Personalized Medicine

Gianna Sanone

Overview

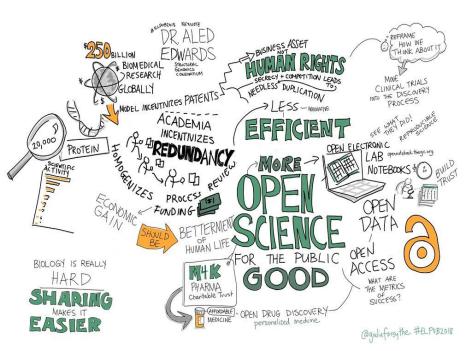
- History
- Pros
- Cons
- Plan and Implementation
- ❖ Graph 1
- ❖ Graph 2
- Fun Facts
- Summary
- References

History/Definition



- Personalized medicine relies on technology to identify a person's biology before giving medication, and if the medication will have a reaction to the person then technology and doctors can customize a different medicine that will be safe for the patient.
- Scientists wanting to know beforehand what response a patient will have to a drug before giving it to them
- Field of molecular biology- created better understanding of a person's biology
- They do this because a person health stems change because of gene variation and influences of the environment

Pros



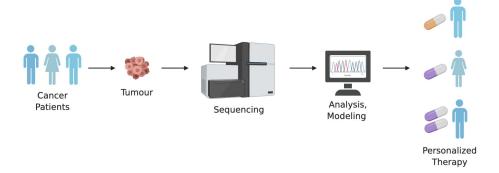
- Know what is reactant to your body and what treatment is not
- Could give the healthcare provider a prediction of how to prevent a disease from entering your body
- Improve disease detection
- Helps disease from progressing
- Disease-prevention strategies
- Prescribe more safer protective drugs
- Prevention of negative side-effects
- Gets rid of trial and error options

Cons

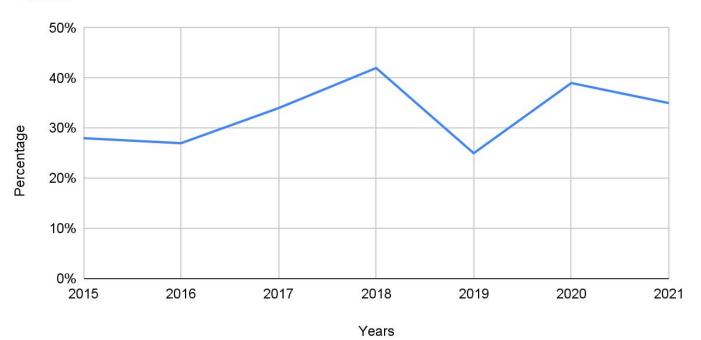
- High cost
- Fear of genetic discrimination
- Messed up data
- Access to genetic testing
- Unprepared primary care workforce

Plan/Implementation

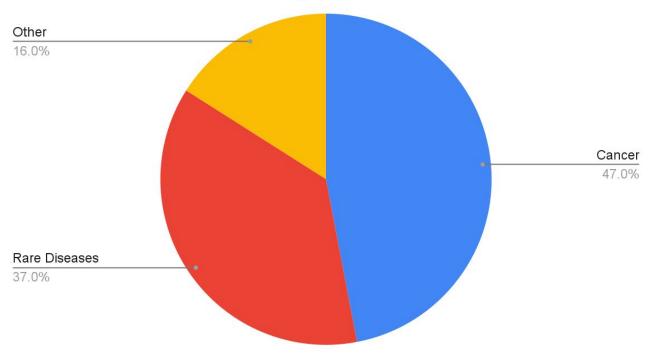
- New technology advancements are providing a real-time image of a person and looks at the structure to see any effects the drug might have on them.
- No more reactive treatment for disease
- More reliance and protection of treatment



Personalized Medicines FDA Approved for each of the Last 7 Years



Personalized Medicine treating for difficult diseases



Fun Facts

- Personalized medicine is also helping us understand the biology of people with more complex diseases(cancer), and is the best treatment for cancer
- Uses your DNA to customize your treatment
- Identifies gene mutations
- Minimizing side effects
- Starting to be useful in treating cardiovascular disorders, depression, pain management



Summary

I am very much with this advancement of technology of medicine. This will allow us to understand a certain person's structure and biology which will help doctors to protect people from diseases or from a disease becoming worse. This advancement has started from the 1950's so it's nothing new. It has been used more than you think it could be used for everyone but not everyone needs special attention. Some might disagree with me though.

References

Milestones in Personalized Medicine: From the Ancient Time to Nowaday

Personalized Medicine- National Human Genome Research Institute

The Personalized Medicine Coalition: goals and strategies

<u>Limitations Persist in Growth of Precision Medicine</u>

10 Things You Should Know About Personalized Medicine

<u>Twenty Years with Personalized Medicine: Past, Present, and Future of Individualized Pharmacotherapy</u>