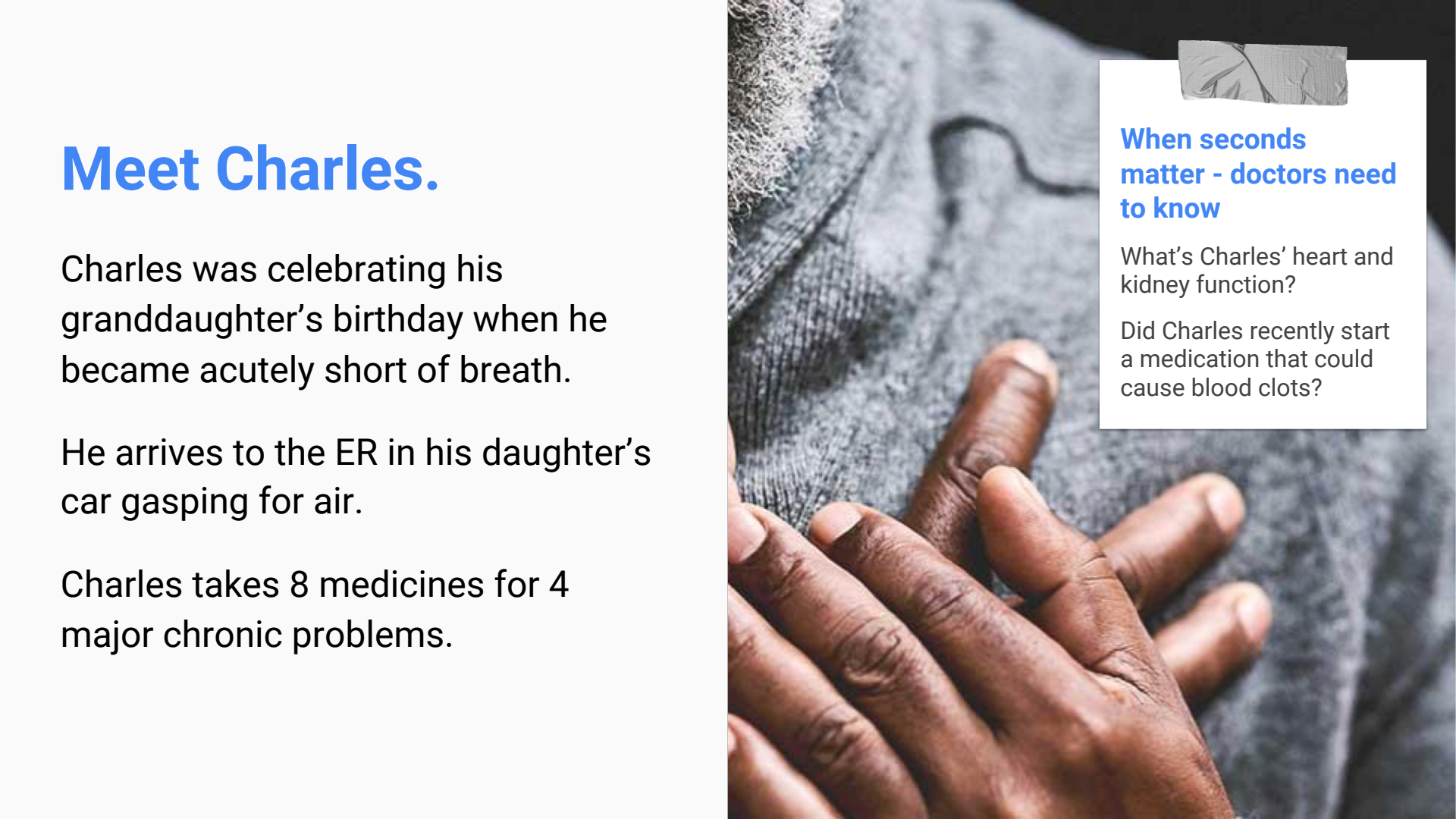# CLEHR

Curating health information to improve patient outcomes & the human experience of care delivery

Meet Charles.

Charles was celebrating his granddaughter's birthday when he became acutely short of breath.

He arrives to the ER in his daughter's car gasping for air.

Charles takes 8 medicines for 4 major chronic problems.

When seconds matter - doctors need to know

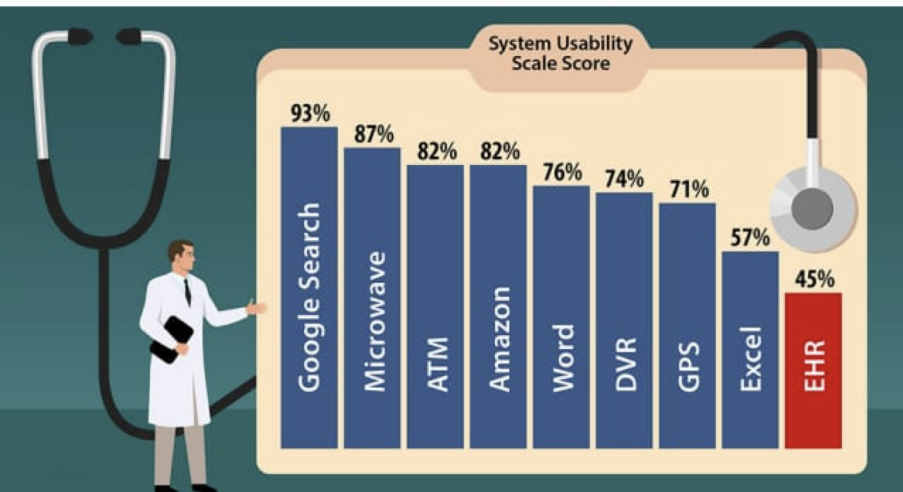What's Charles' heart and kidney function?

Did Charles recently start a medication that could cause blood clots?

The problem

Clunky EHR + explosion of information = pertinent data scattered & buried which

- distracts clinicians (~15% of clinical time looking for data*)
- can result in patient harm

*EHR chart review & patient tracking time as % of total clinical hours across YNHHS EDs

A market ripe for disruption

- Practice inefficiency has driven physician burnout to an all time high

- No competition or incentive to improve usability
  - EHRs built for billing not care
  - 3 large vendors with 70% of market
  - High switching costs

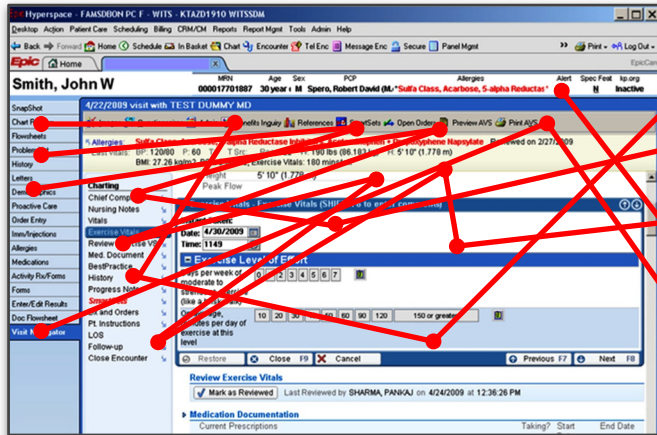- New technology now enables interoperability with 3rd party overlays
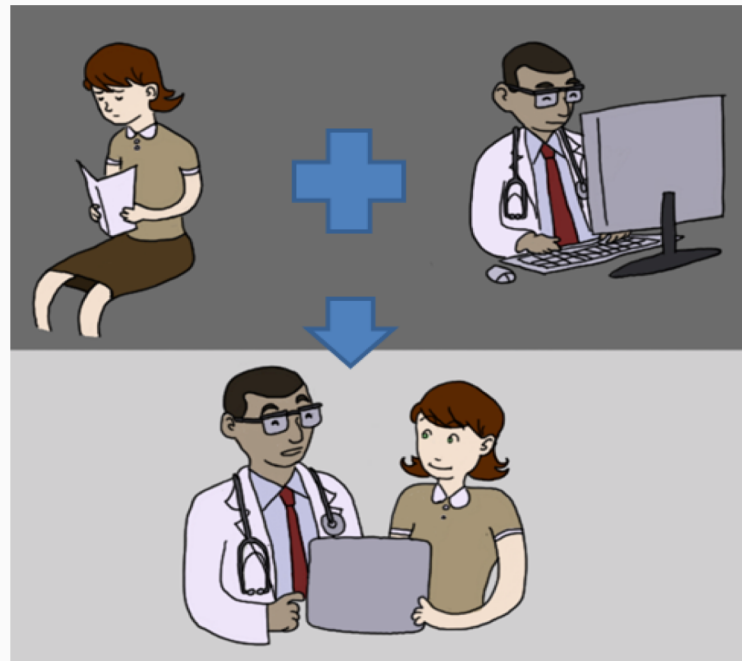
The Problem

This is an actual screen capture of Epic that is publicly available on the internet. Gag clauses prevent sharing screen captures like this

The Problem

Here is a typical workflow for an initial emergency department assessment before seeing a medically complex patient

The Solution

Curate and display customized information most salient to clinicians for safe & effective clinical decision-making
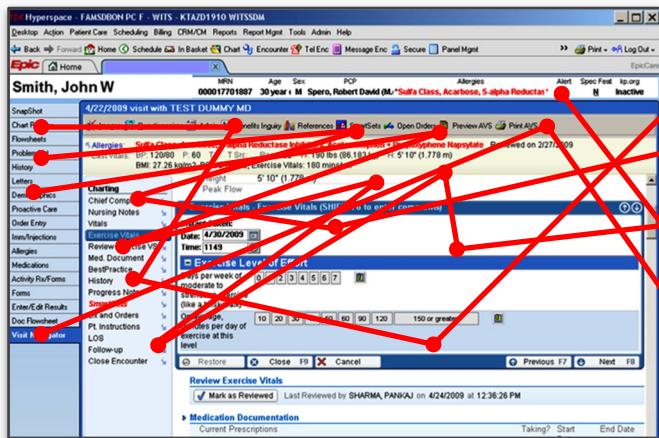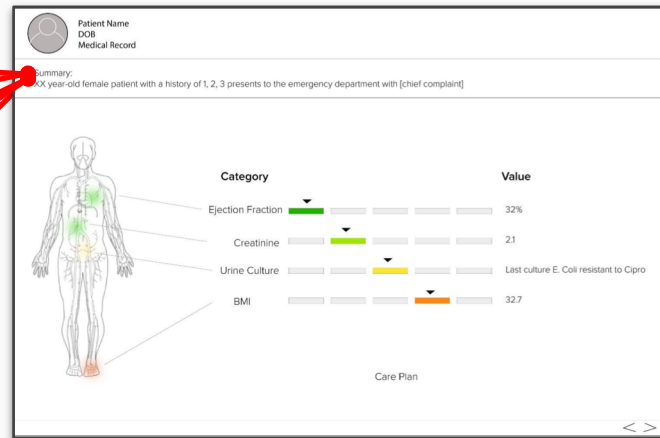
Business Model

Product: ED doctor dashboard nirvana

Customer: Medical practices, hospitals

Value proposition:
- Increased productivity
- Reduced errors
- Reduced physician burnout

Revenue model: subscription-based with customization services

Distribution: EHR-specific app stores (e.g., Epic App Orchard, Cerner Code)

User-centered design

Human-factors engineering

Differentiation from competitors

Clinical domain expertise
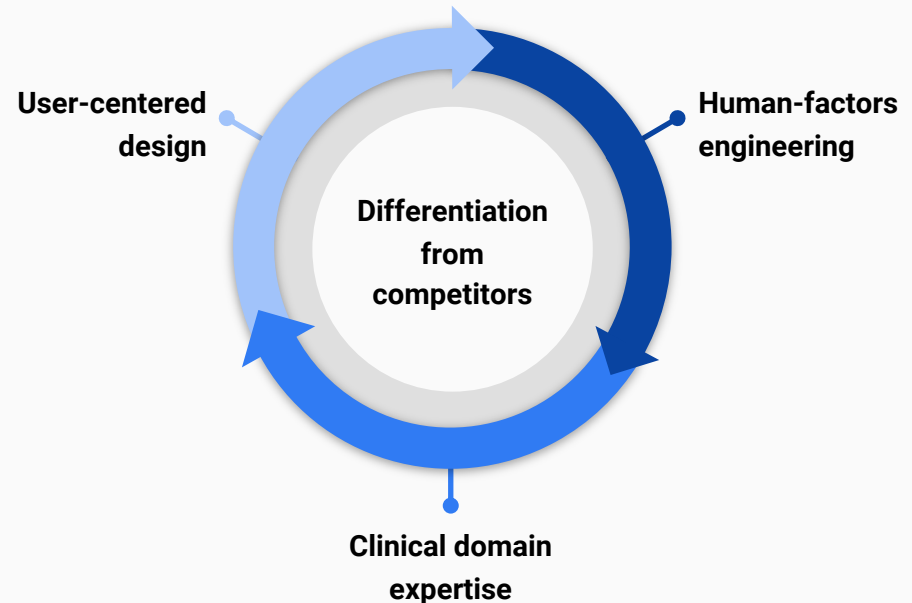
The team

Innovators in digital health design, implementation & EHR integration

Ted Melnick, MD, MHS

Digital health research

Yale School of Medicine

Arjun Venkatesh, MD, MBA, MHS

Implementation science

Yale School of Medicine

Yauheni Solad, MD, MHS, MBA

Informatician & Entrepreneur

Yale-New Haven Health

Greg Makoul, PhD, MS

Seasoned entrepreneur in digital health

Yale faculty | Founder & CEO PatientWisdom

Milestones

Exactly what we would accomplish with Blavatnik funding
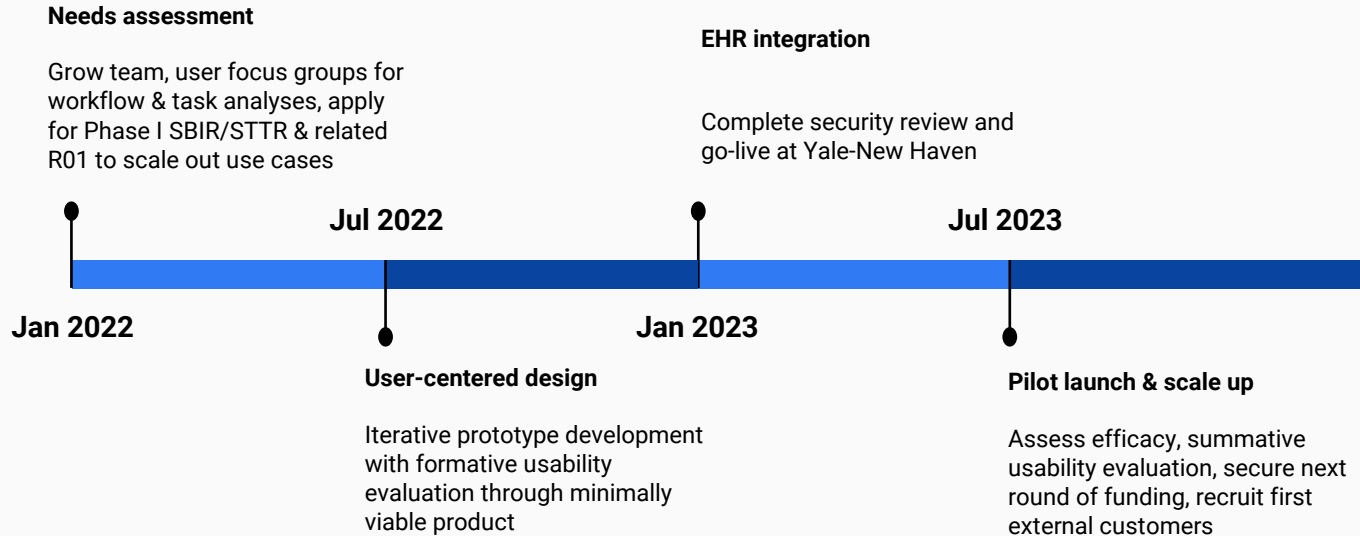
Budget Year 1

Consultants (design, human factors, data standards)
$35,000

Software development contract (programming)
$45,000

Insurance, legal & corporate fees
$20,000

Budget Year 2

Consultants
$35,000

Software development
$75,000

Project manager
$60,000

Fees (legal, insurance, corporate & Epic App Orchard)
$30,000

Needs assessment

Grow team, user focus groups for workflow & task analyses, apply for Phase I SBIR/STTR & related R01 to scale out use cases

EHR integration

Complete security review and go-live at Yale-New Haven

Jan 2022 — **Jul 2022** — **Jan 2023** — **Jul 2023**

User-centered design

Iterative prototype development with formative usability evaluation through minimally viable product

Pilot launch & scale up

Assess efficacy, summative usability evaluation, secure next round of funding, recruit first external customers

Join us.

Thank you. Questions?

- *How will CLEHR be different from the EHR?*
- *Is there a successful EHR overlay market?*