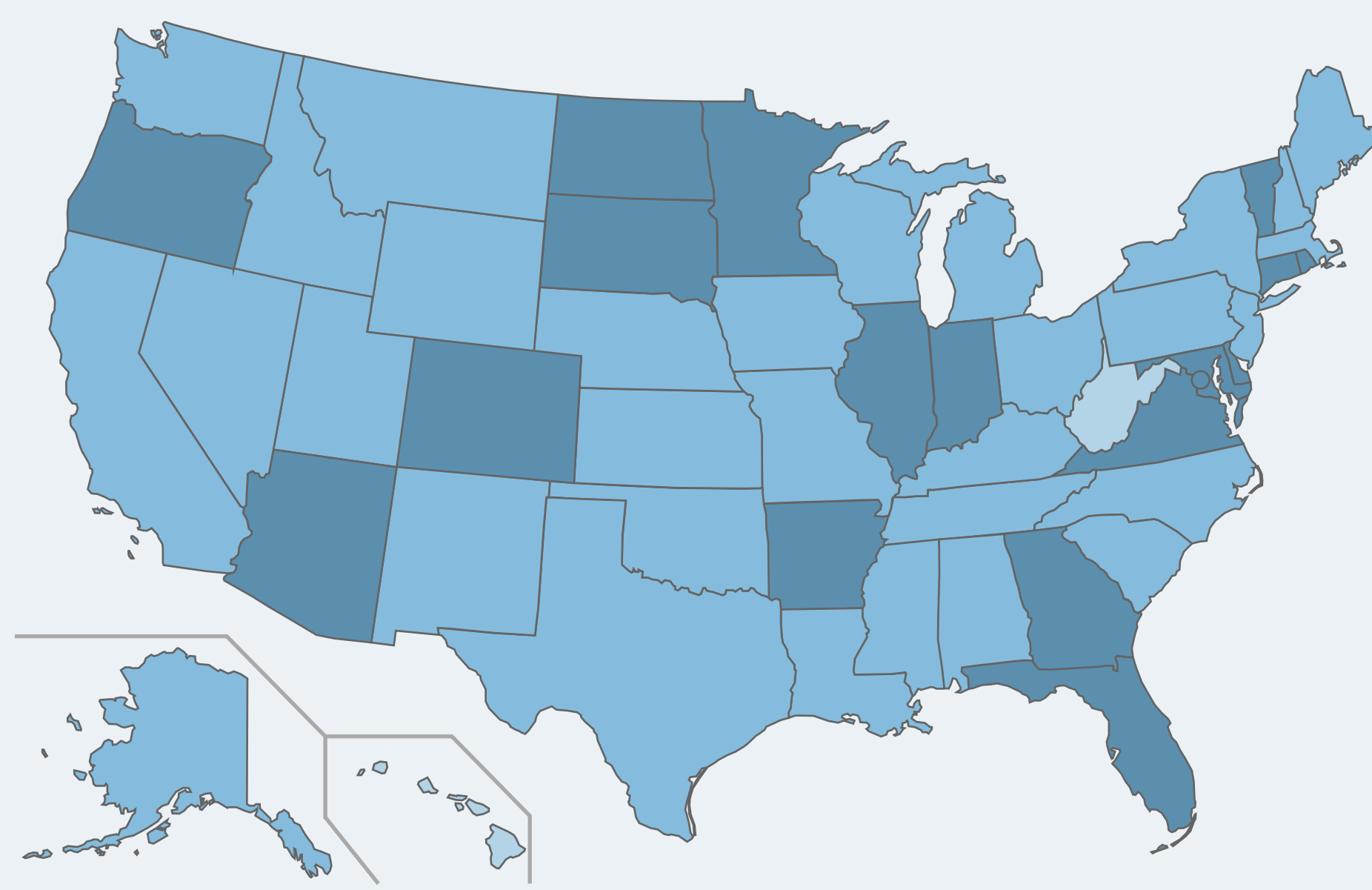


exploring how
**intervention
engine**
uses existing
healthcare data
to revolutionize
population
patient healthcare



By 2014, hospital **Electronic Health Record (EHR) adoption rates** were **above 60%** in 48 states and **above 80%** in 17 of those states.

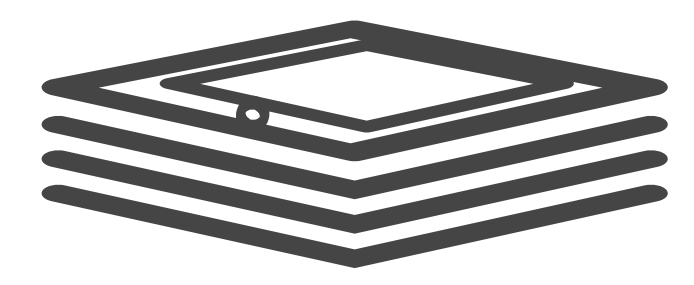
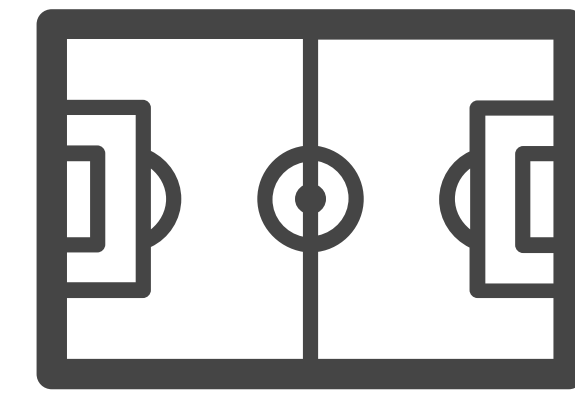


40-59% 60-79% 80-100%

Source: ONC/AHA, AHA Annual Survey Information Technology Supplement

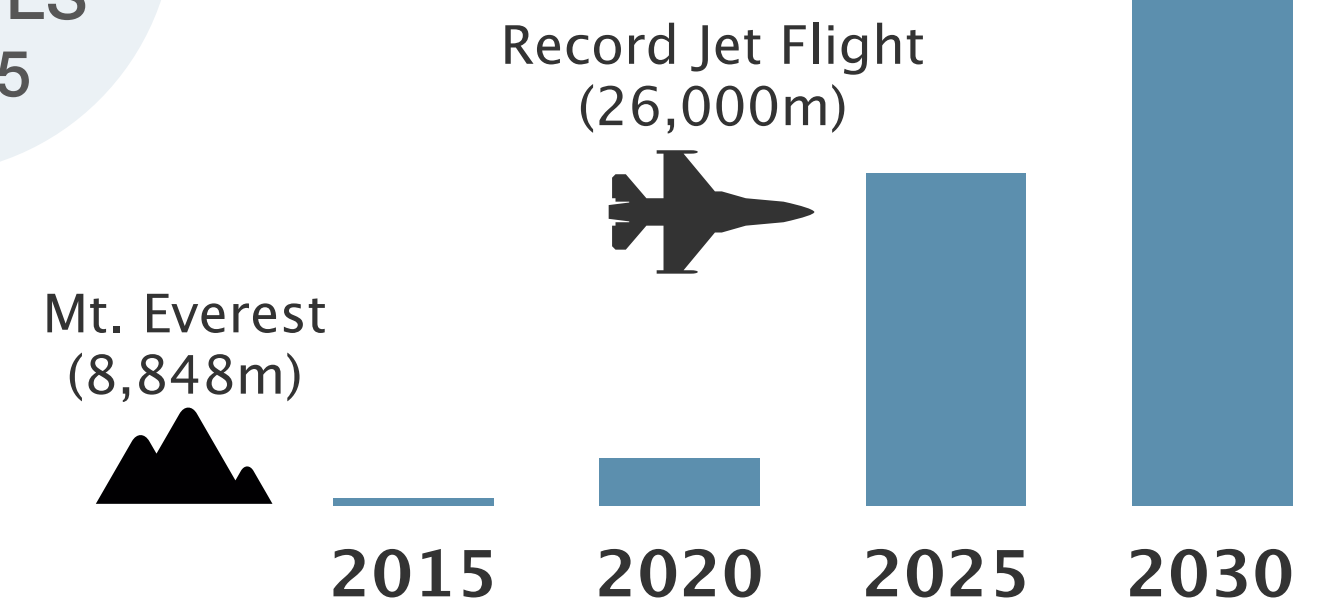
With the mandated adoption of electronic health records (EHRs) in 2009, many healthcare professionals are now trying to figure out how to use all this information.

How much healthcare data are we talking about?



Imagine a stack of iPad Air tablets spread across a football field. If each iPad holds 32 GB of U.S. health data, by 2030, the football field-sized stack of iPads would reach well into space.

335
EXOBYTES
IN 2015



Source: Assumes 48% annual increase, EMC and research firm IDC report.

How can we put this real-time data to use?



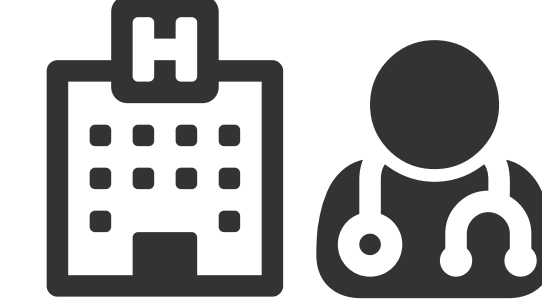
Clinical Quality Measures (CQMs) were introduced as part of meaningful use requirements for the Medicare and Medicaid EHR Incentive Programs to **measure the quality of patient care**.

Eligible hospitals and healthcare professionals are incentivized to report a core set of CQMs to the federal government. These CQMs **focus on high-priority health conditions and best-practices for care delivery**.

Source: Centers for Medicare & Medicaid Services (CMS)



Eligible Hospitals & Professionals



Electronic Health Record



Clinical Quality Measures



Federal Government



BENEFITS

- Encourages healthcare providers to focus on **quality over quantity of care**.
- Helps to ensure that our health care system is delivering **effective, safe, efficient, equitable, and timely care**.

DRAWBACKS

- Highly **complex** and extremely **selective** measures only apply to specific **limited populations**.
- Measures are **predetermined** and don't necessarily measure **patient outcomes**.
- Insights gained from these measures have **no direct feedback loop back to the patient**.

interventionengine

How can we do better?

Let providers **create their own measurements and risk assessment models** from their own data.

How can Intervention Engine improve population patient healthcare?



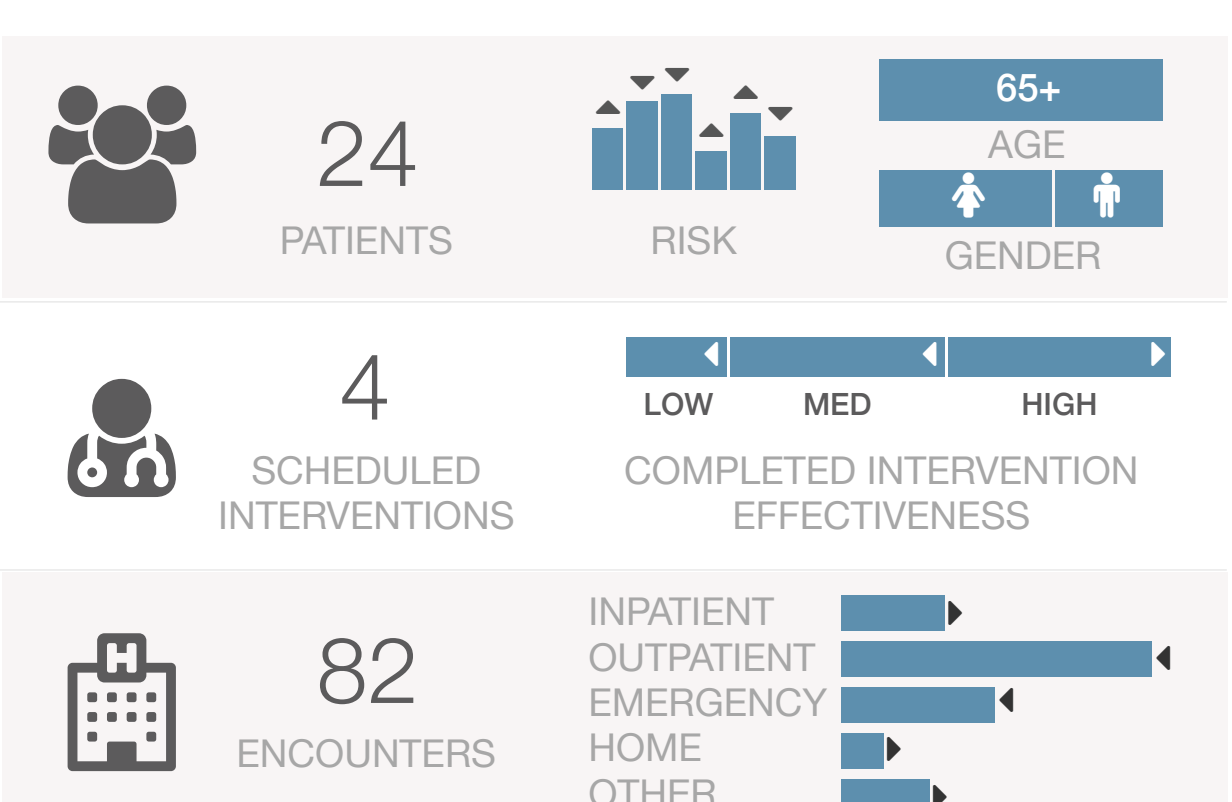
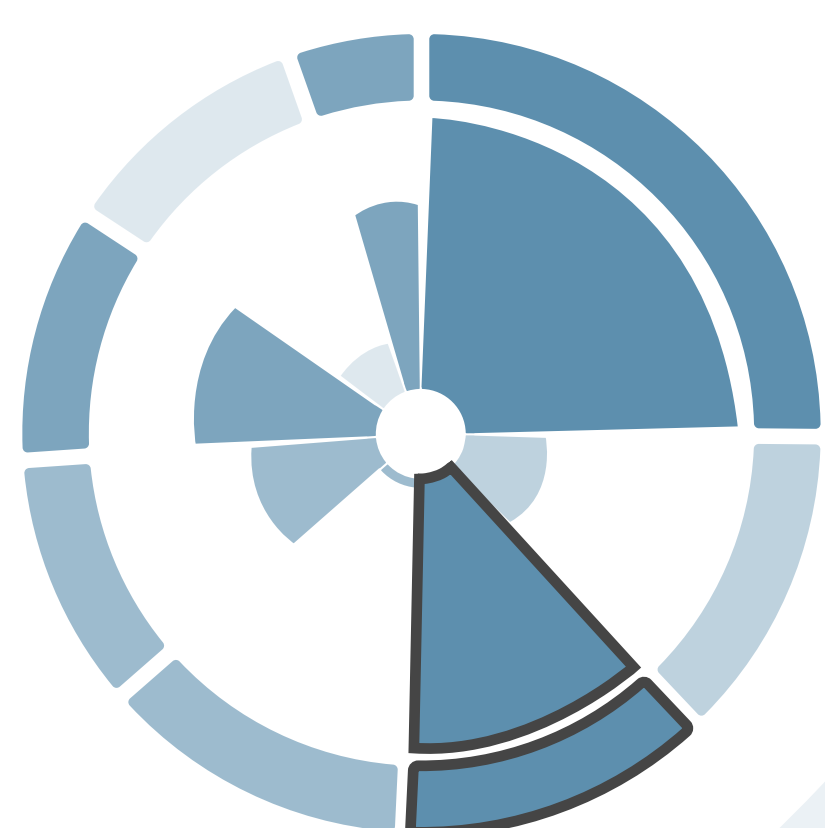
Provider-Built Population Measures

Analyzing populations of patients specific to a provider allows more informed clinical decisions and interventions which lead to better directed population health.



Data-Supported Risk Assessment Models

Providing risk assessment tools supported by patient health data allows providers to better track and treat their populations of patients.



[Intervention Engine] will allow the individual caregiver to efficiently use evidence-based medicine to improve care at reduced cost.

~ Dr. Dana Frank, Chair, Department of Medicine MedStar Good Samaritan Hospital / Union Memorial Hospital



Some might think of Intervention Engine as a tool for “the Health System of Tomorrow.” It is not. It is a game changer. It is a tool that we all needed yesterday. We can’t afford to fall any further behind in caring for our patients on the population level.

~ Dr. Joey Nichols, Director of Scholarship and Discovery - MedStar

Learn more at
www.interventionengine.org
an open source project

Developed by The **MITRE** Corporation