



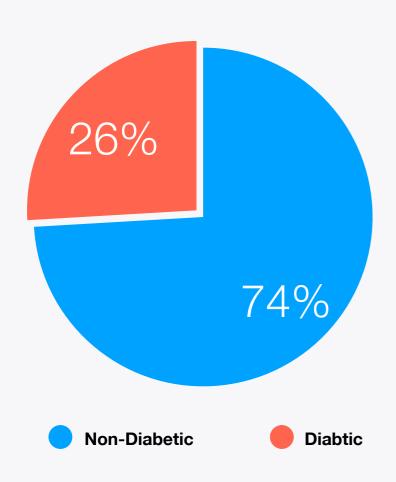
Diabetes Management & Complications Prediction Using Artificial Intelligence

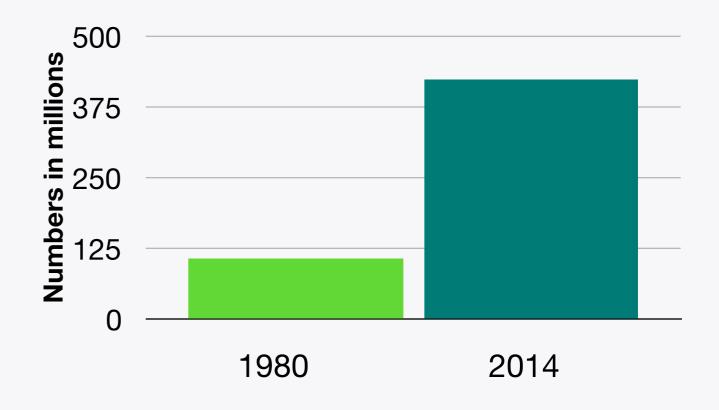
Salem Alelyani, PhD

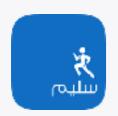
Director of Artificial Intelligence Unit King Khalid University Saudi Arabia

Overview

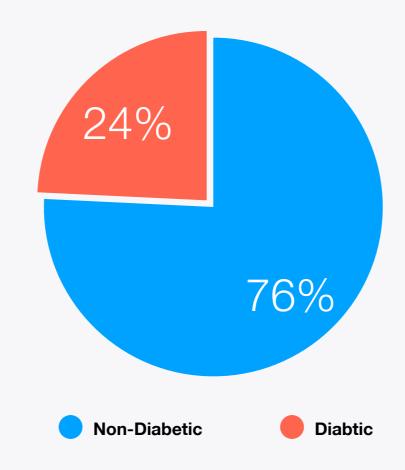
According to WHO







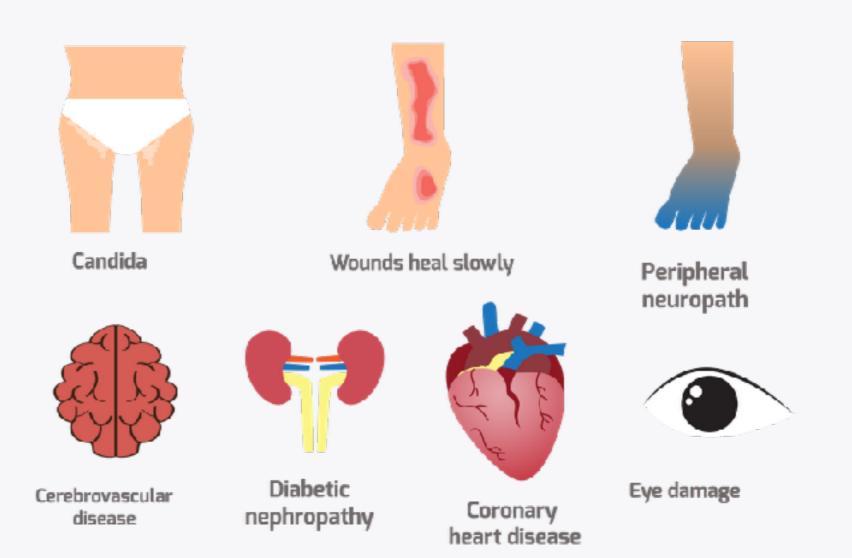
How about Saudi Arabia?



- Among top 10 countries of the world with highest prevalence
- Around 30% of Saudi Health budget is spent on diabetes and its complications

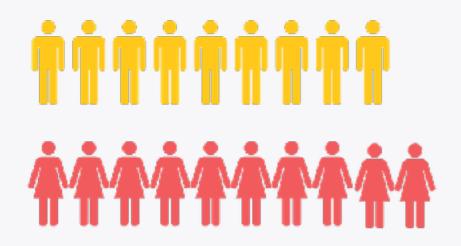


Complications





Physician visits





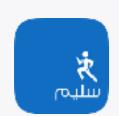


Waiting time



Facilties

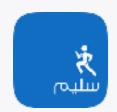
Most of that is avoidable



The good news

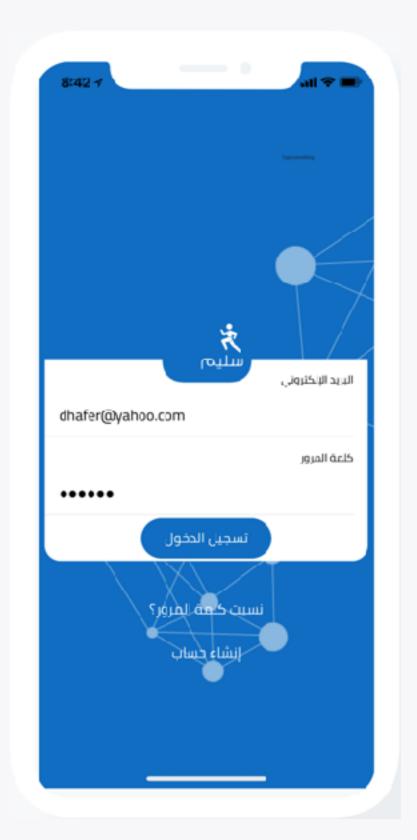
According to Harvard School of Public Health:

- Type 2 is largely preventable
- About 9 cases in 10 could be avoided
- Changing lifestyle.. weight, diet, exercise, tobacco
- Diabetes management doesn't require regular physical visits





saleem.life

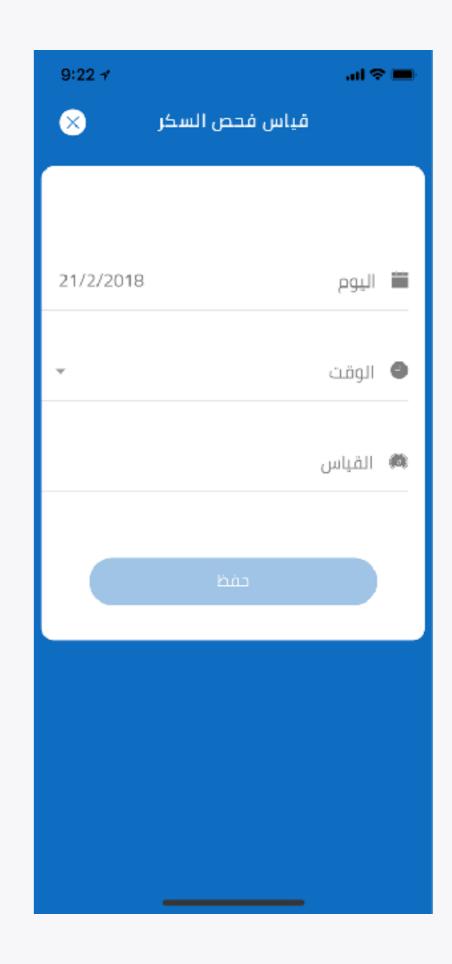


 $\left(\mathbf{1} \right)$

Patient's readings



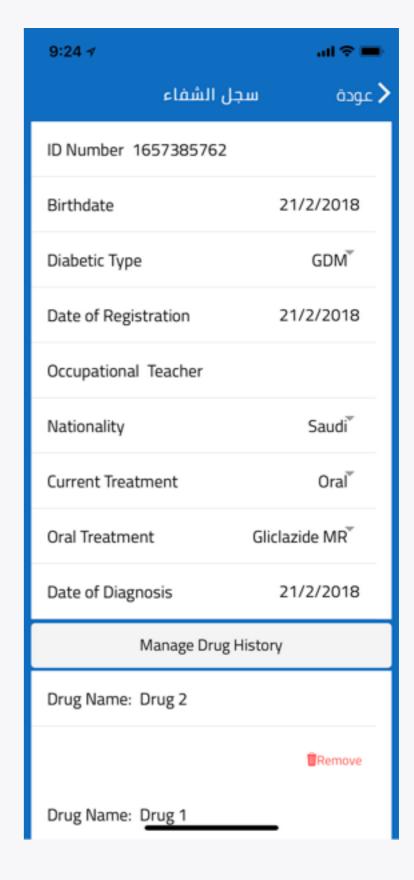
Add it to Saleem





 $\left(\mathbf{2}\right)$

Profile and health data





3

Patient-physician real-time communications





4

Real-time monitoring, data analysis and visualization







Artificial intelligence layer to predict the complications

