The opioid epidemic is responsible for reduced quality of life, decreased productivity, and increased mortality. Since 2000, both opioid prescriptions and opioid-related deaths have quadrupled, and it is estimated that half a million deaths have occurred in the US. As the dynamics of this epidemic are complex and multi-faceted, many agencies are trying to curb its progress; however, it has not slowed down. The purpose of this study is to simulate the “natural” history of this epidemic using a mathematical simulation model. While mathematical models have influenced public health policies for other complex disease patterns, modeling has not been used widely to inform policy related to the opioid epidemic. In this research, we show some of the advantages of using a modeling approach and its potential to inform opioid-related public health policies.

*Sponsored by the Department of Behavioral and Community Health Sciences*

*Light refreshments will be served.*