



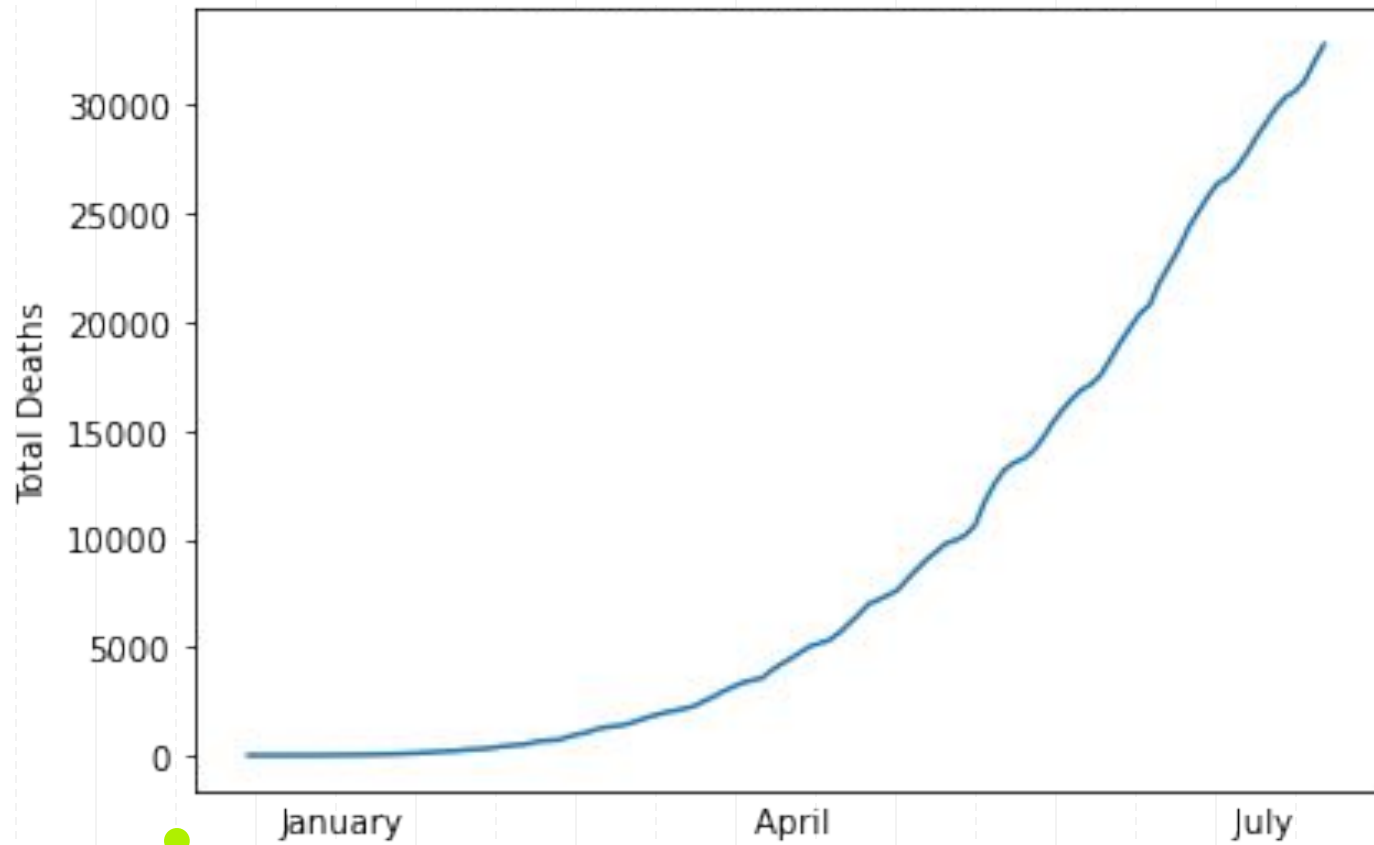
Combating COVID-19 in Mexico: Who Needs a Ventilator?

Michael Jehl

February 10, 2021

(Pretend it's July 2020 during presentation)

COVID-19 Deaths Continue to Rise



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Physicians could reduce the death rate by more than 50% by using ventilators more judiciously.



METHODOLOGY

Our Responsibility

Make sense of recent data to help healthcare workers provide better care during the pandemic

The Data

- 230,000+ test results
- Patient-level clinical and epidemiological data
- April 12 to June 3

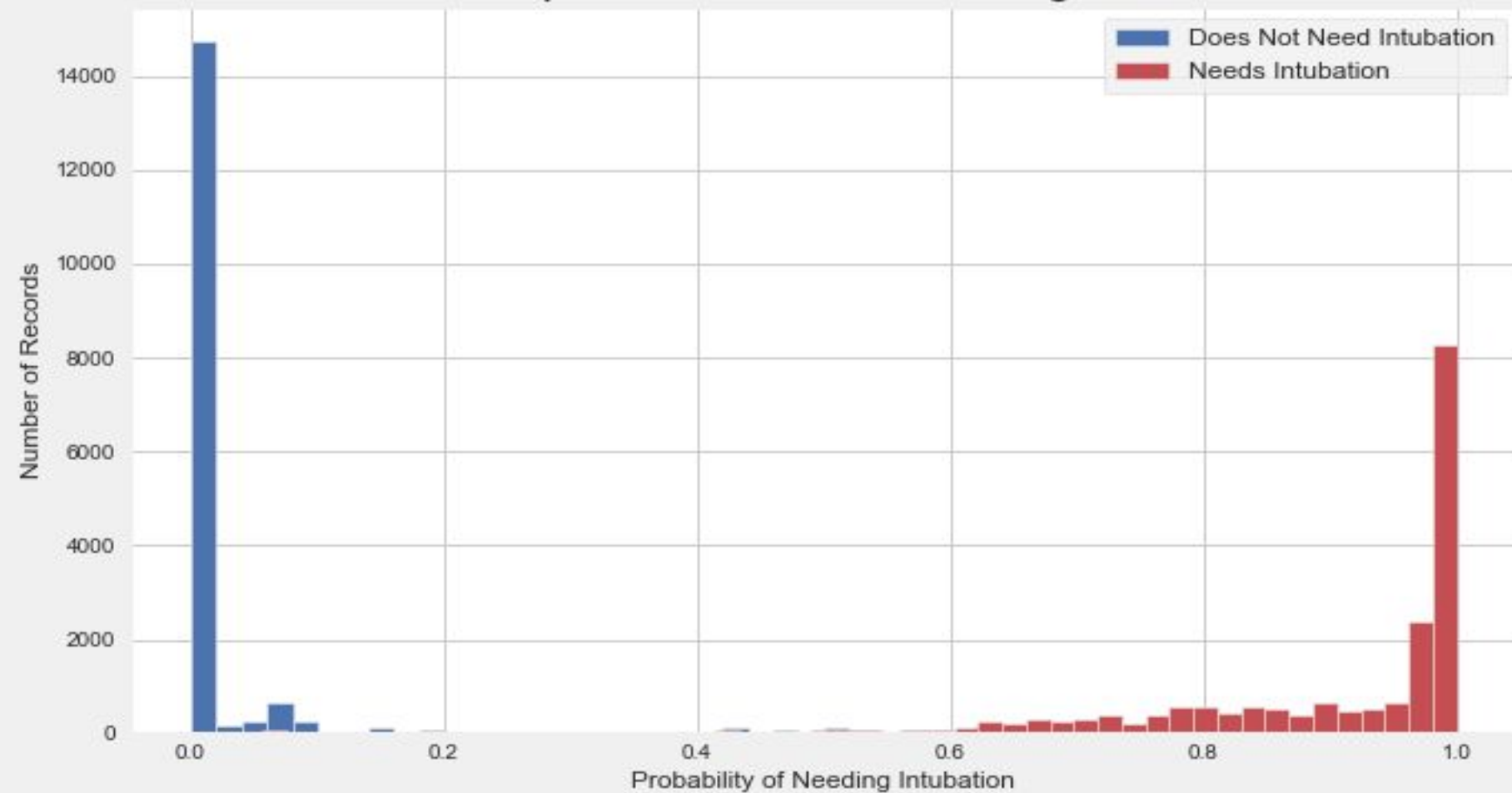
The Goal

Build model that classifies who is most at risk and likely to benefit from intubation

Target: Intubation (Yes/No)



Our model predicts outcomes with high confidence



FEATURE IMPORTANCE AND MODEL OUTCOMES

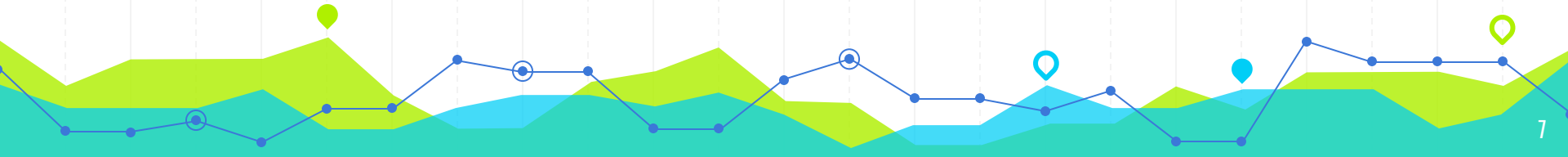
Most Important Features	Less Important Features
Intensive Care	Asthma
Pneumonia	Obesity
Age	COPD

IMPACT

Improved patient care

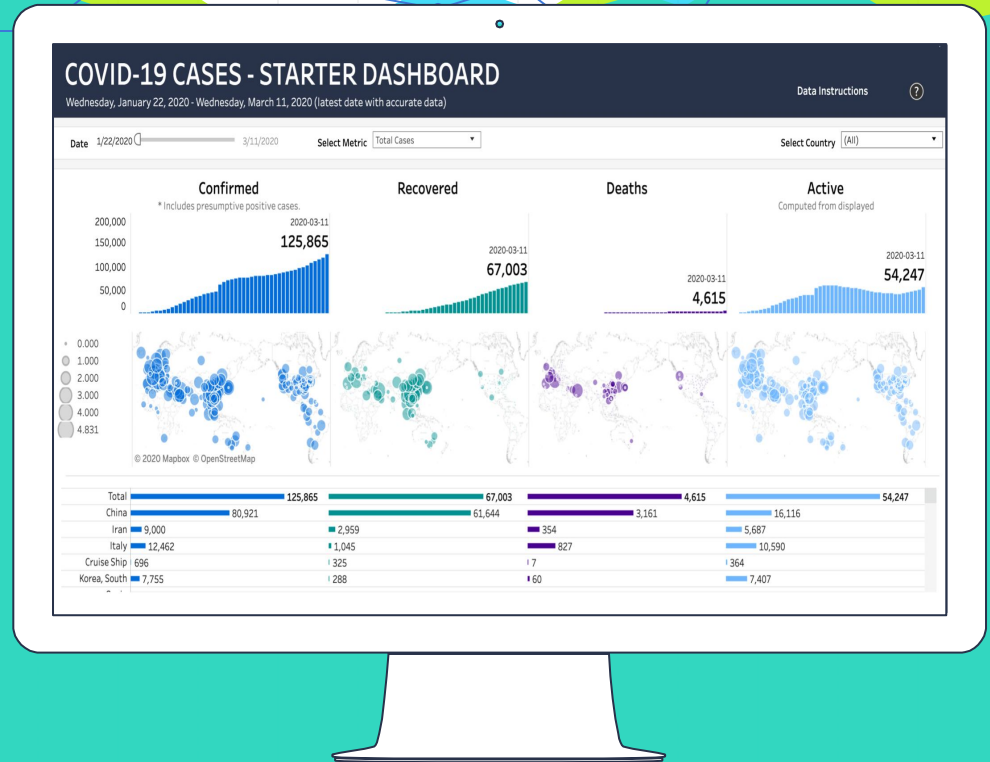
Potential to save lives

Efficient allocation of limited resources



FUTURE WORK

Incorporate more detailed clinical data into model to build app for healthcare workers



Thank you for your time.

Any questions?

