



**Boston
Children's
Hospital**

Innovation & Digital
Health Accelerator

Implementing AI at Boston Children's

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Prioritizing quality and safety when sourcing AI use cases and opportunity areas at Boston Children's Hospital

Two primary categories of AI efforts supported at Boston Children's Hospital

ENTERPRISE AI

Goal: ensure responsible, scalable, and sustainable adoption of AI at Boston Children's Hospital, and integrate it seamlessly into hospital operations

SMALL-SCALE INNOVATION SUPPORT

Goal: explore and validate high-impact, low-risk AI use cases, engaging our workforce in the application of novel tech and generating key learnings early

Shared quality/safety considerations in sourcing and prioritizing both enterprise efforts and small-scale innovation use cases

Risk Level: considerations around impact of model accuracy and implications for patient care

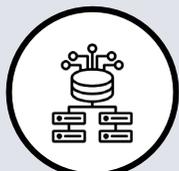
Data Privacy and Compliance: considerations around adherence to data privacy norms and other compliance metrics

Equity, Diversity, Inclusion: considerations around access, equity, and impact on disparity gaps

Example Efforts



BCH ChatGPT Instance



Modernized data infrastructure



Clinical Documentation

Example Efforts



Medical Education



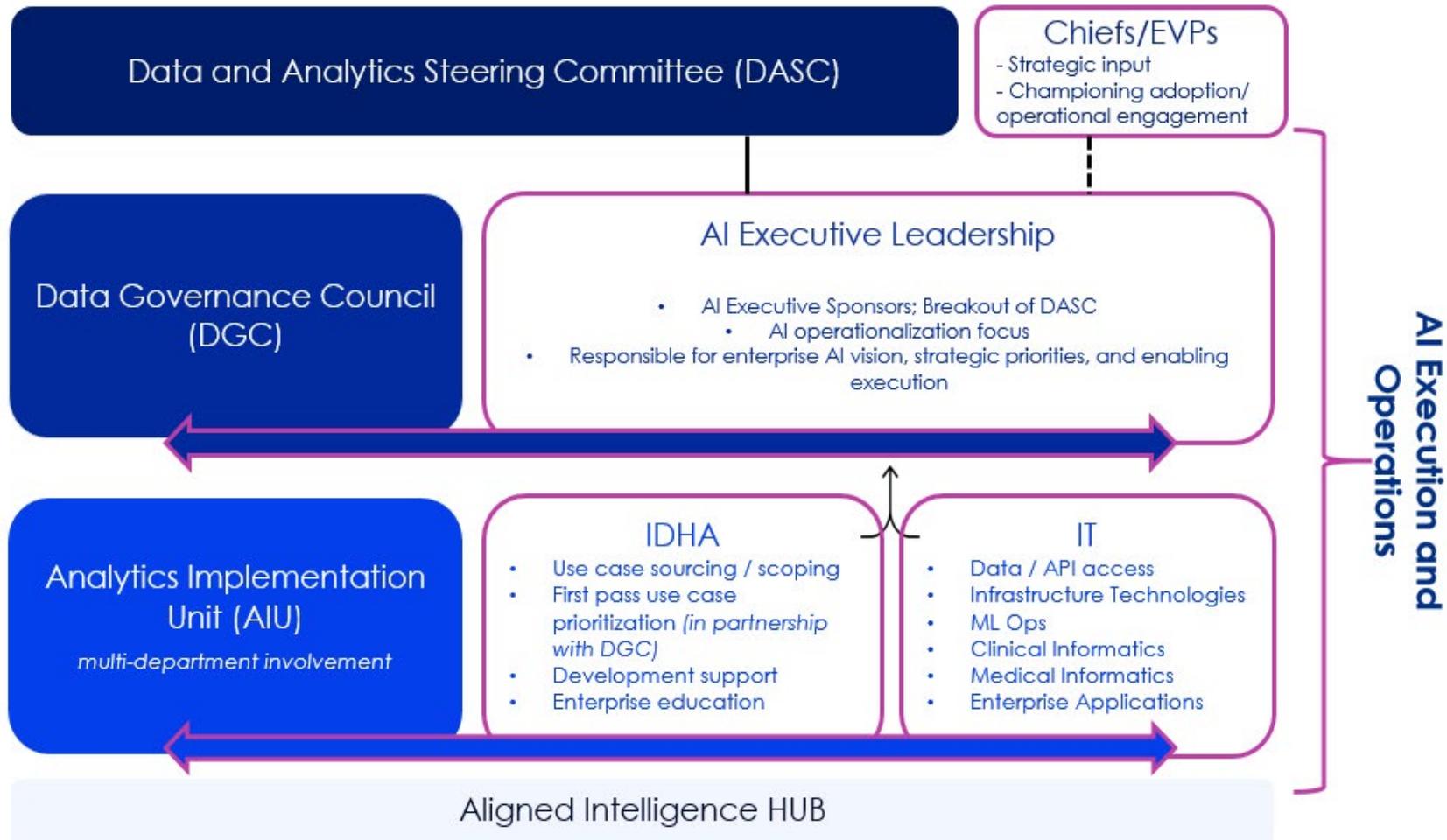
Clinical Policy Querying



Capacity Management

Establishing standard protocols and guidelines for AI governance, implementation, and use within the hospital

Boston Children's Hospital AI Governance Structure



Implementation Elements

- 1 Usage guidelines and education for BCH staff**
To ensure effective and responsible use of tools leveraging novel AI technology by clearly outlining risks, considerations, and end user responsibilities
- 2 Data privacy and compliance**
All AI tools adhere to BCH policies and HIPAA regulations to ensure the utmost security and confidentiality of patient data
- 3 Research and validation**
Ongoing measurement of the accuracy and/or efficacy of AI tools, and involvement of the IRB where relevant
- 4 Human-in-the-loop**
Maintaining human oversight and review in all cases where AI output could impact patient care

Ongoing monitoring of all AI efforts and market / regulatory standards to ensure quality and safety in existing and future tools

Monitoring and evaluation of AI efforts at Boston Children's Hospital *to maintain highest levels of performance, care, and safety*

Clinical review of output accuracy and appropriateness

Large language model performance evaluation

Establishment of metrics to evaluate overall initiative success and efficacy

Technology, industry, and policy partnerships

to collaborate, understand technological capabilities and advances, and develop best practices for responsible use of AI in healthcare and to incorporate into BCH standards



THE WHITE HOUSE



DECEMBER 14, 2023

Delivering on the Promise of AI to Improve Health Outcomes

[BRIEFING ROOM](#) [BLOG](#)



New consortium of healthcare leaders announces formation of Trustworthy & Responsible AI Network (TRAIN), making safe and fair AI accessible to every healthcare organization

March 11, 2024 | Microsoft Source

