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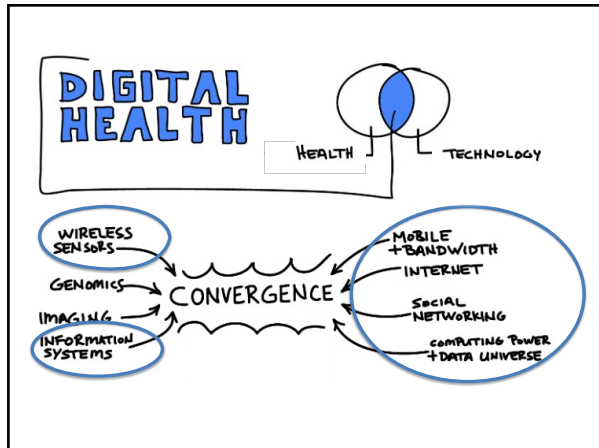
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GOALS



- 01 Digital Health**
Define the convergence of health and technology to form Digital Health
- 02 Digital Health Usage**
Define 4 ways that digital health technology can be used by healthcare providers in their practice.
- 03 Ethical Dilemmas**
Analyze potential ethical case studies looking at dilemmas for each form of digital health discussed.
- 04 Strategies**
Describe strategies to mitigate these potential ethical issues in digital health.

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Reduce Workload & Fatigue

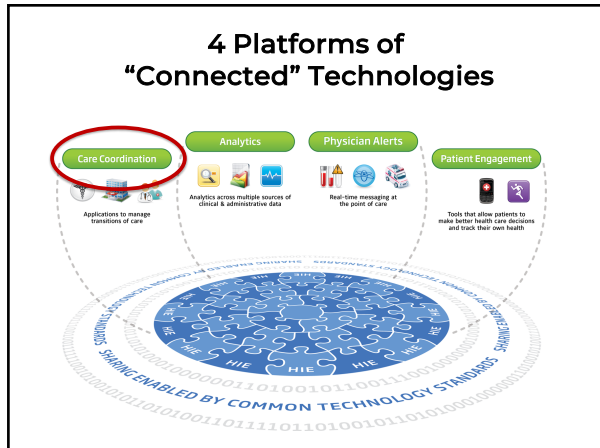
Automation through a Healthcare technology platform can relieve care teams of the need to synchronously accompany every patient workout, resulting in a significant increase in their patient capacity. In addition, aspects of a clinical workflow can be automated with symptom surveys and medication reminders.

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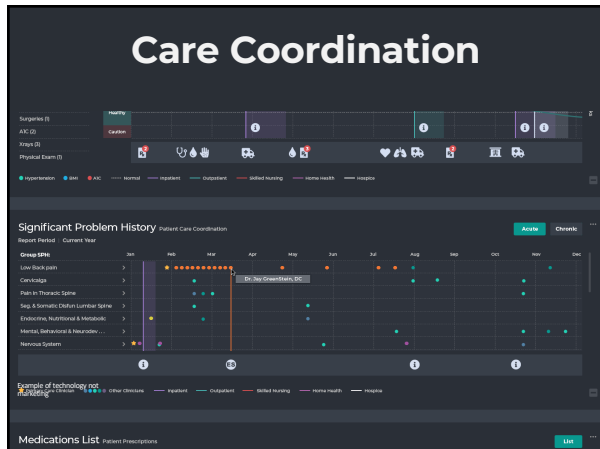
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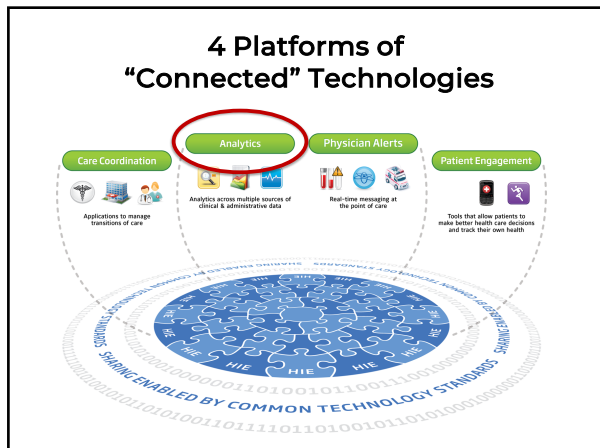
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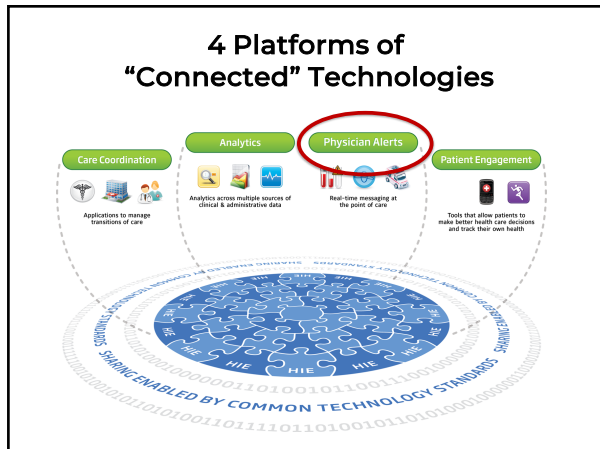
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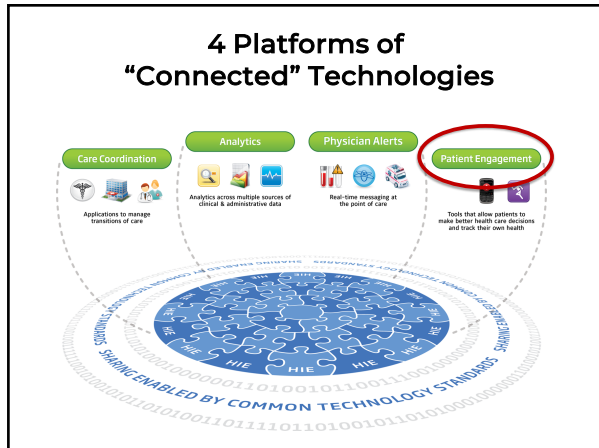
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Enhance Patient Access and Engagement

Smart RTM™ Technology

EMBODI

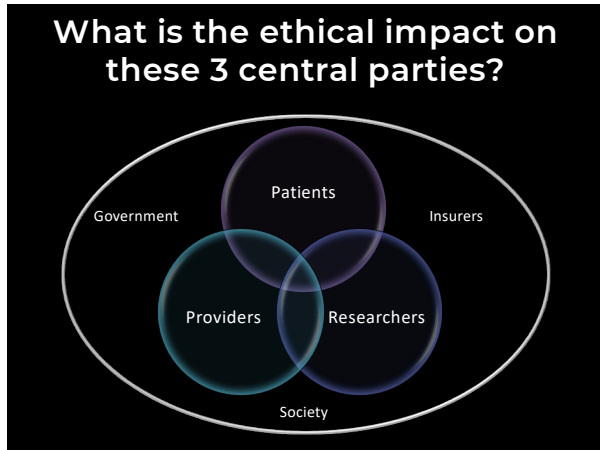
Health user-friendly patient experience app keeps patients engaged and facilitates both synchronous and asynchronous communication between the patient and the care team. Patients report lower anxiety since they stay close to home but know that their care teams are always watching over them.

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1. Privacy/Confidentiality

“Establishes national standards to protect individuals’ medical records & other personal health information, and applies to health plans, health care clearinghouses, and those healthcare providers that conduct certain health care transactions electronically...”

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What Costs are you willing to pay for a violation?

\$125,000 per violation

Investigation, public disclosure, loss of income and maybe your practice

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CASE STUDY

Privacy & Confidentiality

You are on a plane working on a patient chart, can someone see that chart?

Does it follow HIPAA guidelines?

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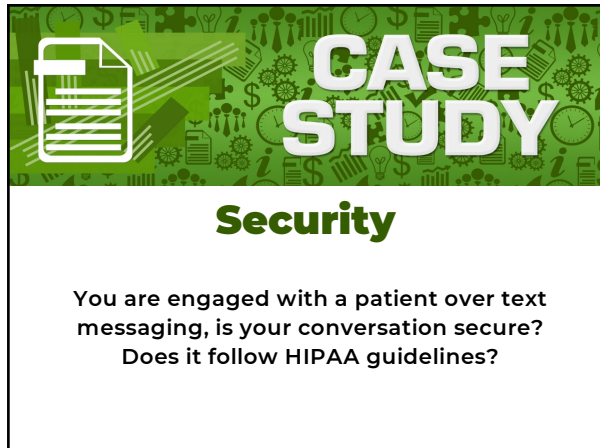
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CASE STUDY

Security

You are engaged with a patient over text messaging, is your conversation secure?
Does it follow HIPAA guidelines?

25

Text messaging is **not HIPAA compliant**



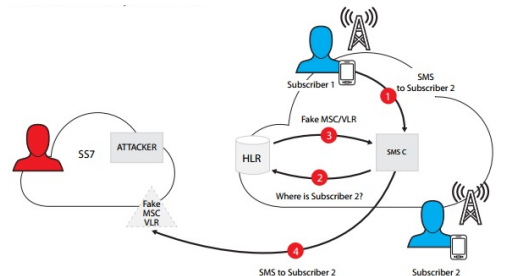
Unencrypted SMS messages should not be used for communicating ePHI unless a patient has initiated contact by SMS or requested provider-patient communications by text message - in which case healthcare providers can use text messaging provided reasonable safeguards are applied.

Given its ease of use, many healthcare organizations and professionals may wonder is text messaging HIPAA compliant. The answer is generally "no," but there are exceptions.

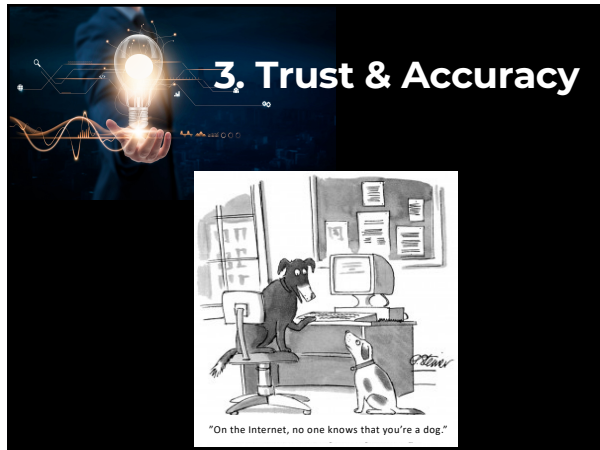
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Is Text Messaging HIPAA Compliant?

SS7 (Signaling Systems) attacks are mobile cyber attacks that exploit security vulnerabilities in the SS7 protocol to compromise and intercept voice and SMS communications on a cellular network.



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CASE STUDY

Trust & Accuracy

A patient comes in and wants to show you data from a health-tracking app they've downloaded from the web....

- What concerns do you have about trust and accuracy?
- What might be some solutions?

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There are accuracy concerns, right?

Applications / cardiac / iPhone

From sources across the web

- Heart Rate Monitor - Puls...
- Instant Heart Rate
- Cardio
- Instant Pulse - Blood Pres...
- Heartify
- Heart Health Monitor
- Heart Analyzer
- Blood Pressure App - Sm...
- wellit Welltory
- Curable
- Flaredown for Chronic Ill...
- Medisafe Medication Ma...
- Daylio
- Bearable - Symptom Trac...
- mySymptoms Food Diary
- Pathways Pain Relief
- Wave
- Calm

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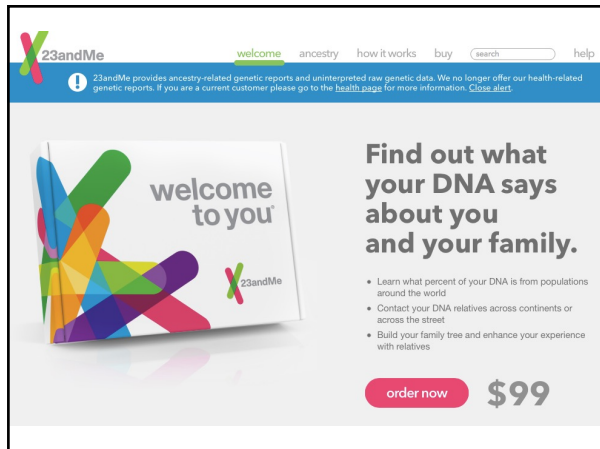


CASE STUDY

Patient Autonomy


- What concerns do you have about patient autonomy?
- What might be some solutions?

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! 23andMe provides ancestry-related genetic reports and uninterpreted raw genetic data. We no longer offer our health-related genetic reports. If you are a current customer please go to the [health page](#) for more information. [Close alert](#)

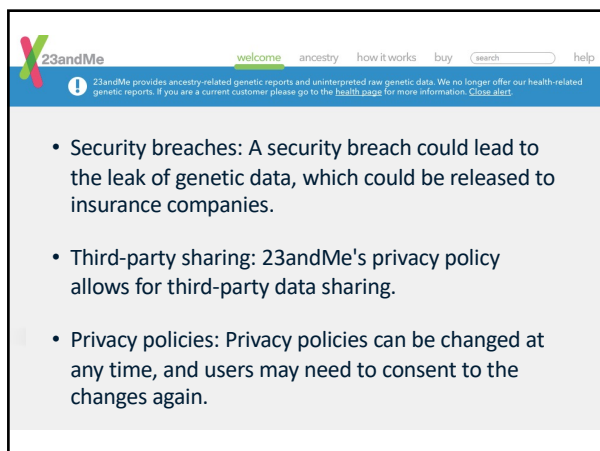


Find out what your DNA says about you and your family.

- Learn what percent of your DNA is from populations around the world
- Contact your DNA relatives across continents or across the street
- Build your family tree and enhance your experience with relatives

[order now](#) **\$99**

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23andMe [welcome](#) [ancestry](#) [how it works](#) [buy](#) [help](#)

! 23andMe provides ancestry-related genetic reports and uninterpreted raw genetic data. We no longer offer our health-related genetic reports. If you are a current customer please go to the [health page](#) for more information. [Close alert](#)

- Security breaches: A security breach could lead to the leak of genetic data, which could be released to insurance companies.
- Third-party sharing: 23andMe's privacy policy allows for third-party data sharing.
- Privacy policies: Privacy policies can be changed at any time, and users may need to consent to the changes again.

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Strategies to Mitigate Risk

- Consent, consent, consent
- Minimize presence of PHI in interventions
- Do NOT use PHI on social media
- Minimize access to data sets
- Make both the participant and the program unidentifiable
- Encrypt, use firewalls, use passwords
- Educate and incorporate patients' voices & opinions
- Disclose risks
- Disclose presence (or non-presence) of humans "on the other end" of the intervention
- Apps and Services that are Accreditation by National Sources:

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Questions for the future...

- When and how to obtain "informed consent" for certain digital media
- How will digital health change the relationship between provider and patient?
- What if a patient refuses to use or refuses access?

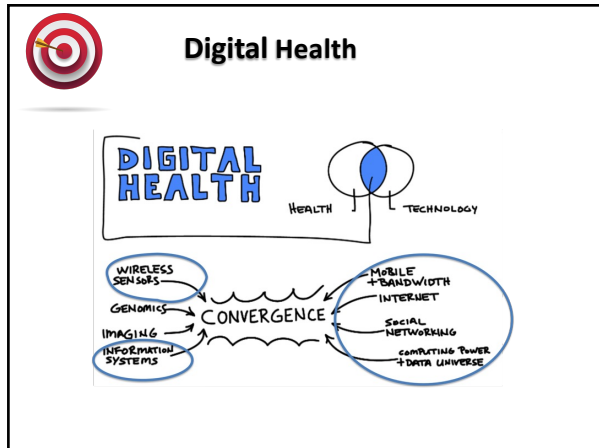
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Review GOALS

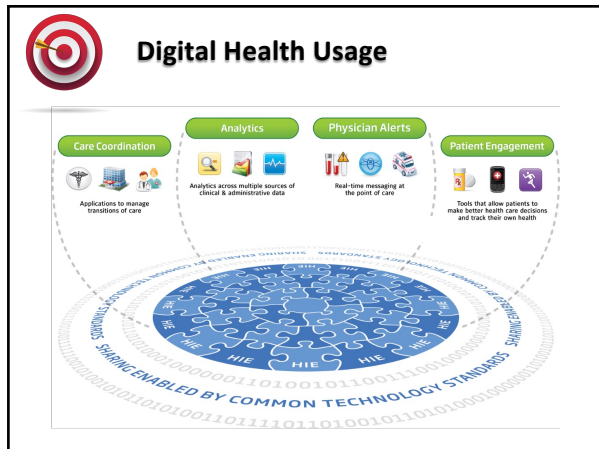


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Strategies

- Discuss Accuracy with Patients
- Constantly review policies that affect PHI that is external of your offices

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QUESTIONS??

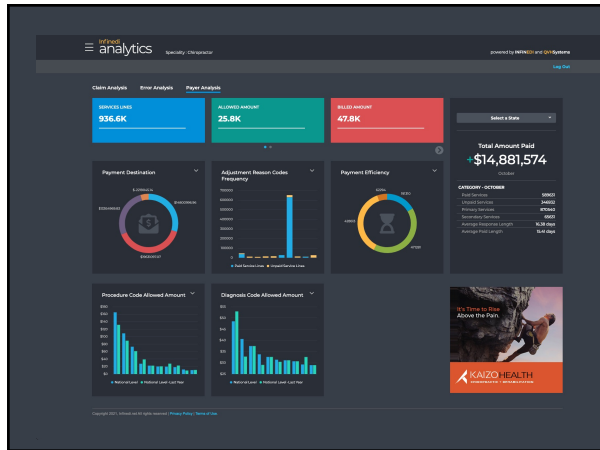
What concerns do YOU have about digital health?

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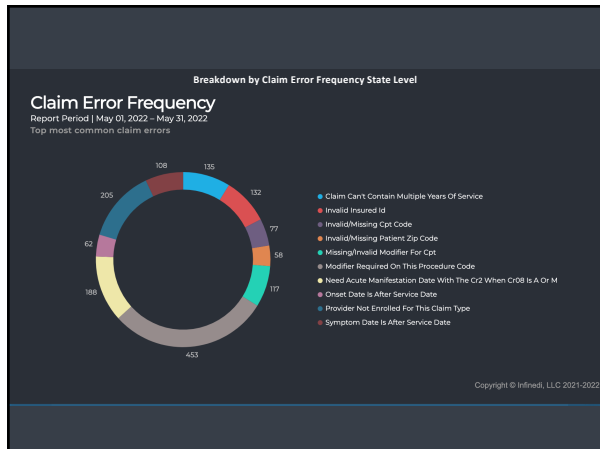
Changing the future...

How we change the profession with Data and Analytics

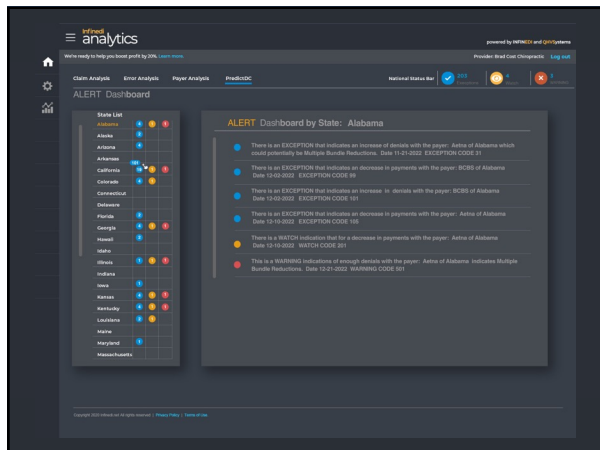
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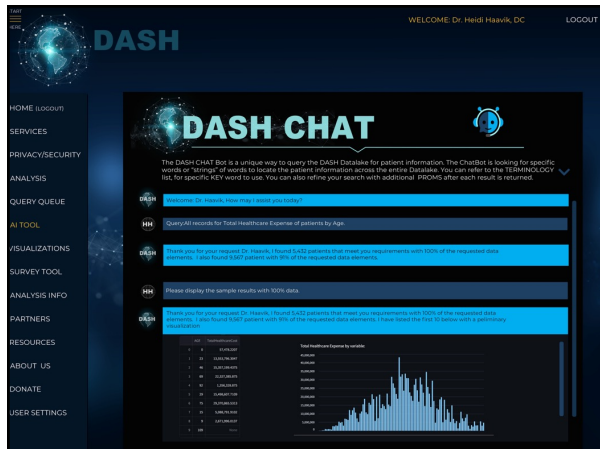
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