A wide range of University of Michigan researchers are working to tackle the root causes of, and potential solutions for, the nation’s opioid epidemic.

The university’s Opioid Solutions network (opioids.umich.edu) serves as a central hub for U-M research, educational activities and community outreach related to opioids.

The network encourages and coordinates efforts across campus to find solutions to what the federal government has declared a public health emergency.

Opioid Solutions draws on nearly 100 U-M faculty—in fields ranging from psychiatry, pharmacy and public policy to basic science and law—whose research explores opioid misuse and overdose.
Fifty-one percent of all opioid medications distributed in the United States each year are prescribed to adults with mood disorders such as depression and anxiety, according to U-M researchers. Despite representing only 16 percent of the adult population, adults with mental health disorders receive more than half of all opioid prescriptions distributed each year, says Matthew Davis, assistant professor at the U-M School of Nursing. This finding can help researchers better understand the needs of this particular segment of the population.

Research shows that about 6 percent of patients who have not previously taken opioids find themselves dependent on these drugs long after they have recovered from surgery. Through the university’s Precision Health initiative, researchers are working to identify risk factors that might increase the likelihood of a recovering patient becoming a chronic opioid user—based on their health, genetics, social, environmental and lifestyle factors. From there, they can create guidelines to tailor pain management plans and reduce opioid prescriptions.

How many prescription pain pills should a patient receive after breast cancer surgery? Or a hernia repair? Surgical teams have lacked an evidence-based guide to help them prescribe powerful opioid pain medications wisely. Until now. A new tool developed at U-M is available online (opioidprescribing.info) for free use by any team that performs 11 common operations. For each operation, prescription amounts are based on pain control and surgical quality research plus data and patient surveys from hospitals across Michigan.