Advanced Care Planning
Clinical Impact in Solid Tumor Oncology Patients

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Background

Place of death congruence with desired place of death is low

Patients often misunderstand the goals of their care

End of life quality of care improves with increased communication

Aims

Identify population at high risk for mortality

Increase advanced care planning conversations

Decrease readmission rates

Improve end of life care
This is a machine learning-based model that, at the time a patient arrives in the ED, calculates their risk of dying up to 60 days from admission.

For high-risk patients, an automated email is sent to inpatient providers, pharmacist, case manager, and charge nurse requesting Advanced care planning.
## Results

<table>
<thead>
<tr>
<th></th>
<th>Pre-intervention</th>
<th>Post-intervention</th>
</tr>
</thead>
<tbody>
<tr>
<td>Advanced Care Planning Note</td>
<td>3%</td>
<td>81%</td>
</tr>
<tr>
<td>Average Length of Stay</td>
<td>5.90</td>
<td>5.73</td>
</tr>
<tr>
<td>Length of Stay Index</td>
<td>0.87</td>
<td>0.67</td>
</tr>
<tr>
<td>30 Day Readmission Rate</td>
<td>23%</td>
<td>17%</td>
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<tr>
<td>30 Day Return to ED Rate</td>
<td>26%</td>
<td>22%</td>
</tr>
<tr>
<td>ICU Transfer</td>
<td>3%</td>
<td>3%</td>
</tr>
<tr>
<td>IP Mortality</td>
<td>10%</td>
<td>7.5%</td>
</tr>
<tr>
<td>Discharge to Hospice</td>
<td>32%</td>
<td>41%</td>
</tr>
<tr>
<td>Code Status Change</td>
<td>3%</td>
<td>29%</td>
</tr>
</tbody>
</table>
Conclusions and Next Steps

• Trends toward better end-of-life care for cancer patients
• Greatest trend was increased ACP conversations
• Continue documentation on solid tumor oncology service
• Next this algorithm will be applied to our 9100 malignant hematology service
• Scale to other hospital systems?
References

