Leveraging AI To Diagnose Illnesses
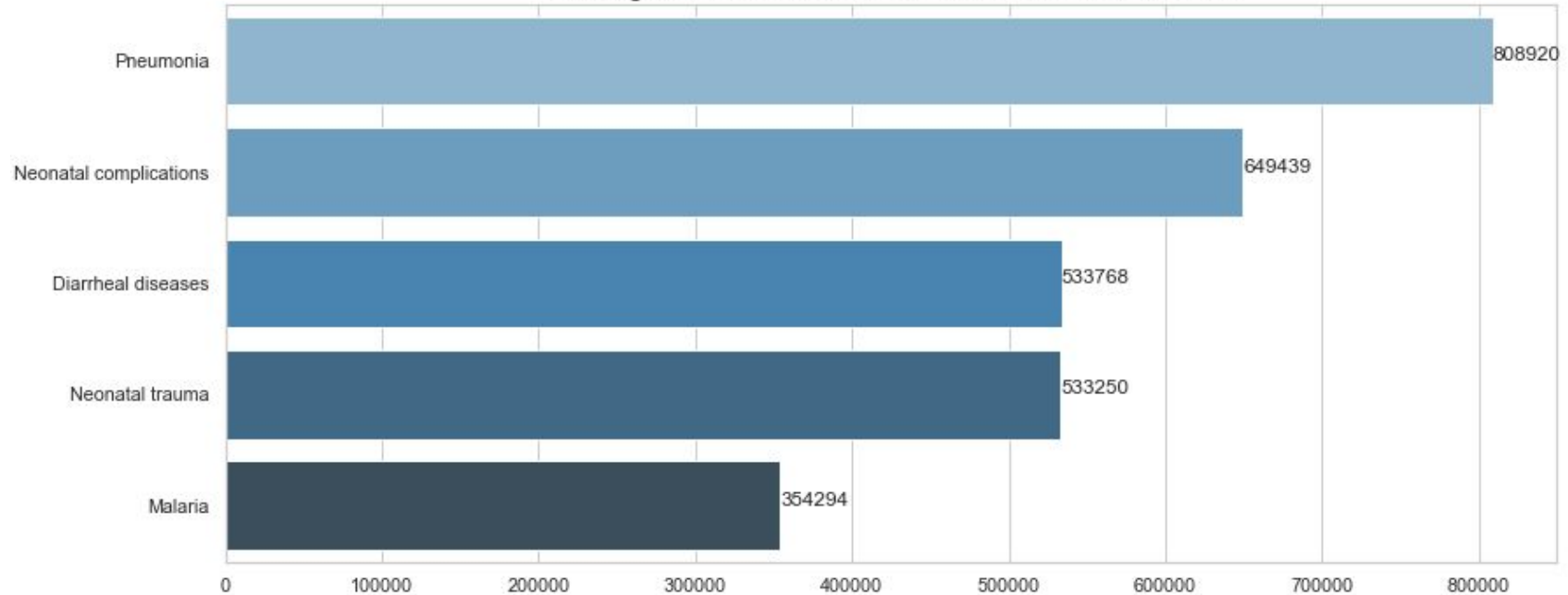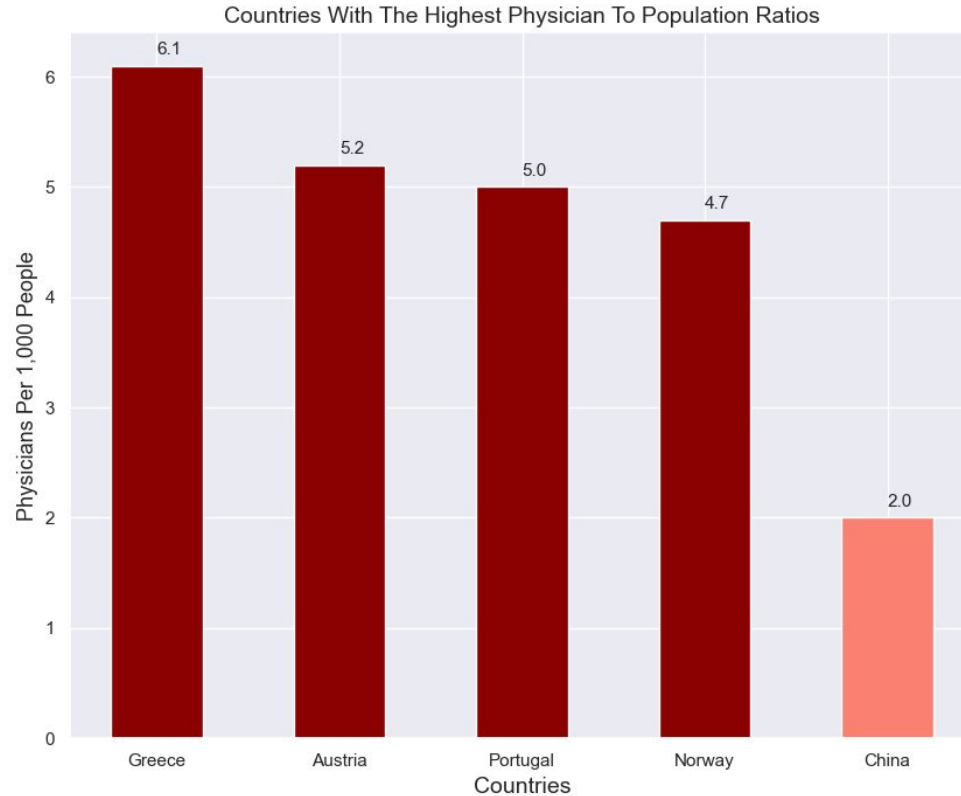
Samantha Baltodano

Agenda

1. Deaths from pneumonia

2. Physician burnout and doctor shortages

3. AI In Healthcare

4. Actionables

Pneumonia Accounts For 17% Of All Children Deaths In China

Leading Causes of Death In Children Under 5 Worldwide

Cause	Deaths
Pneumonia	808920
Neonatal complications	649439
Diarrheal diseases	533768
Neonatal trauma	533250
Malaria	354294

Physicians Are Overworked, Fatigued, and Burnt Out

Countries With The Highest Physician To Population Ratios

How Can We Address These Problems?

➤ Benefits:

- ○ Early diagnosis

- ○ Increased efficiency

- ○ Reduced costs
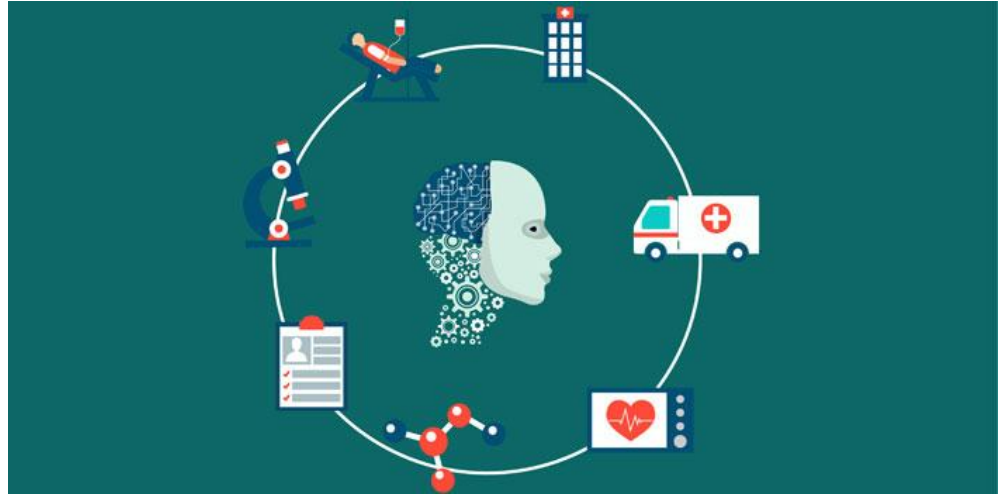
Next Steps

➢ Utilize machine learning to detect pneumonia in children

➢ Randomized controlled trials to track AIs impact on patient outcomes

Resources

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7. Klöppel S;Stonnington CM;Barnes J;Chen F;Chu C;Good CD;Mader I;Mitchell LA;Patel AC;Roberts CC;Fox NC;Jack CR;Ashburner J;Frackowiak RS; "Accuracy of Dementia Diagnosis: A Direct Comparison between Radiologists and a Computerized Method." *Brain : a Journal of Neurology*, U.S. National Library of Medicine, pubmed.ncbi.nlm.nih.gov/18835868/.

Thank you

Check out the full project on [Github](#)!