AIM-AHEAD Council of Councils Working Group (Draft)

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Executive Summary

Launched in July 2021, AIM-AHEAD is a fast-paced initiative focused on building AI talent and technology to improve the health of all Americans. It aims to bring AI tools to patients and support hospitals lacking the resources to explore AI/ML advancements. Led by the University of North Texas Health Science Center in Fort Worth, AIM-AHEAD coordinates a nationwide network through Regional Hubs. The program is uniquely designed to provide tailored concierge services, regulatory compliance assistance especially for new investigators and under-resourced institutions, while matching computing infrastructure and datasets to each stakeholder's research needs.

Since its launch, AIM-AHEAD successfully built a nationwide network, fostering collaboration among researchers, healthcare providers, community organizations, and the private sector. It reached groups typically excluded from traditional funding sources and created numerous mentorship opportunities. Through AIM-AHEAD Connect, the program established an ecosystem for professional development, offering courses, webinars, symposiums, and networking. It developed AI/ML training curricula, providing hands-on mentorship to nearly 400 researchers and clinicians across the country. The initiative supported multidisciplinary research projects to improve health, including tribal collaborations, decision-making tools for safety-net hospitals, and AI co-development with community health centers. AIM-AHEAD also produced peer-reviewed publications, secured new funding (e.g., NIH, NAIRR, NSF), and provided valuable health insights. It strengthened institutional capacity in AI health labs and federated networks, particularly in under-resourced institutions, demonstrating strong evidence of developing an AI-ready workforce, expanding capabilities, and improving health outcomes for sustained national impact.

On April 5, 2024, the NIH Council of Councils established the AIM-AHEAD Working Group to assess the initiative's progress and guide its future direction. The group reviewed AIM-AHEAD's scope, goals, and achievements, offering recommendations to strengthen its impact. Led by Drs. Karen Johnston, Jean King, and Susan Gregurick, with 9 members from a wide range of disciplines, leadership experiences, and institutions across the nation, the Working Group held monthly meetings from October 2024 to May 2025. They analyzed a range of qualitative and quantitative data, including progress and evaluation reports, success stories, publications, and stakeholder feedback, and engaged with trainees, awardees, the internal advisory Committee, and the external advisory board to gain insights. Based on their findings, the Working Group identified key successes, challenges, and developed recommendations to ensure AIM-AHEAD's long-term impact on improving health through AI/ML.

Key Recommendations

- **Extend Award Timelines:** Shift from one-year awards to multi-year (e.g., 3-year with renewal) OTAs to support meaningful planning, trust-building, and impactful research outcomes.
- **Tailor Mentorship Approaches:** Use a flexible, needs-based mentorship model that accounts for varying institutional resources and individual backgrounds in AI/ML.
- **Build Community Trust:** Engage local ambassadors to promote AI/ML education, strengthen communication, and align initiatives with community needs.

- **Broaden Program Scope and Partnerships:** Stay adaptive to the rapidly evolving AI landscape by supporting next-gen technologies, expanding the workforce, and building partnerships with industry and new funders.
- **Centralized Support Services:** Streamline communication, resources, and collaboration tools across the AIM-AHEAD consortium to boost engagement and coordination.
- **Implement Innovative Evaluation Methods:** Develop new ways to track community impact, career pathways, and program ROI beyond traditional academic measures.
- **Ensure Long-Term Sustainability:** Embed AI/ML education in communities and institutions through train-the-trainer models, permanent roles, and integration into academic curricula.

Introduction and Charge of the Working Group

The [Office of Data Science Strategy (ODSS](.)) leads the NIH Strategic Plan for Data Science through scientific, technical, and operational collaboration with the institutes, centers, and offices that comprise NIH. This Strategic Plan provides a roadmap for accomplishing the following five overarching goals:

Goal 1: Capabilities to Sustain the NIH Data Management and Sharing Policy

Goal 2: Programs to Enhance Human Derived Data for Research

Goal 3: New Opportunities in Software, Computational Methods, and Artificial Intelligence

Goal 4: Support for a Federated Biomedical Research Data Infrastructure

Goal 5: Strengthen a Broader Community of Data Science

The rapid increase in the volume of data generated through electronic health records (EHRs) and other biomedical research presents exciting opportunities for developing data science approaches, such as artificial intelligence (AI) and machine learning (ML) methods, to enhance biomedical research and improve health for all Americans. However, several challenges hinder the widespread adoption of AI/ML technologies, including high costs, limited capability for broad application, and inadequate access to necessary infrastructure, resources, and training. Additionally, there is a lack of comprehensive and high-quality AI-ready data, as well as a shortage of a pipeline of talented researchers in both industry and academia to harness the full potential of AI/ML to advance biomedical research and medical practice. Furthermore, tackling the complex drivers of health outcomes requires an innovative and transdisciplinary framework that transcends scientific and organizational silos. Mutually beneficial and trusted partnerships can be established to enhance the adoption of these tools and empower researchers and communities across the United States in AI/ML applications and innovation.

Recognizing these challenges and in support of the NIH's data science strategic plans to advance AI initiatives that bridge the gap between AI, clinical, and biomedical research, the NIH launched AIM-AHEAD in July 2021. The AIM-AHEAD program is a large, coordinated network of institutions and organizations with a focus on developing AI expertise among researchers and clinicians across the US. Support is provided for multidisciplinary research projects that harness AI/ML to improve the health of Americans. This support also aims to enhance the AI capabilities and infrastructure of limited-resourced communities or hospitals that otherwise would not have had the resources or the capacity to benefit from the advances of AI/ML.

AIM-AHEAD Goals and Current Status.

AIM-AHEAD has three major goals.

1. To **broaden the participation** of researchers and communities across the US in the development and deployment of AI
2. To **address health challenges and disparities** in behavioral/mental, cardiometabolic, and cancer outcomes using AI/ML

3. To **improve the capabilities** of this emerging technology in communities and institutions across the US

To advance the goals, the AIM-AHEAD Coordinating Center (A-CC) was established to develop and support a consortium of institutions and organizations to build capacity and capability in AI/ML through infrastructure, training, and access to large scale, high-quality, comprehensive data from all Americans (e.g., EHR, genomics, imaging, lifestyle and other non-traditional data). The ACC is led by the University of North Texas Health Science Center in Fort Worth, in coordination with seven regional hubs and three functional cores (Figures 1a and b).

- **Leadership/Administrative Core:** Provides overall leadership and management of the A-CC
- **Regional Hubs:** Build relationships with stakeholders locally as part of the Leadership/Admin Core
- **Data and Research Core:** Support pilot projects, PI research projects and larger consortium projects in AI research
- **Data Science Training Core:** Identify training needs and develop training and workforce development resources in AI/ML
- **Infrastructure Core:** Engage with institutions across the country and provide infrastructure that will enhance capacity for AI/ML

Figure 1a: The AIM-AHEAD Coordinating Center (ACC) organizational structure
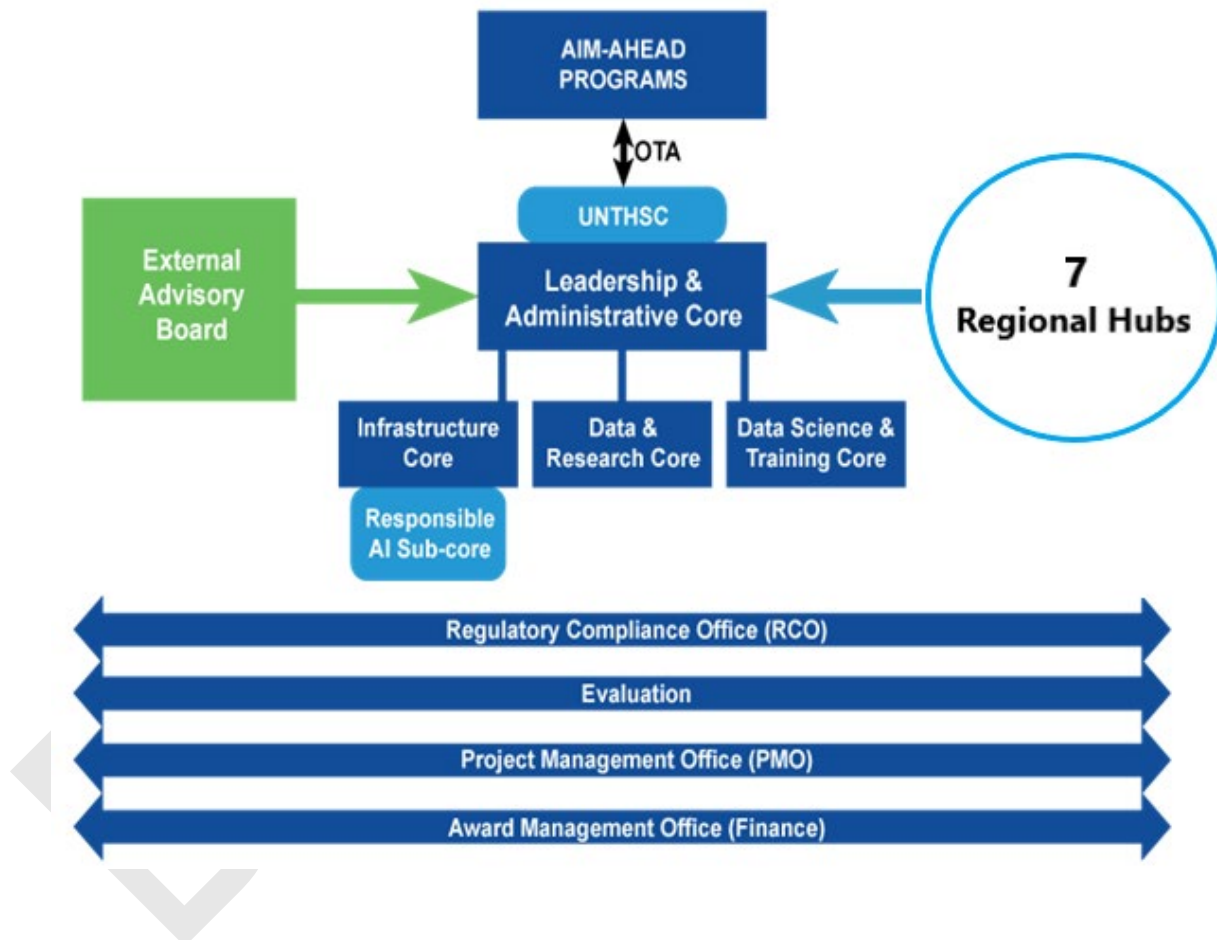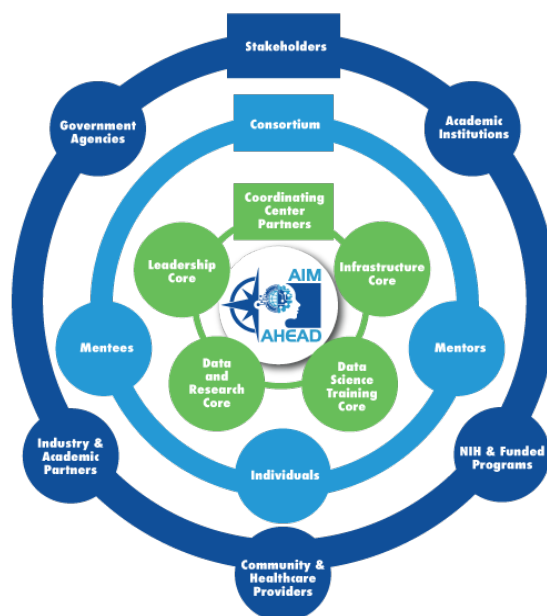
Figure 1b: AIM-AHEAD Consortium and stakeholders

Since July 2021, the A-CC leadership has worked with local communities and stakeholders to identify high-priority areas, known as the **AIM-AHEAD North Stars**. The four guiding North Stars for AIM-AHEAD are:

1. Develop a broad talent of AI/ML workforce.
2. Increase knowledge, awareness, and national-scale community engagement/empowerment in AI/ML.
3. Use AI/ML to address behavioral health, cardiometabolic health, and cancer for all.
4. Build community capacity and infrastructure in AI/ML to address community-centric health needs.

The A-CC supports research and development awards, training, infrastructure, and public-private awards in these priority areas. These activities are supported by each of the functional cores (Figure 1). In addition, the program developed joint traineeships with NIH-supported programs to upscale AI biomedical and clinical researchers in AI to improve health and democratize data access to NIH resources by leveraging All of Us, The National Clinical Cohort Collaborative (N3C), Bridge2AI datasets, infrastructure, and training components**.** All funding announcements and review criteria are approved in compliance with all laws as well as HHS and NIH policies.

Since its inception in 2021, the program has significantly accomplished the following:

- ● **Developed** a nationwide network, fostering connections and collaborations among researchers, healthcare providers, community organizations, and private sectors, particularly effectively reached communities and institutions that are not typically funded by traditional granting mechanisms (see Figure 2).

- **Generated** a wealth of mentorship opportunities and **created** an ecosystem of professional development through a virtual hub platform called **AIM-AHEAD Connect** that offers networking, connections, online courses, webinars, and symposiums (Figure 3).
- **Developed AI/ML training curricula**, providing **hands-on, mentored training** to nearly **400 researchers and clinicians** nationwide**.**
- S**upported** multidisciplinary research projects and **facilitated** collaboration to harness AI/ML to improve behavioral/mental health, cardiometabolic health, and cancer outcomes for all, which resulted in advancing **tribal health**, **decision-making tools for safety-net hospitals**, and **AI co-development with community health centers, and** produced peer-reviewed publications, new funding (NIH, NAIRR, NSF, etc.), and non-federal agencies.
- **Strengthened** institutional capacity in AI health labs, federated networks, and AI capabilities in limited-resourced institutions

Overall, AIM-AHEAD d**emonstrated strong evidence of** developing an **AI-ready workforce**, expanding capabilities, and improving health outcomes, laying the foundation for **sustained national impact. The program also** stands at the forefront of fostering connections and collaborations, and expanding capacity in AI capabilities by providing opportunities, training, and resources to institutions and communities that would not otherwise be engaged.

Figure 2: AIM-AHEAD broad outreach and supports researchers and institutions across the nation in many different domains to develop AI talents and improve the health of Americans
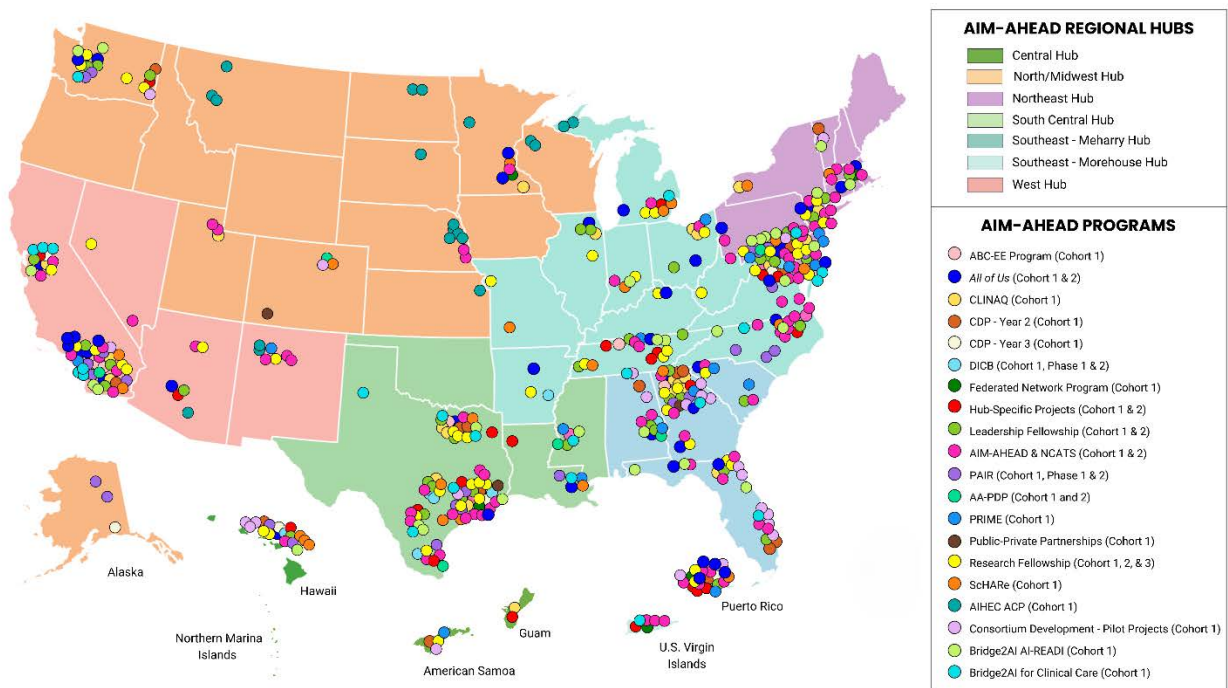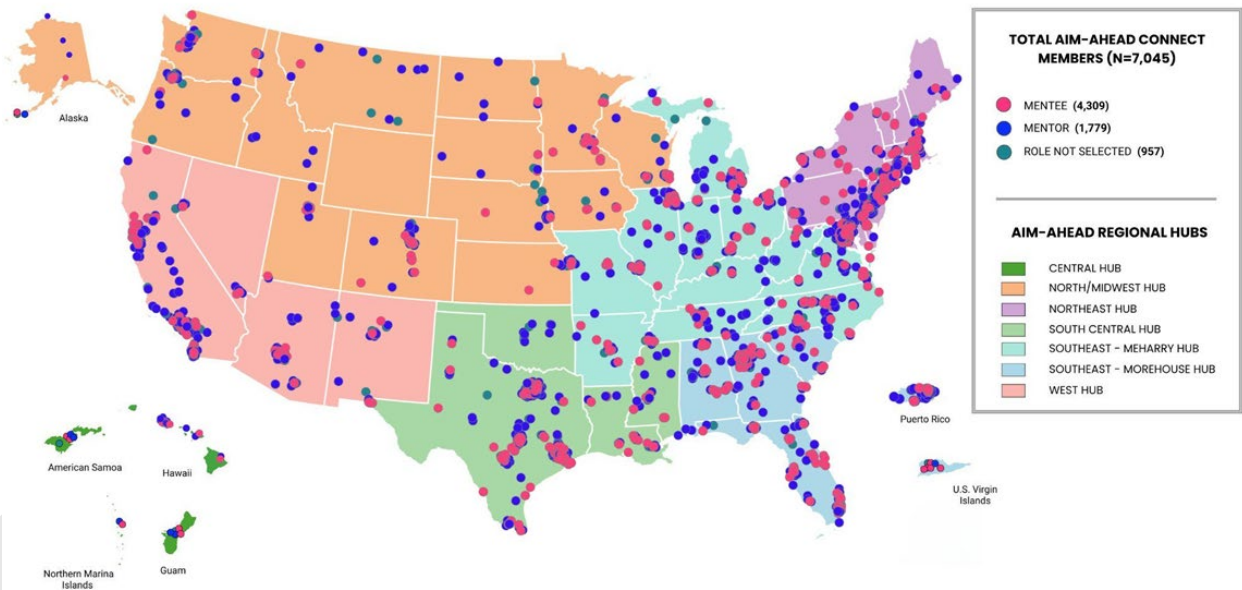

Figure 3: AIM-AHEAD Mentees and Mentors distribution across the nation

Charge of the Working Group

On April 5, 2024, the NIH Council of Councils charged an AIM-AHEAD Working Group to assess the AIM-AHEAD's progress to date and to provide recommendations for the future of this initiative. NIH expects to use these recommendations to guide the future focus of the initiative.

Specifically, the charge for the working group will be to:

- Review the current scope and goals of the AIM-AHEAD as well as progress to date.
- Based on the progress, provide recommendations to enhance the future of the AIM-AHEAD program objectives and goals.
- Provide recommendations on potential future success measures for the AIM-AHEAD program.

Working Group Methodology

The working group's formation started with an invitation and acceptance to join the AIM-AHEAD Working Group of the Council of Councils (CoCs), the Advisory Council to the Director of the Division of Program Coordination, Planning, and Strategic Initiatives (DPCPSI) within the NIH Office of the Director. The invited Working Group members were carefully selected for their wide range of expertise, institutional affiliations, and leadership experience across the nation. This broad representation fostered review comprehensive materials, thoughtful and well-rounded discussions and contributed to the development of insightful, actionable recommendations for the future of the AIM-AHEAD program.

The working group met monthly from October 2024 to April 2025, with each meeting lasting approximately 120 minutes. All meetings were virtual, and multiple sessions were included within each meeting to take advantage of discussions with different stakeholder groups. The working group held a kickoff meeting with NIH ODSS leadership and Program Staff, four meetings focused on each of the North Stars, and one meeting with AIM-AHEAD's Internal Advisory Committee and External Advisory Board. Additional meetings were held for the Council of Councils Working Group to discuss the recommendations and refine the report and prepare slides for presentation at the May CoCs meeting.

The meetings were structured around the four North Stars of the AIM-AHEAD program. For each meeting, the Working Group actively invited relevant MPIs/Program Leads, awardees, and stakeholders who were directly engaged with that North Star to share their experiences, insights, and challenges regarding the AIM-AHEAD program. This structure ensured that discussions were grounded in real-world experiences, highlighted tangible successes, surfaced specific challenges and opportunities unique to each area of the North Star. In addition, the Working Group reviewed comprehensive quantitative and qualitative materials prior to each North Star meetings, including video recordings from the AIM-AHEAD leaderships, evaluation reports, progress reports, lessons learned, success stories , metadata of programs, awardees, a list of publications, and grants, were provided to the Working Group for review in advance of each meeting. The following comprehensive quantitative and qualitative materials, including but not limited to, the following documents:

Quantitative and Qualitative Documents

- Metadata on programs, stakeholders, applicants, awardees
- Outreach and curriculum data
- Program evaluation data and reports
- Executive summaries
- Details about private partnerships, fellowships, and pilot projects
- Program manuals
- Research grants, publications, presentations, patents, and other measures of impact
- Data and infrastructure details
- Consortium structure and governance information
- Progress and lessons learned reports

As the meetings progressed, it was noted that requesting the awardees and community stakeholders to answer questions ahead of the meeting would help make the meetings more efficient and allow for more active engagement with specific questions to be asked and answered. The questions that were asked of the community stakeholders and awardees are listed below:

The community stakeholders answered three questions:

- **Question 1**. What are the top three goals of your organization?
- **Question 2**. Can you explain your relationship to AIM-AHEAD?
- **Question 3**. How does AIM-AHEAD help advance your organization's goals?

The awardees answered three questions:

- **Question 1**. What are the goals of your research and any partnerships with stakeholders (e.g., community organizations, healthcare providers, etc.)?
- **Question 2**. Can you explain your relationship to AIM-AHEAD?
- **Question 3**. How does the AIM-AHEAD award help advance your goals and foster stakeholder collaboration?

Through a structured review of documents, listening sessions, and open discussions, the Working Group gathered valuable feedback highlighting the program's successes and impacts, as well as identifying gaps, challenges, and opportunities for improvement. Each meeting was designed for maximum efficiency, typically divided into four sessions across a 120-minute period to ensure balanced engagement with the diverse groups contributing to each of the four North Stars (See Appendix C for detailed meeting agendas). The Working Group engaged 18 AIM AHEAD leaders, 14 Trainees, 16 Awardees, 9 Organizational stakeholders, and 7 External Advisory Board and Internal Advisory Committee (for a complete breakdown, see Appendix D). Following these presentations and engagement, the Working Group dedicated 30 minutes closed session to collectively synthesizing key takeaways, highlighting program achievements, identifying challenges, assessing program sustainability, and developing informed recommendations to guide the future direction of AIM-AHEAD.

North Star 1: Develop a broad talent of AI/ML workforce

The AIM-AHEAD Consortium strives to build an AI/ML workforce focused on improving health for all Americans. To achieve this, the Data Science Training Core (DSTC) was tasked with identifying training needs and developing targeted resources. AIM-AHEAD proposed establishing a broad network of AI/ML practitioners by 1.) providing a variety of professional development and training opportunities that create pathways for individuals from varied backgrounds to access and engage with AI/ML, 2.) fostering partnerships with a variety of organizations, including those who serve populations disproportionately affected by disease, and 3.) expanding AI/ML adoption through collaborative initiatives.

To kickstart biomedical researchers in using AI and reduce barriers to data access, AIM-AHEAD developed three fellowships and five collaborative training programs that leverage other NIH data resources and have collectively trained **387** investigators. Although each program has specific areas of emphasis, they share a focus on application-based learning opportunities utilizing large-scale data. The multifaceted training approach includes curricular learning focused on teaching the technical skills related to AI research, hands-on learning using real world data and case studies, individual/group projects, one-on-one mentorship, meaningful collaborations with peers and experts, networking, and career development. Additionally, the AIM-AHEAD Connect platform (https://connect.aim-ahead.net/) offers online coursework, mentor connections, and other open resources to over 7,000 members.

The working group emphasized several key accomplishments. Overall, there was a strong sense of success surrounding the training programs, evidenced by optimistic evaluation metrics and trainee reports that associating with AIM-AHEAD has significantly enhanced their access, understanding, and credibility within the AI for health space. The program has achieved broad engagement across various organizations. The AIM-AHEAD community and its resources, including the online Connect platform, hub engagement, consortium-wide activities, and individual programs, form a robust and accessible ecosystem for individuals from varied backgrounds. Furthermore, the programs address a wide range of training needs, from data science skills to leadership, publication, grant writing, and other professional development opportunities supporting a variety of career paths. The evaluation and impact of educational activities are assessed through a multifaceted approach, incorporating qualitative assessments alongside quantitative metrics.

In addition to highlighting these areas of success, the working group identified some challenges and areas for improvement. These lessons learned were used to inform the following recommendations for the future of AIM-AHEAD:

Recommendation 1.1: Lengthen the award timeline for training programs.

The working group acknowledged that AIM-AHEAD has made a significant effort to reduce the research administrative burden on applicants and speed up timelines to achieve regulatory compliance. However, the quick timeline constraints imposed by the current one-year OTA mechanism have emerged as a significant and persistent challenge across all consortium activities. After four months spent on program development and planning, releasing calls for proposals and recruiting, conducting scientific and programmatic reviews of applicants, and issuing notices of awards, AIM-AHEAD can typically offer eight-month training programs. Awardees must quickly obtain data access, which often requires multiple institutional agreements, in addition to institutional review board (IRB) determination, before

proceeding with their hands-on training and research projects. AIM-AHEAD often engages lower-resourced institutions that may have limited staff with experience to complete these processes on a compressed timeline. Despite the obstacles associated with data governance processes, using real-world data is strongly preferred over training with synthetic data alone. Besides advancing AIM-AHEAD's goal of democratizing data access, the experience also serves as a valuable guided learning opportunity for navigating these essential regulatory processes. The working group has, therefore proposed a shift away from year-long award timelines. A two- or three-year AIM-AHEAD award would directly benefit trainees by providing more time for hands-on, targeted training, exploring the data, refining research plans, and completing independent research.

Recommendation 1.2: Ensuring consistent quality mentorship should be a high priority.

Mentorship is an essential component of training and has resulted in strong outcomes in the AIM-AHEAD programs. However, the quality of mentorship does not always seem consistent. Awardees in the same programs can have extremely varied experiences. A formal mentoring structure and process requires careful screening, matching, training, and continued monitoring of the participating mentors. More training for the mentors and a more robust vetting process are necessary to ensure competence and appropriate matching. Mentors should be held accountable for their commitment, and both mentors and mentees should be encouraged to set clear expectations and goals at the training outset. AIM-AHEAD has noted that developing a large and reliable mentor pool to regularly tap from has taken time to build, and that the mentor network has strengthened as the consortium as grown. The working group emphasized the need for flexible and tailored mentoring that acknowledges an individual's strengths and gaps. Given that AIM-AHEAD engages a wide range of stakeholders and organizations that each have their own unique support needs, the mentor match process should move away from a purely algorithmic process and become more personalized to ensure a meaningful and successful training experience.

Recommendation 1.3: Encourage a culture of publishing preprints prior to publishing in peer-reviewed journals.

The working group suggests the establishment of a standard for publishing preprints for all the AIM-AHEAD program participants, as this can serve many benefits. Although AIM-AHEAD gathers success metrics, the full impact of training opportunities often manifests over time. While academic publications are not the sole determinant of success, they provide tangible evidence of researcher productivity. Posting preprints accelerates the dissemination of scientific findings, a crucial advantage in rapidly evolving fields like AI/ML. This is valuable for evaluating the success of AIM-AHEAD programs, but can also promote trainee career advancement. Further, open-access preprint servers help democratize access to scientific knowledge, aligning with AIM-AHEAD values.

Recommendation 1.4: Leverage strategic, multidisciplinary partnerships among trainees.

Interdisciplinary learning fosters innovation and improves patient outcomes by integrating nontraditional professionals, including clinicians, in AI research. Each AIM-AHEAD cohort represents a broad range of skill sets, requiring personalized guidance as awardees balance research and training with other professional obligations, such as teaching and clinical duties. However, this presents the significant challenge of developing and delivering tailored training within a compressed timeframe. Facilitating multidisciplinary dyads can help those with clinical backgrounds contribute effectively

without extensive technical AI/ML expertise. Multidisciplinary teams are more effective and innovative. Recognizing the distinct roles within the awardee population, AIM-AHEAD should cultivate strategic collaborations that leverage these differences and promote peer-to-peer learning and knowledge exchange.

Recommendation 1.5: Further emphasis on the collection and analysis of evaluation metrics.

Although AIM-AHEAD has established a robust process for program evaluations, the working group identified areas of further reporting that could contribute to actionable lessons learned and help build long-term sustainability plans. Importance should be placed on identifying factors contributing to those with successful and positive experiences. Continued emphasis on both quantitative and qualitative metrics, including exit interviews, is necessary for identifying ways to scale positive experiences across all participants. Since the backgrounds of those involved are varied, AIM-AHEAD could also assist participants in setting individual goals around success and then measuring how well they meet those goals. Finally, the working group noted that the training programs are very competitive, receiving a much higher number of applicants than can be supported. Analyzing rejection data could help identify which backgrounds and organizations are still experiencing difficulties accessing the necessary resources to participate in AI/ML.

North Star 2: Increase knowledge, awareness, and national-scale community engagement/empowerment in AI/ML

The AIM-AHEAD consortium successfully engaged and empowered a wide-range of community stakeholders through regional hubs, raising awareness and providing essential knowledge and skills. This was achieved through holding regular webinars, panels, and public forums, as well as by fostering collaborations among academic institutions, healthcare systems, and public organizations. The hubs played a critical role in facilitating partnerships, building trust, offering training, mentorship, and concierge services, addressing the fast-paced demands of the programs, and acting as central points of assistance and support. Additionally, the hubs supported small-scale community-engaged AI/ML research projects to address health issues unique to their context and needs. These efforts led to increased participation from institutions and communities, enabling them to identify AI/ML opportunities and contribute to healthcare discussions.

The working group noted the successful community engagement and communication between the AIM-AHEAD hubs, awardees, and stakeholders. The hubs effectively engaged a wide range of stakeholders and maintained open, reciprocal communication, demonstrating the quality of their relationships. Stakeholders were well-acquainted with their respective cores and hubs, highlighting effective communication. Many awardees and stakeholders utilized AIM-AHEAD resources, benefiting from the system's support. The working group observed that several awardees have received multiple AIM-AHEAD awards, indicated strong retention and sustained ongoing research and collaboration. The working group was impressed by the complexity of the projects, their broad reach, and their impact across various domains, particularly in hard -to-reach communities and institutions that are not typically funded by NIH grant mechanisms.

The Working Group also noted that AIM-AHEAD spurred innovative applications of AI/ML in healthcare by engaging a wide range of stakeholders. Some impacts include a project that strengthened collaborations with the Indian Health Service (IHS) by utilizing tribal EHR data to predict predicts dementia risk in AI/AN, leading to collaboration with tribal representatives and IHS stakeholders. This effort generated a peer-reviewed publication and was followed in a nearly $2 million grant from non-federal agencies. Another project established trust with a safety net healthcare system in Texas by developing AI/ML risk models to help busy oncologists predict and prevent chemotherapy-related complications. The collaboration generated several publications and introduced AI tools to the hospital, which lacked the resources to independently explore such technologies, ultimately enhancing patient care through advanced risk assessment. The program also fostered collaboration between a private business and a community health center in Colorado. This led to the development of an AI chatbot designed to assist patients with cancer and cardiometabolic diseases, providing tailored support that addresses their specific healthcare needs. These examples clearly demonstrate that the program partnered with various stakeholders, strengthened local capacity, and aligned resources to address health challenges using AI, yielding a strong return on investment (ROI) and securing additional funding from federal and non-federal agencies.

In addition to highlighting accomplishments, the working group also identified key challenges and gaps and made several recommendations for improvement.

Recommendation 2.1: Consider multi-year research **awards to address the rushed timeline.**

The working group found that the one-year award duration created several challenges for all involved, including MPIs, awardees, and stakeholders. The short timeline put pressure on submission and review cycles, often conflicting with other institutional deadlines. Additionally, delays in data access, due to lengthy IRB processes and multi-institutional data use agreements, made it difficult to execute complex research effectively. For many communities new to these projects, the lack of a sponsored research office and the limited time to build trust also posed barriers. The group recommended moving to a multi-year OTA with set grant cycles, suggesting a 2-3 year duration. This would address the time constraints, enhance relationships and trust with communities and awardees, and provide greater stability, allowing for more focused, successful projects with increased impact. All members of the working group strongly support this recommendation.

Recommendation 2.2: Consider a phased approach for new relationship development.

Community-based organizations often require substantial time to establish new academic relationships and time to meet regulatory requirements (e.g., IRB and Data Use Agreement [DUA]). More time is needed for effective relationship-building since existing issues around AI mistrust further complicate these issues. Rushing this process could damage trust. A phased approach, such as a six-month pre-award period for handling IRB, DUA, and partnership formation, followed by a year of actual project work, would allow for capacity building and community relationship development. This "seed stage" approach can be formalized through hubs to ensure more effective and sustainable project initiation.

Recommendation 2.3: Develop centralized resources and support systems.

Centralized resources and support systems could significantly assist junior trainees, researchers, and community members who lack the necessary resources and infrastructure, including training mentorship, IRBs, DUAs, and relationship-building. Formalizing the individualized time that hubs spend

with teams to navigate these infrastructural barriers is essential. Providing stakeholders with a step-by-step process and support for that process would help them overcome these challenges more effectively, ensuring smoother and more successful project execution. A centralized support system could also address both publication and grant writing challenges, such training can be particularly impactful to stakeholders from low-resourced institutions and organizations.

Recommendation 2.4: Adopt the train-the-trainers model to develop sustainable capacity in communities.

AIM-AHEAD projects require building trust within communities, and abruptly ending projects damages this trust. It's crucial to focus on sustaining connections, especially with under-resourced communities, to ensure ongoing support and continued progress over time. The working group recommended the adoption of the train-the-trainers model by establishing a community ambassador program. Community ambassadors can serve in various capacities, including trust-building, education, advocacy, feedback, local mobilization, and capacity-building. This approach promotes greater participation, empowers communities to take an active role in shaping their healthcare futures, and promotes the sustainable integration of AI/ML into public health. Hubs should implement a formal process to assess ongoing needs for program sustainability and resource development. Communication should extend beyond immediate needs by asking, "What do you need to continue?" to ensure long-term success and support.

Recommendation 2.5: Develop evaluation metrics for community engagement, trust, and uptake.

Comprehensive evaluation metrics to assess community engagement, trust, knowledge, and uptake of AI/ML technology in healthcare are crucial for the successful adoption and long-term sustainability of these technologies. In addition, trust evolves over time as engagement, education, and the impact of AI/ML applications unfold. The working group recommended developing and collecting metrics, including both baseline measurements and ongoing tracking, to capture the effectiveness of community engagement and gauge the level of trust and collaboration, ensuring that AI/ML technologies can be successfully integrated into healthcare systems in a way that benefits all community members.

North Star 3: Use AI/ML to address health in behavioral health, cardiometabolic health, and cancer for all

One of the central aims of AIM-AHEAD is to harness AI/ML to tackle significant health challenges in behavioral/mental health, cardiometabolic health, and cancer in all communities affected by these issues. This goal is pursued through fostering multidisciplinary collaborations among academic institutions, healthcare providers, policymakers, private enterprises, patient advocacy groups, and community organizations. The program launched competitive solicitations, including 1- and 2-year Consortium Development Projects, to create robust networks that test new AI research paradigms and extract value from health data while addressing data and algorithmic bias and integrating non-clinical variables. The Innovation in Under-Resourced Settings initiative collaborates with healthcare organizations to co-design AI/ML interventions tailored to chronic diseases in medically underserved areas. The ABC-EE Program focuses on the responsible deployment of AI/ML in biomedical research. Additionally, a public-private partnership program promotes collaborations among public health

departments, non-traditional institutions, and data science organizations to improve local community health.

Overall, these programs supported **61** well-balanced research projects to cover the full scope of the North Star III initiative. The projects leveraged EHRs, images, genomics, lifestyle, and non-clinical data from various sources, including NIH databases (e.g., the All of Us Research Program, the National Cancer Institute's Surveillance, Epidemiology, and End Results Program [NCI SEER], the National Heart, Lung, and Blood Institute's [NHLBI] BioData Catalyst) and data providers such as OCHIN and MedStar. Many investigators also utilize their own datasets, as well as tribal health datasets, datasets from healthcare systems, community health centers, or federal organizations such as the Centers for Medicare and Medicaid Services (CMS), Scientific Registry of Transplant Recipients (SRTR), Department of Veterans Affairs (VA), and Centers for Disease Control and Prevention (CDC), to conduct their research. Integral to the program's success is the Infrastructure Core, which provides crucial computing resources, software, and AI/ML tools to facilitate research. This core has been pivotal in establishing efficient data, computing, and analysis environments to advance AIM-AHEAD's goals. A notable example is a research team at Houston Methodist Hospital that developed ML models using EHR to predict kidney transplant dropout risks in patients from medically underserved communities. The team wanted to validate the AI models using Beth Israel Deaconess Medical Center data without moving the data. The AIM-AHEAD Infrastructure core made it possible by providing technical infrastructure, concierge services, and support for federated analytics while ensuring data privacy and security. Awardees also integrated the practice of responsible AI by consulting AIM-AHEAD's Responsible AI Subcore, collaborating with responsible AI experts, and employing Community-Based Participatory Research (CBPR) principles to ensure the fair, transparent, accountable, and safe development of AI while maintaining data protection and security.

The working group highlighted several key strengths of the AIM-AHEAD program, noting its impactful and unique design. One of the significant advantages is the ability to provide concierge services, regulatory compliance support, flexible infrastructure, and wide range of data resources tailored to the specific needs of each research project. The program's adaptability is demonstrated by the broad range of resources utilized by different projects, reflecting its capacity to support researchers with expertise and tools they might not otherwise be able to access. The working group also emphasized the role of the program's hubs, which bring together stakeholders at various stages of their projects to share knowledge and engage in discussions about AI/ML in health research. These hubs foster collaboration and help increase community understanding of how AI can benefit health outcomes, extending the program's impact beyond just researchers. The working group recognized the critical role of AIM-AHEAD in fostering the creation of valuable datasets and promoting their sharing and access, offering significant downstream benefits and repeated use. A notable impact is a project supported by the program that developed diverse, multi-modal imaging datasets for breast and prostate cancer. In collaboration with the Infrastructure Core team, the investigator made these datasets available for broader access, enabling researchers in the field to leverage the data for ongoing studies. The working group also noted the program's role in building confidence and bravery among awardees, particularly those engaging in new AI/ML projects. This focus on confidence-building is essential for cultivating a culture of creativity, innovation, and advancing the next generation of AI/ML health researchers. The working group also noted that the program has built a nationwide network, fostering valuable connections and collaborations among awardees and stakeholders. The program has resulted in numerous peer-

reviewed publications in high-impact journals, many of the awardees have secured additional grants from various funding federal (NIH, NSF) and non-federal funding agencies, reflecting the quality and collaborative nature of the research.

In addition to highlighting the accomplishments, the working group identified some challenges, gaps, and areas for improvement that are crucial for the AIM-AHEAD program's future success, sustainability, and growth. These lessons learned were used to inform the following recommendations for the future of AIM-AHEAD.

Recommendation 3.1: Increase the research award duration period.

The working group reiterated concerns raised by stakeholders, awardees, and MPIs regarding the program's challenges, particularly the administrative burden and the short preparation and funding periods (1-2 years). Being part of the consortium is transformative for many communities and organizations that participate in it. However, the short funding period and administrative complexities create significant hurdles to researchers from institutions with limited resources and infrastructure, which hinder awardees' ability to analyze and fully utilize their data, ultimately reducing the effectiveness of the support provided. As mentioned earlier, the working group further emphasized that the 1-year grant period is insufficient as it limits awardees' ability to complete their projects fully, necessitating more extended support. It was recommended that the program extend its funding duration to 2-3 years, enabling more thoughtful planning, stronger trust-building, and more significant research impact.

Recommendation 3.2: Foster industry collaboration for long-term sustainability.

The working group recognized that for AIM-AHEAD projects to be sustainable, they must demonstrate the tangible benefits of AI/ML initiatives within institutions and organizations, thereby encouraging continued investment from local stakeholders. Without visible and measurable value, stakeholders may be reluctant to contribute resources, posing a risk. One of the primary themes emphasized by the working group is the importance of fostering new collaborations and partnerships with industry and other external entities. This is especially critical given the uncertainty surrounding federal funding, as industry partnerships can provide additional funding sources and ensure the program's long-term sustainability.

Recommendation 3.3: Strengthen mentoring and pipeline development.

The working group underscored the need for scalable and sustainable mentoring programs to prevent a "leaky pipeline," ensuring that individuals remain engaged and involved in AI/ML initiatives over time. The importance of providing continued support to participants through local hubs was highlighted to encourage ongoing professional development and strengthen mentorship opportunities. Moreover, the success of mentored individuals in obtaining follow-up funding or transitioning into impactful industry roles emphasizes the importance of this aspect of the program. The working group recommended that the program track the number of trainees transitioning into foundations/industry careers, which would demonstrate the program's broader impact beyond academia. The ability to create a pipeline to academia and industry is crucial in advancing awardee career opportunities and ensuring the program's future viability.

Recommendation 3.4: Reduce the barriers to data access and regulatory challenges.

A significant challenge identified by the working group is the difficulty that new researchers face in accessing data and navigating the complex regulatory processes required to initiate research. These barriers often delay the start of the study and consume a considerable portion of the funding period. The working group stressed the importance of providing more explicit guidance and support to overcome these hurdles, ensuring that researchers, especially those from under-resourced institutions, can access and utilize data efficiently. Addressing these challenges is essential for enabling more timely and effective research in AI/ML applications.

Recommendation 3.5: Enhance AI/ML methodology within the research projects.

The working group also emphasized the importance of enhancing AI/ML methodologies within research projects. While research projects often demonstrate health-related contributions, the novelty and suitability of AI/ML approaches may not always be clearly defined. Therefore, the working group recommended a stronger focus on mentorship and feedback to ensure the robustness and appropriateness of AI/ML methodologies used in these projects. Furthermore, the use of visualization and dashboards tools in reports was suggested as a way to enhance the clarity of complex information, making the connections between different project components easier to understand and communicate to a broader audience.

North Star 4: Build community capacity and infrastructure in AI/ML to address community-centric health needs

The AIM-AHEAD Infrastructure Core was established to pilot and test data and computing infrastructure, tools, and governance models relevant to the community's needs. This Core works closely with consortium members to assess their infrastructure constraints and ensure their access to representative health data that is AI-ready. Promoting sustainable AI/ML infrastructure for curating, accessing, analyzing, and sharing data (e.g., integrated platforms/services or cloud computing, federated networks) is a key priority.

The working group expressed that AIM-AHEAD has been successful in its primary goal of enabling capacity-building and facilitating access to resources. Two Data and Infrastructure Capacity Building projects were highlighted for their advancements in AI concierge tool development and engagement with stakeholders. First, The AI Resource Concierge for Healthcare (ARCH) project is actively working to integrate AI Navigator services to help researchers and communities adopt open-source AI/ML tools while ensuring regulatory compliance and providing hands-on training. Second, aiMATCH has developed a tool that identifies and matches AIM-AHEAD participant needs with training tools and expertise. It is anticipated that the release of these tools will significantly benefit the 7,000+ stakeholders across the AIM-AHEAD community.

The working group also found that AIM-AHEAD has effectively reached communities and institutions that are not typically funded by traditional granting mechanisms. While AIM-AHEAD's infrastructure, networks, and resources are very well-received by the general community, they are particularly beneficial for those groups whose participation may be overlooked by larger networks or projects due to

institutional constraints (e.g., organizations that are smaller, less research-focused institutions, rural, or otherwise geographically isolated). A notable example is the Federated Network Program, which is working towards building capacity across four healthcare providers in to enable data analysis without centralizing sensitive patient data, thereby enhancing collaboration across healthcare systems. The program also provided support for emerging and under-resourced institutions to develop AI research labs and grants through its Program for AI Readiness (PAIR). As a result, the PAIR awardees have leveraged the support, training, and resources to secure additional funding, including two NSF National AI Research Resource (NAIRR) pilot awards focused on privacy-preserving synthetic data and improving the accessibility of biomedical data. Overall, AIM-AHEAD is advancing health research by providing AI/ML opportunities to communities that would otherwise remain untapped.

In addition to highlighting these areas of success, the working group identified some challenges and areas for improvement. These lessons learned were used to inform the following recommendations for the future of AIM-AHEAD:

Recommendation 4.1: Consolidate generated data resources.
Working towards improving the sustainability and scalability of AIM-AHEAD resources should be a critical focus area for the program. Centralizing data and other resources generated by AIM-AHEAD could reduce barriers to access. Giving others appropriate access to provide their own updates as needed will remove redundancy and streamline data collection and dissemination efforts. The working group suggested that AIM-AHEAD can generalize some of their prior efforts to build a centralized infrastructure in order to achieve this.

Recommendation 4.2: Develop a centralized repository for sharing impact quickly.
Publication remains the primary channel for disseminating scientific projects and results. The path to publication is not always efficient, and years can pass from the time research is completed to its public release. AIM-AHEAD augments this by hosting an annual meeting where awardees present their research progress. Awardees have offered additional means to view AIM-AHEAD's outputs and impact, which would help them better engage with the community and establish new collaborations. Facilitating the sharing of cutting-edge results among awardees should be a priority. A centralized repository that is not public but is searchable from within the community could be developed and hosted by AIM-AHEAD to house this information.

Recommendation 4.3: Enhance personalized support services for investigators.
AIM-AHEAD actively encourages the participation of individuals beyond traditional academic and research institutions. As each of these stakeholders has unique skills and needs, personalized support provided by concierge services and mentorship are critical for the continued success of the program. Although these activities can be resource-intensive, awardees have highlighted them as a major strength and necessity across all career levels. AIM-AHEAD has recently incorporated mentor training into the programs to help ensure mentorship quality and support positive mentor-mentee interactions. Given that awardees' success is significantly influenced by their experience with these mentors and advisors, the working group recommends that these forms of support be provided further attention. Many mentees seek both career guidance and technical expertise, and some report wanting more

engagement from their mentors overall. Clear expectations should be shared with both mentees and mentors to avoid misalignment, and mentorship check-ins should be regular so that mismatches can be reconciled quickly. The working group highlights that AIM-AHEAD should remain flexible to prioritize tailored support. The number or type of mentors and advisors may differ based on an individual's or team's strengths and gaps as well as based on the aims of the projects themselves. For example, projects that are working towards establishing federated networks may benefit from additional hands-on support. As this is a complex task that involves specialized expertise, instituting an advisory board that engages regularly with awardees can help ensure groups are consulting with the appropriate experts in a timely manner.

Recommendation 4.4: Expand metrics of project impact, including an evaluation of institutional capacity-building.
AIM-AHEAD capacity-building projects foster institutional growth and promote an institution's ability to engage in future large-scale projects. To date, much of the demonstrated impact of capacity-building projects has focused on the success of individual awardees. The evaluation team could also develop and collect metrics that capture concepts related to the success of the institution, such as "Does the institution then advance based on involvement in the program?" Additionally, tracking the downstream benefits (i.e., mid-and long-term impact) of the work awardees facilitate by providing the data and infrastructure to others is suggested.

Recommendation 4.5: Lengthen the award timeline.
As described in the other North Star sections, delays due to regulatory requirements (e.g., IRB approval, data access) are a significant concern for many awardees given AIM-AHEAD's short funding timelines. AIM-AHEAD has addressed these challenges by establishing the Regulatory Compliance Office (RCO) within the Leadership Core, which develops resources, tracks progress and provides assistance to both awardees and their institutions. Lengthening the primary award timeline from one year to either two or three years will allow awardees to save their protected time for active research rather than waiting for access.

Recommendation 4.6: Develop sustainability plans.
Current awards rarely include long-term sustainability plans. AIM-AHEAD should outline plans for how communication and relationships with community organizations will continue as awardees transition into new positions and may become less involved with AIM-AHEAD. Processes that enable alumni to stay engaged with AIM-AHEAD once their funded programs have ended should also be considered.

Conclusions

The initiative successfully built a nationwide network of institutions and organizations. With over 7,000 members, 4,293 trainees, and 1,779 mentors, the program brought together researchers, healthcare providers, community organizations, the private sector, and hard-to-reach communities that often lack

access to traditional research funding. Through its virtual platform, AIM-AHEAD Connect, it fostered a vibrant ecosystem of mentorship and professional development, offering networking, courses, webinars, and symposiums. The program also developed specialized AI/ML training curricula, equipping nearly 400 researchers and clinicians across the country with mentored and hands-on skills to apply AI in health research. Collaborations with other NIH programs have further expanded the reach and impact of AI/ML training across biomedical research. Feedback from trainees and evaluation metrics demonstrate enhanced skills, improved access, and increased "credibility" in the AI for health space

The consortium's success is also evident in its strong partnerships through regional hubs, engaging a wide range of stakeholders and empowering communities to participate in AI/ML research and training. The program supported locally driven projects addressing specific health challenges, strengthened institutional capacity, and introduced AI solutions in underserved settings. Notable impacts include expanded tribal collaborations, improved clinical decision-making in safety net hospitals, and the co-development of AI tools with community health centers to enhance patient care. AIM-AHEAD has had a profound impact by fostering multidisciplinary collaborations that tackle key health challenges, including mental health, cardiometabolic health, and cancer, particularly in hard-to-reach communities or low-resourced institutions. By offering tailored infrastructure, regulatory support, and access to a wide range of data resources, the program has facilitated innovative research, such as AI models for predicting kidney transplant dropout risks and multi-modal AI in cancer research. The outcome research results will help us to better understand health disparities with the goal of ultimately improving the health of all Americans. The research projects also resulted in numerous peer-reviewed publications and new funding from federal agencies like NIH, NAIR and NSF and non-federal agencies. Additionally, the program strengthened institutional capacity by building AI-focused labs, federated data networks, and navigation tools, empowering more organizations to lead in AI/ML health research.

Overall, AIM-AHEAD has clearly demonstrated evidence of developing an AI-ready workforce, expanding research capabilities, improving health outcomes, and laying the foundation for long-term impact. These successes provide a strong foundation for continued progress and sustained support of the program to maintain momentum, broaden the program's impact, build a pipeline of AI-ready researchers and clinicians, and bring AI solutions into communities and institutions, ultimately improving health outcomes for all Americans. The working group recommends renewal of the program with a multi-year award. To maximize the program's success, the working group recommended the following in the next cycle of the program.

1. **Change timelines for the award**: A one-year award period is often insufficient for building meaningful partnerships, completing administrative processes, and executing complex research activities. A multi-year OTA (with 6-9 years duration) allows for more thoughtful planning, stronger trust-building, and more significant research impact.

2. **Develop approaches to maximize the success of mentor/mentee relationships**: AI research and training isn't one-size-fits-all. Institutions vary in resources and readiness, and individuals come from different disciplinary backgrounds. Some need tailored mentorship, others need specific tools or foundational support. A flexible, needs-based approach helps meet people and institutions where they are.

3. **Adapt approaches to maximize community trust and commitment** establishing community ambassadors program can sustain expertise and engagement in local communities. These

ambassadors can promote AI/ML education, facilitate communication between the consortium and the community, and help tailor initiatives to local needs.

4. **Broaden goals for stakeholders, partners and funding resources**: As the AI continues to evolve at an unprecedented pace, the program should be flexible to evolve beyond the current scope to support next-generation technologies, new research frontiers, and expanded workforce capabilities. The program should also forge industry partnerships, attract diverse funding sources, and co-develop impactful tools with community voices at the center.

5. **Centralize and broaden support services, communications, and collaboration services:** Adopting a more centralized model for the variety of support services offered can streamline access to key resources, improve coordination, and ensure consistent engagement across all members of the AIM-AHEAD consortium.

6. **Implement novel evaluation approaches: AIM-AHEAD should take a multifaceted approach to evaluation that** better measures impact and community outcomes, tracks how AI-trained talent is transitioning into industry roles, and quantifies the program's ROI beyond traditional academic benchmarks.

7. **Consider methods to assure sustainability of expertise and programs in local communities, academic environments, etc.:** Build local capacity by training community ambassadors/train-the-trainer models, establish permanent support roles, and embed AI/ML education into academic curricula and community initiatives. This will help sustain skills, resources, and collaborations beyond the initial program lifecycle.

Appendix A: Working Group Roster

Co-Chairs

Karen C. Johnston, M.D.
Council of Councils Member (2027)
Professor
School of Medicine
University of Virginia

Jean King, Ph.D.
Council of Councils Member (2028)
Dean of Arts and Sciences
Professor of Biology, Neuroscience, and Biotechnology
Worcester Polytechnic Institute

Susan Gregurick, Ph.D.
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Members

Julie A. Baldwin, Ph.D.
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Executive Director, Center for Community Health and Engaged Research
Regents' Professor, Department of Health Sciences
Northern Arizona University

W. Marcus Lambert, Ph.D.
Associate Vice President for Research
Associate Professor
Department of Epidemiology and Biostatistics
The State University of New York (SUNY) Downstate Health Sciences

Jennifer J. Manly, Ph.D.
Council of Councils Member (2028)
Professor, Neuropsychology
Department of Neurology
Columbia University

Mahasin S. Mujahid, Ph.D.
Chair, Epidemiology Division
Professor, School of Public Health
University of California, Berkeley

Karandeep Singh, M.D.
Chief Health AI Officer
Joan and Irwin Jacobs Center for Health Innovation
University of California, San Diego Health

Lucy Wang, Ph.D.
Assistant Professor
Information School at UW
University of Washington

Ex-Officio Member

Samson Gebreab, Ph.D.
Program Official for AIM-AHEAD
Office of Data Science Strategy
Division of Program Coordination, Planning, and Strategic Initiatives, NIH

Executive Secretary

Eva Lancaster, Ph.D.
Health Science Officer
Office of Data Science Strategy

Appendix B: Working Group Timeline

The working group timeline depicted below shows the main topics and the groups of interviewees.

Date	Topic	Content/Session Focus	Interviewees/Presenter(s)
November 14, 2024	North Star 1	Perspective from Program Leads	Program Leads and Hub Directors of North Star 1
November 14, 2024	North Star 1	Perspective from Trainees and Awardees	Trainees and Awardees of North Star 1
December 12, 2024	North Star 2	Perspective from Program Hub Leads	Program Hub Directors of North Star 2
December 12, 2024	North Star 2	Perspective from Awardees	Awardees of North Star 2
December 12, 2024	North Star 2	Perspective from Community Stakeholders	Community Stakeholders of North Star 2
February 13, 2025	North Star 3	Perspective from Program Leads	Program Leads of North Star 3
February 20, 2025	AIM-AHEAD Program	Perspective from Internal Advisory Committee Co-Chairs	Internal Advisory Committee
February 20, 2025	AIM-AHEAD Program	Perspective from External Advisory Board	External Advisory Board
March 10, 2025	North Star 4	Perspective from Program Leads	Program Leads of North Star 4
March 10, 2025	North Star 4	Perspective from Awardees	Awardees of North Star 4

Appendix C: Meeting Agendas

March 13, 2025 Agenda
NIH and Council of Council Working Group (15 mins)
- Welcome
- Conflict of Interest review
- Review report updates, report timelines

AIM-AHEAD Program Leads Q&A North Star 4 (30 mins)
- NS4: Build community capacity and infrastructure in AI/ML to address community-centric health needs
- AIM-AHEAD Program Leads presentation
- Q&A with AIM-AHEAD Program Leads

Council of Council Working Group Awardees Session (30 mins)
- NS4: Build community capacity and infrastructure in AI/ML to address community-centric health needs
- Introductions
- Q&A with AIM-AHEAD Awardees

Council of Council Working Group Closed Discussion Session (35 mins)
- Summarize the Main Takeaways and Outcomes

Action Items and Next Meeting (10 mins)
- Review the meeting minutes and expand the draft final report

February 20th, 2025 Agenda
Introductory Council of Council Working Group Closed Session (15 mins)
- Welcome
- Conflict of Interest review
- Discuss agenda, debrief NS3

Internal Advisory Committee Session (45 mins)
- Presentation by Dr Lorsch & Dr Chiang
- Q&A

External Advisory Board Session (30 mins)
- Brief Introductions of EAB
- Q&A

Council of Council Working Group Closed Discussion Session (30 mins)
- Summarize Main Takeaways from Int Adv Comm & EAB
- Review draft report/action items
- Reminder: March 13th NS4 meeting

February 13, 2025 Agenda
NIH and Council of Council Working Group (30 mins)
- Welcome
- Conflict of Interest review
- NIH Brief and Q&A

AIM-AHEAD Program Leads Q&A North Star 3 (30 mins)

- NS3: Use AI/ML to address health in behavioral health, cardiometabolic health, and cancer for all
- AIM-AHEAD Program Leads presentation
- Q&A with AIM-AHEAD Program Leads

Council of Council Working Group Closed Discussion Session (40 mins)
- Review Awardees and Stakeholders Responses to the three questions
- Summarize the Main Takeaways and Outcomes

Action Items and Next Meeting (5 mins)
- Next Meeting: Feb 20th with the NIH Advisory Committee and External Advisory Board
- Review the meeting minutes and expand the draft final report

December 12, 2024 Agenda

NIH and Council of Council Working Group (10 mins)
- Welcome
- Conflict of Interest review
- Review NS1 Draft

AIM-AHEAD Program Leads Q&A North Star 2 (30 mins)
- NS2: Increase knowledge, awareness, and national-scale community engagement/empowerment in AI/ML
- AIM-AHEAD Program Leads presentation
- Q&A with AIM-AHEAD Program Leads

AIM-AHEAD NS2 Awardees Q&A (25 mins)
- NS2: Increase knowledge, awareness, and national-scale community engagement/empowerment in AI/ML
- Introductions
- Q&A with AIM-AHEAD Awardees

AIM-AHEAD NS2 Community Stakeholders Q&A (30 mins)
- NS2: Increase knowledge, awareness, and national-scale community engagement/empowerment in AI/ML
- Introductions
- Q&A with AIM-AHEAD Community Stakeholders

Council of Council Working Group Closed Discussion Session (25 mins)
- Summarize Main Takeaways outcomes
- Review any immediate follow-up/action items

November 14, 2024 Agenda

NIH and Council of Council Working Group (10 minutes)
- Welcome
- Conflict of Interest review

AIM-AHEAD Program Leads Q&A North Star 1 (30 mins)
- NS1: Develop a broad talent of AI/ML workforce
- AIM-AHEAD Program Leads presentation
- Q&A with AIM-AHEAD Program Leads

AIM-AHEAD Trainees/Awardees Interview (30 mins)
- NS1: Develop a broad talent of AI/ML workforce
- AIM-AHEAD Trainees/Awardees Interview

- Q&A with AIM-AHEAD

Council of Council Working Group Closed Discussion Session (30 mins)
- Summarize Main Takeaways outcomes
- Review any immediate follow-up/action items

October 15, 2024 Agenda

kickoff meeting with NIH ODSS leadership and Program Staff (10 mins)
- Welcome
- Conflict of Interest review
- Introduction of Council of Council Working Group Members & NIH Program Team

The Council of Council Working Group Charge and Brief Overview of the AIM-AHEAD Program (25 mins)
- Council of Council Working Group Rationale and Charge, and AIM-AHEAD's mission, objectives, and structure with North Stars

Council of Council Working Group Strategy and Cadence (15 mins)
- Approaches to running the Council of Council Working Group
- Brainstorm who should be invited to present at the Council of Council Working Group
- Ways to engage AIM-AHEAD MPIs, trainees, awardees and stakeholders

Overview of Council of Council Working Group Logistics and Access (10 mins)
- Logistics & Access

Future Meetings and Timeline (**10 mins)**
- Tentative timeline
- Upcoming meetings and strategies for scheduling.

Questions and Answers (20 mins)

Appendix D: Overview of Participant Engagement Types

This appendix includes a total number of participants for each of the North Star meetings. Participants either joined the meetings virtually or submitted their responses to questions from the Council of Council Working Group prior to the meetings.

North Star 1
- **MPIs / Program Leads**: 8
- **Fellowship / Trainees**: 14
- **Total Participants:** 22

North Star 2
- **MPIs / Program Leads**: 10
- **Awardees**: 5
- **Community Stakeholders**: 6
- **Total Participants:** 21

North Star 3

- **MPIs/Program Leads**: 9
- **Awardees**: 7*
- **Stakeholders**: 4*
- **Total Participants:** 20

closed session, written responses only

North Star 4

- **MPIs/Program Leads**: 7
- **Awardees**: 9
- **Total Participants:** 16

Appendix E: Acronyms

- ➢ **AI:** Artificial Intelligence
- ➢ **CBPR**: Community-Based Participatory Research
- ➢ **CDC**: Centers for Disease Control and Prevention
- ➢ **CHC**: Community Health Center
- ➢ **CMS**: Centers for Medicare & Medicaid Services
- ➢ **DUA**: Data Use Agreement
- ➢ **EAB:** External Advisory Board
- ➢ **EHR**: Electronic Health Records
- ➢ **FQHC**: Federally Qualified Health Center
- ➢ **IHS**: Indian Health Services
- ➢ **IRB**: Institutional Review Board
- ➢ **ML**: Machine Learning
- ➢ **NAIRR**: National Artificial Intelligence Research Resources
- ➢ **NCI SEER**: National Cancer Institute Surveillance, Epidemiology, and End Results
- ➢ **NIH:** National Institutes of Health
- ➢ **NSF**: National Science Foundation
- ➢ **ODSS:** Office of Data Science Strategy
- ➢ **OTA:** Other Transactions Authority
- ➢ **RCO**: Regulatory Compliance Office
- ➢ **SRTR**: Scientific Registry of Transplant Recipients
- ➢ **VA**: Department of Veterans Affairs