

Jon Gilbert Fox



Tor Tosteson, ScD

GEISEL RESEARCHERS TO RECEIVE \$1 MILLION AWARD FOR COMPARATIVE OUTCOMES RESEARCH

A **TEAM OF RESEARCHERS** at the Geisel School of Medicine, led by Tor Tosteson, ScD, has been approved for a \$1 million funding award from the Patient-Centered Outcomes Research Institute (PCORI) to design new methods for comparing the effectiveness of alternative therapies that can lead to improvements in practice and better outcomes for patients.

The award is one of 24 new research grants from PCORI, an independent, non-profit organization authorized by Congress in 2010 with the mission of funding research that will provide patients, their caregivers, and clinicians with the evidence-based information needed to make better-informed health care decisions.

The three-year project, called “Randomize Everyone: Creating Valid Instrumental Variables for Learning Health Care Systems,” will utilize the expertise of scientists and clinicians across Geisel and Dartmouth-Hitchcock.

The multidisciplinary study team includes methodologists Todd MacKenzie, Tracy Onega, Steven Andrews, and Karen Schifferdecker from Biomedical Data Science, The Dartmouth Institute for Health Policy and Clinical Practice, and Community and Family Medicine, and clinical researchers John Batsis and Jon Lurie (Medicine), Adam Pearson and Sohail Mirza (Orthopaedics), and James Bernat (Neurology).

To make the best treatment choices, patients and clinicians need good evidence when comparing the effectiveness of different therapies for the same health condition. To help meet this need, significant investments have been made to improve the accessibility and usability of big data sources such as electronic health records for “learning health care systems.”

“The expectation has been that the large quantity of accessible health care data will help show which treatments are better in real practice settings. But the quality of the resulting evidence depends on how comparable the patients are who follow one treatment versus another,” explains Tosteson, a professor of biomedical data science and of health policy and clinical

practice. “Randomization helps make sure that we can make fair comparisons.”

Each stage of the methodology development will be guided by patients, clinicians, system managers, information technologists, and other key stakeholders—who will actively participate in developing methods for informed consent, improving patient and provider engagement, identifying key targets for randomization, and planning for future implementations of the project.

“By improving the performance of learning health care systems, they will be making an important contribution to future health care for themselves and their families, and to the overall health of the population,” Tosteson says.

TIM DEAN



BEYOND THE BOOKS

CREATED BY STUDENTS FROM THE GEISEL SCHOOL OF MEDICINE, BEYOND THE BOOKS gives voice to community members while teaching future physicians the value of listening. Learning about the challenges medically underserved populations face, or have faced, medical students gain a deeper understanding of how social factors intertwine with health—knowledge that is essential to providing good care. What sets Beyond the Books apart from similar programs is that medical students are prepared to be both advocates for their patients and shepherds of community health.

A story in the spring 2017 issue of *Dartmouth Medicine* gave voice to the four medical students who created the program.

In this video, community members are the focus. Listen as they talk about how Beyond the Books is changing the way we see each other—one relationship and one story at a time.

You can watch the video at dartgo.org/beyondthebooks

SUSAN GREEN