

# Dynamic LACE for Preventing Hospital 30- day Readmissions

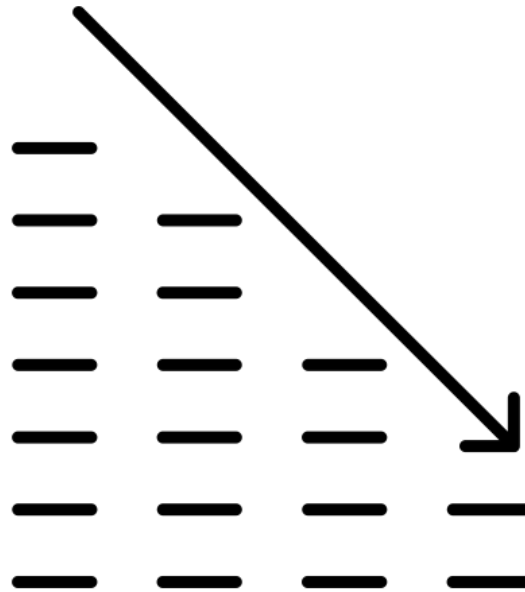
Justine Nguyen, Xiao Wang, Dan Yaeger



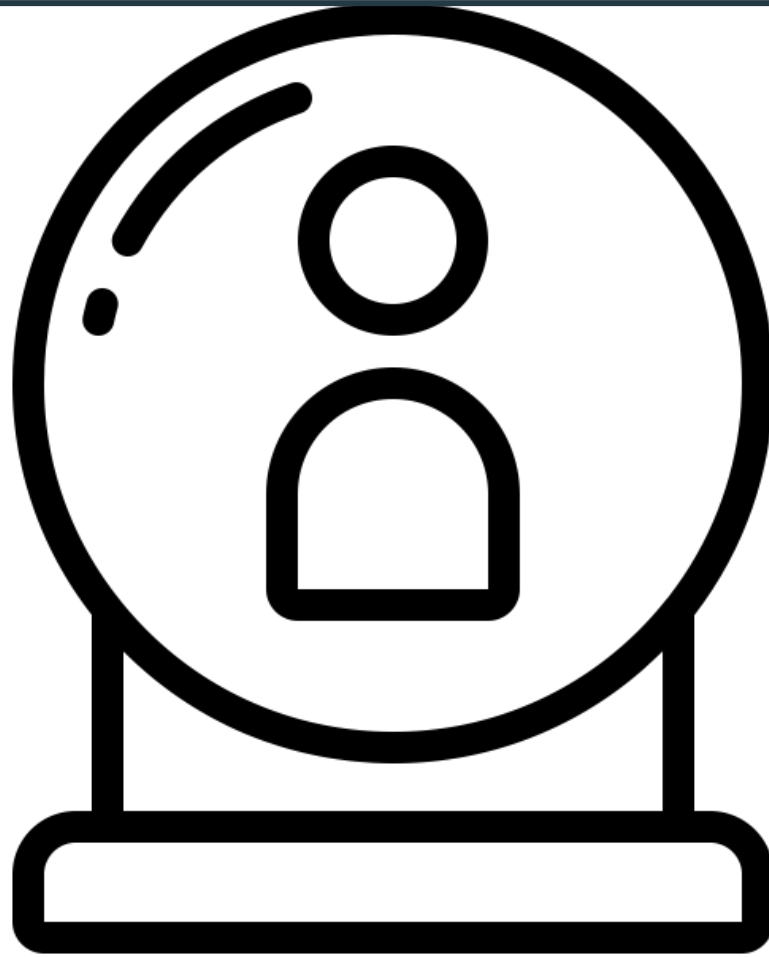
<https://www.disabledglobalchallenge.com/money-down-the-drain/>



<http://pie.med.utoronto.ca/PatientTeaching/>



Created by anbilero adaleru  
from Noun Project

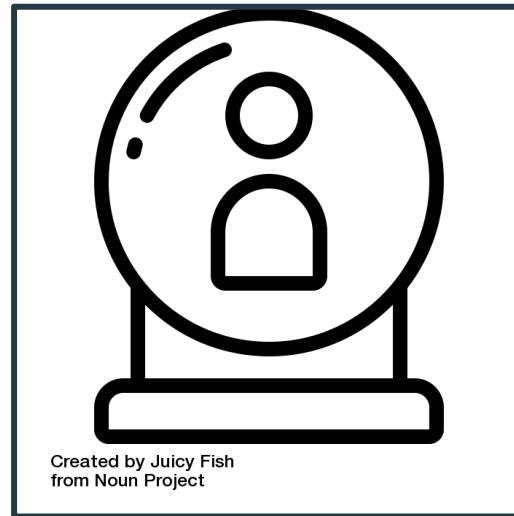


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from Noun Project

**L** - length of stay  
**A** - admission source  
**C** - comorbidity  
**E** - ER, number of visits

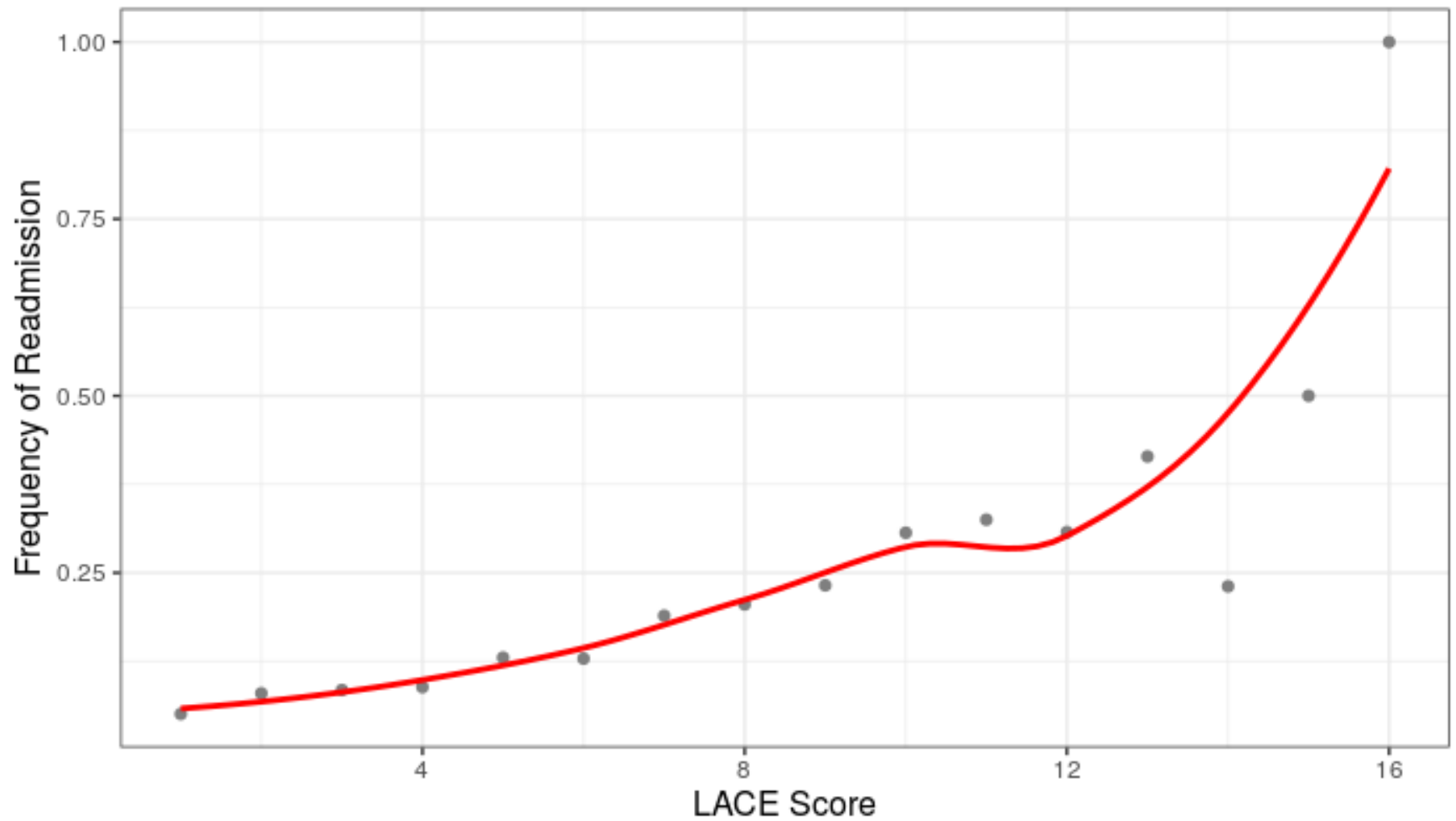


**LACE  
score**



**Likelihood  
of  
Readmission**

## Correlation of LACE and Readmissions





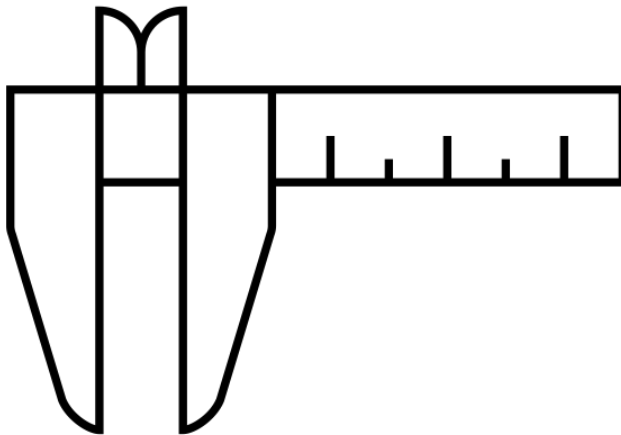
**LACE Score: 10**



**LACE Score: 11**



# Maximizing benefit and minimizing cost



Created by Bakunetsu Kaito  
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## Cost Metric

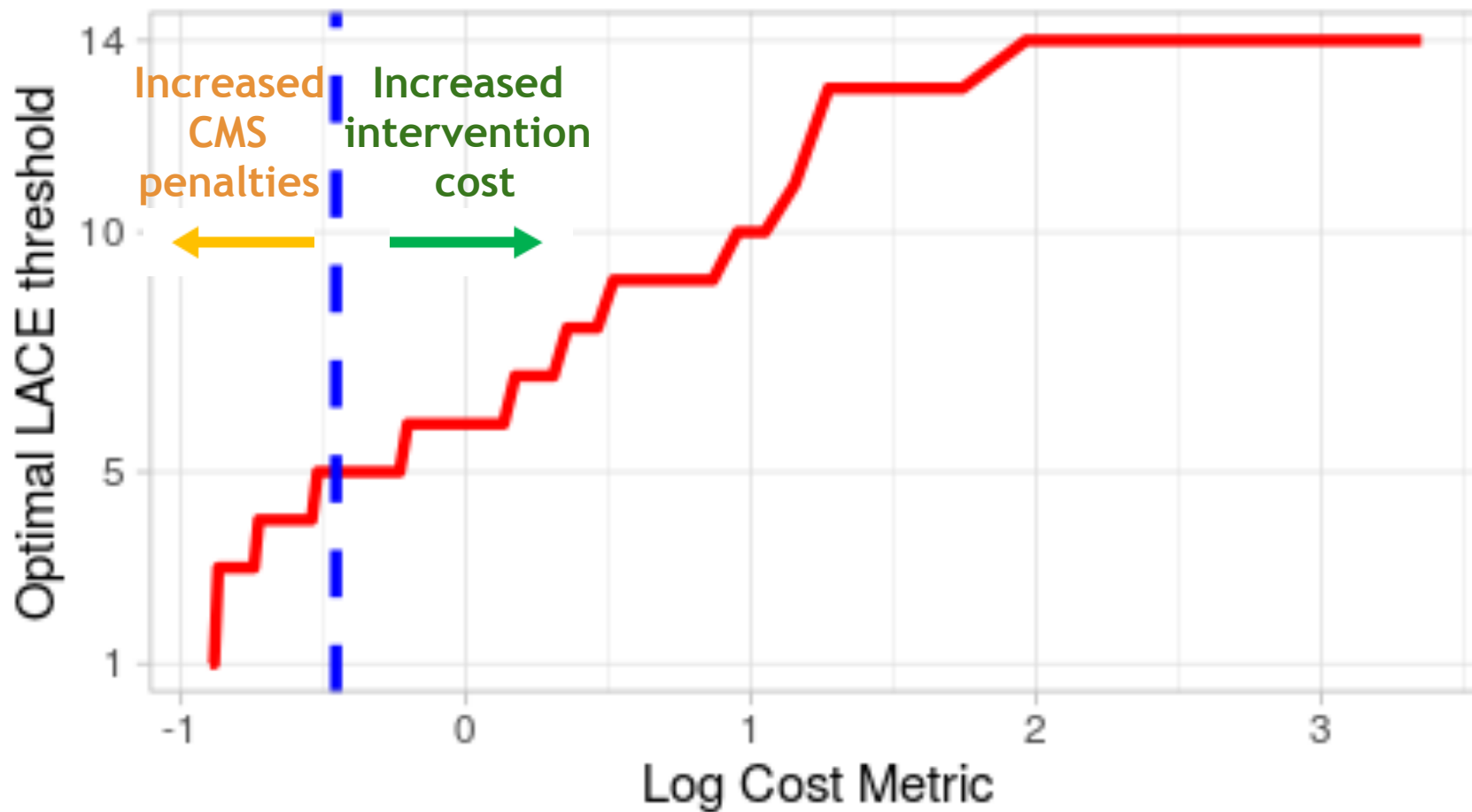
Cost of  
intervention

Cost of  
readmission

Small when cost of  
readmission high

Large when cost of  
intervention high

## Optimal LACE Threshold by Log Cost Metric



$$V_{\text{value}} > -\$ (\text{cost})$$