

AI in Medicine:  
**Not Optional**

## Evolving Role of Artificial Intelligence in Radiological Imaging

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# Financial Disclosures

None

# Underrecognized Urgency

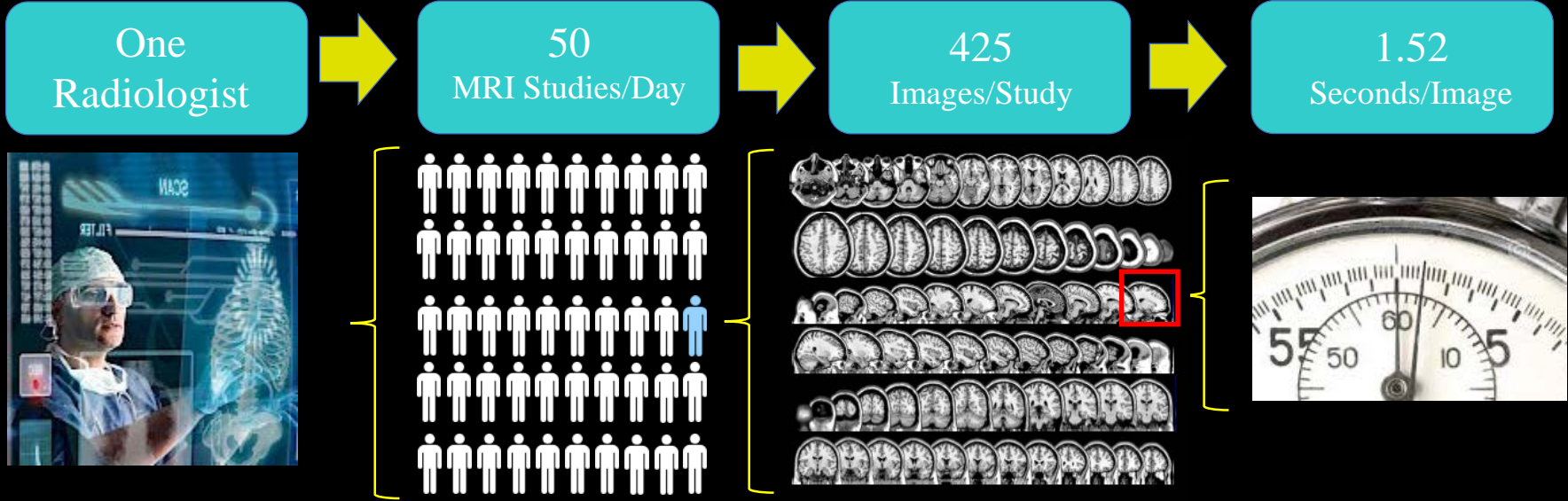
Data Overload

Data Waste

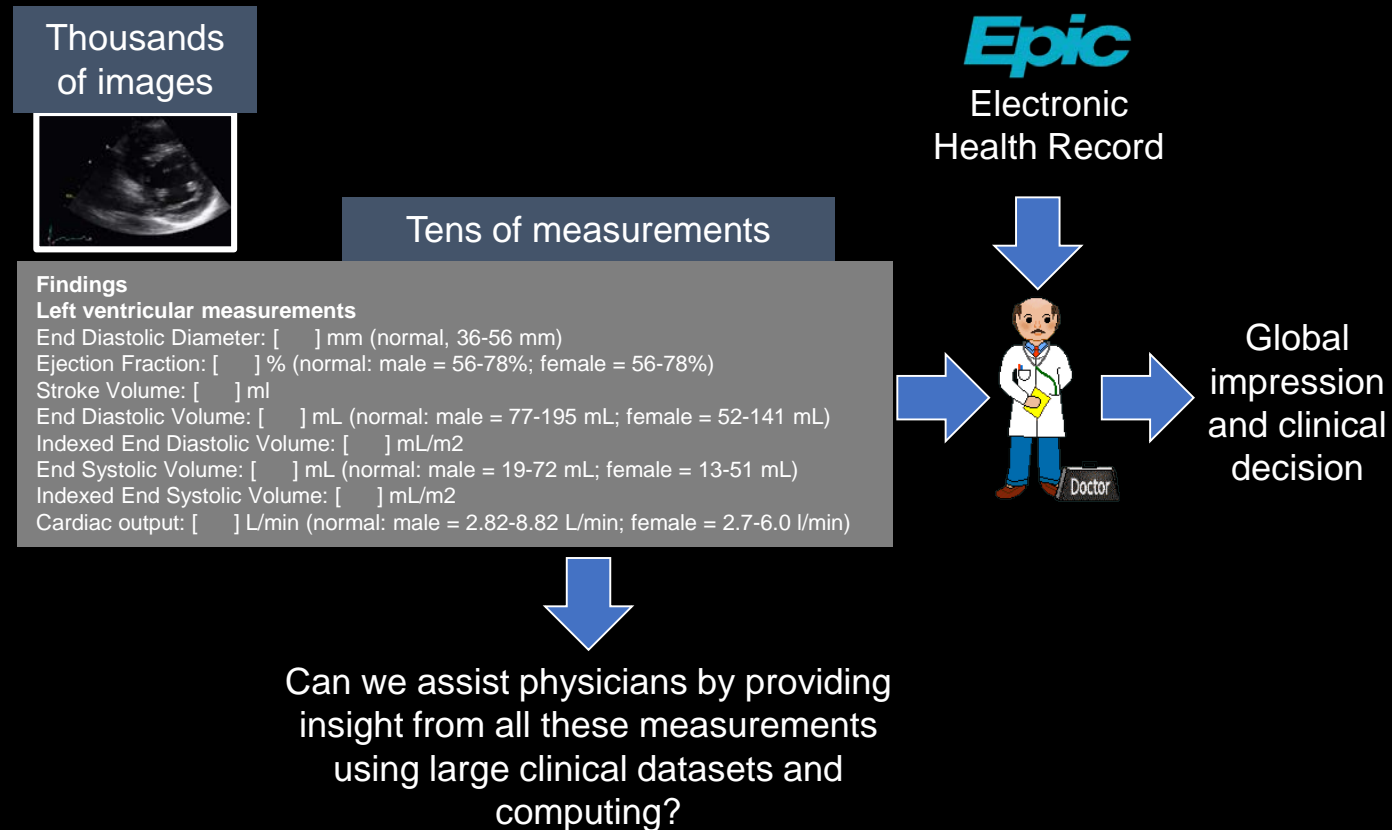
Medical Errors

Physician Shortages

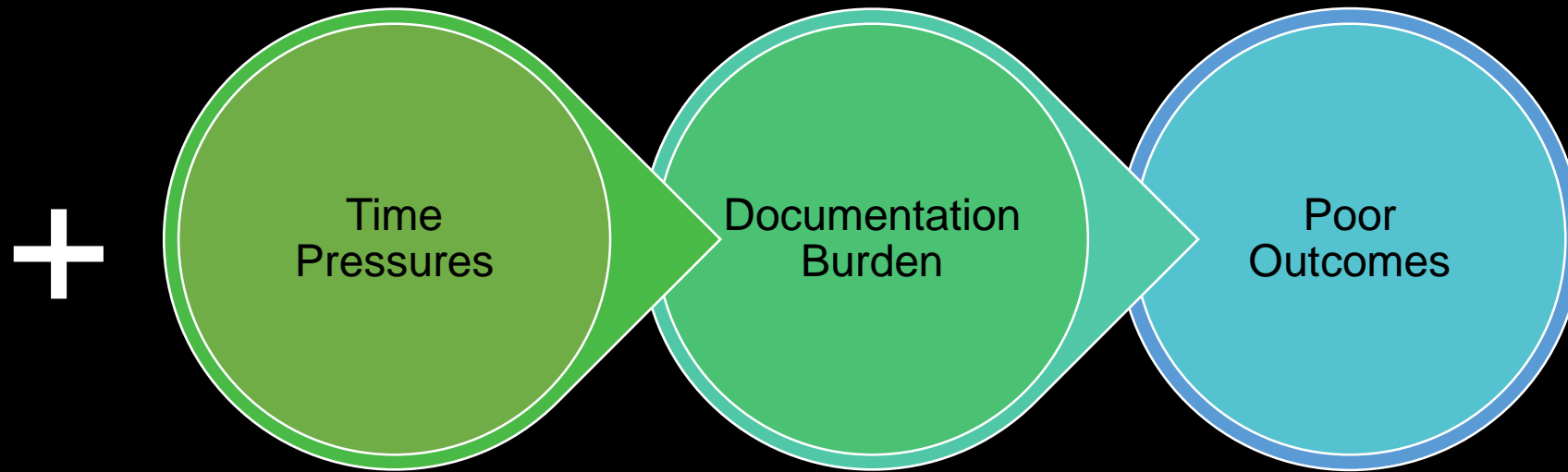
# Data Overload



# Data Overload and Data Waste



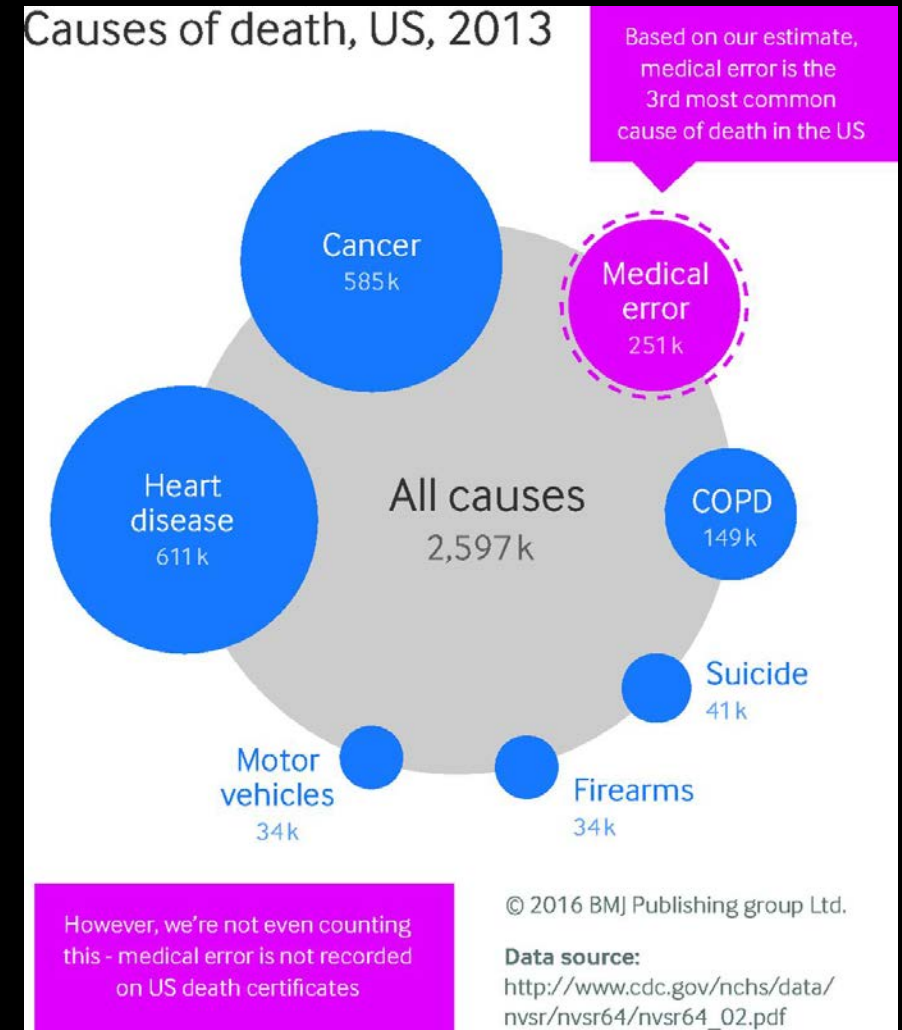
# Additional Pressures





# Medical Errors

- 3<sup>rd</sup> largest cause of death in the US
- The number is probably larger
- Errors lead to
  - Decrease patient safety
  - Poor outcomes
- Poor patient experience
- Poor patient engagement





# Shortage of Physicians

## China's doctor shortage prompts rush for AI health care



Credit: CC0 Public Domain

Qu Jianguo, 64, had a futuristic medical visit in Shanghai as he put his wrist through an automated pulse-taking machine and received the result within two minutes on a mobile phone—without a doctor present.

hindustantimes

Sunday, Oct 13, 2019

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## Healthcare crisis: Short of 5 lakh doctors India has just 1 for 1,674 people

Millions cannot access India's overburdened hospitals and inadequate medical facilities, a crisis illustrated by the fact that India is short of nearly 500,000 doctors.

INDIA Updated: Sep 01, 2016 11:20 IST

## New Findings Confirm Predictions on Physician Shortage

APRIL 23, 2019

SHARE: f t in e

The United States will see a shortage of up to nearly 122,000 physicians by 2032 as demand for physicians continues to grow faster than supply, according to new data published today by the AAMC (Association of American Medical Colleges). The projected shortfall is similar to past projections and ranges from 46,900 to 121,900 physicians.

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<https://medicalxpress.com/news/2018-09-china-doctor-shortage-prompts-ai.html>

<https://www.aamc.org/news-insights/press-releases/new-findings-confirm-predictions-physician-shortage>

<https://www.hindustantimes.com/india-news/healthcare-crisis-short-of-5-lakh-doctors-india-has-just-1-for-1-674-people/story-SZepTvj78WgOVlo93tBVK.html>

# Summary

- Make Providers more efficient
- Make them more accurate
- Reduce Errors
- Plan for bias elimination
- Need safe, faster options for testing, validation and implementation

