# A.I and Health

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# Role of Artificial intelligence in Health

- AI is already in use to detect diseases such as cancer.
- Technology applications and devices help in a healthier lifestyle.
- Machine learning algorithms can process large amounts of information and be more precise than humans.
- Help provide treatments

# Health Monitoring Tools:

AI helps healthcare professionals to better understand, daily patterns, their needs, and provide feedback and support.

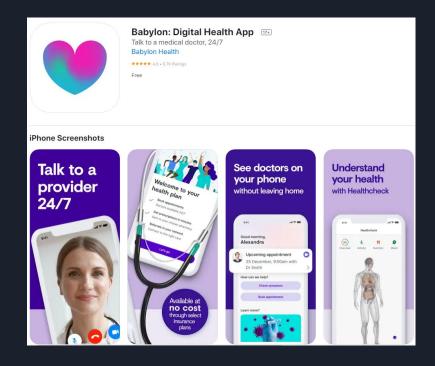
- Wearable health trackers: FitBit, Garmin and Apple
- Monitors heart rate and activity levels
- Keeps user updated, and can send reports to doctors.
- Suggestions: Sleep, Exercise level, Heart rate



## Digital Consultation

Use of big health data with analytics to provide help to patients

- Example: Babylon
- Based on personal medical history and common medical knowledge.
- Users report symptoms into the app (speech reorganization) and compares to database and illnesses.
- Asks patients to specify symptoms, and decides what the patient should do (urgent care, primary care doctor)



### Precise Treatment

- AI has been created to analyze data and reports from a patient's file, external research and clinical expertise to help best select the individualized treatment path.
- We have been developing treatments for populations and making same medical decisions based on few similar characteristics among patients.
- AI helps shift to creating personalized treatments for precision and prevention.
- Predict health issues based on individual genetics.



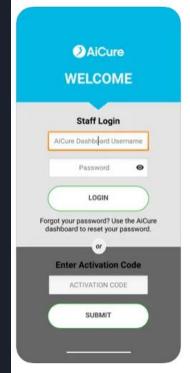
# Medication management

- Monitors the use of medications by patients. (elderly patients)
- A smartphone's webcam is partnered with the AI to autonomously confirm that medications are taken
- Helps manage their condition
- There are AI's that have 'conversations' and interacts with aging people to help keep their minds sharp. (prevents loneliness)



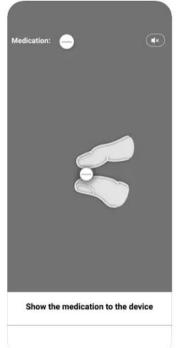


#### iPhone Screenshots









Al robots' help in surgeries

- Robots have been used in medicine for more than 30 years
- Surgical robots can execute operations themselves or help human surgeons.
- Used in labs and hospitals for repetitive tasks, physical therapy and support those with long-term conditions, such as a pacemaker.





#### Citation

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