

Scaling Artificial Intelligence Governance Across a Large Healthcare System

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Building the Future of Health Together

HIMSS NORTH CAROLINA CHAPTER



Presenter



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Agenda



Introduction



Our AI Journey



Our Challenges



Looking ahead

Learning Objectives



Identify

Identify strategies needed to scale AI Governance



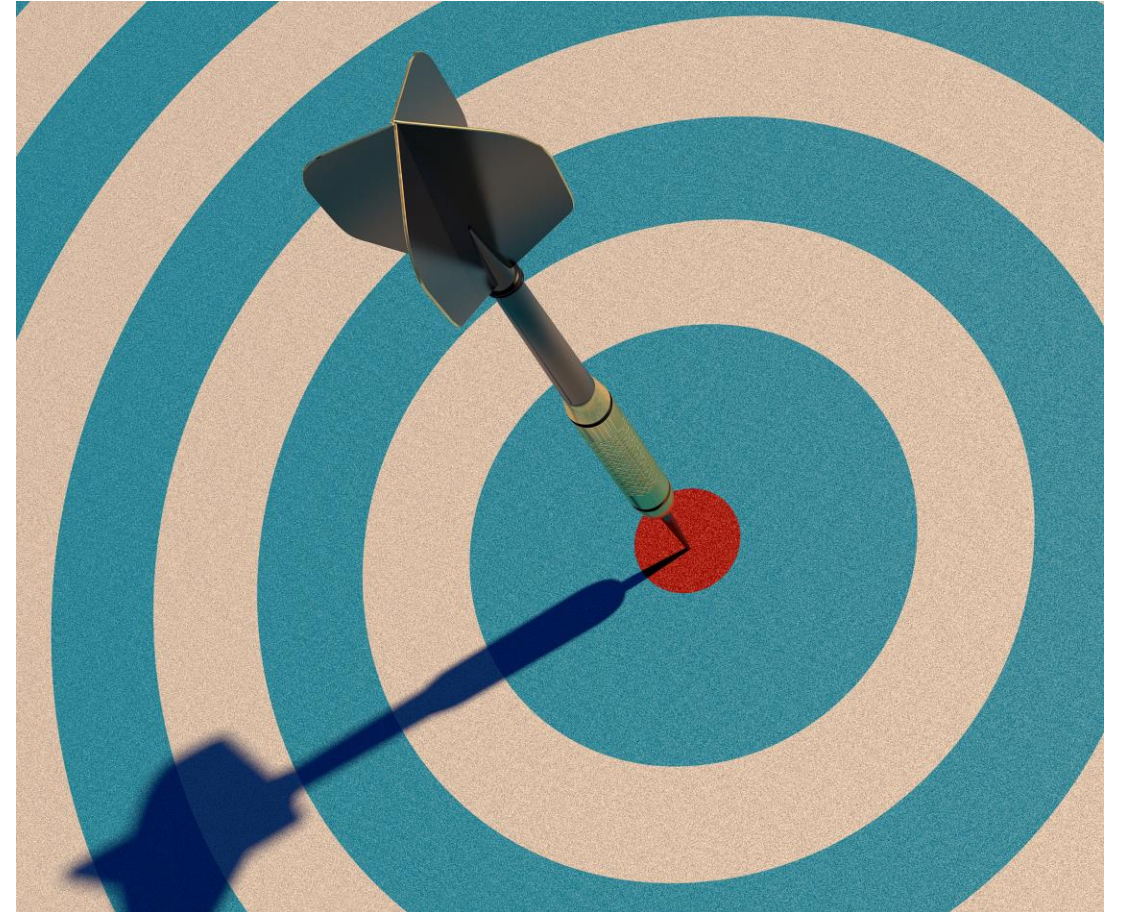
Discuss

Share UNC's ways to bring external vendors into your own AI governance journey

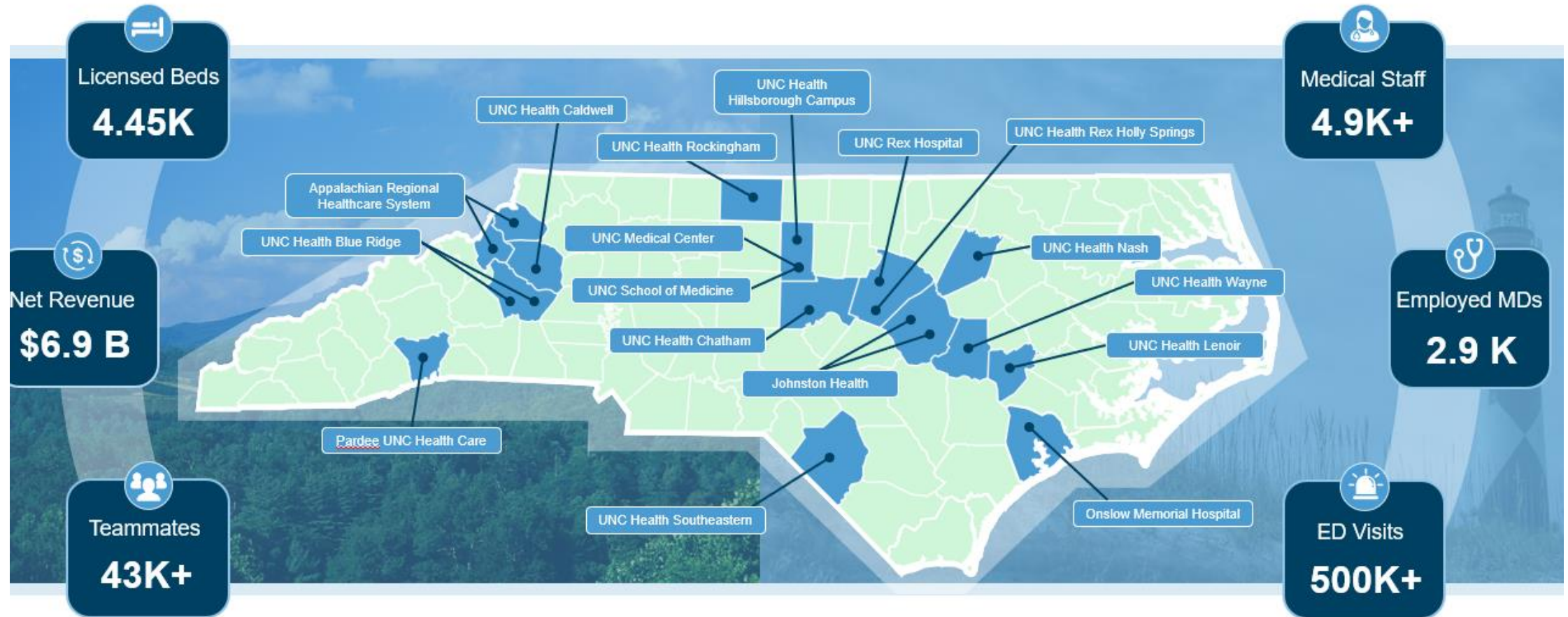


Explain

Describe how IT governance and AI governance work hand in hand to create sustainable process



Quick Overview : UNC Health



System Values



We are a leader in applied/operational AI

Started Adopting in 2016 and focused on developing/implementing solutions that address system's need

 **Medical Coding**
Administrative



Optum's Computer-Assisted Coding "reads" records, identifies discrepancies and suggests appropriate coding

 *Supports proper reimbursement*

 **Case Duration Accuracy**
Operations



Internally developed case duration tool improves OR scheduling, boosting access and revenue

 *28.5% more accurate than the native EHR model*

 **Better Sepsis Detection**
Clinical



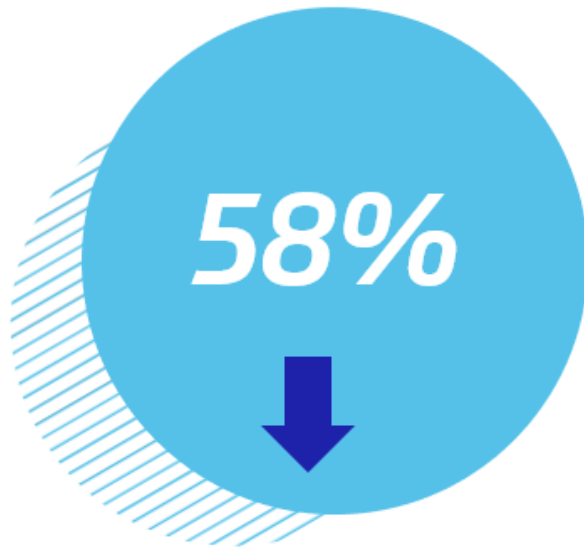
Internally developed sepsis detection model is more accurate than the EHR's native model, improving care

 *Improves order set usage and reduces false alerts*



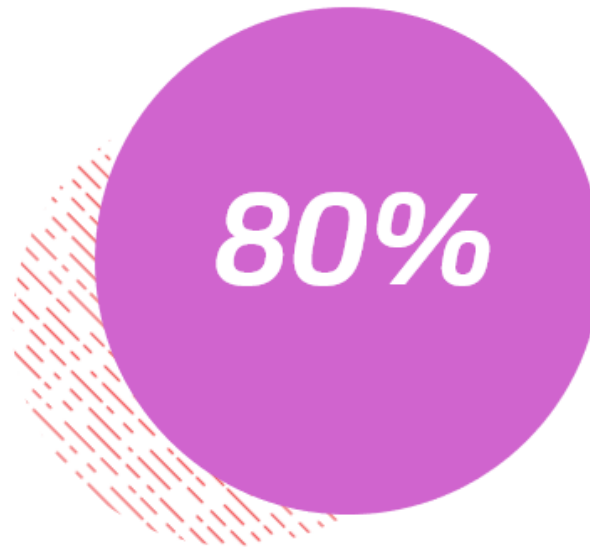
Other additional value-added AI solutions

Impact of AI in patients and providers



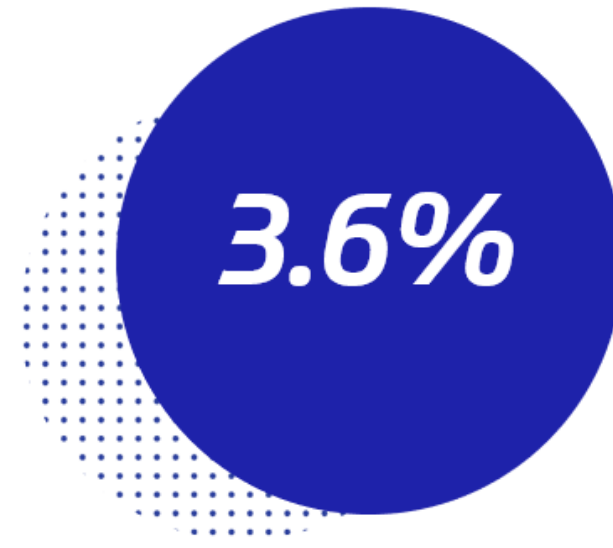
Decreased False Alerts

The ED model decrease alerts by 58% monthly when compared to original SIRs rule-based Model



High Sepsis Detection Rate

The model has maintained a sensitivity of 80 % for detecting sepsis cases



Mortality Reduction

Mortality rate in the last 6 months (3/23-8/23) decreased by 3.6% compared to rate in the 6 months before implementation

As AI in healthcare continues its rapid growth, the need of responsible AI framework becomes more and more apparent.



Opportunity to provide better care

A boy suffering chronic pain for 3 years finally receives correct diagnosis from ChatGPT
(<https://people.com/boy-suffering-chronic-pain-for-3-years-finally-receives-diagnosis-via-chatgpt-7968393>)



Promises to save money

AI could save up to \$360 billion annually if adopted widely
(<https://www.healthcaredive.com/news/artificial-intelligence-healthcare-savings-harvard-mckinsey-report/641163/>)



Discomfort on use of AI in health care

60% of American would be uncomfortable with provider relying on AI in their own health care.

(<https://www.pewresearch.org/science/2023/02/22/60-of-americans-would-be-uncomfortable-with-provider-relying-on-ai-in-their-own-health-care/>)



“

***Good Brakes
Allow Us to
Go faster***

Excerpts from Dr. Rumman Chowdhary's written testimony on AI governance, presented to the House Science Committee on July 22, 2023

https://republicans-science.house.gov/_cache/files/6/8/68b1083c-d768-4982-a8f9-74b0e771a2bc/E551A6FE9CEB156D4DE626417352ED0E.2023-06-22-dr.-chowdhury-testimony.pdf



Scaled AI Governance as Need and Scope of AI Changed Over Time

2016 (Team)



Assessment of the use case
Peer review, model cards
and summary

2018 (Departments)



Teammates across IT
functions
Clinical workflow
consideration
Model management and

2023 (Enterprise)



Multi disciplinary team
across system
Standard framework and
charter
Systemwide AI model

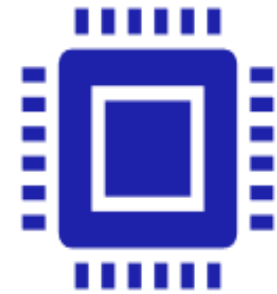
AI Governance Part of Existing IT Governance Structure



Process **streamlined and efficient**



conversation of **funding** became easier

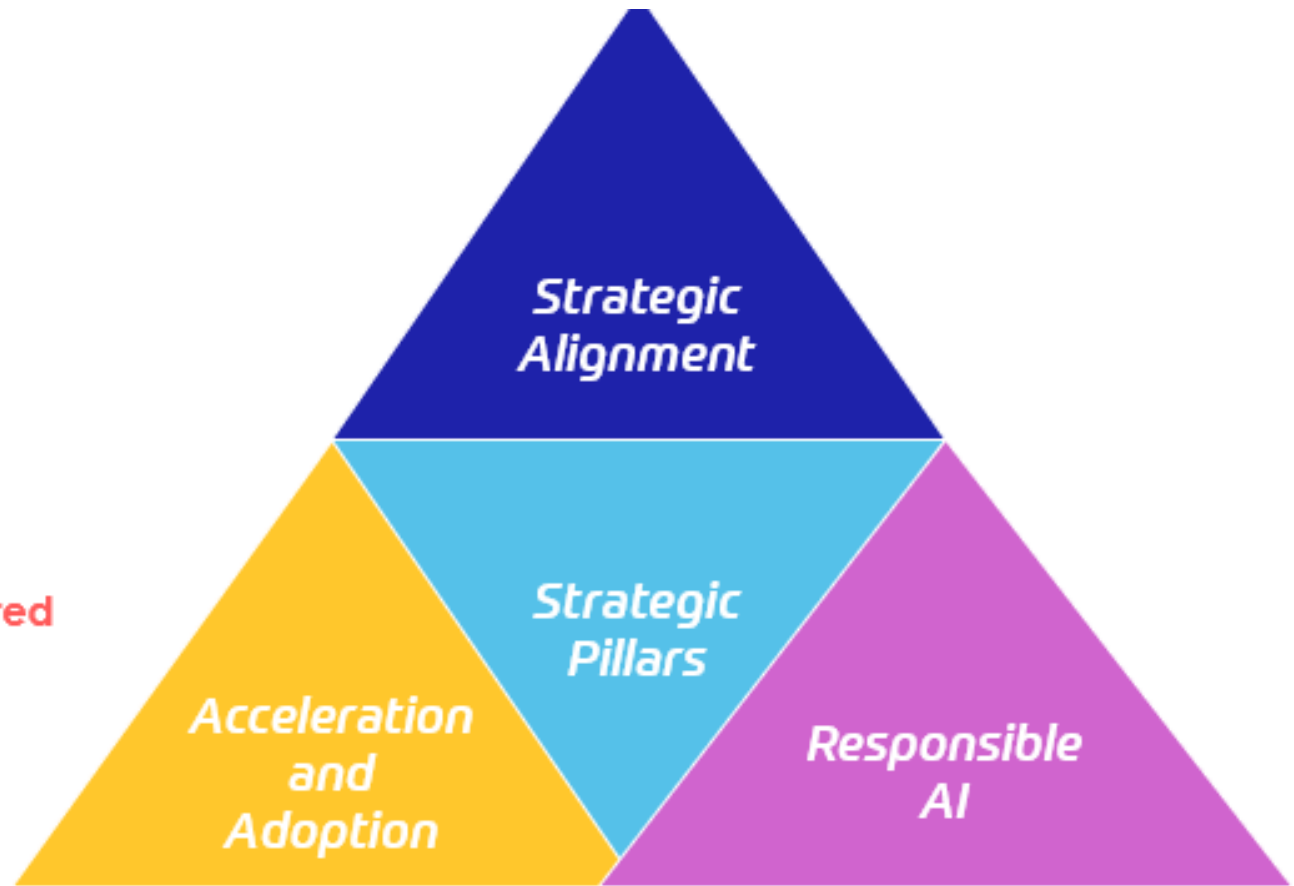


Funding, Security, Enterprise Architecture, Responsible AI are part of **final decision** on a vendor or application selection process

System Workgroup With Clear Charter

AI and Automation workgroup for all AI related decisions/recommendations

Group meets monthly to discuss/strategize on responsible AI acceleration and adoption.



Standard set of definitions for Vendor and Internal Developed AI solutions

		<p><u>Criteria 1*:</u></p> <p><i>Does this tool / application qualify as an AI tool?</i></p> <p>AI includes algorithms that classify, analyze, and draw predictions from data while also learning from new data to make the algorithms more powerful and accurate over time.</p>	
		Yes	Maybe
<p style="text-align: center;"><u>Criteria 2*:</u></p> <p><i>Is there any associated risk with this tool / application?</i></p> <p>e.g., those affecting clinical or operational decisions, with the potential for misuse, or that might impact equitable care (e.g., staffing or resource allocation).</p>	Yes	<p style="text-align: center;"><u>Full Audit / Review</u></p> <p>Evaluated by the technical AI expert group and AAA.</p>	<p>AAA determines whether to perform a full or limited review.</p>
	Maybe	<p>AAA determines whether to perform a full or limited review.</p>	<p style="text-align: center;"><u>Limited Audit / Review</u></p> <p>Evaluated only by the technical AI expert group.</p>

Standard but Evolving Framework



Deliberate Plurality of Voices in AI Governance Platform

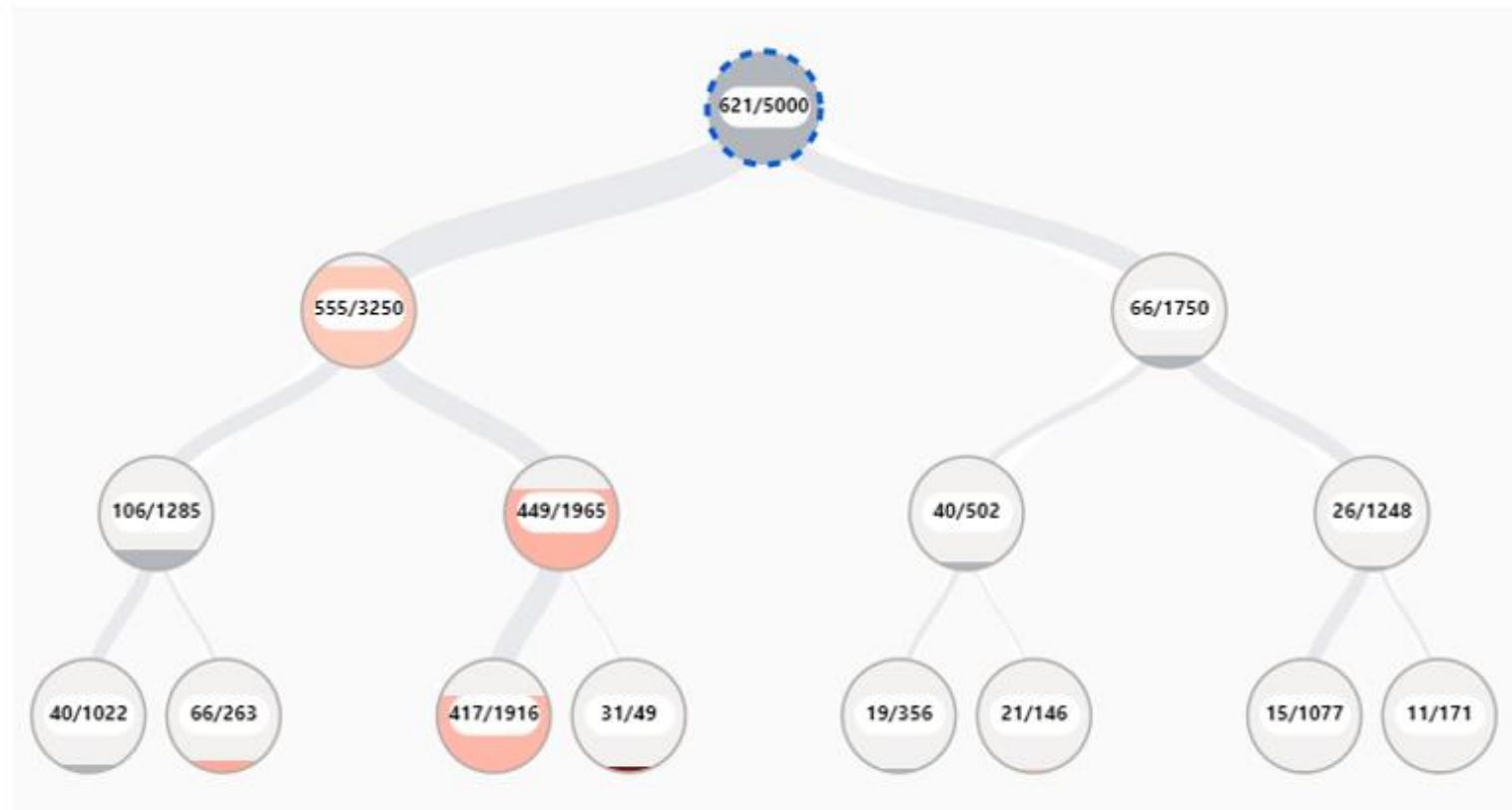
**16-voting members representing different
functions/units**

Consensus will be sought but
majority will make decision if there is
no consensus

- Clinical Informatics
- Analytics, Security
- Care Access
- Entity leaders
- Ethics
- Human Resources
- Innovation
- Legal
- Nursing
- Pharmacy
- Pop Health
- Privacy
- Providers
- Revenue

Reliable and continuous monitoring framework

Process of discovering and highlighting common failure patterns



Challenges



Challenges



Evolving definition of AI



Data and AI Fiduciary



Resources and Training



Centralized vs federated governance model

Looking Ahead



Broader adoption



Aligning with state
and federal
government agencies



AI education to
teammates and
leaders



Support model

Questions



Thank you.

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