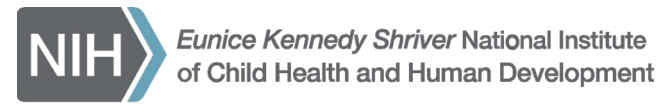


NIH Research Plan on Rehabilitation

Theresa Cruz, PhD

National Center for Medical Rehabilitation Research (NCMRR)





Background

NICHD History



Congress directs NICHD to lead SIDS research
1974

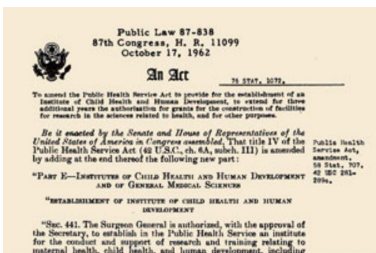


Best Pharmaceuticals for Children Act
2002

Healthy pregnancies.
Healthy children.
Healthy and optimal lives.
New Mission and Vision
2020

1962

NICHD Founded



1990

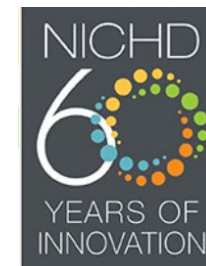
National Center for Medical Rehabilitation Research



2007

Renamed: *Eunice Kennedy Shriver* NICHD

2022



National Center for Medical Rehabilitation Research (NCMRR)

- Through basic, translational, and clinical research, NCMRR fosters development of the scientific knowledge needed to enhance the health, productivity, independence, and quality of life of people with physical disabilities
- Collaborates with many other government agencies and organizations to help advance medical rehabilitation research and care
- Supports research through research grants, training and career development activities, small business and technology grants, and research infrastructure



Implications of the 21st Century Cures Act (P.L. 114-255): Improving Medical Rehabilitation Research at the NIH

1990 Law	2016 Law
Research plan required within 18 months, with updates as appropriate	Revised research plan not less than every five years; NCMRR Director annually reports to Coordinating Committee and Advisory Board, identifying resources for research
Coordinating Committee makes recommendations for research priorities	Coordinating Committee makes recommendations for research priorities; Committee periodically hosts scientific workshop
Establishes Advisory Board with specified membership	Reauthorizes Advisory Board with updated, specified membership; Adds DPCPSI Director
	Review and coordination/prevent duplication
	Secretary may enter into Interagency Agreements
	New definition of medical rehabilitation research





Previous Research Plans

Previous NIH Research Plan on Rehabilitation

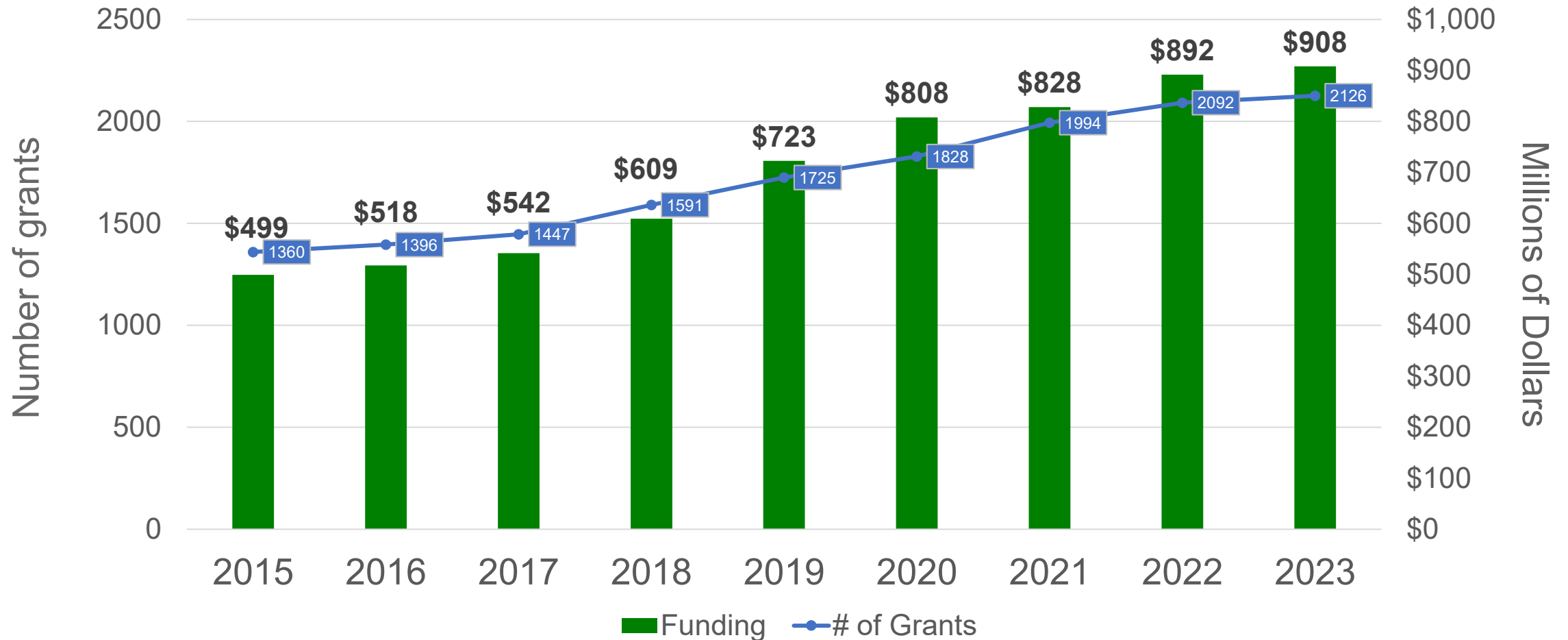
- Themes from 2016 and 2021 Plans
 - Rehabilitation Across the Lifespan
 - Community and Family
 - Technology Use and Development
 - Research Design and Methodology
 - Translational Research
 - Building Research Capacity and Infrastructure
- Highlights for 2021
 - Moving beyond observational studies; greater inclusion of PWDs and their lived experiences, open-source tools, data sharing, and CDEs, etc.



[*See full document](#)



NIH Extramural Rehabilitation Portfolio Across Years



Source: [RePORT \(nih.gov\)](https://report.nih.gov)





2026 Research Plan

Timeline for New Research Plan

2024

- Gather Feedback from Internal and External Parties
- Review Progress on Current Themes
- Draft Potential New Themes

2025

- Refine New Themes and Continue Gathering Feedback
- Finalize Research Plan and Seek Approvals

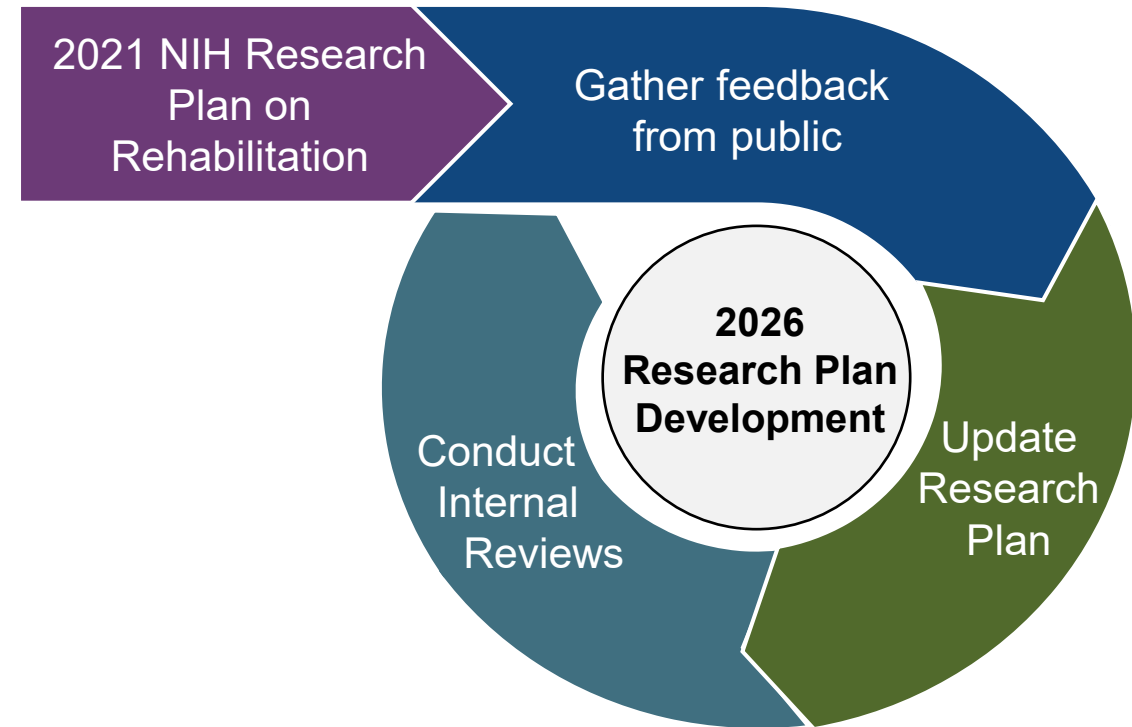
2026

- Publish Final Research Plan



Activities (February 2024 – September 2024)

- Gather input and feedback from public:
Round 1
 - Request for Information issued in February 2024
 - Discussed goals at May 2024 Board meeting
- NIH Medical Rehabilitation Coordinating Committee
 - Chaired by NCMRR and NIDCD
 - Membership from 20 Institutes, Centers and Offices
 - Drafted new themes: June – September 2024





Draft Themes

2026 Proposed Themes

- *Areas for growth in the next five years*
- *Not inclusive of all rehabilitation research*
- *All require input from consumers*

- 1. Basic and Mechanistic Studies**
- 2. Social Determinants of Health**
- 3. Rehabilitative and Assistive Technology**
- 4. Implementation Research**
- 5. Training, Career Development, and Infrastructure**



1. Basic and Mechanistic Studies

Potential Objectives:

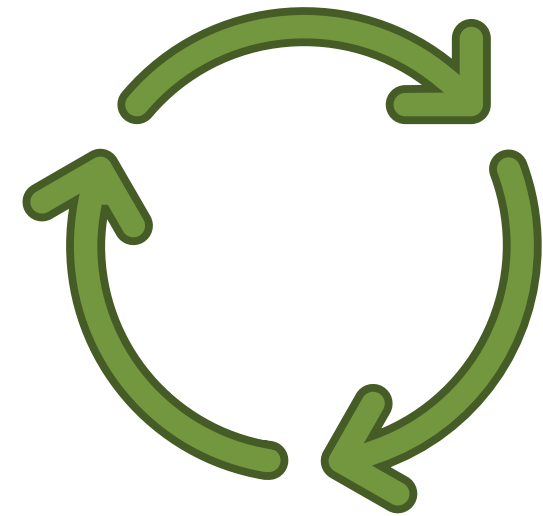
- Support -omics, cellular, and systems level research to understand and predict individual recovery from disabling disease or injury.
- Advance precision medicine approaches for rehabilitation by supporting the development and use of biomarkers associated with specific injuries, illnesses, and disorders to guide prescription of rehabilitation interventions
- Investigate the timing and type of physiological and behavioral mechanisms for adaptive and maladaptive changes associated with disabling conditions.



2. Social Determinants of Health

Potential Objectives:

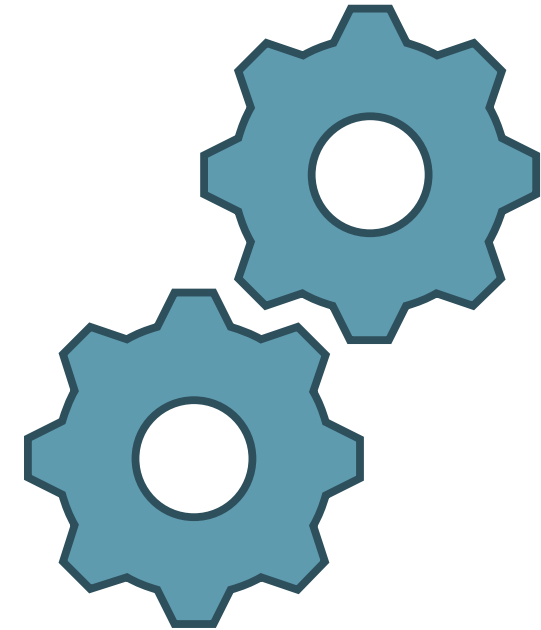
- Use rehabilitation principles to understand and mitigate systemic causes of health disparities experienced by people with disabilities, including ableism.
- Examine the impact of minoritized identities such as racial/ethnic minorities, LGBTQI+, low SES, and rural populations on receipt and effectiveness of rehabilitation therapies.
- Study the barriers and facilitators to rehabilitation and routine preventive health services for PWD through a health equity framework.
- Understand and address the impact of comorbidities on rehabilitation
- Examine the impact of the care delivery environment (i.e. inpatient, outpatient, SNF, community, home, foreign and domestic) on rehabilitation outcomes.



3. Rehabilitative and Assistive Technology

Potential Objectives:

- Support early-stage technology development for rehabilitation
- Develop the evidence base for device usage in low resource settings
- Leverage the resources of the NIH Small Business Program to advance commercialization of products and technology transfer to industry
- Increase access to rehabilitation services through telehealth and remote assessment, delivery of care, and adherence monitoring.



4. Implementation Research

Potential Objectives:

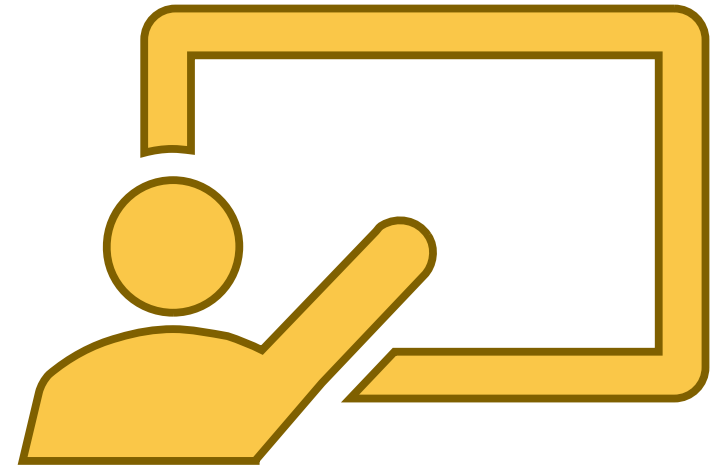
- Work with consumers of rehabilitation to ensure that therapies are desired, acceptable, cost efficient, and easy to use
- Invest in pragmatic studies that show reproducibility of efficacy studies in real world settings
- Plan for adoption and sustainability needs at the beginning of trials
- Engage with continuing medical education and professional societies to translate findings into practice



5. Training, Career Development, and Infrastructure

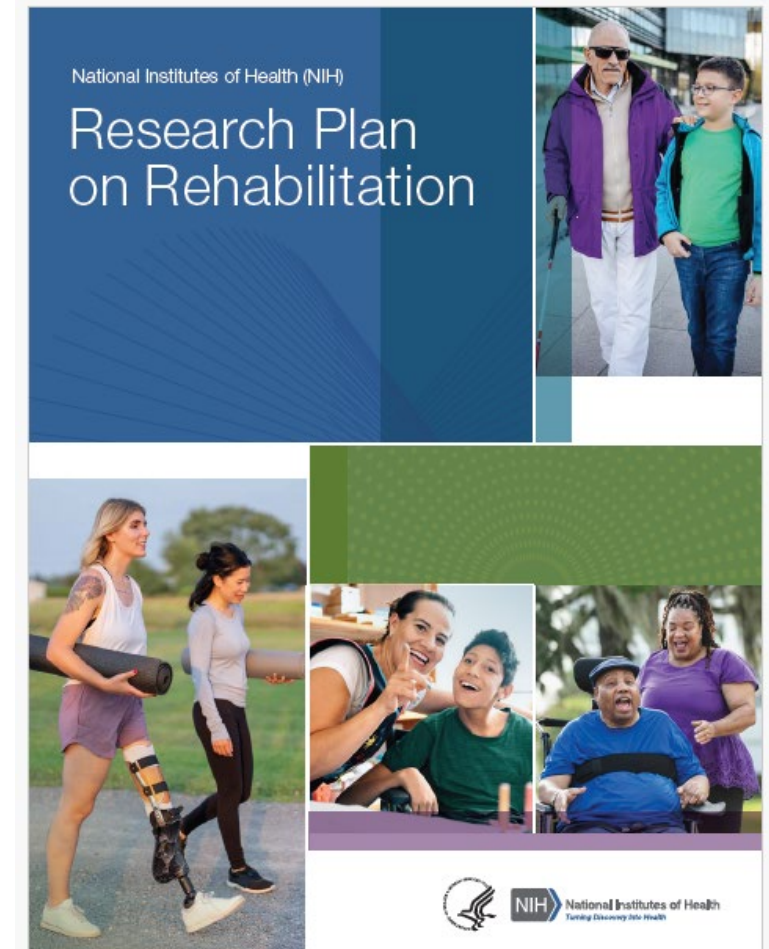
Potential Objectives:

- Develop training programs that provide diverse researchers and clinician scientists at all career stages with access to cutting-edge approaches and methodologies and the insight needed to apply these approaches to advance rehabilitation science.
- Support individual training and career development awards from rehabilitation researchers, as well as early career awards and pilot funding through infrastructure grantmaking mechanisms.
- Develop infrastructure to foster team science approaches for rehabilitation researchers across domains of expertise and career stages to create a robust, self-sustaining network.
- Create and implement a strategy for recruiting individuals with disabilities and underrepresented minority groups into research careers.
- Train rehabilitation researchers in the ethical use of Artificial Intelligence.



Feedback Round 2: October- December 2024

- National Advisory Board for Medical Rehabilitation Research
 - Subcommittee
 - Full Board
- Grand Rounds at Shirley Ryan AbilityLab
- American Congress of Rehabilitation Medicine



Socializing the Plan with the Community

Current plans to further socialize the 2026 Rehabilitation Research Plan refresh include:

- 1 **Issue a second Request for Information (January 2025)**
- 2 **Association of Academic Physiatrists (Feb 2025)**
- 3 **NIH Rehabilitation Conference (March 2025)**
- 4 **American Society of Neurorehabilitation (April 2025)**



Next Steps

1. Issue Request for Information in January 2025
2. Finalize edits to Research Plan in April 2025
3. Seek concurrence with Themes at May 2025 Board Meeting
4. Obtain Clearances
5. Submit to Congress and President
6. Publish and Disseminate Research Plan



Questions

- Join the NIH Rehabilitation Research Listserv:
<https://www.nichd.nih.gov/news/NICHDnews/Pages/index.aspx>

