RWMC - *Predicting and Improving Patient Outcomes*

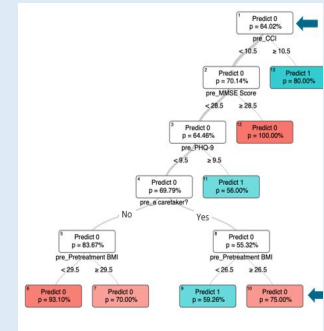**Team**: Baptiste Rossi, Megan Tschirch, John Vroom

Background
- The Comprehensive Oncology Program for Elders (COPE) aims to mitigate physical decline in elderly cancer patients

Objectives:
- Analyze COPE assessment data to determine predictors of patient outcomes (mortality)
- Explore validated tools to measure patient reported outcomes and how to incorporate into COPE program

Across all models evaluated, a number of key variables showed up at each time point. These are listed below and offer some insight into which patient characteristics are most associated with patient death

Initial visit

Charleston Index: CCI Score

Metastatic Tumor

BMI

Presence of a care giver / independence assessment

PHQ-9 > 10

MMSE

30d

Charleston Index: CCI Score

Metastatic Tumor

BMI at pretreatment start

Presence of a care giver / independence assessment

PHQ-9 > 10

Reco: Pharmacy Index Alert

90d

Non Metastatic Tumor

Otherwise, same features from the initial visit

	SMS Texting	Web/App/Email	Phone	Asynchronous On-Site (i.e., waiting room iPads)
Benefits	• High response rates & engagement - similar to pen and paper[1] • Ideal for populations w/o reliable internet access or not comfortable with mobile apps	• Patients able to answer large number of questions on own time • Diverse data types possible, including qualitative	• High quality results • Lowest technological barriers to collection	• Eliminates need for internet access/device • Limited change to patient schedule • Questions can be presented in clear/concise manner; on site troubleshooting
Drawbacks	• Cannot collect complex data; limited number of questions possible at once • Complex set up • Patient must know how to text	• Needs access to personal computer and internet access required • Tech savvy required (esp. apps) • Lower response rates	• Logistically difficult to collect responses; resource intensive • Requires manual data entry at RWMC	• Facility must purchase technology (iPads) • Patient privacy concerns • Requires real-time analysis of results by caregiver/intake nurse

Recommendations

1. Focus on more frequent collection of measures most highly associated with patient survival

2. ymptom tracking via SMS text message:

3. On Site Collection of key COPE patient screening items and patient feedback