

Chief Academic Officer Forum

March 5, 2025



Geisinger
College of
Health Sciences



- CAO Updates
- Informatics Overview
- Research Spotlight
- Drive to THRIVE Progress
 - HSS Collaborative
 - CoPA: Committee on Professionalism and Accountability
- Upcoming Events
- Open Discussion and Q & A

CAO Updates

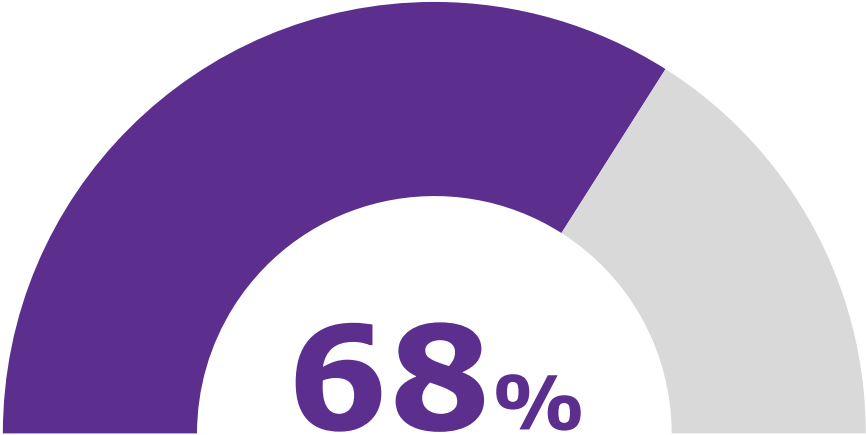


Geisinger College of Health Sciences

Self-serve templates at <https://geisinger.sharepoint.com/sites/EdMarCom/SitePages/self-serve-templates.aspx>

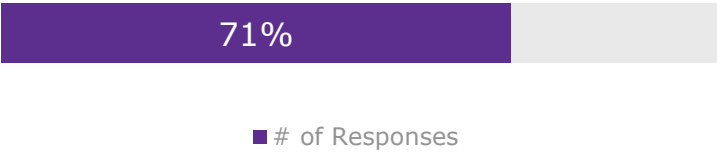
Engagement Score

Overall Engagement Score



↑	5 points	63%
2023 Engagement (for comparison to 2024 Engagement)		
↑	5 points	63%
Geisinger Overall		

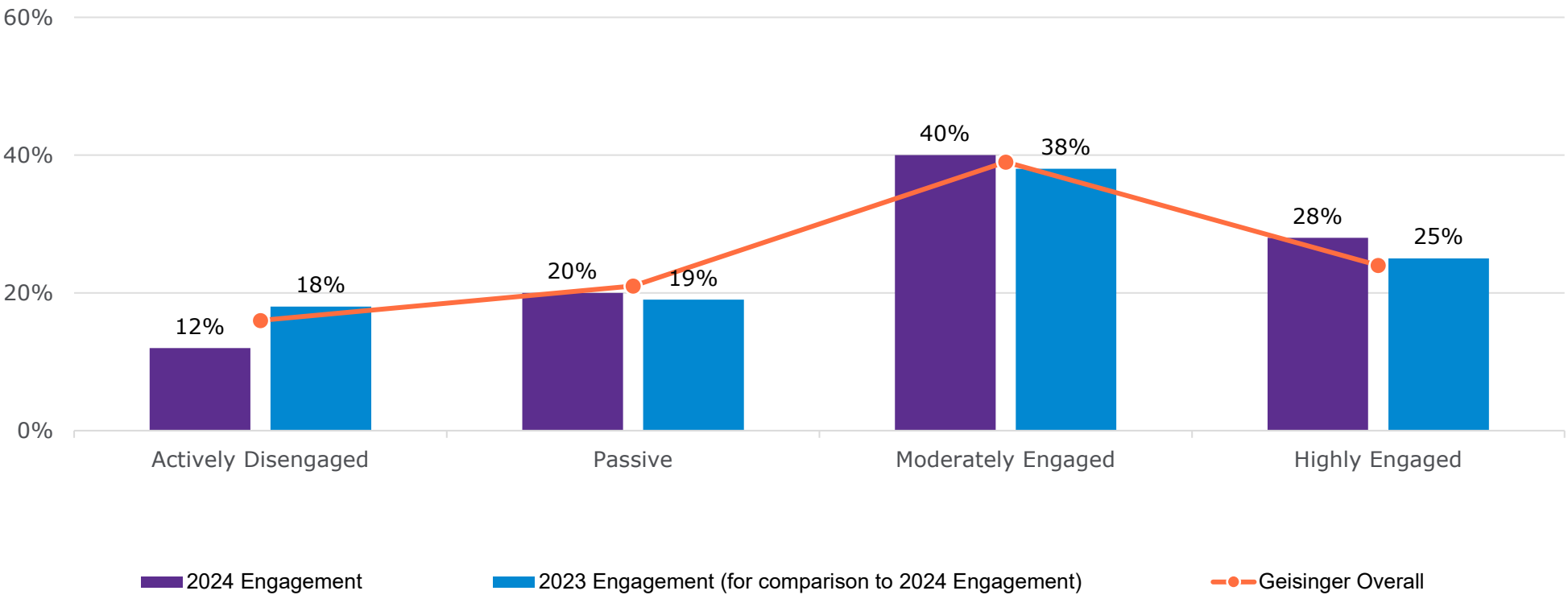
Participation Rate



Number of Participants

# of Responses	594
# of Possible Responses	838

Engagement Distribution



Geisinger Overall	-4	-1	+1	+4
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Top 10 Items

Dimension	Item	<div> <div>% Positive Perception</div> <div>% Positive Hesitance</div> <div>% Negative Hesitance</div> <div>% Negative Perception</div> </div>				2023 Engagement (for comparison t	Geisinger Overall
Safety & Security	My supervisor takes action to address safety concerns that are brought to their attention	97	2	1		+1	+7
Supervisor, Communicates Effectively (Geisinger Competency)	My supervisor is responsive when I have questions or concerns	95	3	1		+1	+7
Well-being	I feel comfortable having open and honest conversations with my supervisor, about my personal well-being	95	4	1		+3	+9
Supervisor, Drives Results (Geisinger Competency)	My supervisor recognizes my efforts and results	94	4	1		0	+7
Work Effectiveness, Ensures Accountability (Geisinger Competency)	I know what is expected of me at work	94	5	1		+2	+1
Supervisor, Communicates Effectively (Geisinger Competency)	My supervisor is open and transparent in communication	93	4	2		0	+8
Supervisor, Instills Trust (Geisinger Competency)	I have the freedom to express my opinions even though they might contradict the views of my supervisor	92	6	1		0	+10
Safety & Security	Workplace safety and security are considered important here	91	7	2		+5	+7
Diversity, Equity & Inclusion, Values Differences (Geisinger Competency)	At Geisinger, I am respected by individuals whose demographics and cultural backgrounds are different from mine	89	7	2		+1	+3
Supervisor, Ensures Accountability (Geisinger Competency)	My supervisor provides valuable feedback throughout the year that allows me to improve my performance	89	7	2		0	+5

Bottom 10 Items

Dimension	Item	<div><div>% Positive Perception</div><div>% Positive Hesitance</div><div>% Negative Hesitance</div><div>% Negative Perception</div></div>	2023 Engagement (for comparison t	Geisinger Overall
Pay & Benefits	Compared with other places I might work, I feel I am fairly paid	<div><div>46</div><div>20</div><div>13</div><div>21</div></div>	0	-1
Decision Quality, Decision Quality (Geisinger Competency)	Geisinger makes high-quality decisions at the right speed	<div><div>52</div><div>26</div><div>15</div><div>7</div></div>	+3	-2
Pay & Benefits	Compared with other places I might work, I feel my benefits are competitive	<div><div>53</div><div>23</div><div>12</div><div>12</div></div>	-1	-5
Develops Talent, Develops Talent (Geisinger Competency)	Geisinger offers excellent career opportunities to employees who are strong performers	<div><div>56</div><div>24</div><div>12</div><div>9</div></div>	-2	-7
Engagement, Stay	It would take a lot to get me to leave Geisinger	<div><div>58</div><div>21</div><div>9</div><div>12</div></div>	+4	+4
Engagement, Stay	I rarely think about leaving Geisinger to work somewhere else	<div><div>58</div><div>20</div><div>11</div><div>10</div></div>	+3	+2
Employer Brand	Geisinger is considered one of the best places to work for someone with my skills and experience	<div><div>60</div><div>23</div><div>10</div><div>8</div></div>	+5	-4
Work Effectiveness, Drives Results (Geisinger Competency)	Geisinger's work processes allow me to be as productive as possible	<div><div>62</div><div>17</div><div>11</div><div>11</div></div>	+5	-1
Work Effectiveness, Communicates Effectively (Geisinger Competency)	Overall communication at Geisinger is effective	<div><div>62</div><div>21</div><div>10</div><div>7</div></div>	+4	+7
Work Effectiveness, Strategic Mindset (Geisinger Competency)	Geisinger is quick to invest in new ideas that will drive future success	<div><div>63</div><div>23</div><div>8</div><div>6</div></div>	+8	-1

National Issues and Challenges

Change at a rapid pace, still with uncertainty about specifics



Financial Challenges

- Limit on NIH indirects
- Effect of tariffs
- Potential freezes on other federal funds



DEI Programming

- DEI initiatives
- Gender-affirming care
- Limitation in activity in some projects and programs



Immigration

- ICE activity
- Response of community members inside and outside of Geisinger Family



Health Policy

- Policy changes
- WHO withdrawal
- CDC changes
- Communication challenges

Our Leadership Posture

Guiding with Vision and Integrity

Executive Presence

- Be a leader
- Take care of each other
- Be careful about assumptions and opinions
- Avoid catastrophic thinking and voice



Mission Focus

- Our priorities do not change
- Our values do not change
- We will treat all people with dignity and respect
- We will change what we do when we must



Ambient Optimism

- Our determined expectation for a brighter future, paired with our confidence that we can make a difference, keeps us moving forward
- We have a lot of work to do

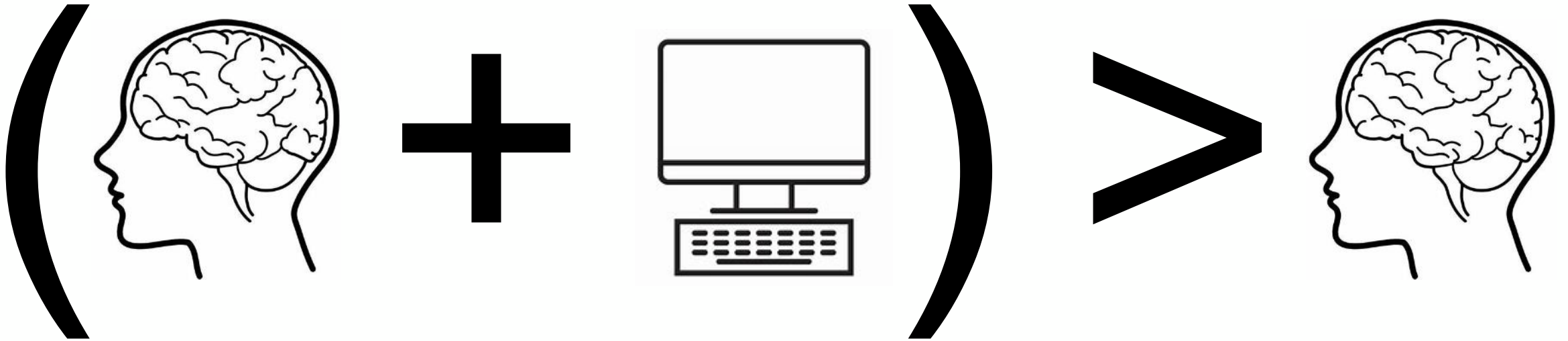
Informatics Overview

David K. Vawdrey, PhD
Chief Data Informatics Officer

Geisinger

March 5, 2025

A “Fundamental Theorem” of Informatics



Job of Informaticians and Health IT Professionals:
Develop and implement  to make this equation true

Data Modernization

An Enabling Foundation: Our Data Infrastructure (ODIN)

Core Systems / Data Sources

80

active systems

11

legacy systems

400+

data processing jobs

46

core foundation tables

408,000

curated data fields

91+

TB data



Enterprise Warehouse

28 years

Epic EHR data

6.1M

patients

11.6 yrs

data per patient

1.4M

GHP members

71.5M

lab results/year

113M

vital signs/year

1.8M

imaging studies/year

16.1M

prescriptions/year



Generate and Deliver Insights

Analytics Tools

2,900

analytic assets in inventory

83,000

Analytics Hub links visited/year

54,000

SlicerDicer sessions/year

5,300

analytics service requests/year



AI/Predictive Modeling

557,000

risk stratifications
performed/month

3,100

interventions completed/month

Continuously Improve (Intervene and Evaluate)

Quality

Affordability

Experience

Access

An Enabling Foundation: Our Data Infrastructure (ODIN)

Core Systems / Data Sources



+others

Unified Data

Unified Governance

Workspaces

Clinical
Enterprise

Geisinger Health
Plan

Research
Institute

AI & Data
Science

College of
Health Sciences

Marketing / CRM

Risant Health



databricks



data.world

Generate and Deliver Insights

Analytics Tools

Geisinger

Analytics Hub



SAP BusinessObjects



Cogito
Epic
SlicerDicer

strata



AI/Predictive Modeling

python

Epic

Cognitive
Computing



Continuously Improve (Intervene and Evaluate)

Quality

Affordability

Experience

Access

An Enabling Foundation: Our Data Infrastructure (ODIN)

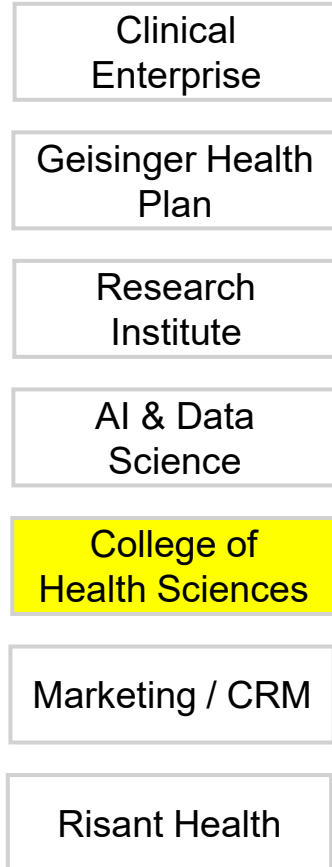
Core Systems / Data Sources



Unified Data

Unified Governance

Workspaces



databricks



data.world

Generate and Deliver Insights

Analytics Tools



AI/Predictive Modeling



Continuously Improve (Intervene and Evaluate)

Quality

Affordability

Experience

Access

AI at Geisinger

Geisinger's Vision for AI

Apply AI in safe, effective, and ethical ways to benefit patients, members, clinicians, employees, learners, and others throughout the Geisinger system

2025 Focus: Scaling AI Across Geisinger



Point of Care and Closing Care Gaps

Scale stroke risk program
Launch high-risk breast cancer screening
Upgrade intracranial hemorrhage program
AAA Identification & Screening
Epic Sepsis Prediction
Epic Deterioration
Epic End-of-life index
Colo Cancer Screening
Flu Complications
Lung nodule detection & high-risk screening



Improve Workforce Experience & Boost Productivity

Deploy Geisinger's AI assistant (Gaia)
Expand ambient documentation program
Simplify review of medical school applications
Automate HEDIS chart abstraction
Reduce burden of Inbasket management
Improve the efficiency of radiology reads
Pilot ambient documentation program
Develop prototype Geisinger AI assistant



Optimize Resources & Patient Access

Standardize primary care panels
Inform ED staffing by forecasting arrivals
Forecasting inpatient bed demand
OR Scheduling
CC 365 referrals for care management

2025 New Programs

2024 building blocks

Enabling Our Workforce with Generative AI

Currently deployed applications

Writer – Produce marketing content in 20% less time

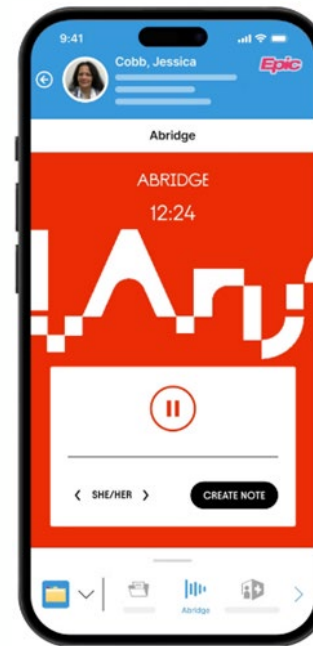
Epic ART – Save clinicians time by drafting responses to patient messages

GitHub Copilot – Computer programming up to 50% faster

Lucidchart – Fast and easy diagramming

Articulate 360 – Rapid creation of educational content

Ambient documentation impact



20% less time spent on notes

~50% less reported burnout, documentation burden, and off-hours work

Glowing reviews

Tools that use generative AI can make our workforce **more productive** *and* **more satisfied**

Provider Surveys: Baseline to Post-Go Live Summary

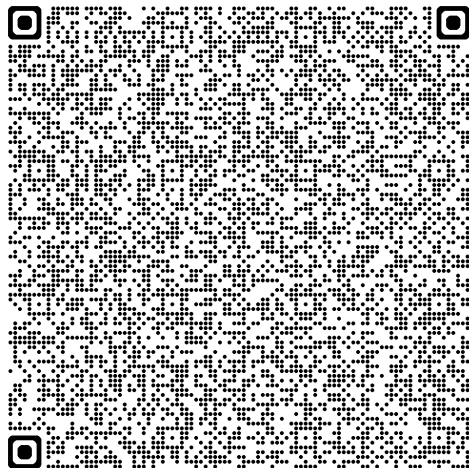
Burnout	Documentation Burden	Work Outside Work	Patient Experience	Patient Access	Net Promoter Score (NPS)
39.4% Improvement	63.6% Improvement	56.3% Improvement	20.3% Improvement	14.5% Improvement	74.6

Provider Surveys: Baseline and Post Go-Live Results

Question Name	Question Description	Providers	Baseline At Risk	Post Go-Live At Risk	At Risk Change
Burnout	Number of providers at risk of Burnout. Mini Z score of 3 or higher, indicating symptoms of burnout or feeling completely burned out.	59	33	20	-13
Question Name	Question Description	Providers	Promoters	Detractors	NPS Score
Net Promoter Score (NPS)	On a scale of 0 to 10, how likely are you to recommend our company to a friend or colleague? % of Promoters (9 or 10) - % of Detractors (0 to 6) = NPS	59	46	2	74.6
Question Name	Question Description	Providers	Avg Baseline Result	Avg Post Go-Live Result	Avg Change
Documentation Burden	Roll up of Effort, Mental Demand, and Temporal Demand (NASA TLX questions). Range is from 0 (low burden) to 60 (high burden)	59	41.0	14.9	-26.1
Work Outside Work	The average amount of time I spend per week writing notes outside of clinic hours is:	59	3.9	1.7	-2.2
Patient Experience	Roll up of Patient Comprehension and Undivided Attention. Range is from 0 (low comprehension and attention) to 10 (high comprehension and attention)	59	7.2	8.6	1.5
Patient Access	I feel that, if urgently needed, I could add at least one more patient encounter to my clinic session. 1 (strongly disagree) - 5 (strongly agree)	59	2.9	3.4	0.4

Geisinger's AI Assistant (Gaia)

See a Demo of Gaia



Capable AI Assistant

Better than Microsoft Copilot, less expensive than ChatGPT

- Summarize documents
- Assist with writing
- Create documents and charts
- Develop applications
- Analyze data



Foundation for Custom Applications

Enables rapid innovation to address Geisinger needs

- Streamline chart summarization and data abstraction
- Provide guidance on adhering to Geisinger policies and procedures (e.g., connect to Policy Manager)
- Process information from multiple sources (e.g., patient and member comments) to generate insights

Please summarize Geisinger's AI policy

12/11/2024 11:45:10 AM

TU

G

Geisinger's AI policy outlines the guidelines and responsibilities for the development, implementation, and management of Artificial Intelligence (AI) projects within the organization. The policy aims to ensure that AI projects align with Geisinger's strategic goals, comply with relevant laws and regulations, and maintain the confidentiality and privacy of data.

Key aspects of policy include:

1. **Governance:** The Artificial Intelligence Executive Steering Committee is responsible for defining AI principles, policies, and frameworks, and ensuring alignment with Geisinger's strategic objectives.
2. **Program Owner responsibilities:** Program Owners are accountable for ensuring that AI projects comply with Geisinger's AI policy and ethical standards, that AI-generated outputs are reviewed and validated before being acted upon.
3. **Data protection:** The policy emphasizes the importance of protecting the privacy and confidentiality of data, including the use of controls for internally developed AI models and third-party AI models.
4. **Vendor compliance:** Third-party AI vendors must ensure that their models and training comply with relevant copyright and intellectual property laws.
5. **Prohibited practices:** The policy prohibits entering Protected Health Information into publicly accessible web-based generative AI tools or public data stores, and AI systems must not be used to expose sensitive data to unauthorized users.

Overall, Geisinger's AI policy aims to promote the responsible use of AI within the organization while ensuring the confidentiality, integrity, and security of data.

12/11/2024 11:45:16 AM

I have two programs, one for document management and storage, and one for Emergency Department triage. How would the AI policy apply to these two programs?

12/11/2024 11:45:33 AM

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Ask something...



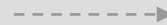
AI-Assisted Screening for Medical School Applications

The Opportunity

Each GCSOM Admissions Committee member dedicates up to 250 hours annually to reviewing applications, with 140 hours spent on initial screening

The Process

~6,000



~1,000



126

**Total
Applicants**

**Selected for
interview**

**Enrolled
Students**

The Approach

Phase 1: AI tools will automatically screen and classify medical school applicants, allowing the Admissions Committee to focus on those requiring deeper evaluation

Phase 2: A large language model (LLM) will generate structured summaries of applications to streamline the interview and ranking process

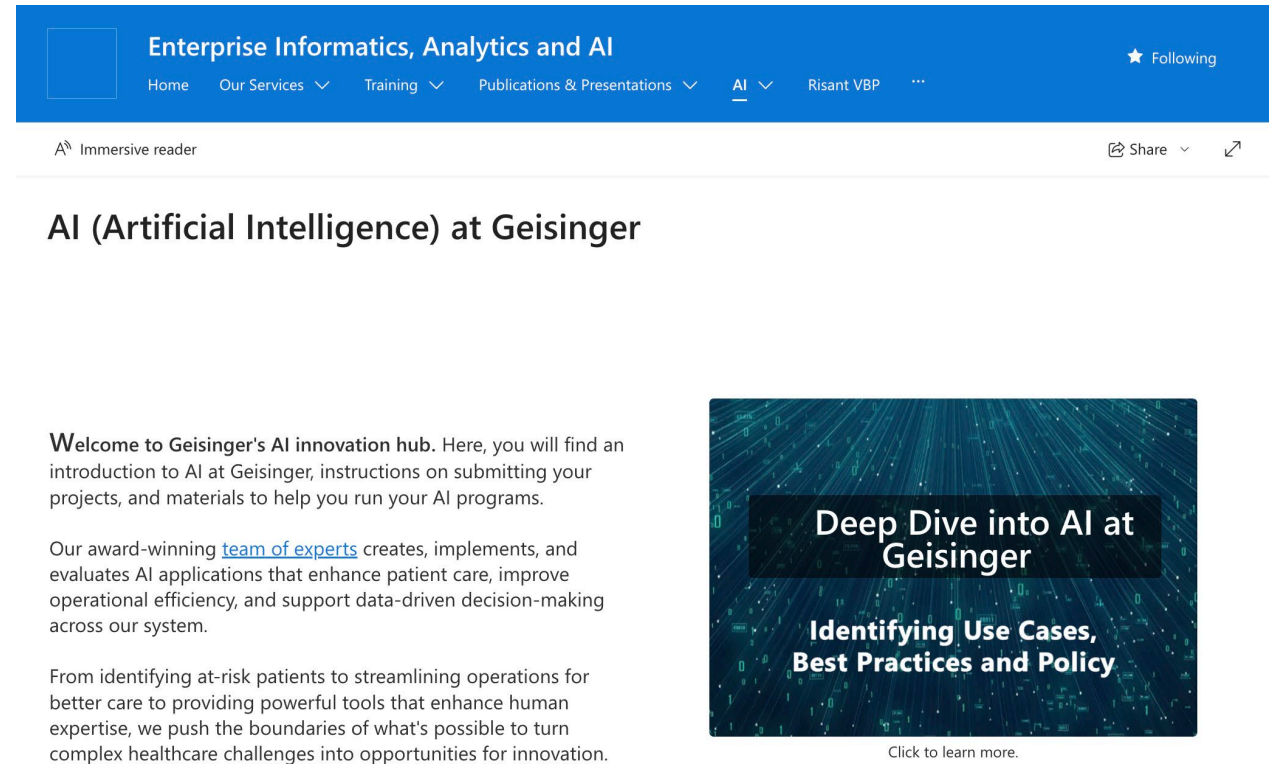


Success Metrics

- ✓ Reduce screening and ranking time
- ✓ Improve Admission Committee satisfaction



Geisinger AI Hub

- Use case suggestions
- Best practices
- *Getting Started* guide
- Live AI Inventory



<https://ai.geisinger.edu>

Past Informatics Seminars

Title and Link	Overview	Presenter(s)
<p>Learning Health System Capacity Building, A Minnesota Case</p>	<p>Abstract: This talk provides context around core characteristics and the transformative potential of learning health systems (LHS) in healthcare. By exploring real-world examples, attendees will see how LHS can significantly improve patient care and healthcare delivery. Additionally, we will explore the role of LHS engagement forums and training opportunities designed to enhance LHS skills and knowledge.</p>	 <p>Genevieve Melton-Meaux, M...</p>
<p>A Gentle Introduction to Artificial Intelligence (In Healthcare)</p>	<p>Abstract: After a long period of apparent stagnation, artificial intelligence is beginning to make significant inroads into healthcare. This talk will give a high-level overview of this technology, defining basic terminology, explaining how it works, and covering its relative strengths and weaknesses. We will discuss the application of AI in healthcare and examine key considerations for responsible implementation</p>	 <p>Morgan Jeffries, MD</p>

Research Spotlight

Adam Buchanan, MS, MPH, CGC

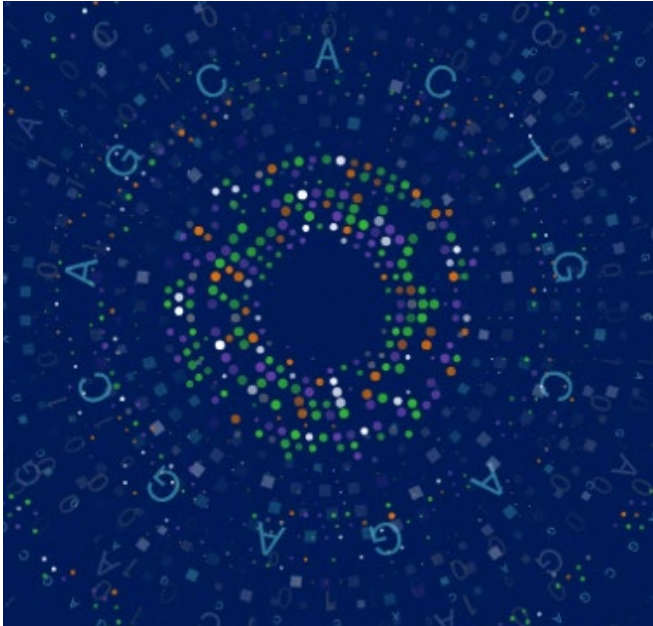
Associate Professor and Chair, Department of Genomic Health

Juliann Savatt, MS, CGC

Assistant Professor, Department of Genomic Health



Kristen Yu, MS, CGC

Senior Genetic Counselor, Department of Genomic Health



Year in Review

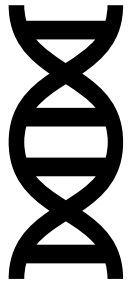
Genomic medicine year in review: 2024

Teri A. Manolio¹  , Jahnavi Narula¹, Alauna Rupert¹, Carol J. Bult², Rex L. Chisholm³, Geoffrey S. Ginsburg⁴, Eric D. Green¹, Gillian Hooker⁵, Gail P. Jarvik⁶, George A. Mensah⁷, Erin M. Ramos¹, Dan M. Roden⁸, Robb Rowley¹, Casey Overby Taylor⁹, Marc S. Williams¹⁰

- Every year NHGRI's Genomic Medicine Working Group identifies **10 key advances** in applying genomic information to clinical care
- **Geisinger work recognized for two of these in 2024**

Both papers from MyCode Genomic Screening & Counseling program

Genomic screening



Results disclosure



Care and research



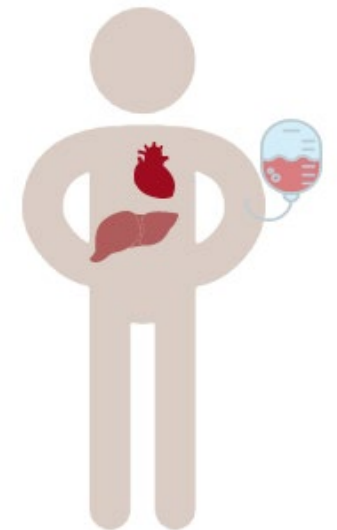
Overarching questions

- How do genetic conditions present when you start with a genetic change instead of clinical features?
- How do patients and clinicians respond?
- What are the clinical outcomes?

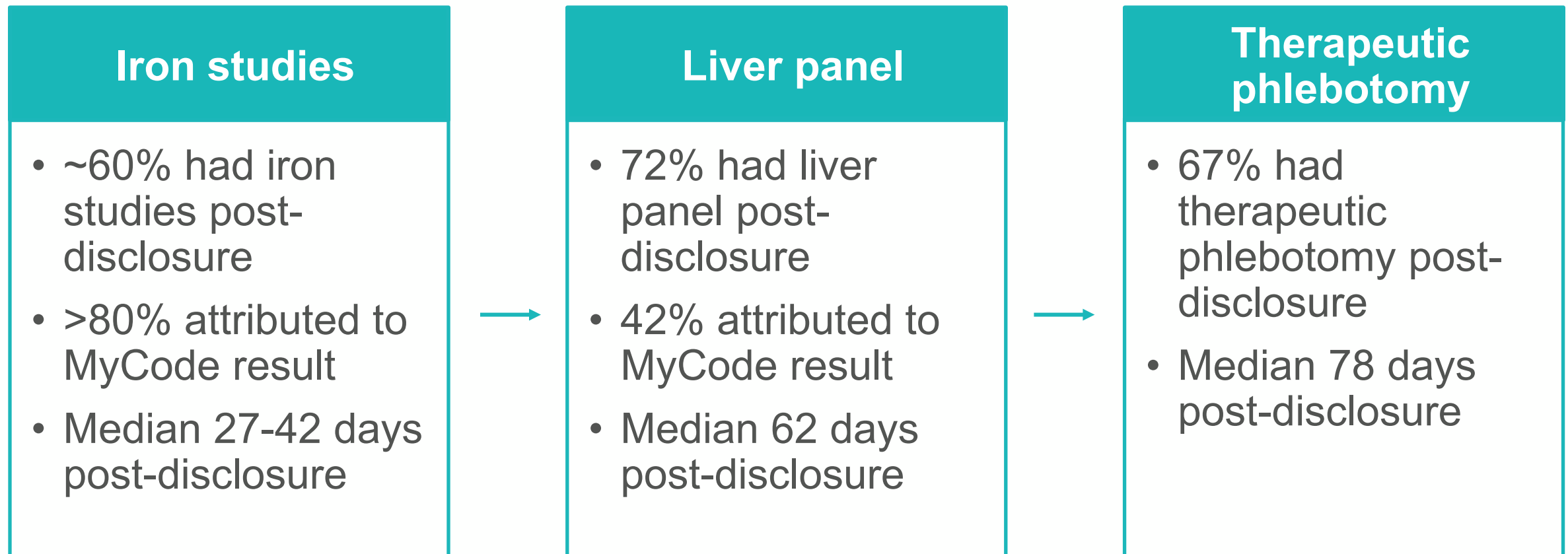
Testing and Management of Iron Overload After Genetic Screening-Identified Hemochromatosis

Juliann M. Savatt, MS; Alicia Johns, PhD; Marci L. B. Schwartz, MS; Whitney S. McDonald, PhD; Zachary M. Salvati, MS; Nicole M. Oritz, MS; Max Masnick, PhD; Kathryn Hatchell, PhD; Jing Hao, PhD; Adam H. Buchanan, MS, MPH; Marc S. Williams, MD

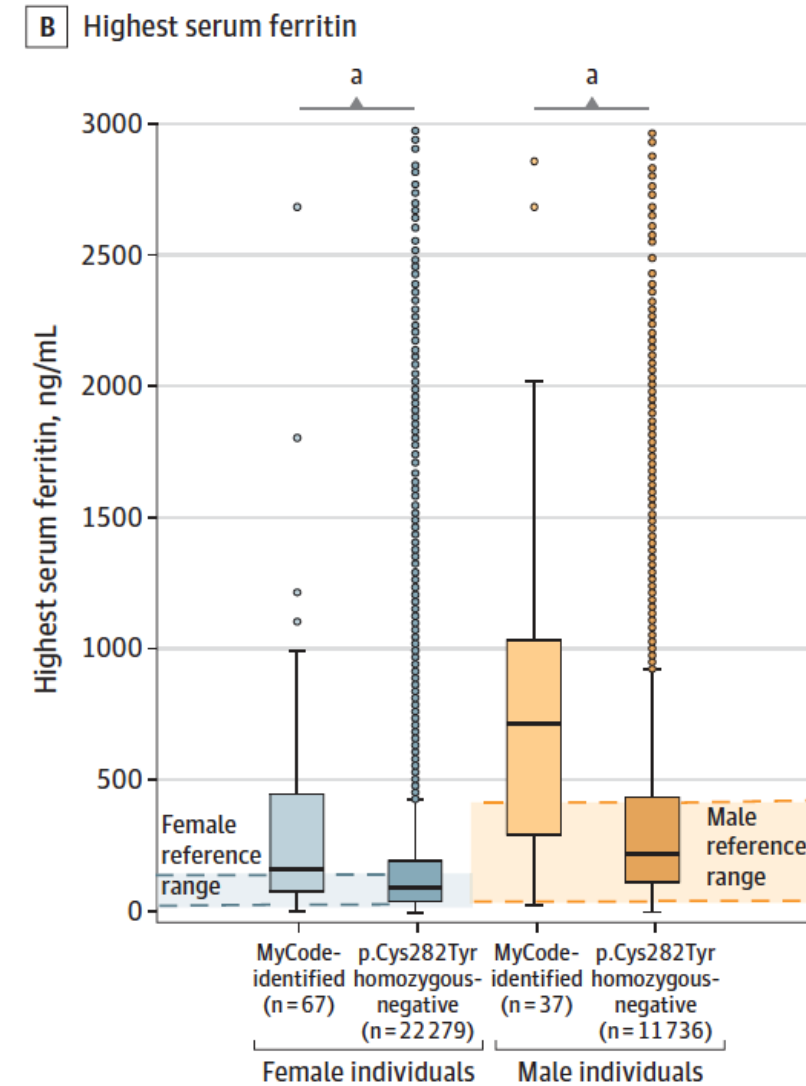
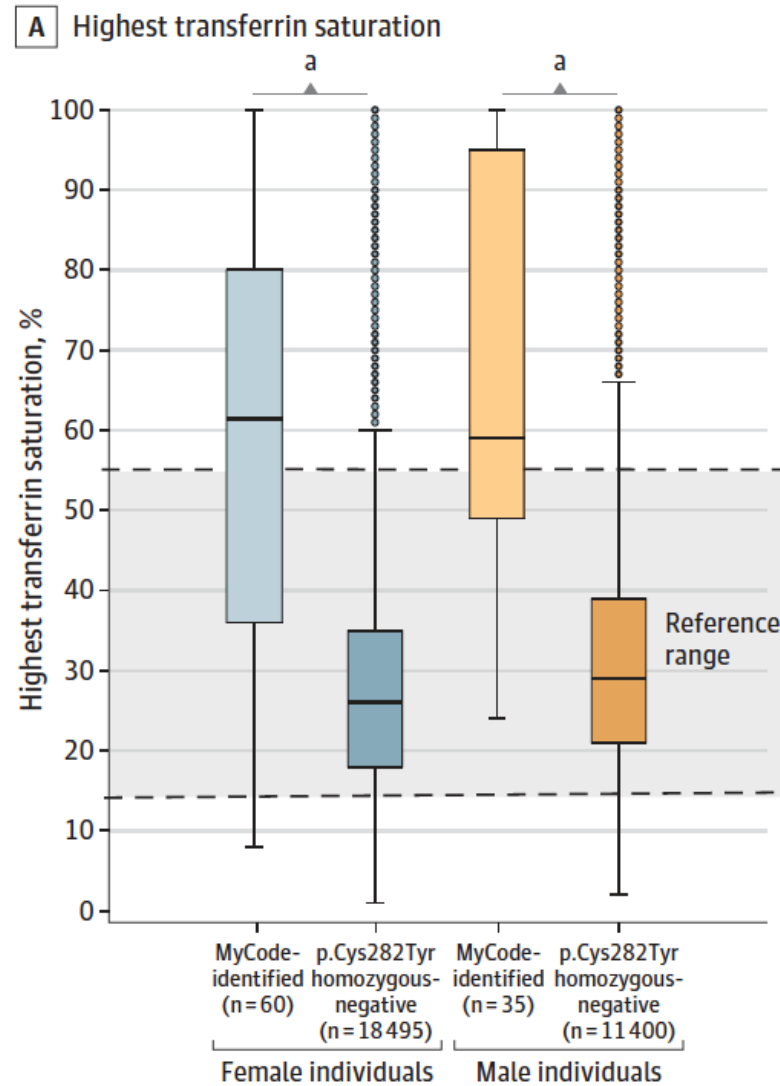
- Hereditary hemochromatosis is a common genetic disease (1:150-1:400 in Northern Europeans)
- Increases risks for end organ damage (e.g., liver, heart)
- **Is genomic screening for *HFE* gene variants associated with recognition of asymptomatic iron overload and prompt management?**



Most participants sought associated care



Significantly higher rates of iron overload



ANESTHESIOLOGY

Evaluation of Malignant Hyperthermia Features in Patients with Pathogenic or Likely Pathogenic *RYR1* Variants Disclosed through a Population Genomic Screening Program

Kristen D. Yu, M.S., Megan N. Betts, M.S., Gretchen M. Urban, M.S.,
Marci L. B. Schwartz, Sc.M., Tanisha O. Robinson, M.D.,
Robert J. Moyer, M.D., Scott W. Taddonio, D.O.,
Anasuya Vasudevan, M.D., Alicia Johns, Ph.D.,
Amy C. Sturm, M.S., Melissa A. Kelly, M.S.,
Marc S. Williams, M.D., S. Mark Poler, M.D.,
Adam H. Buchanan, M.S., M.P.H.

ANESTHESIOLOGY 2024; 140:52–61



- Malignant hyperthermia susceptibility (MHS) can present as potentially fatal hypermetabolic response to triggering anesthesia agents
- Can be averted by using non-triggering anesthesia agent if susceptibility is known
- **How does MHS present among individuals found via genomic screening?**

Yu KD et al., *Anesthesiol*, 2024; image generated via Microsoft Copilot

What did we learn?

No prior knowledge

- None of individuals with pathogenic *RYR1* variant (n=152) were aware of variant before MyCode disclosure



No hyperthermic episodes

- Among 126 surgical procedures that used triggering agents in 68 individuals, no clear evidence of hyperthermic episode



Impacted anesthesia decisions

- Post-disclosure, triggering anesthesia agent used in only 1 procedure

Why are these papers important?



Genomic screening can find at-risk people who were unaware of their risk – opportunity to intervene before symptoms present



Genetic disease doesn't always present how we expect



Collaborations among clinician scientists and clinicians can be impactful in care and research

Drive to THRIVE Progress: HSS Collaborative

Nicole Woll, PhD

Vice Dean for Faculty and Professional Development

Health Systems Science Collaborative

Center for Faculty and Professional Development



GCHS Strategic Plan: Drive to THRIVE

Provide a uniquely Geisinger education that prepares leaders of tomorrow across the health professions continuum

- Fully integrate Health Systems Science into “Geisinger branded” curricula with directed experiential learning elements
- Expand relevant elements of differentiated Geisinger curriculum across health profession education, training, and professional development, including ensuring a baseline understanding of value-based care for graduates and employees

Scott Friedenberg, MD
Director, Health Systems Science Collaborative

*The **HSS Collaborative** aims to integrate Health Systems Science into our “Geisinger branded” curricula, with directed experiential learning for practical, hands-on experience to support understanding, development, and collaboration across the health system*

Drive to THRIVE Progress: CoPA

Michelle Thompson, MD

Vice Dean for GME and Chief Education Officer

Committee on Professionalism And Accountability

Geisinger College of Health Sciences



Strategic Priority – Realize alignment of the clinical learning environment work in professionalism

CoPA Purpose

Uphold Geisinger's
Culture of
Professionalism

- Maintain the Standards of Professionalism
- Inform relevant system policies and guidelines

Concern
Escalation and
Adjudication

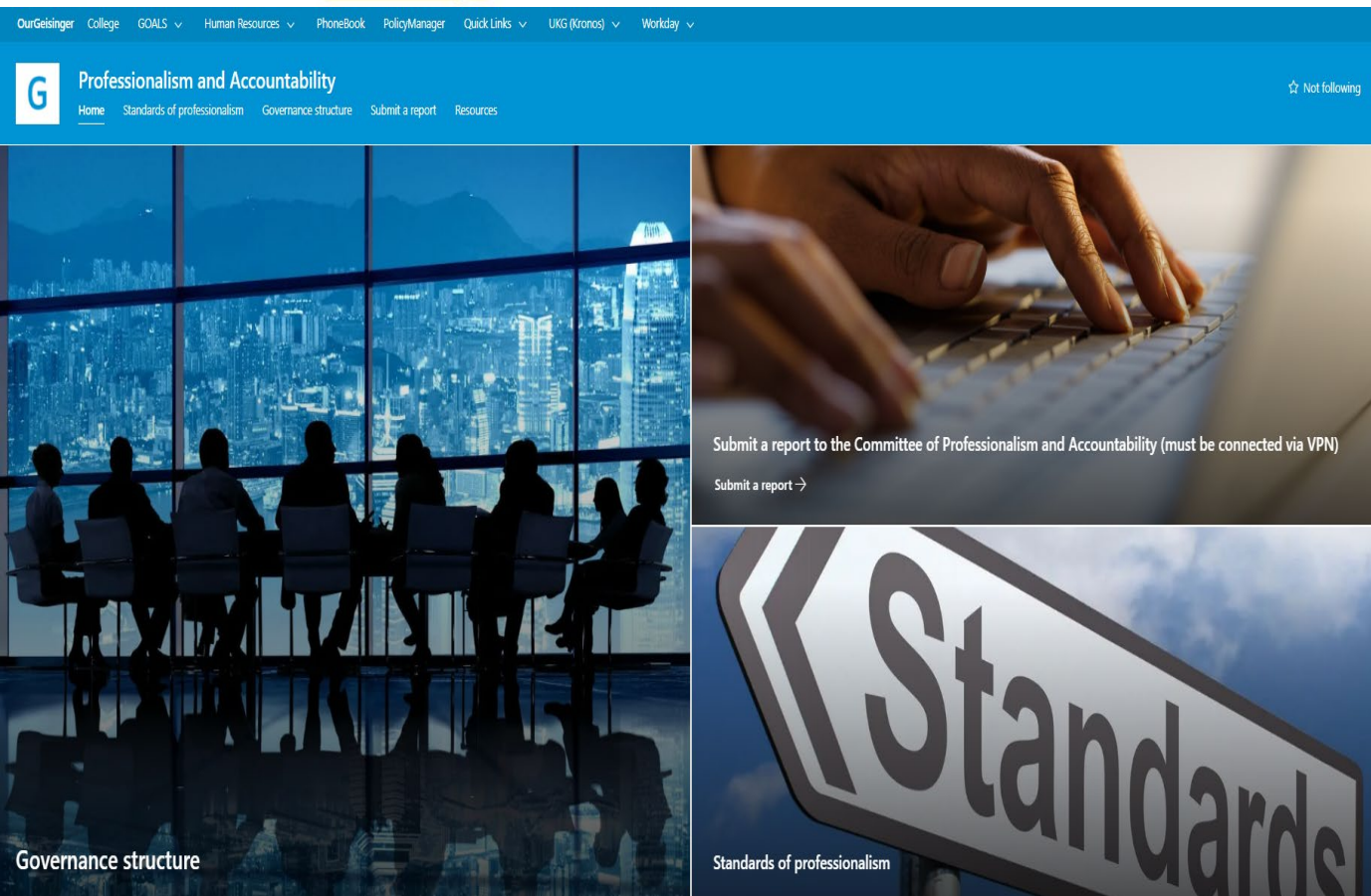
- Facilitation of supervisor response to professionalism lapses
- Ensure fair, equitable assessments and responses

Manage System
Professionalism
Data

- Collect and analyze data related to professionalism
- Use data insights to identify trends, opportunities, and exemplars to guide committee work

Education and
Communication

- Inform, advise, and develop content for professionalism education
- Promote open and respectful communication, encouraging individuals to voice experiences
- Collaborate across the system to integrate professionalism efforts into our daily work



[Professionalism and Accountability - Home](#)

Upcoming Events



Colorectal Cancer: Prevention, Treatment & a Path Forward

When: Wednesday, March 19, 6 p.m.

Where: Geisinger School of Medicine
525 Pine St., Scranton

In recognition of Colorectal Cancer Awareness Month, Geisinger College of Health Sciences invites community members to a panel discussion moderated by **Samuel Lesko, MD, MPH, medical director of the Northeast Regional Cancer Institute**.

Panelists include:

- **Joseph P. Bannon, MD** – Colon & Rectal Surgery, Geisinger
- **Christopher A. Peters, MD** – Radiation Oncology, Northeast Radiation Oncology Center
- **Amber L. Sobuto, DO** – Medical Oncology & Hematology, Hematology & Oncology Associates of NEPA
- **Michael Kondash, DO** – Family Medicine, PrimeMed Medical Group

Attendees will also hear firsthand testimonials from:

- **Aimee Kearney**
- **Matthew Stopper, MD**

Register: go.geisinger.edu/ccawareness25

Questions? Contact Anne Gallagher at apgallagher1@geisinger.edu.



This event is in collaboration with



Schumann: Music, Mood Swings & Madness



Richard Kogan, M.D.

Professor of Psychiatry, Weill Cornell Medical College,
Artistic Director, Weill Cornell Music and Medicine Program

Lecture, Performance, and Reception

**April 10, 2025, 6:00 p.m.
GCSOM Auditorium**

Free for GCSOM students and employees

Register at:

www.scranton.edu/schemelforum
or call: 570-941-4740



Geisinger
College of
Health Sciences



You're invited to
Geisinger Commonwealth
School of Medicine's

MD Class of 2025 Match Day

**Friday, March 21, 2025
11:00 a.m.**

Scranton Cultural Center
420 N. Washington Ave.
Scranton, PA 18503

**For more information or
to view the event live stream, visit:
geisinger.edu/matchday**

Geisinger College of Health Sciences is committed to nondiscrimination in all employment and educational programs or activities. Concerns or questions may be directed to the Title IX coordinator whose contact information is available at geisinger.edu/titleix.

GCHS Major Events*

*As this list is updated it will be communicated to GCHS through the Weekly Update.



Q & A

Please use the Q&A function at the top of your Teams window.

