met with a different group of people. The group included patients, primary care doctors, imaging test providers, researchers, and imaging industry representatives. Group members looked at and sorted the outcomes

from the interviews and previous studies. This group also gave input on other parts of the study.

What were the results?

From the interviews, types of outcomes were

- Physical outcomes, such as pain from holding uncomfortable positions during imaging
- Emotional outcomes, such as anxiety or relief
- Outcomes related to knowledge gained from the test results
- Burden, such as cost or time spent

Most previous studies looked at short-term physical outcomes from imaging, such as radiation exposure or kidney damage. Some studies looked at emotional outcomes. Studies rarely asked patients directly about these outcomes.

At the group meeting, the group sorted the different types of outcomes into four areas:

- Physical effects
- Emotional outcomes
- Information or knowledge gained from the imaging test results
- Burden

What were the limits of the project?

Most people interviewed were white. Results may differ for people of other backgrounds. The research team also didn't ask patients to rank the importance of outcomes.

Future research could look at which outcomes are most important to patients. Studies could also look at how to use these outcomes to improve testing for patients.

How can people use the results?

Researchers can use the results when assessing imaging tests to look at outcomes that matter to patients.

To learn more about this project, visit www.pcori.org/Thompson336.