Explaining the Effect of Age on Patient Activation, Portal Use and Health System Utilization

Emergent Research Forum Paper

Farhan Mushtaq
Worcester Polytechnic Institute
farhanmushtaq@gmail.com

Bengisu Tulu
Worcester Polytechnic Institute
bengisu@wpi.edu

John Trudel
Reliant Medical Group
John.Trudel@reliantmedicalgroup.org

Diane Strong
Worcester Polytechnic Institute
dstrong@wpi.edu

Sharon Johnson
Worcester Polytechnic Institute
sharon@wpi.edu

Lawrence Garber
Reliant Medical Group
Lawrence.Garber@reliantmedicalgroup.org

Abstract

Since the launch of patient portals, it is widely assumed that the portals should empower patients by increasing their participation in health decisions and subsequently reduce the burden on healthcare organizations. It is necessary to examine patient portals as a form of patient activation and how it varies with age. In this research, we analyzed two years of patient portal clickstream and clinical encounter activities. We then analyzed how age could explain the relationship between the variations in frequencies of use in patient portal and clinical encounters.

Results suggest that aging has positive association with encounters but it does not significantly explain the variations in portal usage by itself. There is positive association between portal usage and clinical encounters and it is stronger for younger patient segments. Making use of some portal features that vary for each patient age segments can help in reducing face-to-face encounters and subsequently healthcare costs.