



Health Disparities Research

NIH and NINR Updates

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National Institute
of Nursing Research

A Little History

How (and why) does NIH code and categorize grants?

Why?

- Transparency
- Program Management

How?

- Through late 2000s: manual coding
- Since then: automated coding – RCDC **(mostly...)**



RESEARCH, CONDITION, AND DISEASE CATEGORIZATION RCDC

Learn how NIH creates the RCDC official categorical spending reports and discover tools for analyzing NIH's research portfolio.

[EXPLORE CATEGORY DIRECTORY](#)

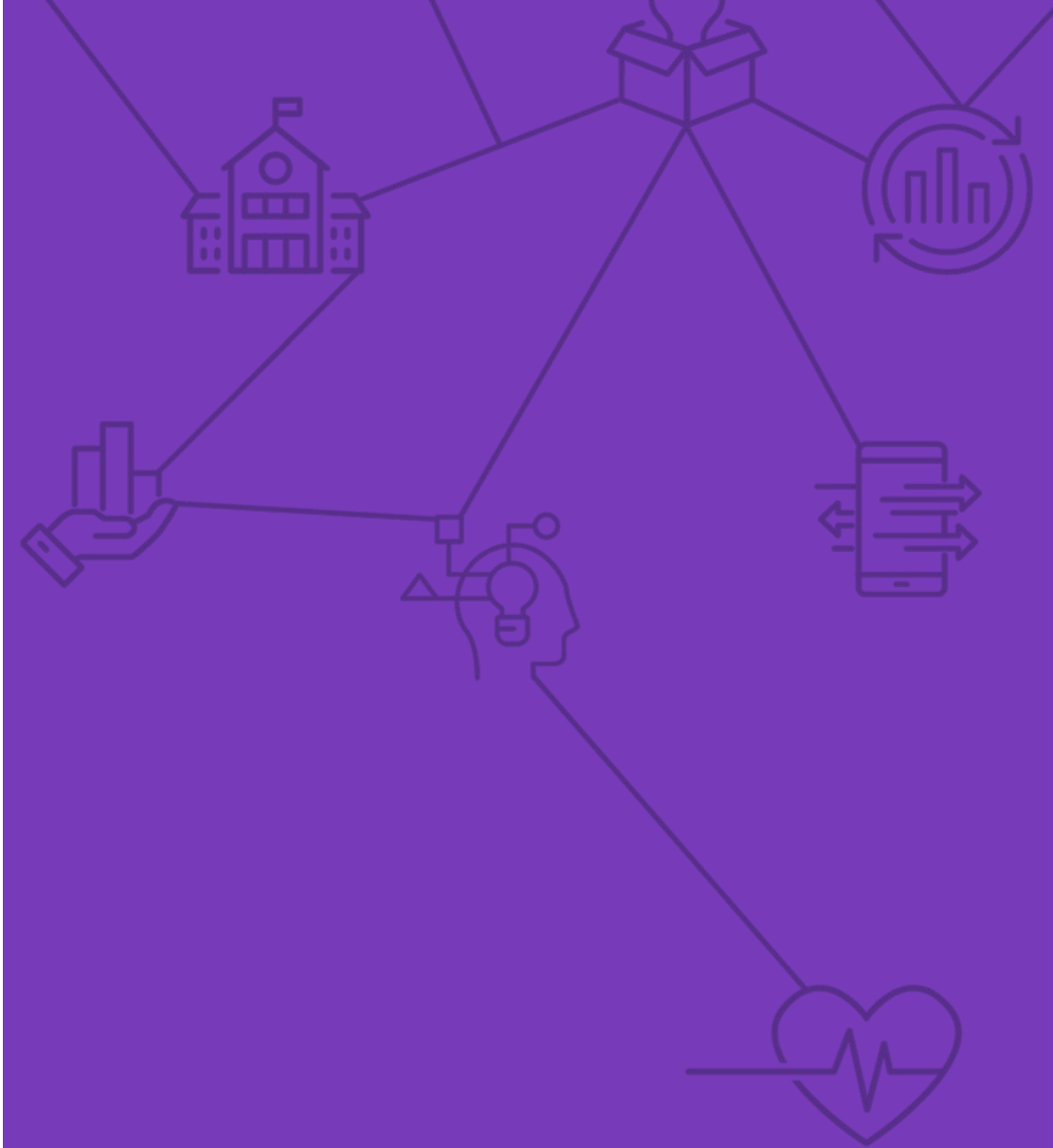


Research, Condition and Disease Categorization (RCDC)

Background

RCDC is utilized at the NIH level for:

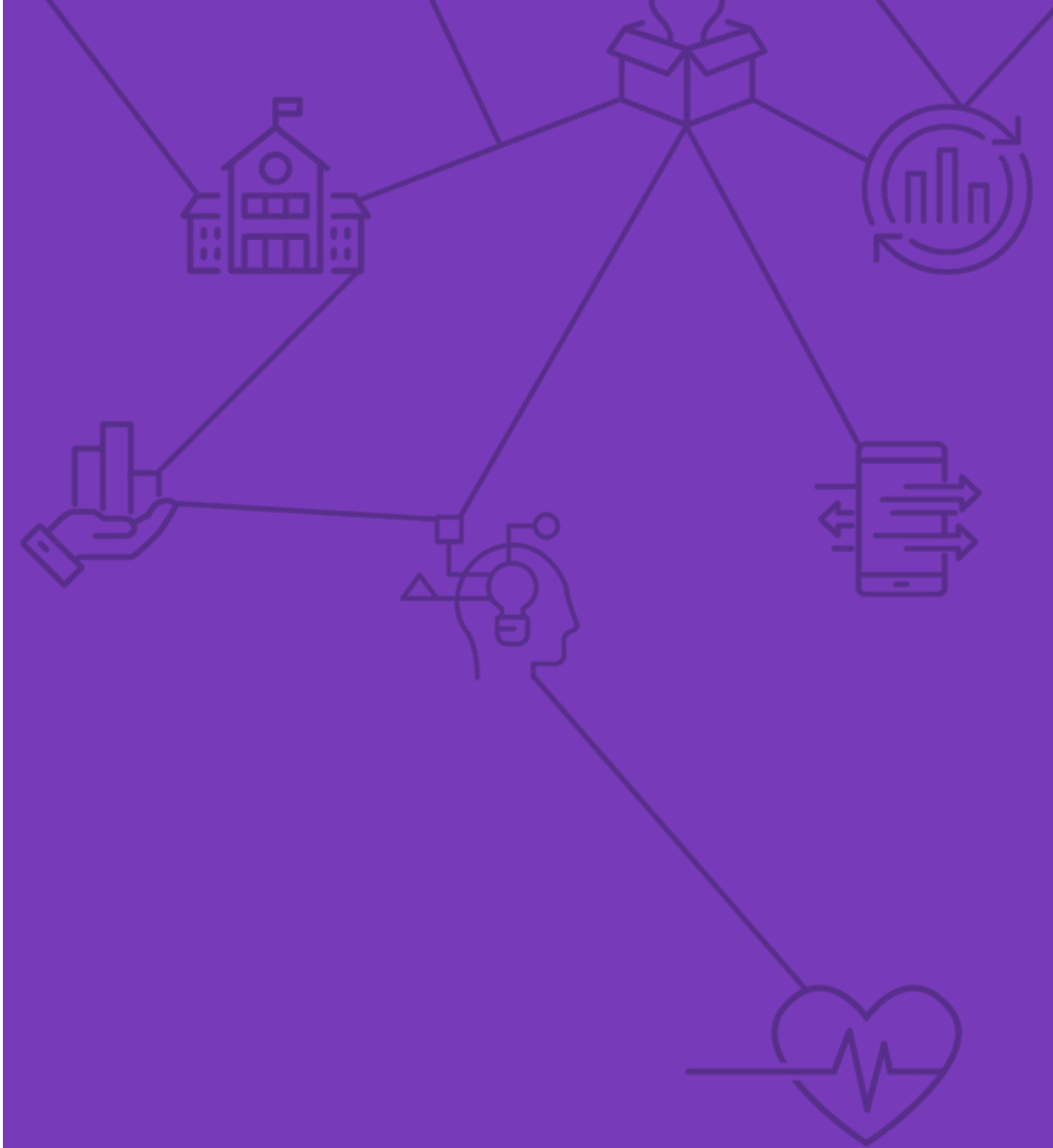
- Reporting processes to categorize funding in research for each fiscal year
- Reporting public funding for 300+ categories
- Utilizing consistent category definitions across all ICs
- Consistent text mining methods applied to all categories each year
- Clear and efficient processes for categorizing and reporting on NIH funding
- Tools for program and category analysis



Research, Condition and Disease Categorization (RCDC)

Process at the NIH level

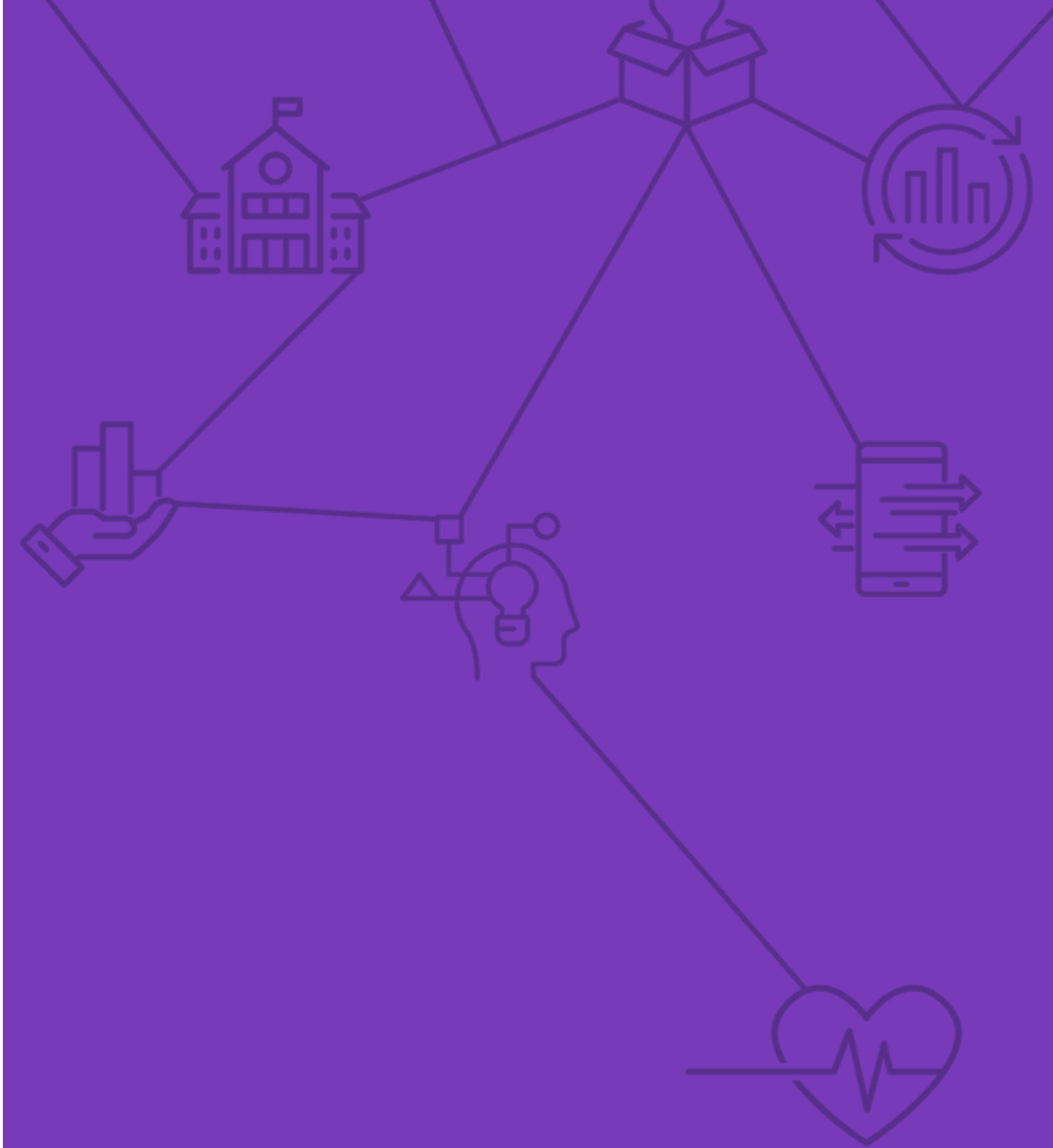
- RCDC indexes and categorizes projects including extramural grants, intramural research projects, research and development (R&D) contracts,
- Automated text mining of projects produces a weighted list of concepts from the RCDC Thesaurus called a project index.
- The categories are also weighted with lists of concepts that define a research area, condition, or disease.
- The category concepts are matched to project indices to produce the category project listing.



Research, Condition and Disease Categorization (RCDC)

Process at the NIH level cont.

- RCDC is a text mining algorithm and is not 100% accurate, therefore staff review the project listings for accuracy on an annual basis.
- RCDC staff maintain the system and frequently updates terms based on current findings and new science.



RCDC Data Populate the NIH RePORT Site

RePORTER

The RePORT Expenditures and Results (RePORTER) module allows users to search a repository of NIH-funded research projects and access publications and patents resulting from NIH funding. Enter just about anything in the RePORTER Quick Search box above (text, PI names, project numbers, fiscal year, agency) or launch the Advanced Search to precisely configure searches using separate search fields.



Welcome to Research Portfolio Online Reporting Tools (RePORT)

In addition to carrying out its scientific mission, the NIH exemplifies and promotes the highest level of public accountability. To that end, the Research Portfolio Online Reporting Tools provides access to reports, data, and analyses of NIH research activities, including information on NIH expenditures and the results of NIH supported research.

Spotlight

[NIH COVID-19 Research](#)

Explore NIH's comprehensive summary of ongoing COVID-19 research, including funding, clinical trials, and more.

[Preview a modernized RePORTER](#), which offers faster searches and mobile-friendly interface.

Estimates of Funding for Various Research, Condition, and Disease Categories (RCDC)

Table Published: March 31, 2023

Select a category from the table below to see the trend

Filter Research/Disease Areas

| Research/Disease Areas (Dollars in millions and rounded) | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | 2022 | 2023 Estimated | 2024 Estimated | 2021 US Mortality ¹⁹ | 2021 US Prevalence SE ¹⁹ |
|---|------|------|------|------|------|------|------|------|-------------------|-------------------|------------------------------------|--|
| Acquired Cognitive Impairment | 798 | 1132 | 1560 | 1978 | 2423 | 2897 | 3259 | 3513 | 3642 | 3663 | - | - |
| Acute Respiratory Distress Syndrome | 108 | 103 | 107 | 123 | 126 | 158 | 148 | 140 | 145 | 146 | 56972 | - |
| Adolescent Sexual Activity | 85 | 91 | 99 | 96 | 102 | 88 | 94 | 81 | 85 | 87 | - | - |
| Agent Orange & Dioxin | 9 | 9 | 11 | 10 | 8 | 6 | 8 | 9 | 10 | 10 | - | - |
| Aging | 2698 | 3150 | 3572 | 4084 | 4653 | 5276 | 5657 | 6044 | 6282 | 6342 | - | - |

<https://report.nih.gov/>



Health Disparities

Transitioning to Automated Coding

Brief History: NIH Minority Health and Health Disparities Coding and Reporting at NIH



Prior to 2016

- Manual process
- 27 ICOs ~ 27 definitions.
- NIH/OER Supplied DEIA funding

2016 – 2022

- RCDC Manual Categorization System (MCS)
- Subcategories for Research, Inclusion, Training, Infrastructure

2023+

- Standard RCDC Categories established
- Research became the focus for each category
- New DEIA categories were added
- Implemented for FY2023 NIH Portfolio

Benefits of Automated Coding

- Increased accuracy and transparency
- Consistent definitions across NIH
- Minimizes coder bias
- Allows more accurate reporting and portfolio analysis
- Can better distinguish between research and workforce development efforts

Before and After

Pre-FY 2023

- Health Disparities
- Minority Health

2023 -

- Health Disparities Research
- Racial and Ethnic Minority Health Research
- Health Disparities and Racial or Ethnic Minority Health Research
- Workforce Diversity and Outreach
- Building Research Capacity at Institutions with Limited NIH Funding



Definitions

Health Disparities Research

- Research investigating preventable differences in health outcomes that adversely affect disadvantaged groups or communities, and research determining how this knowledge is translated into interventions to reduce health disparities
- Population agnostic, all HD research included
- **FY23 NIH: \$5.2B**
- *(FY22 NIH: \$4.9B)*

Racial and Ethnic Minority Health Research

- The scientific investigation of distinctive health characteristics and attributes of minority racial/ethnic groups (including multi-racial individuals)
- Awards that simply stratify data by race/ethnicity are no longer included
- **FY23 NIH: \$2.5B**
- *(FY22 NIH: \$4.4B)*

Health Disparities and Racial and Ethnic Minority Health Research

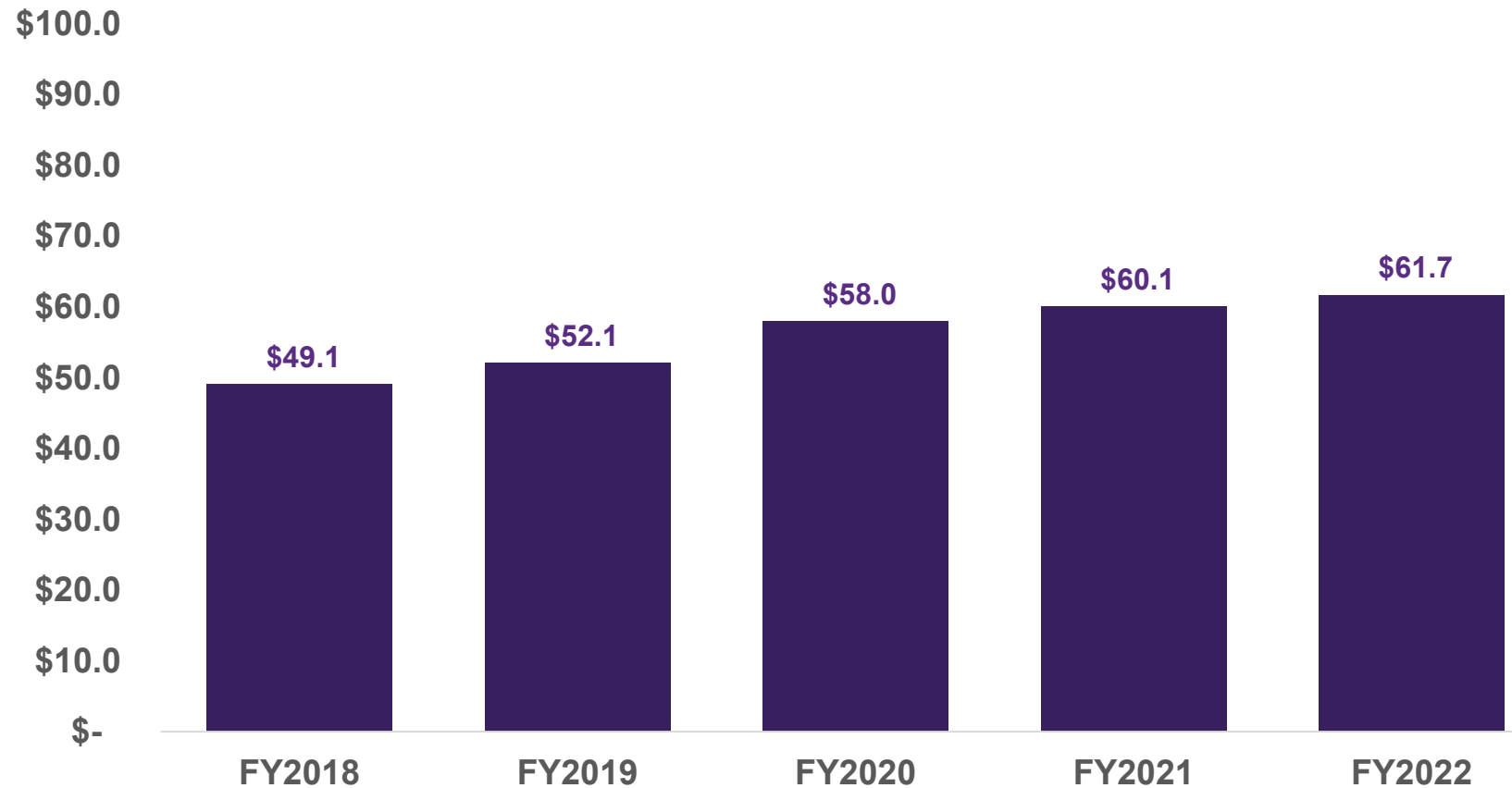
- Union of these two categories
- Eliminates duplicate project counts
- **FY2023: \$5.5B**



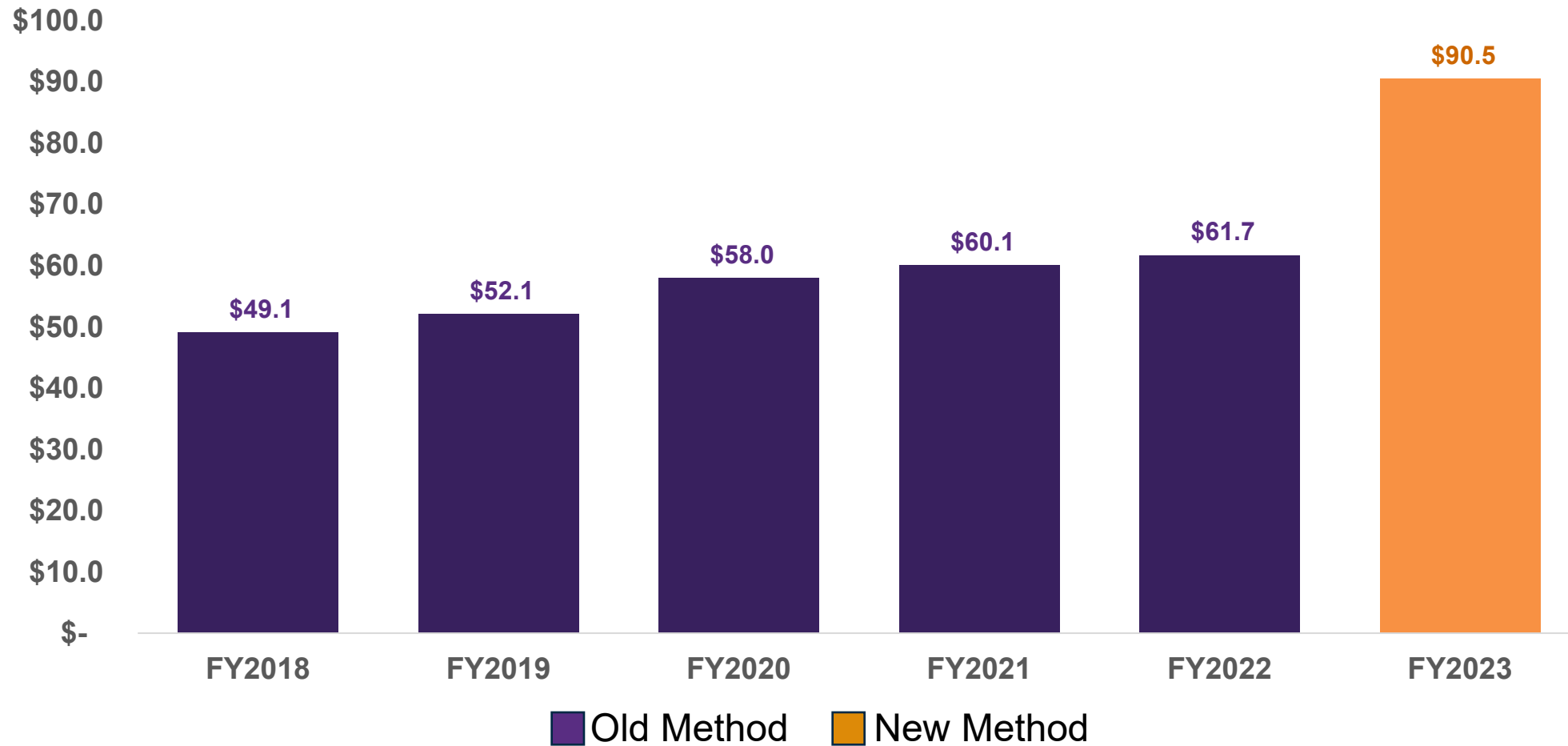
NINR Portfolio Data

RCDC Health Disparities and Minority Health
Categories

NINR Health Disparities Investment – FY2018 to FY2023 (In Millions of Dollars)

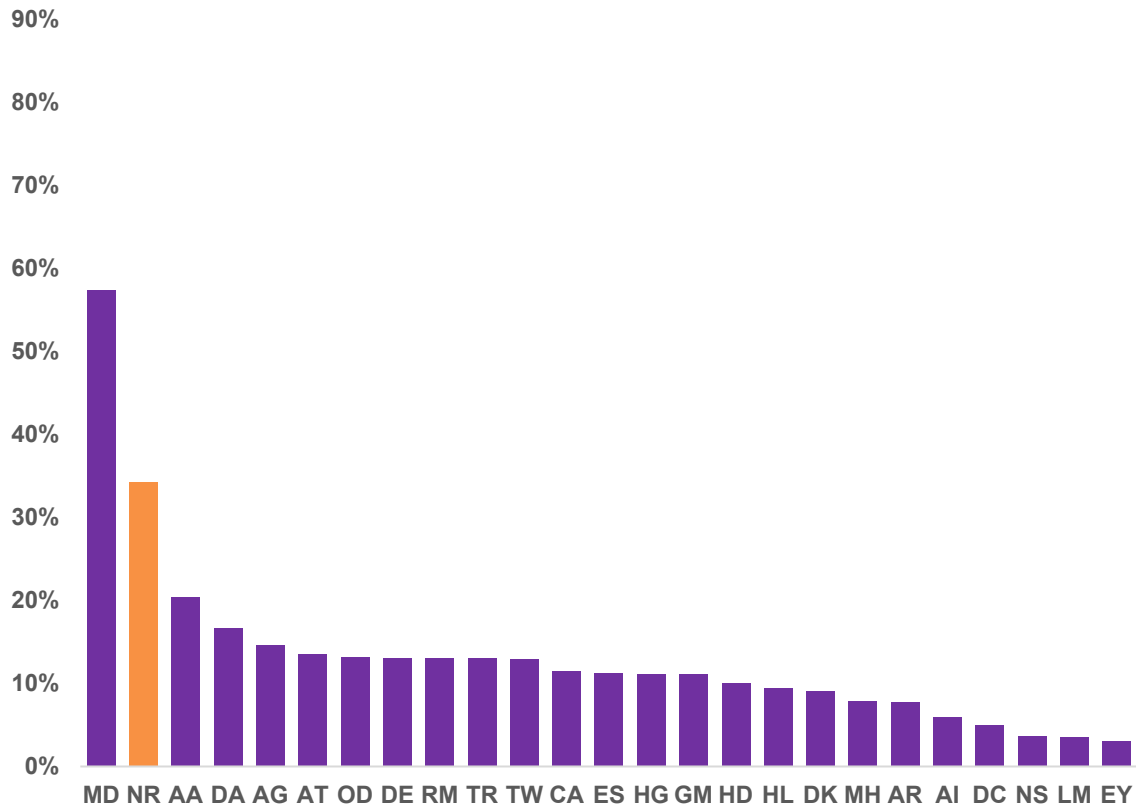


NINR Health Disparities Investment – FY2018 to FY2023 (In Millions of Dollars)

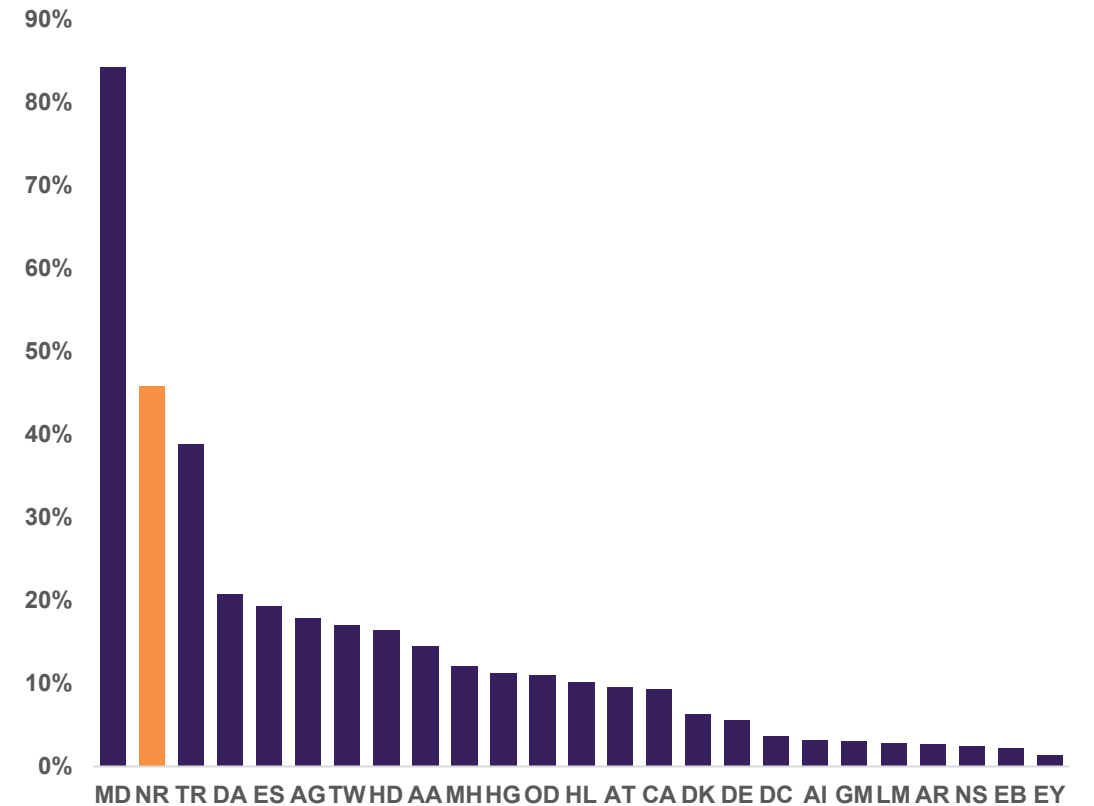


NINR and NIH Health Disparities (Research) as % of Total IC Budget – FY2022 and FY2023

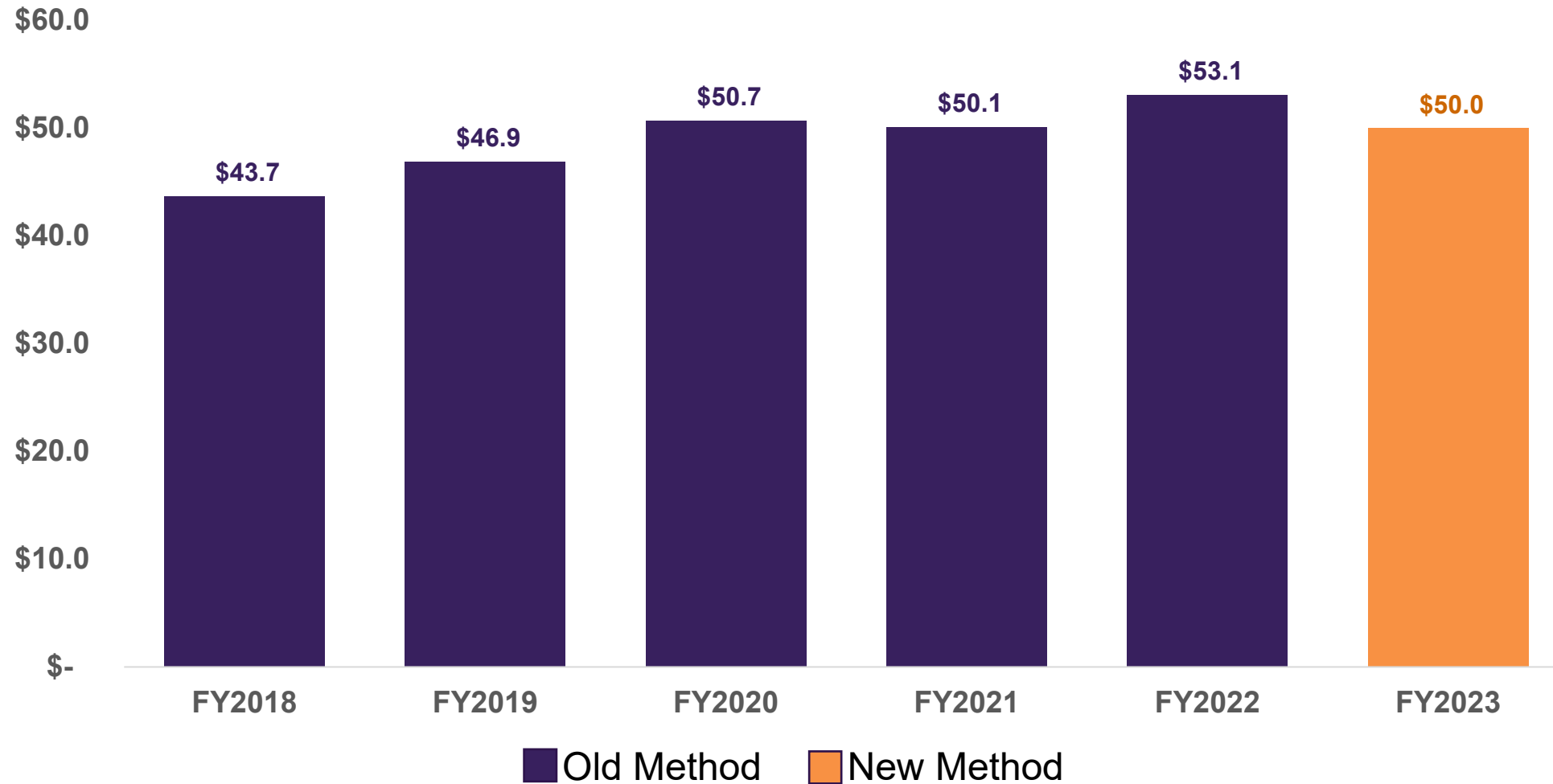
FY2022 NIH HD as a % of Total IC Budget (old method)



FY2023 NIH HDR as a % of Total IC Budget (new method)

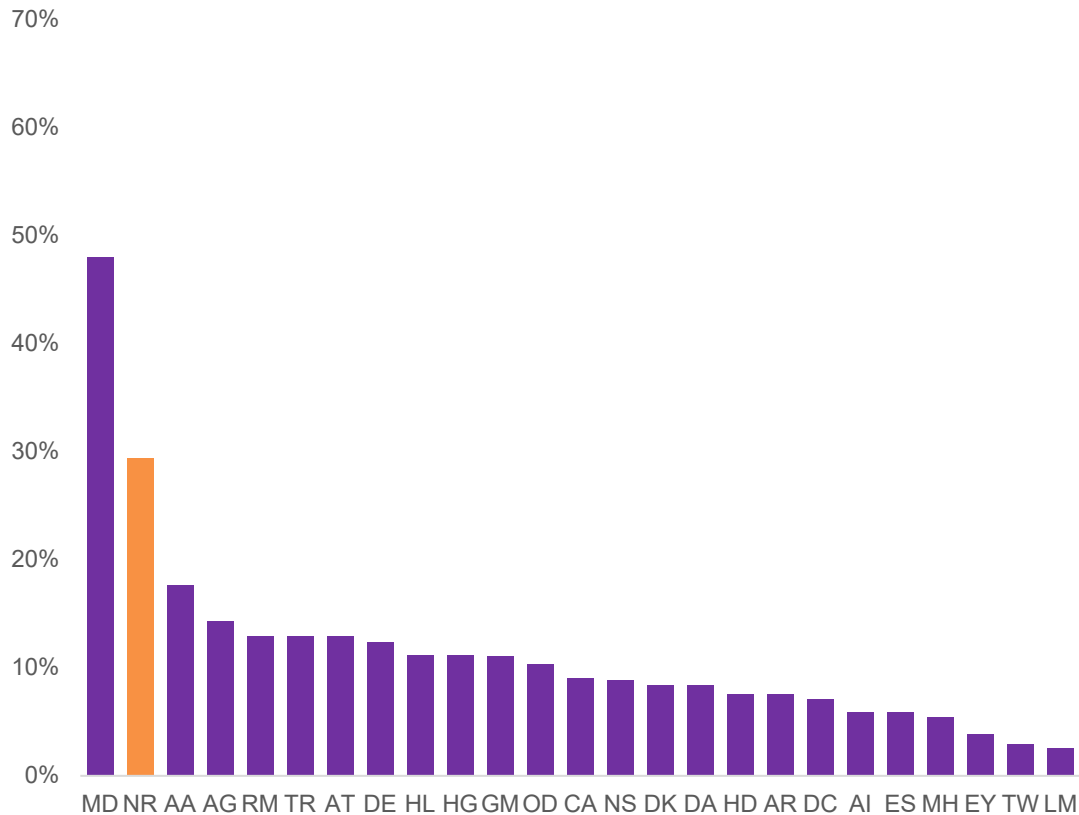


NINR (Racial and Ethnic) Minority Health Research Investment – FY2018 to FY2023 (In Millions of Dollars)

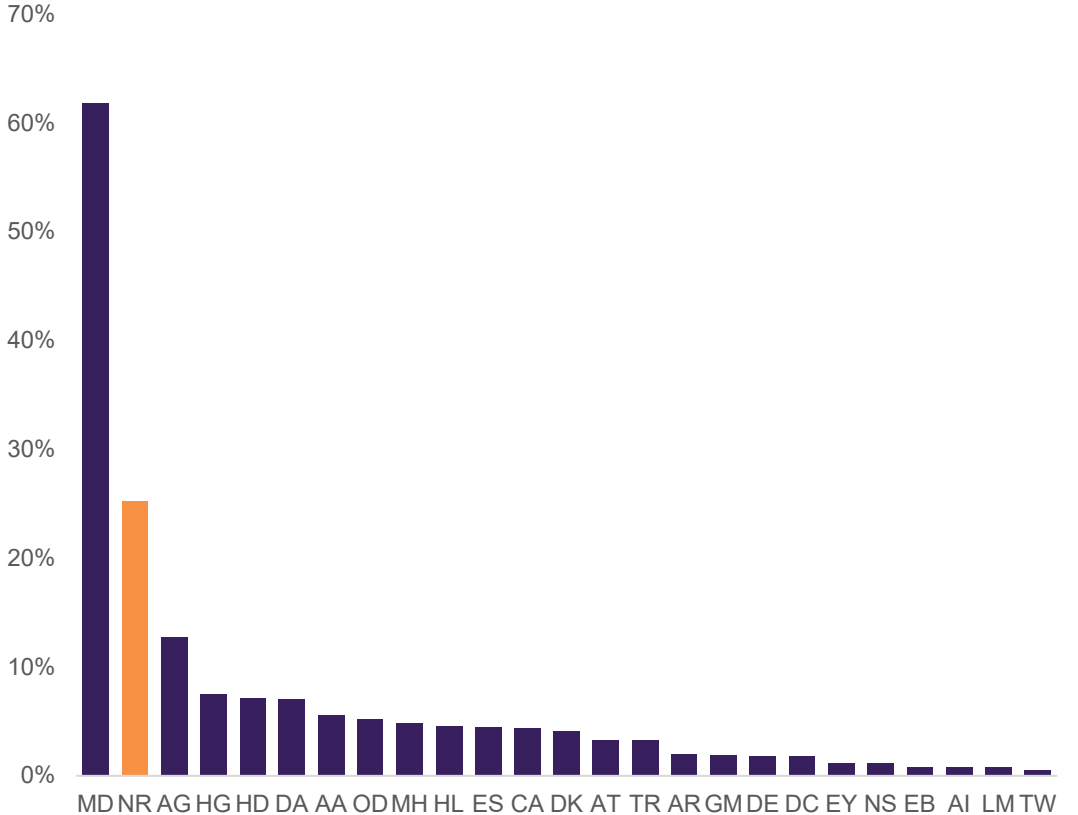


NINR and NIH (Racial & Ethnic) Minority Health Research as % of Total IC Budget – FY2022 and FY2023

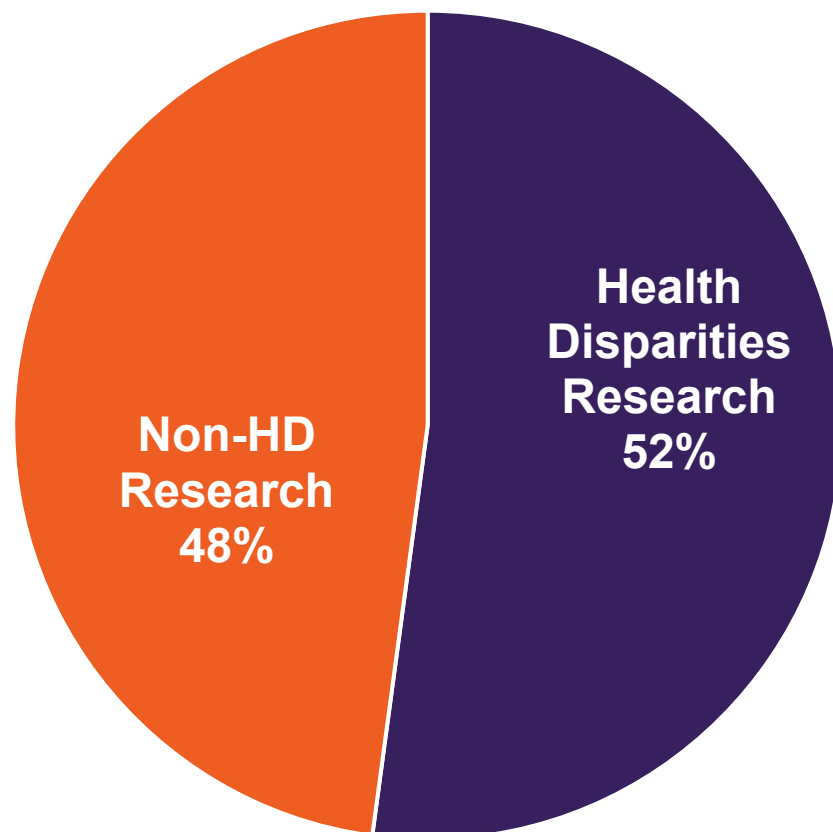
FY2022 NIH MH as a % of Total IC Budget (old method)



FY2023 NIH MHR as a % of Total IC Budget (new method)



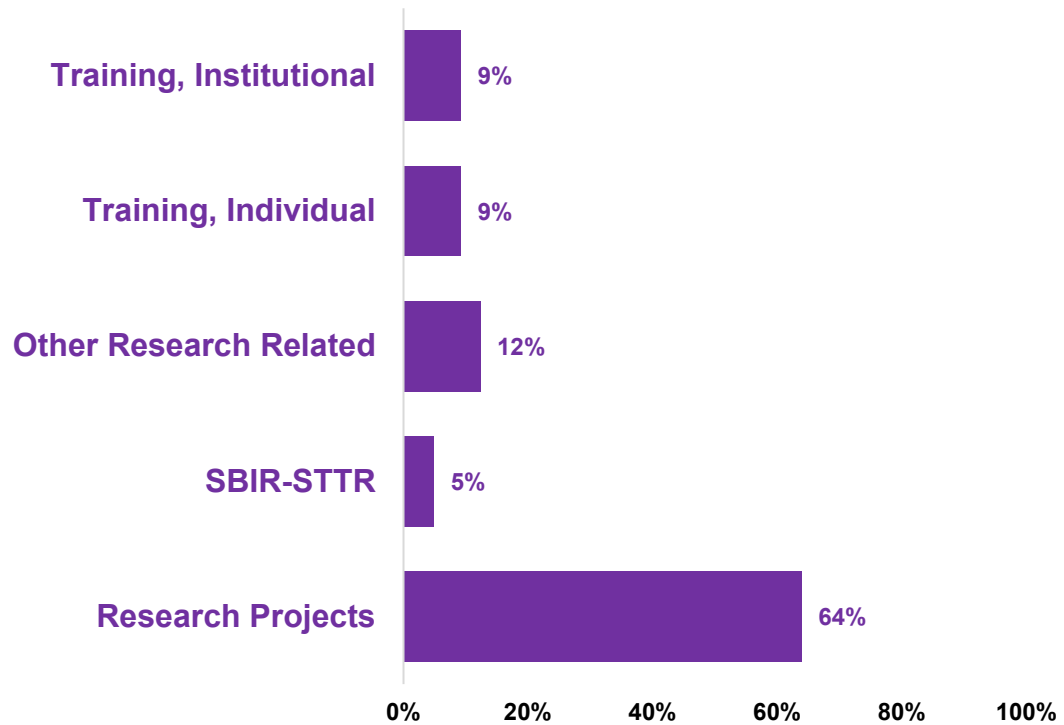
NINR FY2023 - Health Disparities Project Portfolio



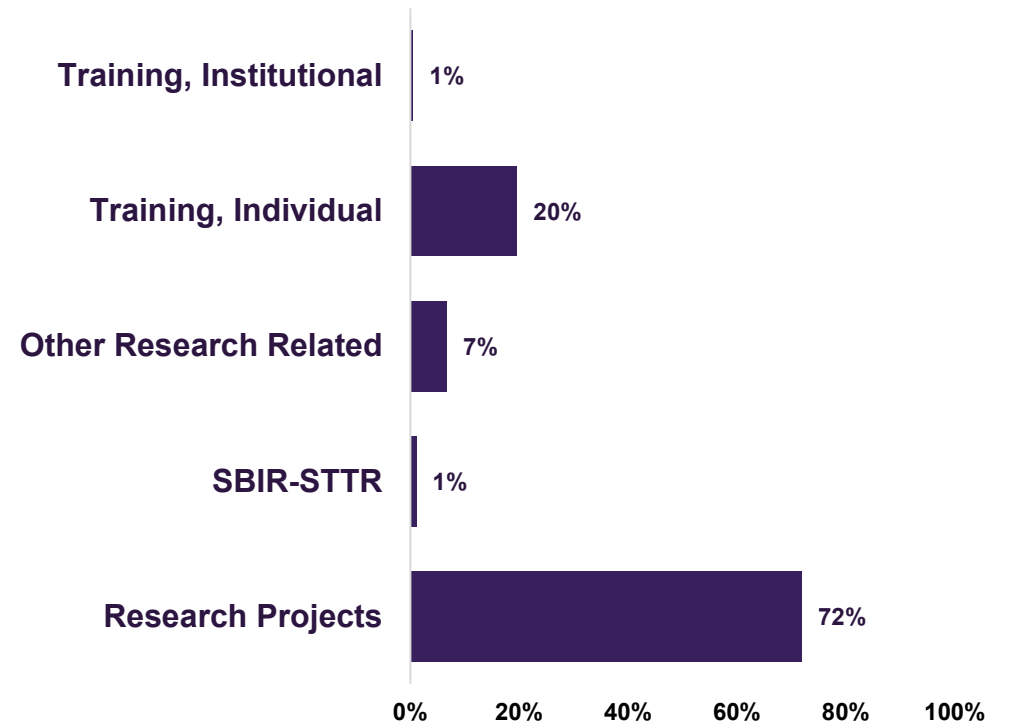
FY2023 – 351 Projects

FY2023 NINR Non-HD and HD Projects by Mechanism

% of Total NINR Non-HD Projects – FY2023

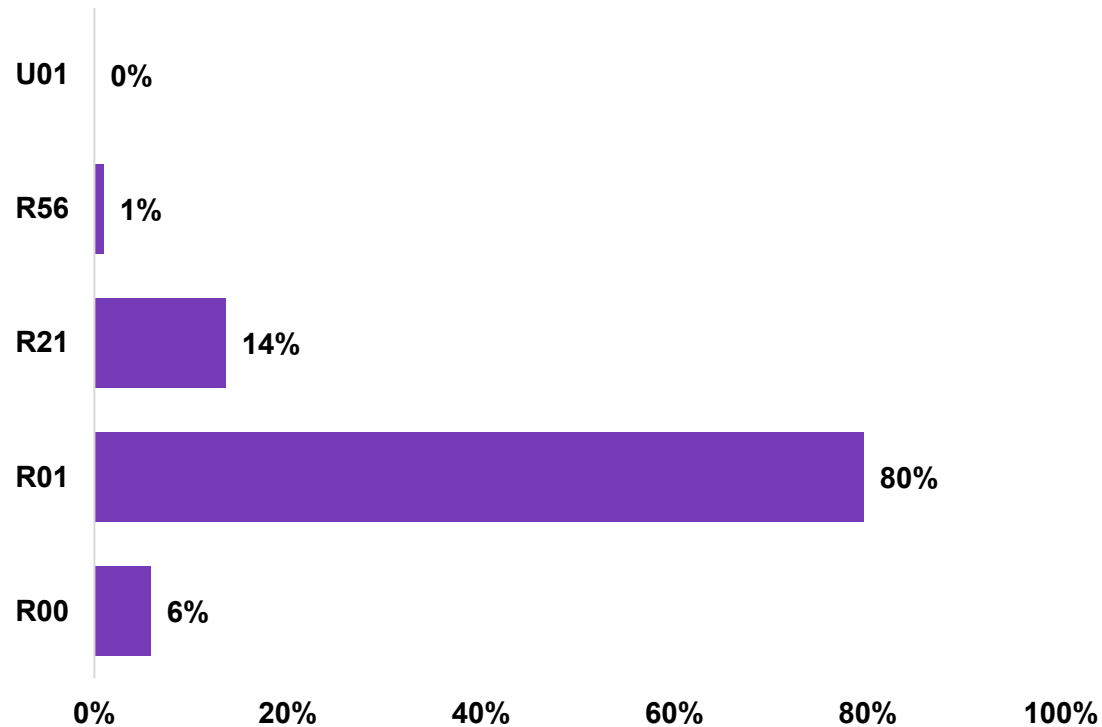


% of Total NINR HD Projects – FY2023

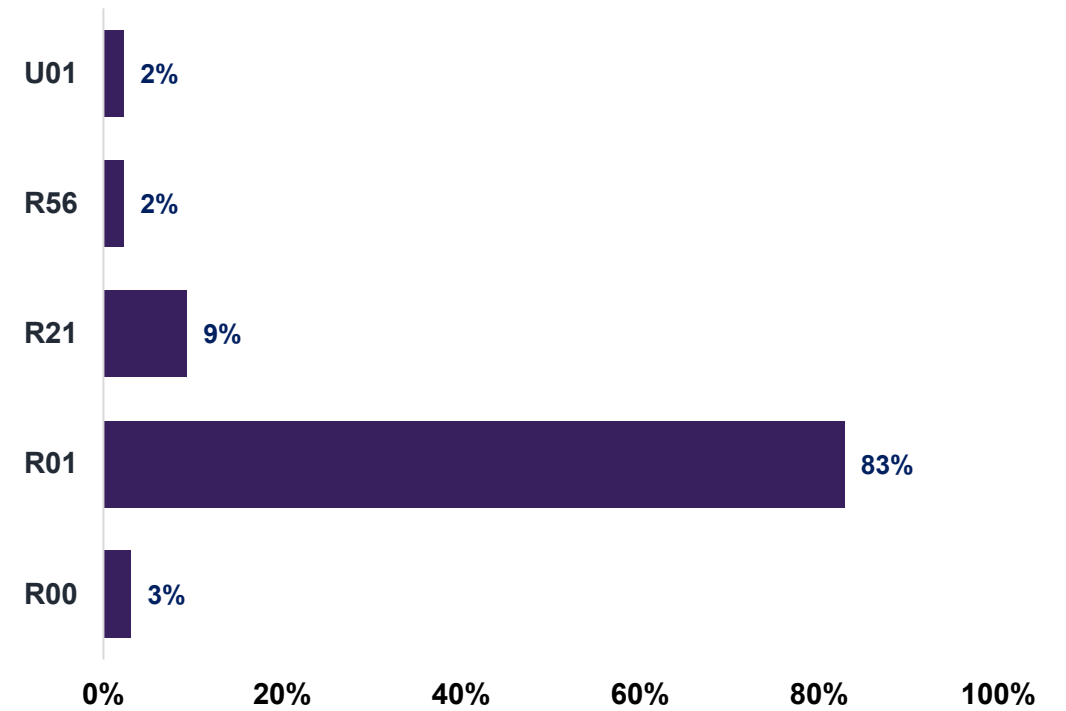


FY2023 NINR Non-HD and HD Projects by Research Activity

% of Total NINR Non-HD Research Projects

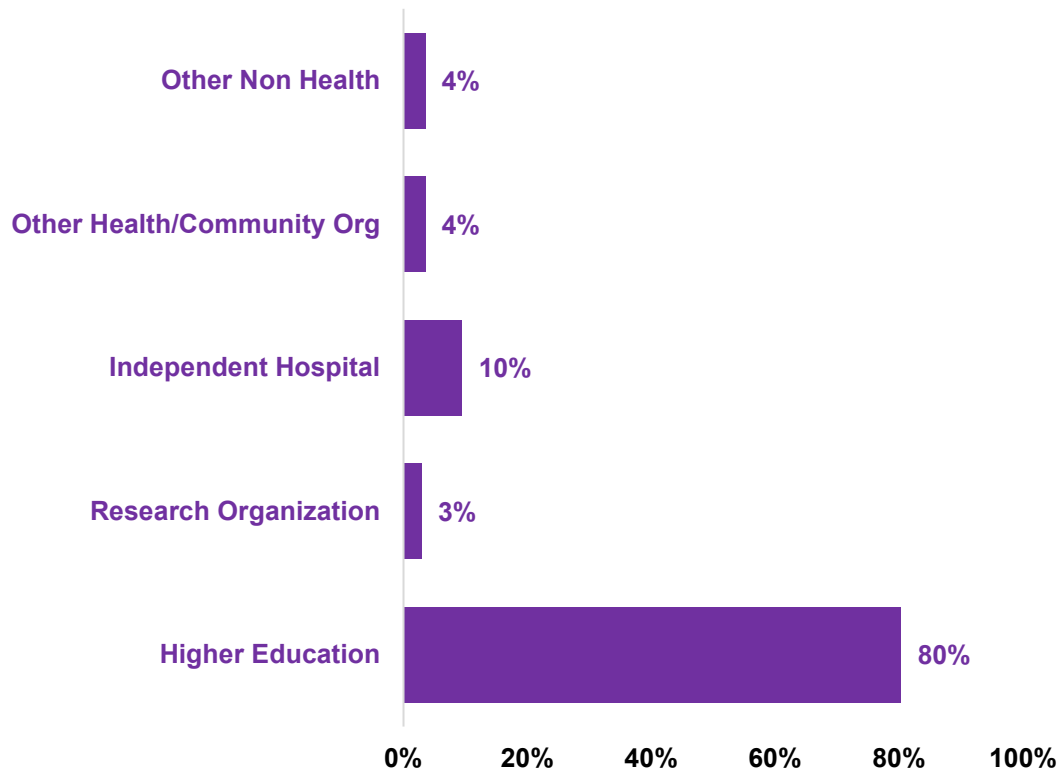


% of Total NINR HD Research Projects

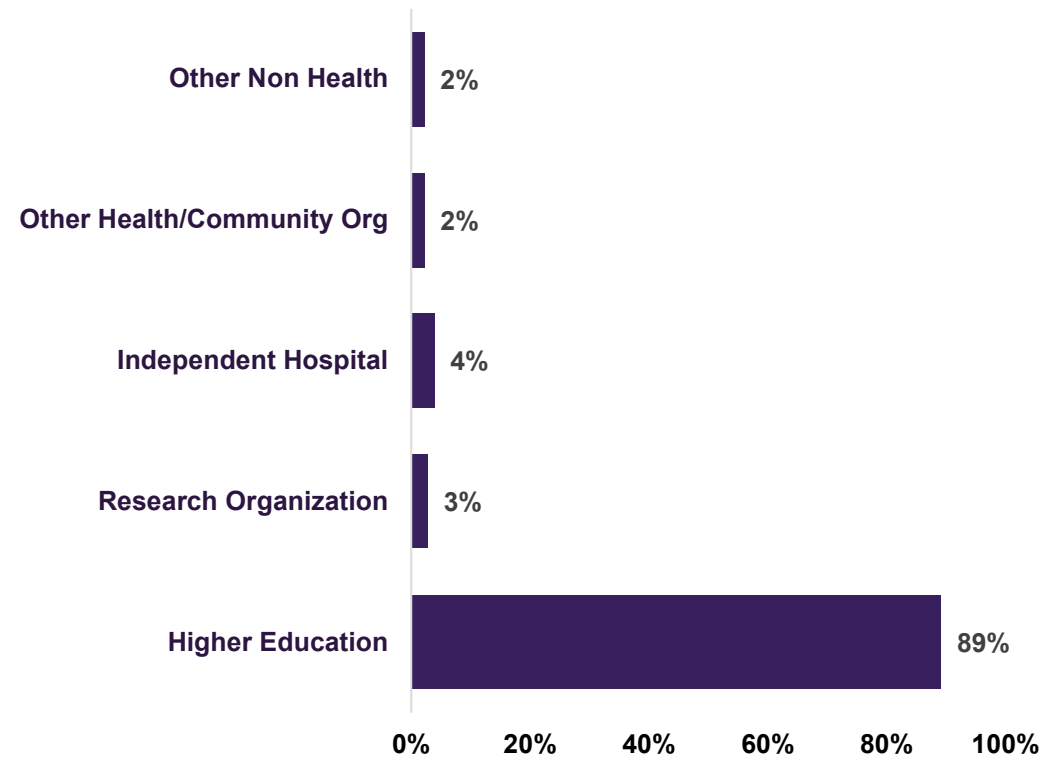


NINR FY2023 Non-HD and HD Projects by Type of Institution

FY2023: NINR Non-HD Projects



FY2023: NINR HD Projects

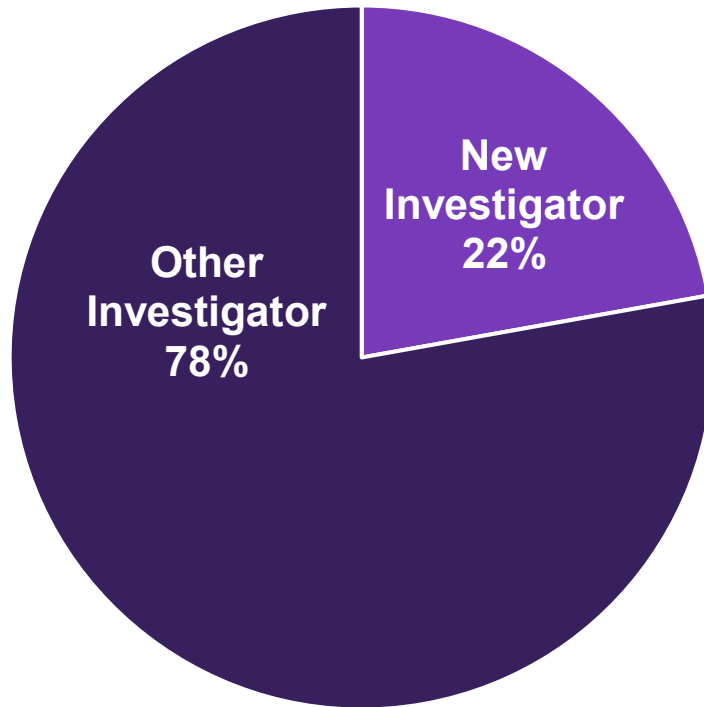




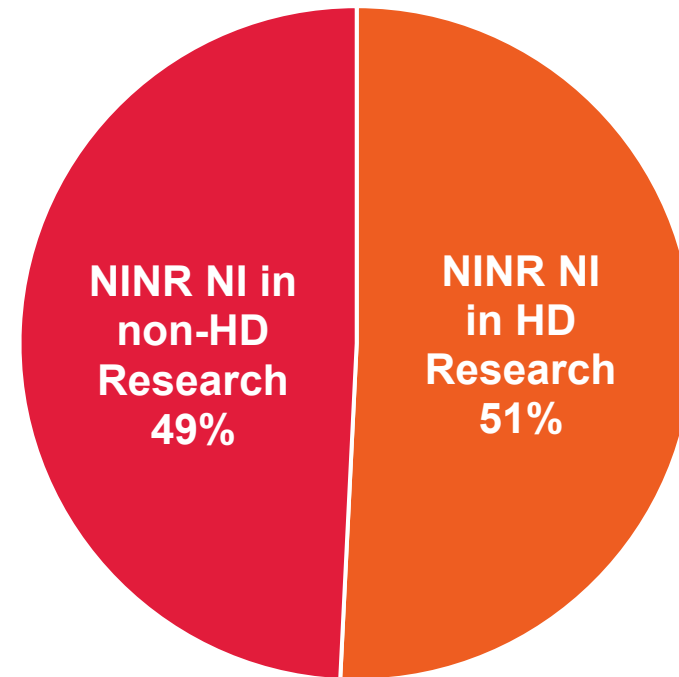
New and Early-Stage Investigators

NINR FY2023 New Investigators and HD Research

NINR: New and Other Investigators

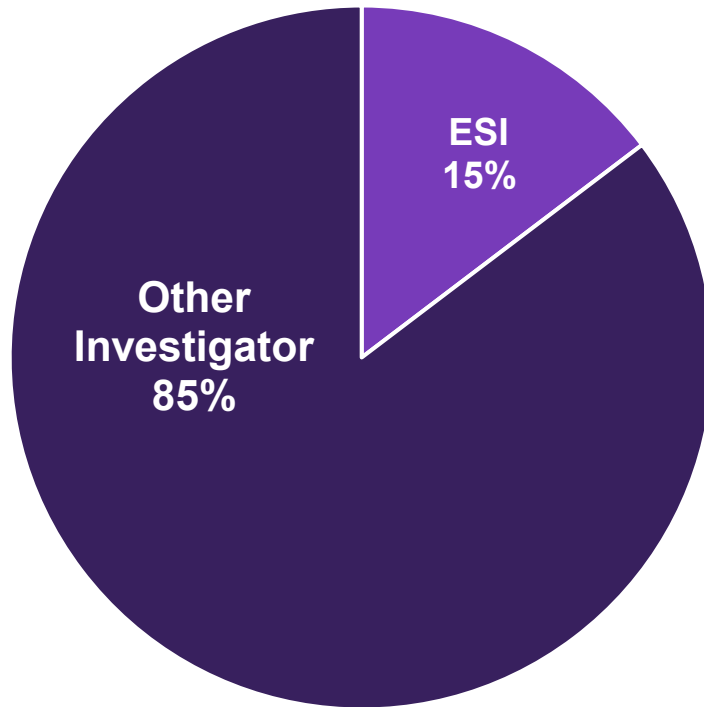


NINR: New Investigators in HDR

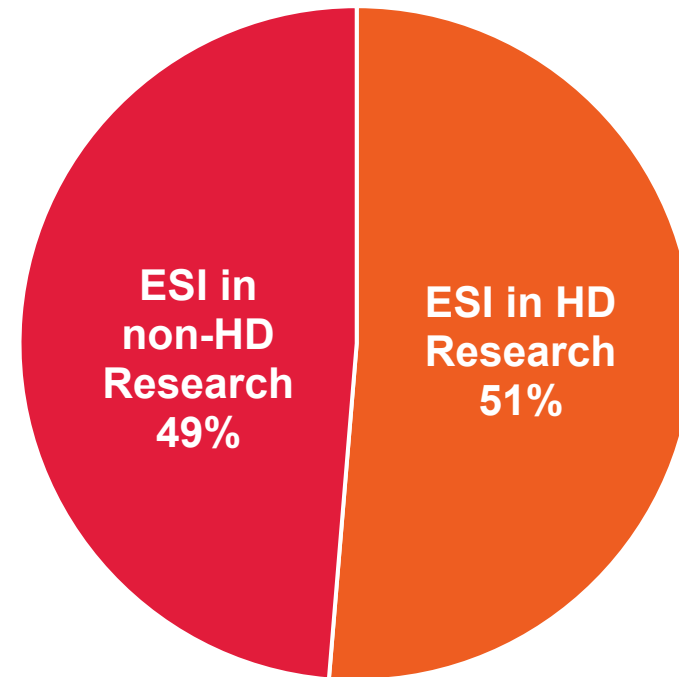


NINR FY2023 Early Stage Investigators and HD Research

NINR: ESIs and Other Investigators



NINR: ESIs in HDR



Bottom Line

New coding methodology confirms that NINR is one of the leaders at NIH in health disparities research

Consistent with NINR's strategic focus on related topics of health equity and social determinants of health

Reflects new \$10M investment in health disparities research



Thank You!

Questions?