



2036 Long Range Plan Summary

Library Operations

Fall 2021



Introduction

The Library Operations (LO) Long Range Plan (LRP) for 2036 is strategic, thoughtful, and forward-thinking to look beyond the obstacles of today and prepare the National Library of Medicine (NLM) to be resilient in the face of future challenges. This plan identifies emerging trends and provides clear steps on how LO will innovate and evolve to improve access to health information and health equity. LO will prepare for the future by working collaboratively internally, with other divisions of the National Library of Medicine (NLM), across the National Institutes of Health (NIH), and externally with partners globally. LO is committed to new initiatives that align with [NLM's 2017-2027 Strategic Plan](#).

NLM, and therefore LO, are [legislatively mandated](#) to support the essential work of acquiring, organizing, preserving, and disseminating biomedical information. These responsibilities, along with many others, have allowed the provision of reliable access to high-quality health information resources to communities around the world. NLM's mission provides the purpose by which LO can evolve in today's fast-moving, digital, and complex environment and look toward becoming more adaptable to the future landscape.

Responsive to the NLM and NIH missions and visions, Library Operations envisions a future in which data and information will continue to transform and accelerate biomedical discovery and improve health and health care globally. Achieving this vision will require LO to evaluate its products and services, rethink engagement and training activities, and retool its information services to make its vast stores of health information and data findable, accessible, interoperable, and reusable universally. This will require new forms of partnership and engagement with major stakeholders across the government and in the public and private sectors to collaborate, share expertise and best practices, and integrate resources to maximize access to important health information. This plan will thoughtfully guide us to evolve to be the best national library possible.

The LO 2036 LRP focuses on laying out new and future work for LO, and as such, it is not intended to be an all-inclusive plan. LO's core functions to collect, preserve, and disseminate biomedical and health information will remain central. The five goals outlined in this document, however, are targeted towards new and future work in support of the [2017-2027 NLM Strategic Plan](#), the [NIH Data Science Strategy](#), the [NIH Strategic Plan](#), the [Optimize NIH Initiative](#), and the [HHS Artificial Intelligence Strategy](#) to maximize opportunities, streamline processes, and make use of automation.



5 LRP Goals





Goal 1: Create a Modernized Organizational Structure

Introduction

Organizations are ever changing and adapting to advances in processes, technology, and people systems. As such, we are paying special attention to organizational and cultural changes needed for all parts of this Long Range Plan (LRP) to work. This goal is focused internally on the organizational structure, processes, and people skills paramount to enabling the success of the LRP's other four goals and the realization of the LO's 2036 vision.

Vision

Library Operations (LO) provides fast and intuitive access to trustworthy biomedical information that includes literature, terminologies, and data sets made accessible to a global audience. In the spirit of customer service, user feedback drives enhanced FAIR (*findability, accessibility, interoperability, reusable*) principles across LO's product portfolio. LO best serves users by adopting a product and customer-centric organizational structure fueled by workforce expertise and integrated technologies. This modern design allows the organization to act with a sense of speed, agility, and innovation in a continuous cycle grounded in supporting scientific research and data-driven decisions, and constantly reevaluate how products are built, integrated, and used to create more value for researchers, clinicians, librarians, and the public.

Objectives

1	Move the organizational structure to a product ownership model by standing up new functions.
2	Increase efficiencies by removing duplication and bolstering technological capability in-house.
3	Cultivate a diverse workforce with the right skills and subject matter expertise.



Goal 2: Unify and Transform NLM Collections

Introduction

Library Operations has a strong and storied history of growing, managing, preserving, and sharing its diverse collection of biomedical information with users who interact with the collection in diverse ways for research, education, and to support the general public in making decisions about their health and well-being. In March 2020, when NLM was forced to close its doors to the public in the face of a global pandemic, no one anticipated the length or impact of the closure. The need for an aggressive digital strategy is more apparent now than ever before. There is an undeniable and permanent shift in how users need—and expect—to discover and access biomedical information online, any time, and in any format. In a world where most users will come to NLM’s “shelves” electronically, we need to make finding valuable resources easier in a unified, cohesive collection.

Vision

To meet the Library’s legislative mandate of disseminating information to users in real time and around the globe, LO will further integrate literature and redefine and manage its diverse collection as a single collection and unified product, encompassing both historical and modern collections. LO will create a single collection management organization that will maximize expertise, physical space, technology, equipment, and workflows. Acquisitions will be centrally managed and executed based on the principles in the NLM Collection Development Guidelines and with the needs of the users at the forefront. As a unified collection, LO will make biomedical information readily accessible by accelerating digitization, increasing digital acquisitions, providing access to data in the collections, and ensuring continued investment in the preservation of the collection regardless of format.

Objectives

1	Create an organizational home for the unified collection.
2	Accelerate digitization and digital acquisitions to improve discoverability.
3	Ensure continued investment in infrastructure and collection space.



Goal 3: Support and Promote the Use of Health Data Standards and Terminologies

Introduction

NLM has a long history in the Health Data Standards and Terminologies (HDST) domain, from the development of subject headings for its *Index-Catalogue* in the mid-1900s to the involvement in the Unified Medical Language System (UMLS) project decades later. NLM has since become a leading partner in the space, and its role has expanded to the production and support of key HDST and tooling, including LOINC, MeSH, RxNorm, and SNOMED CT, the NIH Common Data Elements (CDE) Repository, and the Value Set Authority Center (VSAC).

In an era of accelerating change marked by an explosion of genetic and other health data and rapidly evolving technologies, NLM's HDST must be agile enough to adapt and adopt new concepts spanning infectious diseases, social determinants of health, environmental threats, and changing demographics and policies. NLM must ensure it continues to support, promote, and facilitate the use of standards by collecting terminologies, creating tools, providing curation services and content when needed.

Vision

NLM will develop, advance, and promote the usage of HDST to support effective and equitable sharing, understanding, and use of health and biomedical data in research and clinical systems by fostering a culture of continuous improvement and adaptation, supporting research needs in HDST, and engaging with the HDST community.

NLM will produce and support HDST that serve as the building blocks of applications and downstream services across NLM, NIH, and other government, commercial, and non-profit organizations. NLM must invest in the management of its HDST, seeking out new ways to automate, audit, and correct for quality, improve accessibility, and support these activities with other standards development organizations (SDOs). NLM will pay particular attention to issues of interoperability, technical assistance, and the promotion and use of HDST in ways that contribute to collaborations across the research and clinical spectrum in support of Goal 1 of the NLM Strategic Plan, to Accelerate discovery and advance health through data-driven research.

Objectives

1	Establish an Office of Health Data Standards and Terminologies.
2	Guide development, maintenance, and distribution of health data standards and terminologies.
3	Promote the adoption and effective use of health data standards and terminologies.



Goal 4: Deliver Customer Design and Experience (CX) Support

Introduction

Customer Experience (CX) is not a new concept; NLM has been doing CX for a long time. What is new is the government's central focus on CX improving the customer experience by accessing government-produced information and services with efforts such as the 21st Century IDEA legislation, President's Management Agenda (PMA) for improving customer experience, and OMB Circular No. A-11 (2021) Section 280 – Managing customer experience and improving service delivery. The 21st Century IDEA legislation aims to enhance the digital experience for government customers and reinforce existing requirements for federal public websites.

To better comply with this guidance and best practices, LO will provide CX support aimed to improve the user experience with NLM products and services by assisting product teams to gain an enhanced understanding of customer needs and translate those findings

into measurable actions. The CX Office will use resources offered at the HHS or NIH levels and from leading experts to support product owners' achievement of this goal. Institutionalizing a customer experience mindset and leveraging data insights will improve service delivery and lead to increased trust, additional innovation, measurable cost avoidance, and operational efficiencies.

Vision

The CX Office will provide leadership, support, and training to LO product owners to assist in the continuous enhancement of products and services. The CX Office will help product owners understand user behavior and customers' needs and will translate that understanding into its product development and management. The CX Office will put the principles of digital government strategy into practice to enrich how NLM conducts business and communicates with the public using a consistent look and feel and in ways that do not overlap or duplicate legacy sites.

Objectives

1	Establish a customer experience organization and strategy.
2	Build a common set of practices and standards.
3	Provide product consultation and assessments.



Goal 5: Know and Equitably Engage our Users

Introduction

NLM's impact on accelerating biomedical discovery and improving health comes from the use of its resources and is dependent on people's awareness, understanding, and knowledge of using them. Information professionals skilled in using NLM services and informing others about the Library's offerings can amplify the impact for diverse audiences. For some communities, long-term partnerships with NLM can make a big difference in successfully gaining access to information.

NLM can foster an impactful equitable engagement by leveraging and contributing to the evidence-based activities, including the scientific disciplines that undergird effective, meaningful engagement. In addition to supporting the public's ability to make informed decisions about their health and well-being, LO engagement and training can directly support NLM intramural research and NIH-funded research due to the programs' presence and connections across the NIH, in communities across the U.S., and with other

federal agencies, external organizations, and global partners.

Vision

By 2036, LO engagement and training programs will effectively and equitably engage stakeholders to facilitate access, delivery, and dissemination of NLM and NIH's trusted health information resources and contribute to the research ecosystem.

As the Library's recently centralized unit, the Office of Engagement and Training will provide the skills and expertise needed to deliver effective, equitable engagement programs, maintain relationships, build sustainable infrastructure in underrepresented communities, and complement and enhance other NLM engagement and training activities. Importantly, this means that the vision supports not just LO but all of NLM (e.g., product owners). To achieve this vision, LO will execute three strategies: implement precision engagement, maintain dynamic partnerships, and increase contributions to the research ecosystem.

Objectives

1	Improve the precision and effectiveness of health information engagement activities.
2	Maintain a dynamic partnership portfolio.
3	Increase contributions to the research ecosystem.

Conclusion

The five goals outlined build on LO's 3Cs—collect, curate, connect—to position LO towards new and future work. They are areas we need to refine and resource appropriately as NLM moves into its 3rd century. LO will engage in continuous evaluation to assess whether success is achieved in each goal and flex/pivot where/when needed based on changes in the context or work.

As a first step, LO will create Working Groups and determine the prioritization of the short-term goals outlined in the LRP. LO will simultaneously work on multiple goals in parallel to achieve its short term objectives. While the Library remains under renovation through 2023, LO's initial priority is to jumpstart collection management process efficiencies (Goals 1 and 2), stand up the office of HDST (Goal 3), enhance its CX web presence (Goal 4), and pilot new approaches for user engagement with NLM (Goal 5). By focusing on these, LO will be able to move towards a modernized organizational structure (Goal 1), while equitably engaging our users (Goal 5). LO will conclude the initial year with specific 3-year and 5-year plans to propel toward its 2036 vision.

LO is committed to continuous improvement, innovation, and data-based decision-making aligned with the NLM Strategic Plan and driven by the needs of NLM's users. With our core values that include user focus, service, knowledge sharing, quality, and trustworthiness serving as our beacon, we are confident we will deliver on the goals outlined in this bold 15-year plan.



U.S. Department of Health and Human Services
Public Health Service
National Institutes of Health
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