

ARTIFICIAL INTELLIGENCE IN HEALTHCARE

The Excitement & Concerns

Presentation to the VT House Committe on Health

Date: March 17, 2025 **Presenter:** Tania Malik, J.D.



AGENDA



Overview



Advantages of AI

Concerns About Al



The Role of The Regulator

Digital Twin Technology

Will AI Replace Physicians?

Credit: The Medical Futurist, Dr. Bertalan Mesko and ATA Digital Transformation Special Interest

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Think of AI That Exists In Your Life

- Netflix recommendations
- Sorting your email by priority
- Amazon picks for you
- Grammar assistants
- Google Maps
- Alexa
- Fraud detection on credit cards

Overall Benefit In Your Life



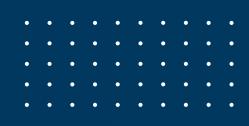
DEFINITIONS

Algorithm



We give the machine a set of data and it starts to learn better than we can because of the amount of data we are giving it is so large. It demonstrates learning. The better the data, the better the answers.

AI is pattern recognition - cancer looks like this





TYPE OF DECISION MAKING IN HEALTHCARE





Human Only

Shadow: Listening in on the conversation and then documenting it.

Suggesting: As decision support.

Partial: Flag a problem on a scan and have the doctor review it.

AI IN HEALTHCARE IS ALREADY HERE

Large Amount of Existing Data

 Genetic testing, Ancestry.com, RPM, RTM



Al is a win for society and regulations need to be nimble without creating barriers for innovation while balancing safety.



- Image Analysis
- Predictive readmission rates

Provider Shortages

PATIENT JOURNEY

Transition Phase

Discharge/Transition Post Care Management Maintenance/Prevention

Recovery Phase

- Monitoring/Follow Up
- Recovery/Rehabilitation



Active Care Phase

- Diagnosis
- Treatment Planning
- Treatment Delivery

Pre-Care Phase

- Wellness/Prevention
- Symptom Recognition
- Care Seeking

Access Phase

- Intake/Registration
- Initial Assessment/Triage

IMAGINE A DOCTOR'S VISIT WHERE AI.

Listened to the conversation

Analyzed the data the patient provides

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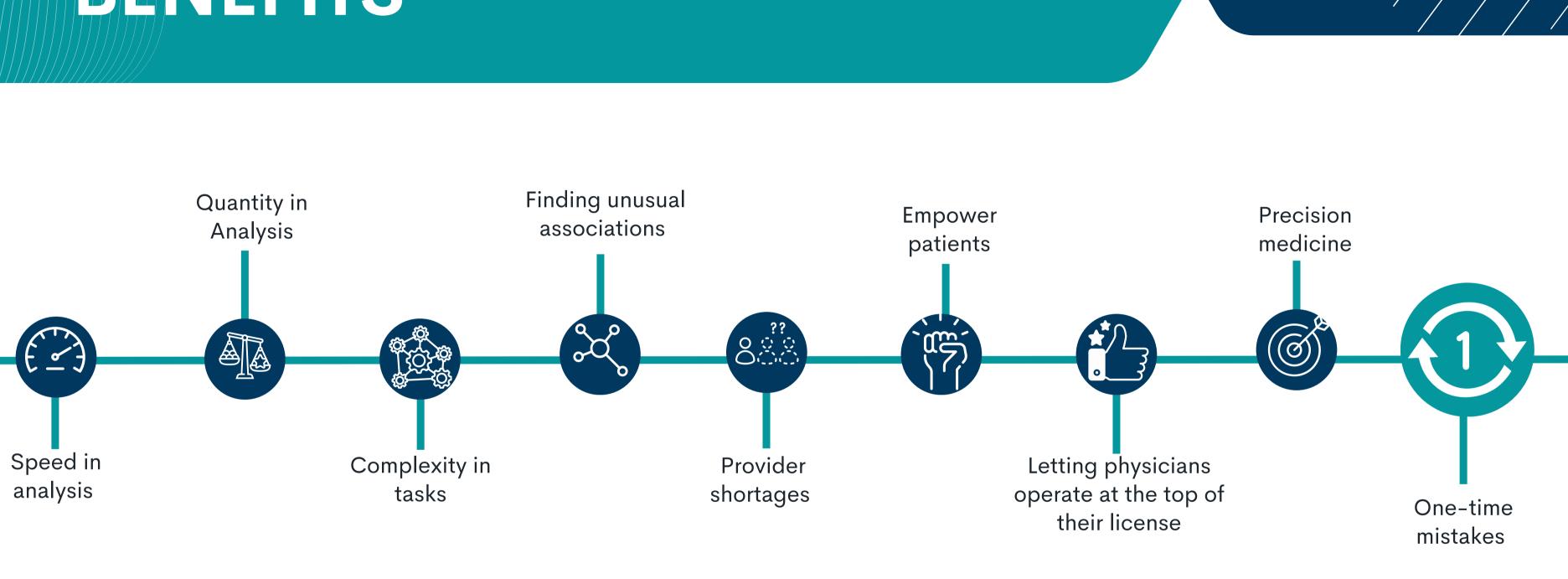


Hired the physician with AI knowing who is more likely to excel

Collected all of the medical records for a patient

Some patients don't know the name of the doctors they have seen.

BENEFITS





• Al basis

• Using technologies that have not been peer reviewed

• Regulations that don't change quickly enough and can stymie innovation

• Privacy

• Cybersecurity

• Deep Fakes

• Who has the legal responsibility

REGULATORY RESPONSIBILITIES & CONSIDERATIONS

• Patients will independently use technologies that may not be vetted.

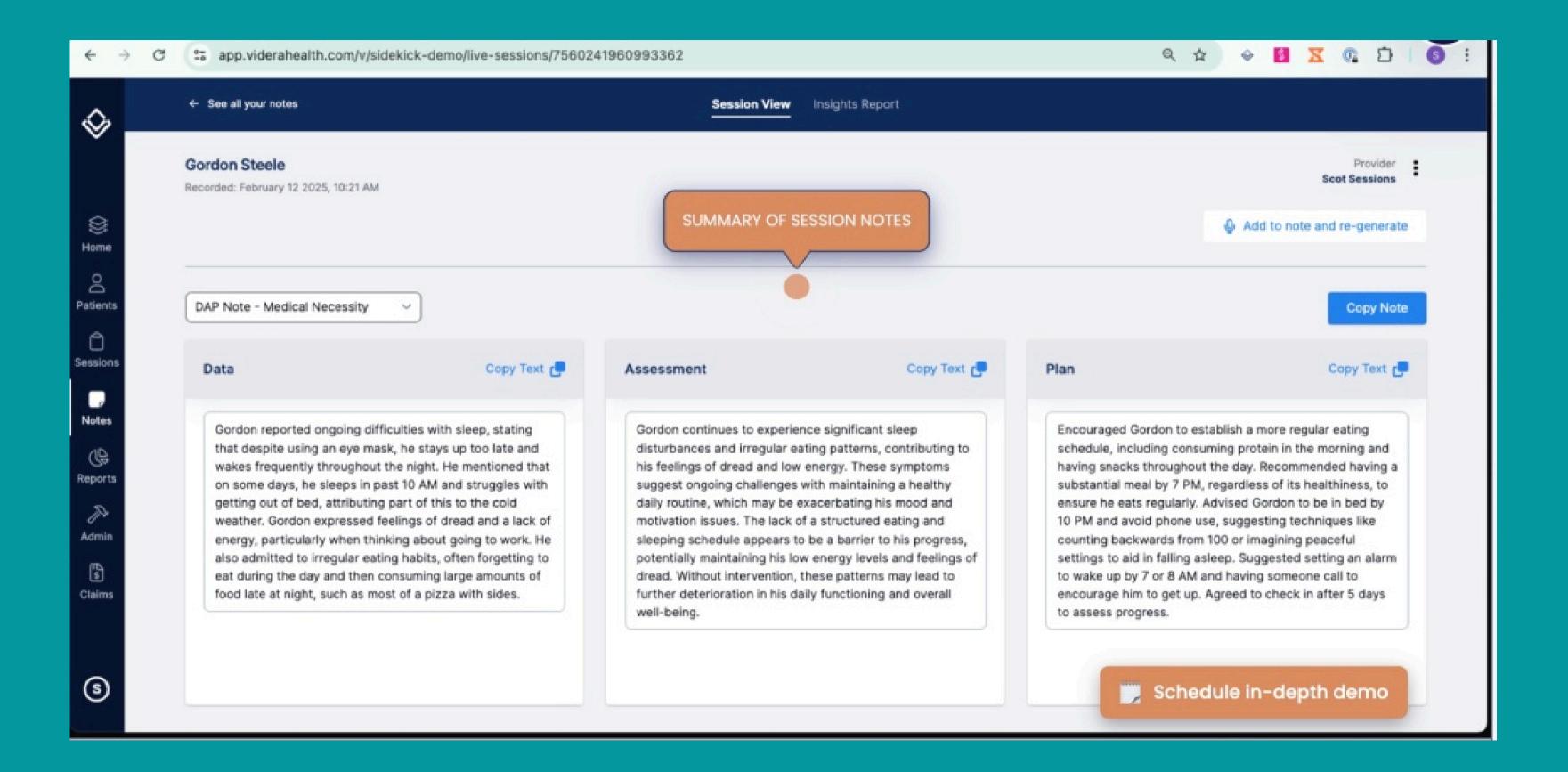
- Patients Rights (Consent).
- Legislation has to be balanced and nimble.
- Bring companies to the table and discuss where the technology is going.
- Privacy and Security at the forefront but without crushing progress. Existing laws may be sufficent and federal laws are a guide.

UTAH ENACTS AI-FOCUSED CONSUMER PROTECTION BILL

The bill imposes disclosure requirements on entities using generative artificial intelligence ("AI") tools with their customers, limits an entity's ability to blame generative AI for statements that violate consumer protection laws, and creates the Office of Artificial Intelligence Policy administer a state AI program. The UAIPA's disclos requirements are not particularly novel, as some state chatbot laws require similar disclosures. 1 H companies should be mindful of Utah's new requ they develop their AI governance program

DEFINITION OF GENERATIVE AI The UAIPA concerns generative AI, which the act "an artificial system that (a) is trained on data; (b) i with a person using text, audio or visual communication (c) generates non-scripted outputs similar to output created by a human, with limited or no human oversightts,

Governor signed on March 13, 2025





DIGITAL TWIN TECHNOLOGY



- Virtual replica of real world counterpart and data.
- failures, traffic patterns, power grids.
- and population health.

is constantly updated based on real-time

• In use for decades to predict machine

• Now in healthcare, it is use for precision

DIGITAL TWIN continued.

- Digital Twin can be used in the healthcare workforce • Documentation.
 - Telling the human which room they should be in.
- care team what has happened so they are clear and their time is maximized.
- Precision care allows for better outcomes.
- Providers main tool in the quick office visit is prescriptions. outcomes and better provider satisfaction.
- De-identified data can show how a population is doing and can pool outcomes.

• Scale the care team and use the tech to nudge the patient and then communicate to the

• With a digital twin, can offer the providers a better look into the patient and give better



A WORD ABOUT AVATARS

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- Nurse Avatars
- Mental Health Therapists
- Peer to Peer Support

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Will Al Replace Physicians?

"AI will not replace medical professionals. But medical professionals that use AI will replace those that don't."

- Dr. Bertalan Mesko





Thank You For Listening!





