Background

- With an increase in and rapid development of health care applications, as well as electronic medical records and patient portals, patients have more access to health information than ever.
- Previous research has found an association between integration of electronic patient reported outcomes (ePROs) with increased survival for patients with metastatic cancer compared to usual care.
- Although greater access to health information as well as personal health records and patient portals can be shown to have positive effects on patient outcomes, the digital divide that is pervasive in the general population extends to oncology as well.
- This project aimed to determine the differences in patient interest and usage of technology for health care amongst various demographics.

Methods

- Through a convenience sample, cancer patients at an urban, NCI-Designated Cancer Center (N=363) were surveyed about their use of and interest in technology.
- The survey took place between August 2017 and January 2018.
- Questions included information about patient access to the internet and self-efficacy with technology.
- Patients were gathered from the infusion center in Medical Oncology as well as our Cancer Center’s Support and Welcome Center.
- Our sample was representative of digital literacy in the general population in terms of race/ethnicity, education, sex, and age.

Results

- About 85% of our patients report owning a smart phone. However, those with less than or equal to a high school diploma are 5X less likely to own a smartphone than someone with a college degree.
- 70% of our patients can find and download an app on their own. However, Only 50% of those > 70, or whose education is less than a high school diploma are able to accomplish this.
- 90% of our patients have access to or use the Internet. However, our patients with less than a high school diploma are 12X less likely to have access to the Internet than those with an advanced degree.
- 87% of patients use the internet mainly at home. Those who are either; over the age of 70, minority race or ethnicity, or have less than or equal to a high school diploma are significantly less likely to have home access.
- Factors that influence whether patients will use the internet to learn about their cancer are race (African American) and education (HS diploma or less).
- 51% of our patients use MyChart (Jefferson’s electronic health record patient portal) on a regular basis. However, patients who were white or with an advanced degree were 2X more likely to report using MyChart than patients of a minority race or those with less than a high school diploma.

Conclusions and Implications

- While many patients are savvy about using the Internet and integrating technology into their care, those who are older, have less than a college degree, and/or are of a minority race or ethnicity are at a significant disadvantage in doing so.
- Despite this divide, new applications and products continue to be implemented in the realm of health care.
- Steps must be taken to provide these patients with extra support or we will propagate a digital literacy divide within our own cancer center and in the general public.
- Our Support and Welcome Center will be hosting several workshops to provide opportunities to increase digital literacy, including a MyChart workshop and Internet Basics.