

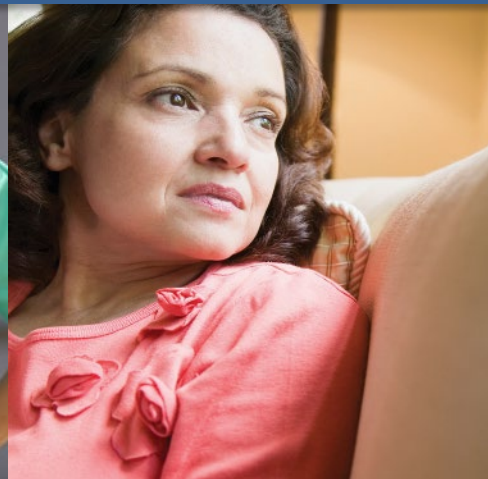


National Institutes of Health

# NINR Strategic Planning Process

National Advisory Council for Nursing Research

May 19, 2020



**John Grason, PhD**

Chief, Office of Science Policy and Legislation  
Division of Science Policy and Public Liaison, NINR

# Overview

- Current NINR Strategic Plan
- Portfolio Overview
- NIH Strategic Plan Template
- Development Timeline
- Discussion



# Advancing Science, Improving Lives 2016-2020

National Institute of Nursing Research

## THE NINR STRATEGIC PLAN:

ADVANCING SCIENCE, IMPROVING LIVES

*A Vision for Nursing Science*



### **Main Focus Areas:**

- Symptom Science
- Wellness
- Self-Management
- End-of-Life and Palliative Care

### **Cross-cutting Areas:**

- Technology
- Training

### **Also Included:**

- Stewardship
- “Sidebars” with Research Highlights
- Development process



## Development Process

- Process began in 2013, with the Plan released in September 2016
- Innovative Questions Initiative
  - Meetings with Experts
  - Public Website (crowdsourcing)
- Public comment on final draft

## FUTURE RESEARCH DIRECTIONS:

### *THE INNOVATIVE QUESTIONS INITIATIVE*

To develop future research directions within each of its focus areas, NINR engaged its stakeholders in a dialogue to identify novel scientific questions. Through this initiative, Innovative Questions (IQ), NINR sought ideas to encourage new thinking and creativity in nursing science, explore unanswered questions, promote results-oriented research, and guide the science over the next five to ten years. The IQ initiative consisted of two components: a series of workshops and a public website. The IQ workshops brought together leading interprofessional scientists to identify and refine innovative research questions through a consensus-building discussion format. On NINR's IQ website, members of the scientific community, professional organizations, and the general public were given the opportunity to submit research questions directly to NINR, and to comment on questions submitted by others. The innovative questions that emerged from the IQ initiative have been made available on the NINR website to serve as a resource for the nursing science community. These questions can be used by anyone, from experienced investigators to trainees, in considering future directions for their own programs of research. The questions also provide the larger scientific community with a better understanding of the potential and importance of nursing science.



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# THE NINR STRATEGIC PLAN:

ADVANCING SCIENCE, IMPROVING LIVES

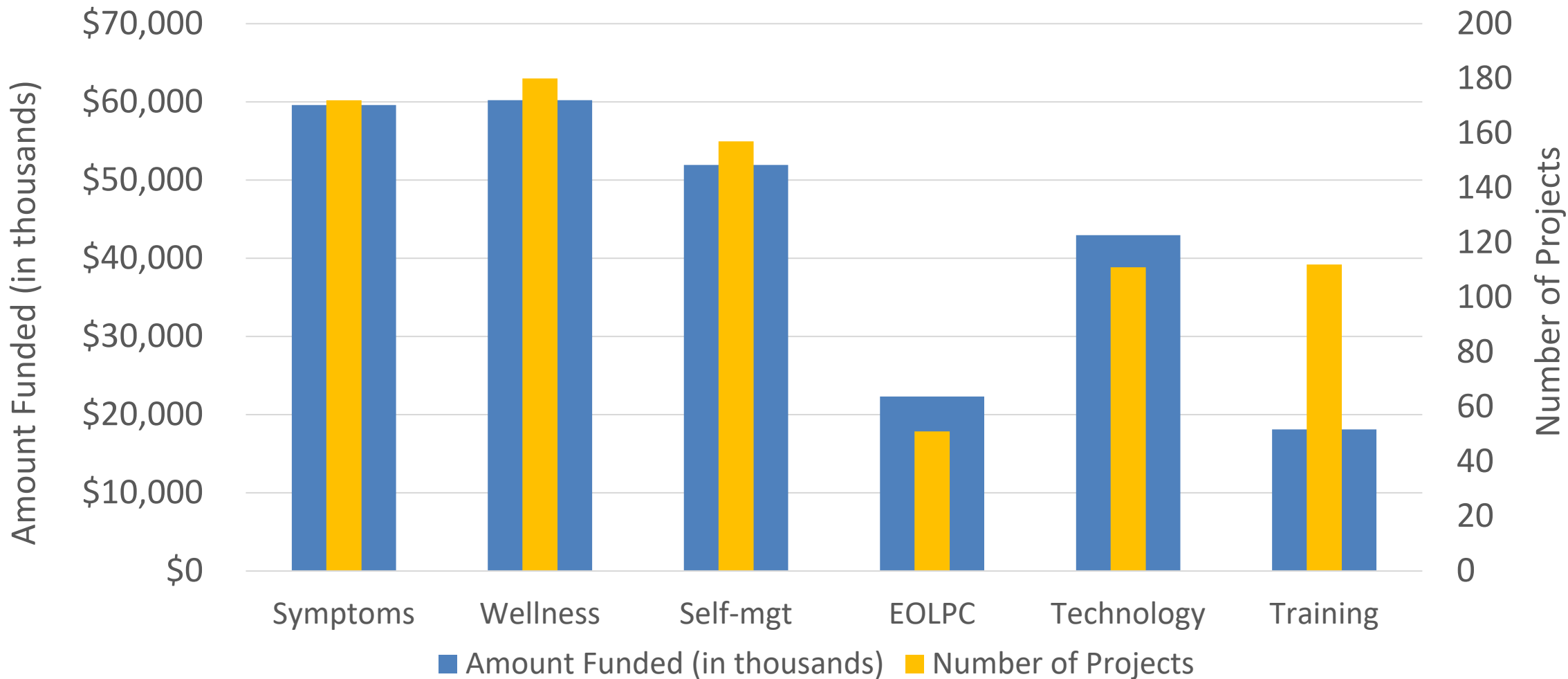
A Vision for Nursing Science



# Portfolio Overview

A screenshot of the NIH RePORTER website interface. The top navigation bar includes 'bMed.gov' and a search bar. Below the navigation bar, there are links for 'HOME', 'ABOUT RePORTER', 'FAQs', 'GLOSSARY', and 'CONTACT US'. The main content area features a search bar and a 'CLEAR QUERY' button. There are also filters for 'Fiscal Year (FY): Current FY is 2020' and 'Active Projects'. A 'ORGANIZATION' filter is visible with a dropdown menu. At the bottom right, there is a line graph with three data series (blue, red, and yellow) and a green shaded area, showing fluctuating data points over time.

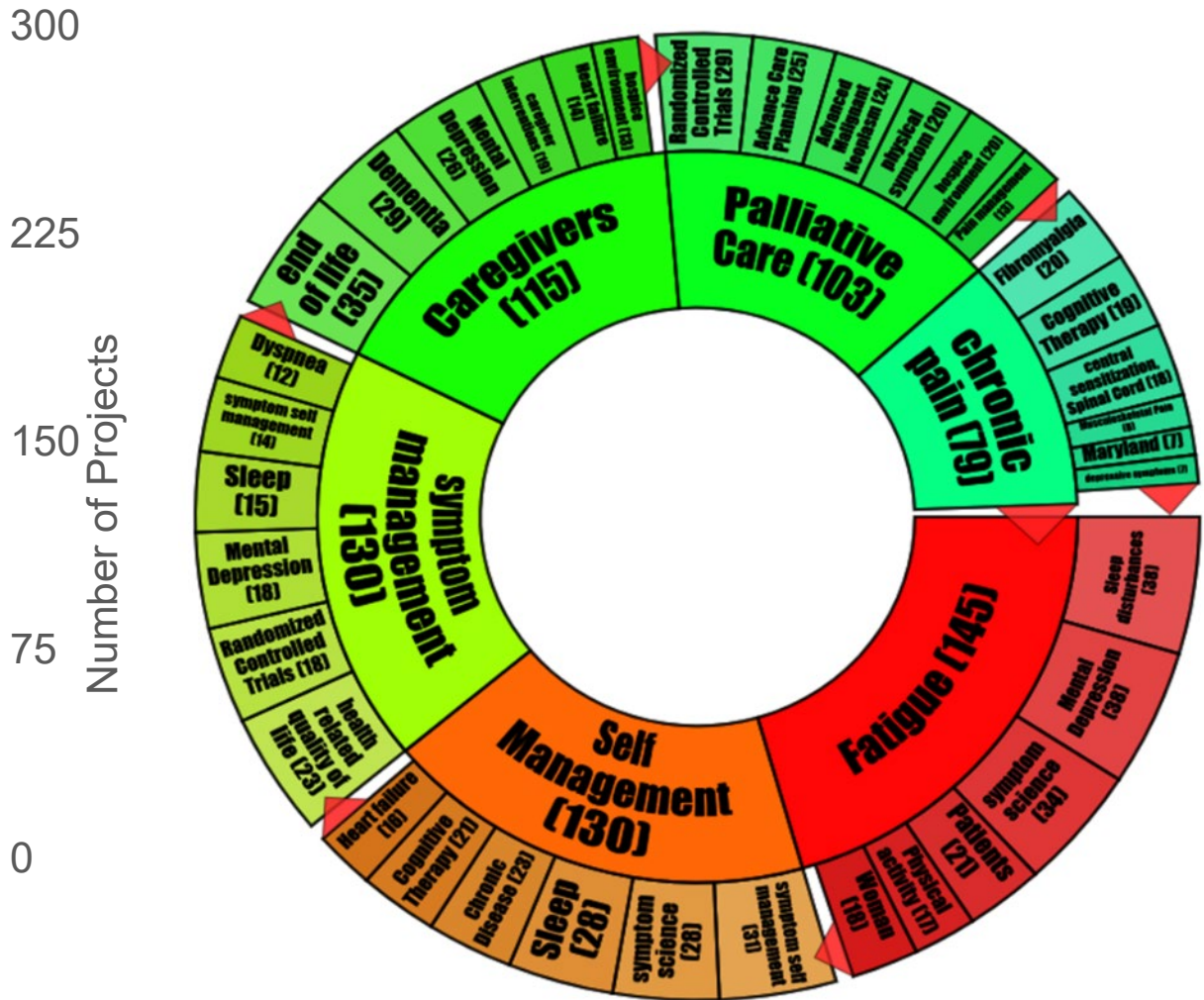
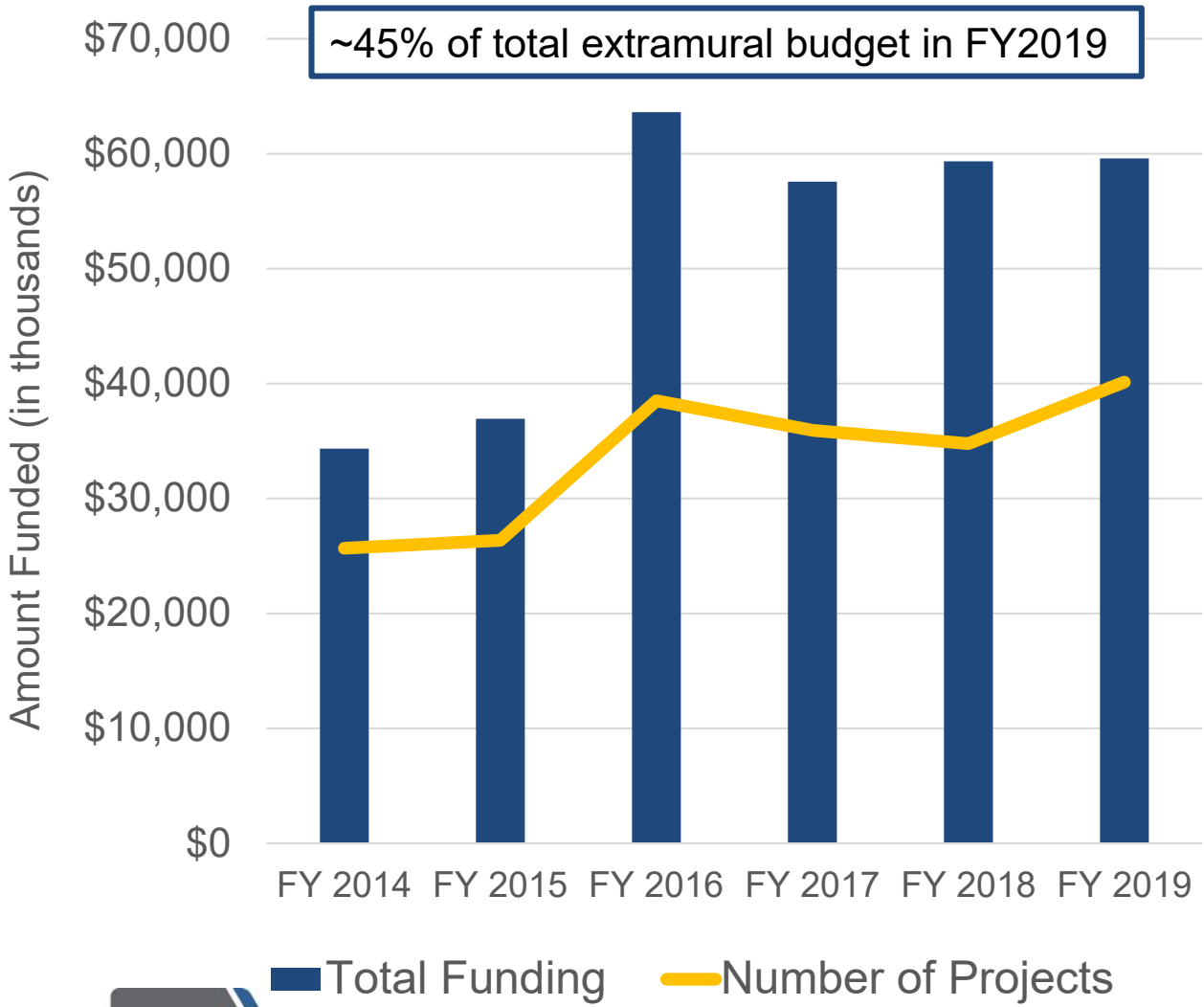
# Funding and Number of Projects in each Focus Area (FY 2019)



**NOTE: categories not mutually exclusive. One project can be in more than one category.**

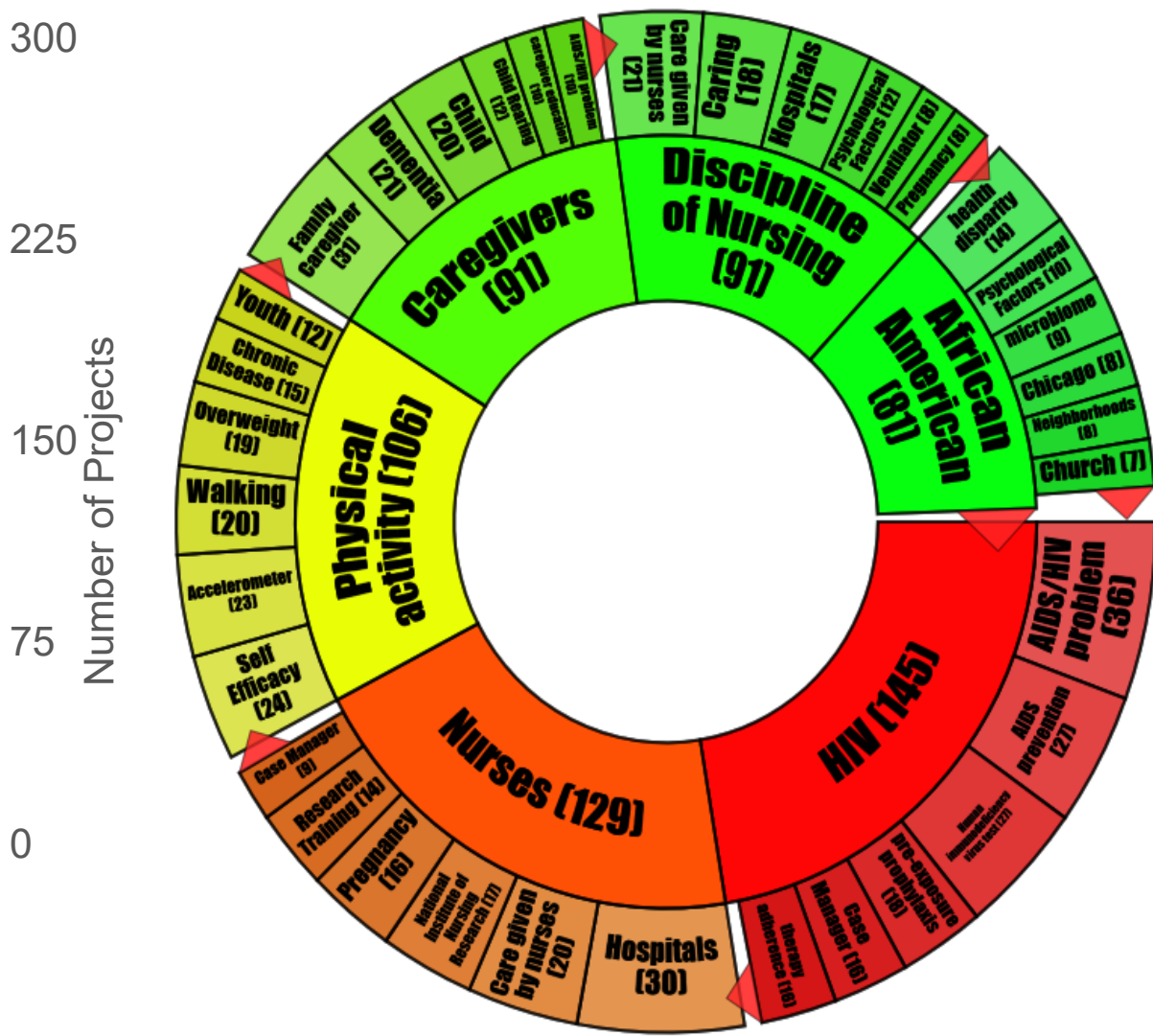
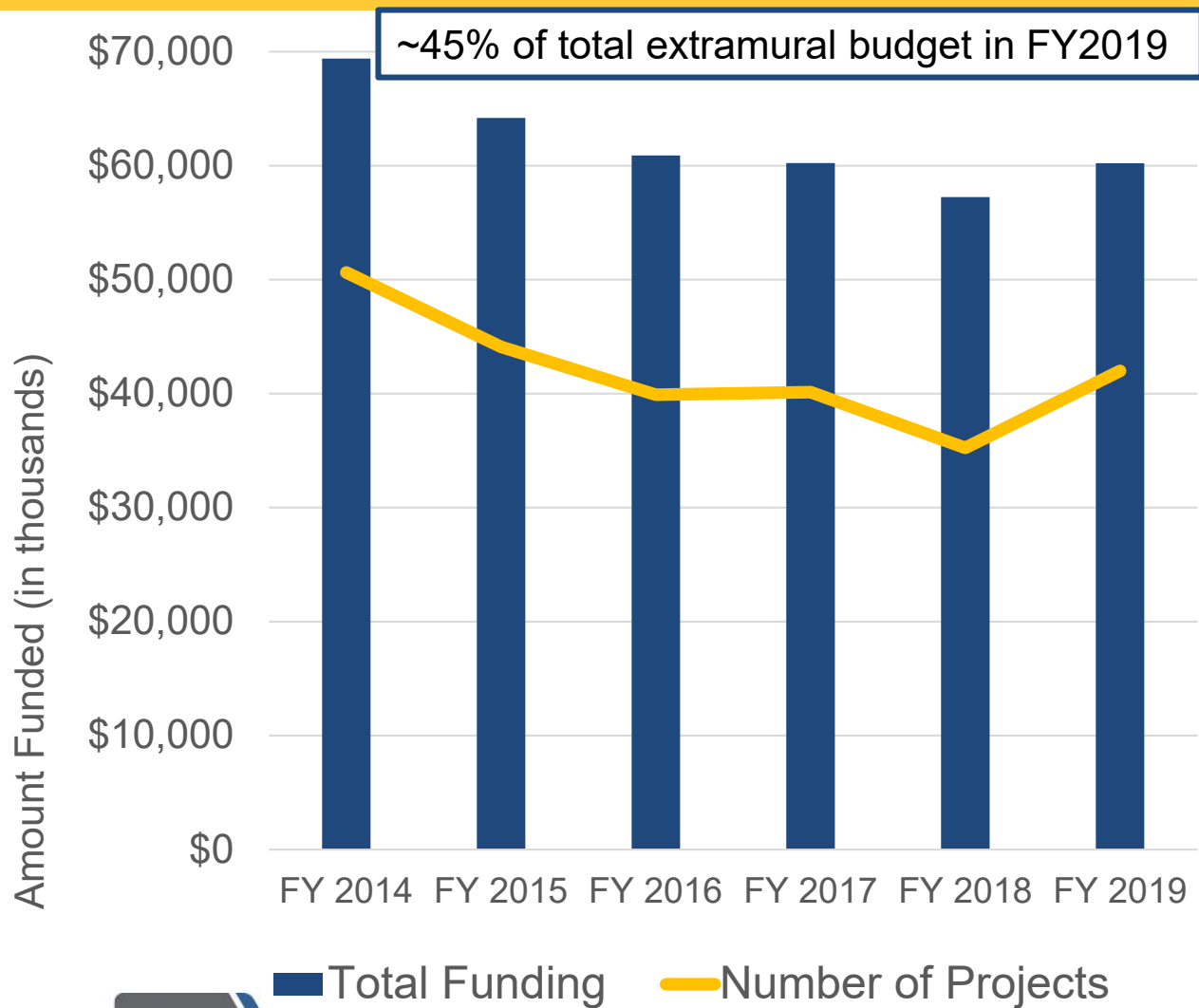


# Symptom Science Research



\*NINR internal data; Award count includes supplements and co-funded projects; Symptom Science became a priority in 2016

# Wellness / Health Promotion - Disease Prevention Research

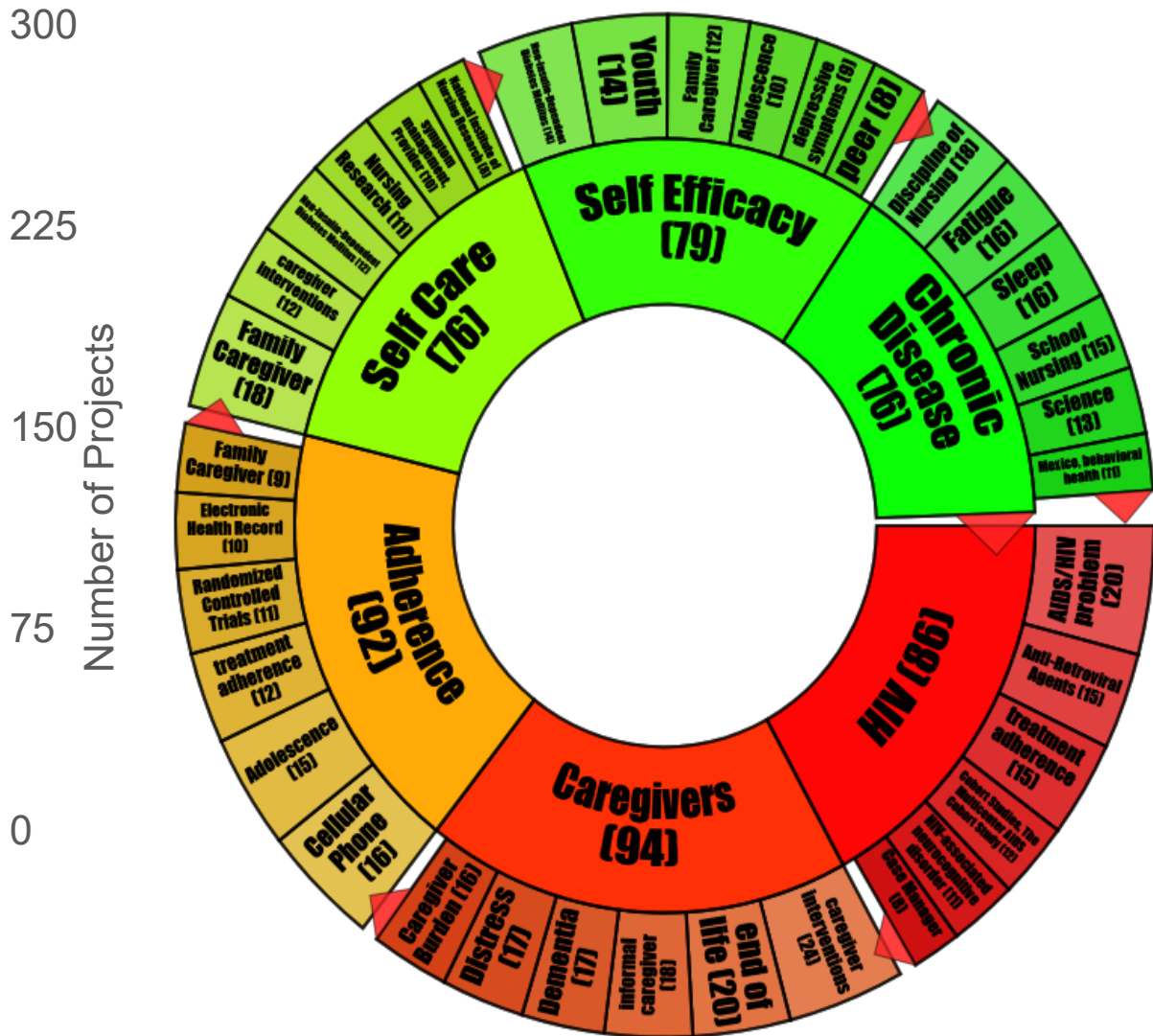
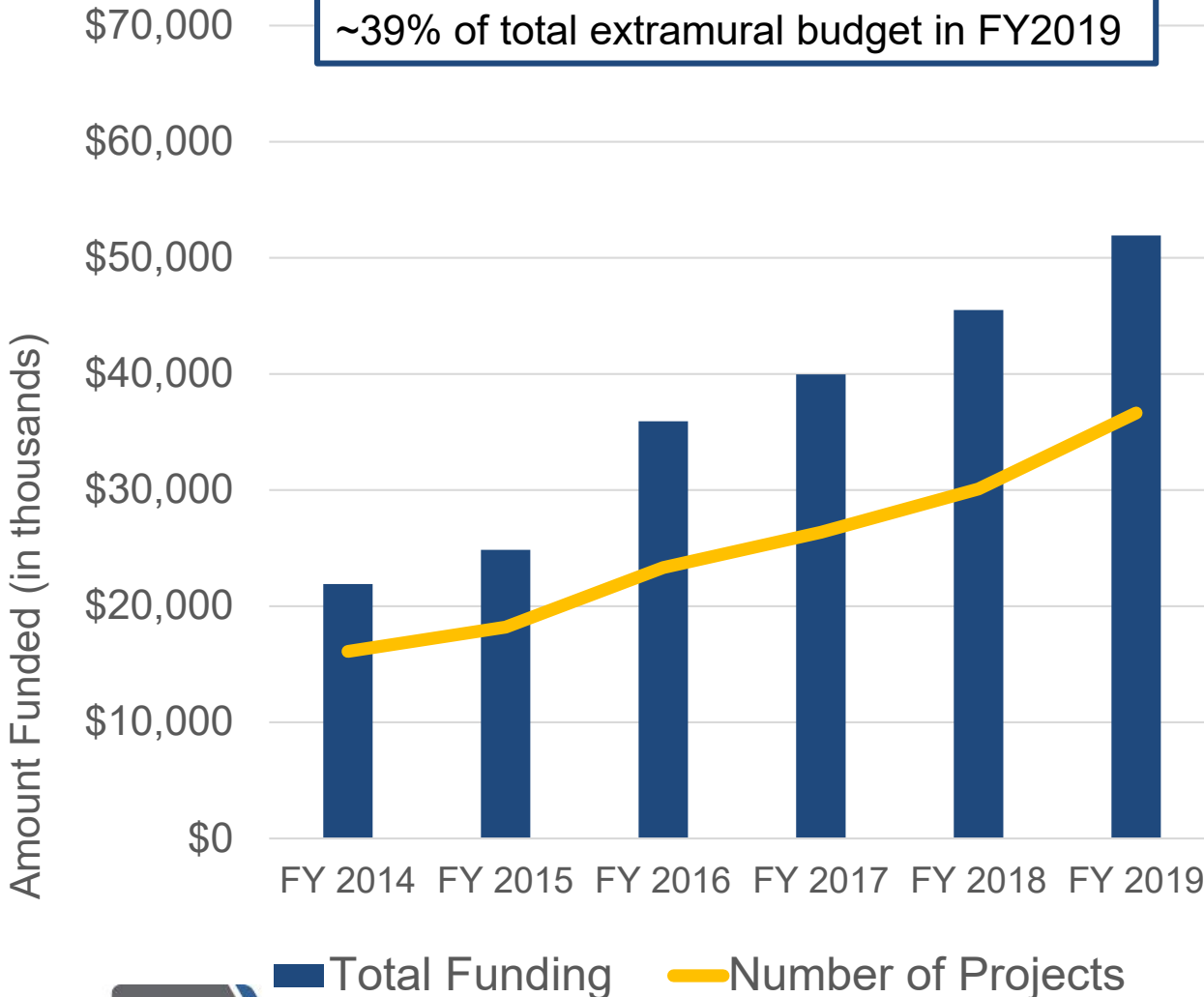


Source: NINR Internal Data  
\*Award count includes supplements and co-funded projects

**NIH/RCDC PVIZ Tool**



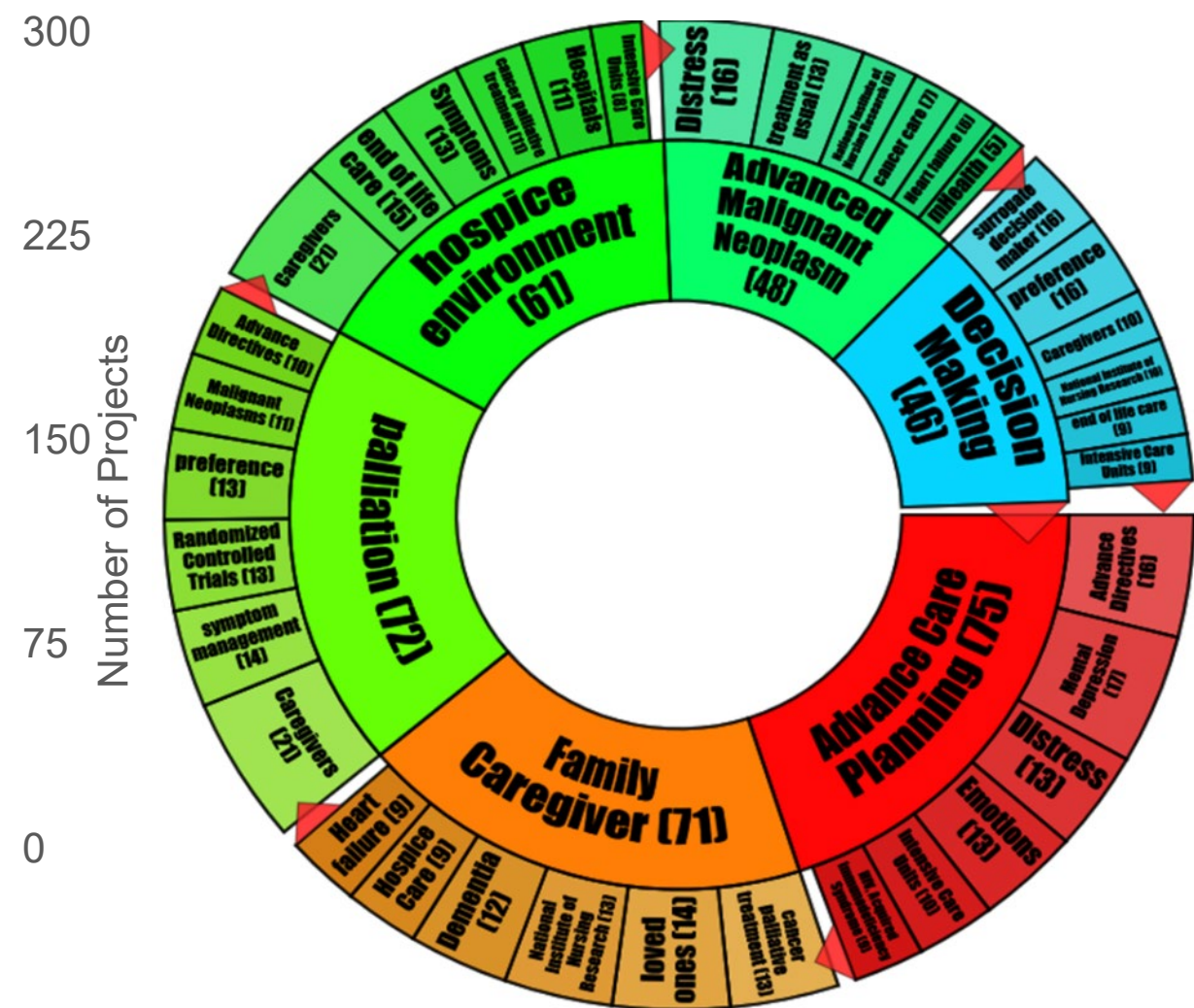
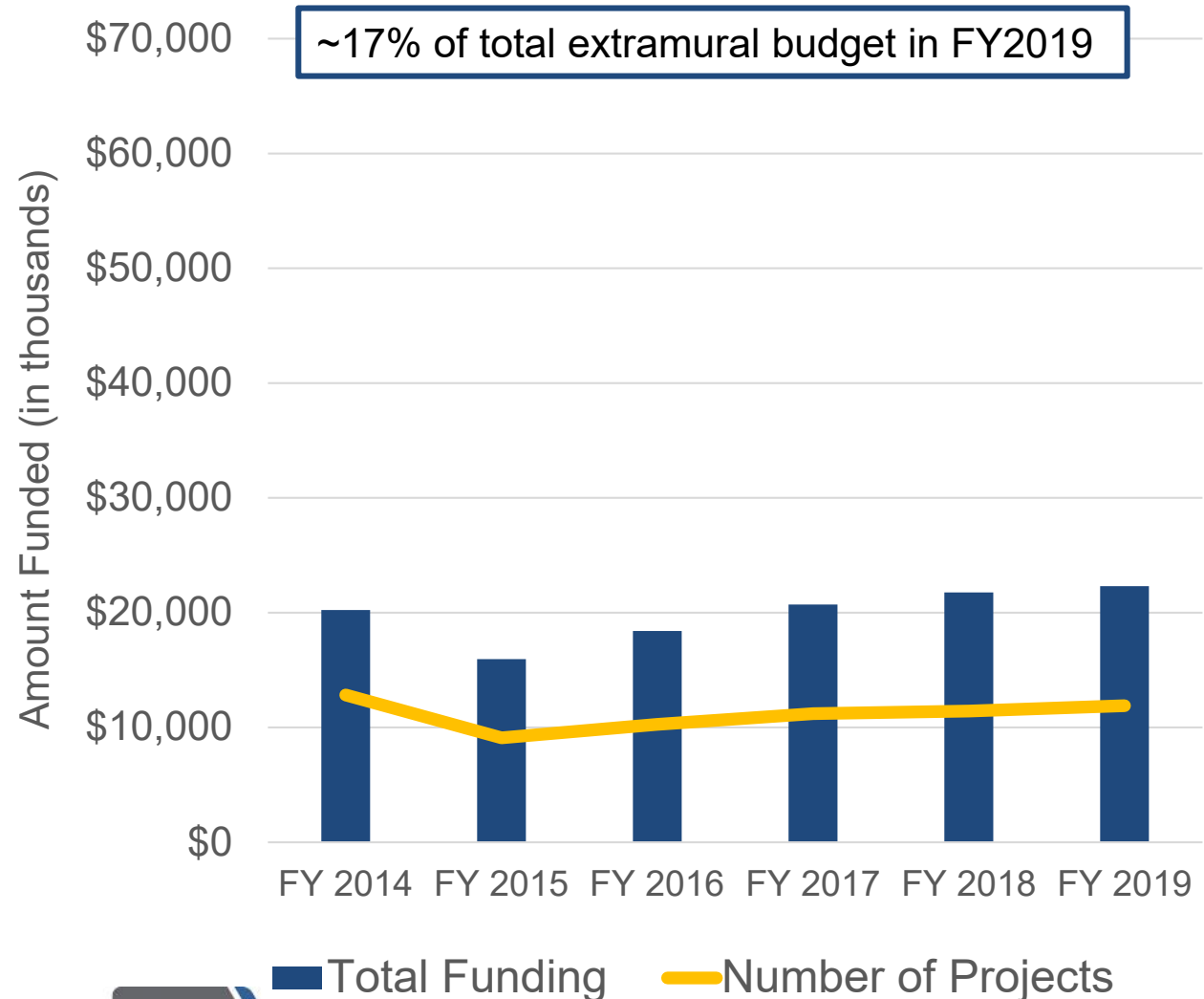
# Self-Management Research



\*NINR internal data; Award count includes supplements and co-funded projects; Self-Management became a priority in 2016

**NIH/RCDC PVIZ Tool**

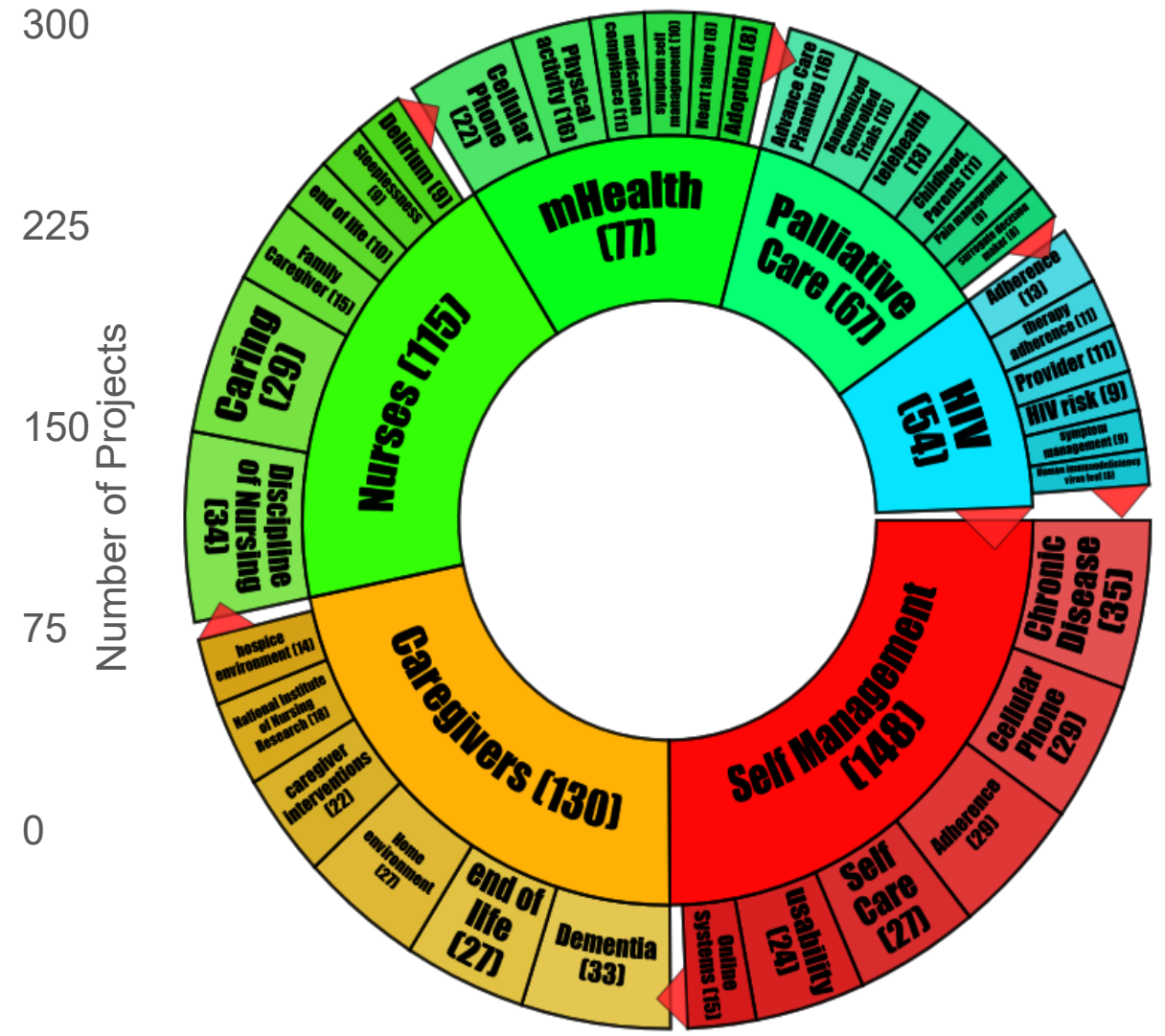
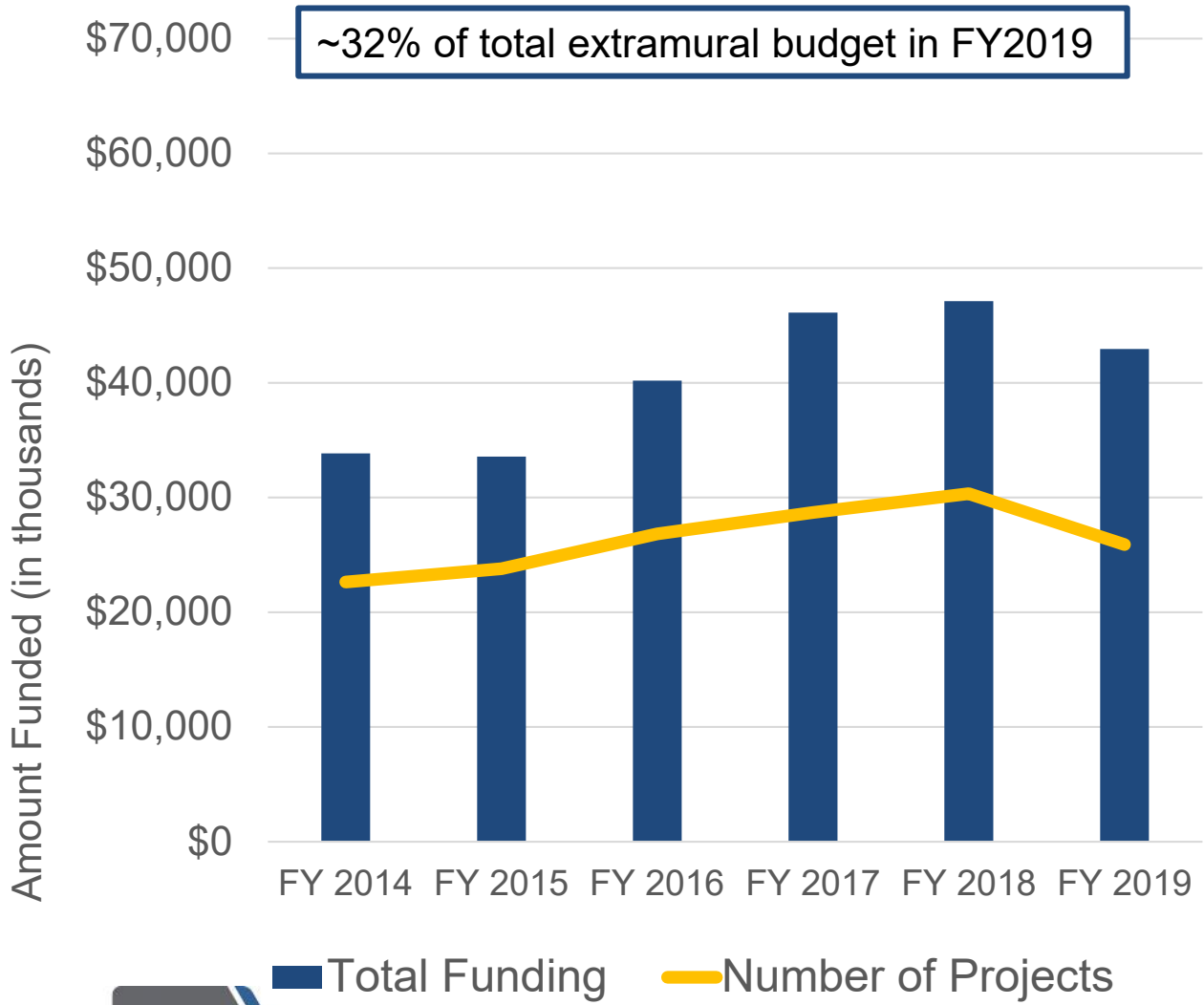
# Palliative and End-of-Life Care Research



NINR Internal Data  
\*Award count includes supplements and co-funded projects

**NIH/RCDC PVIZ  
Tool**

# Technology Research

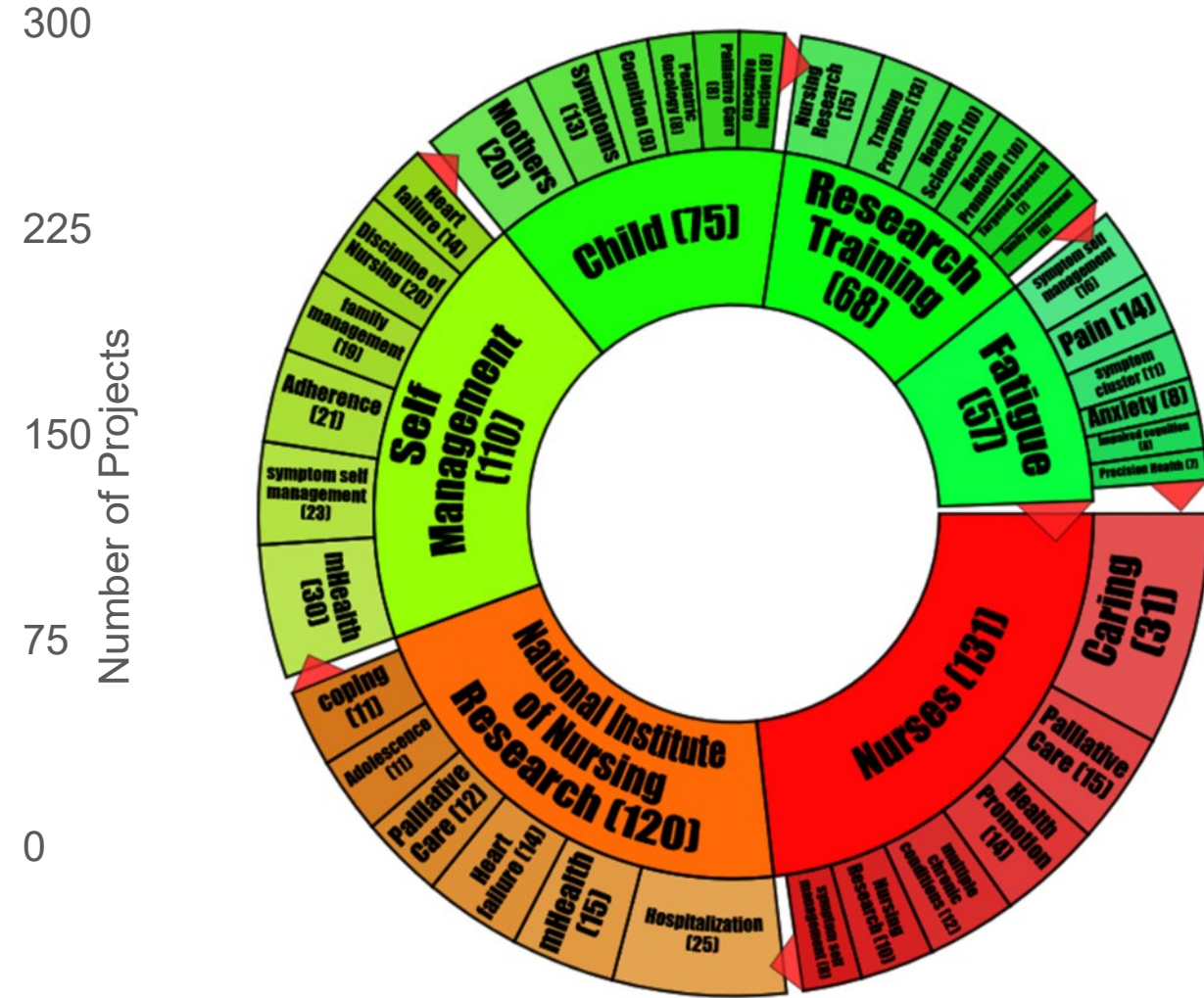
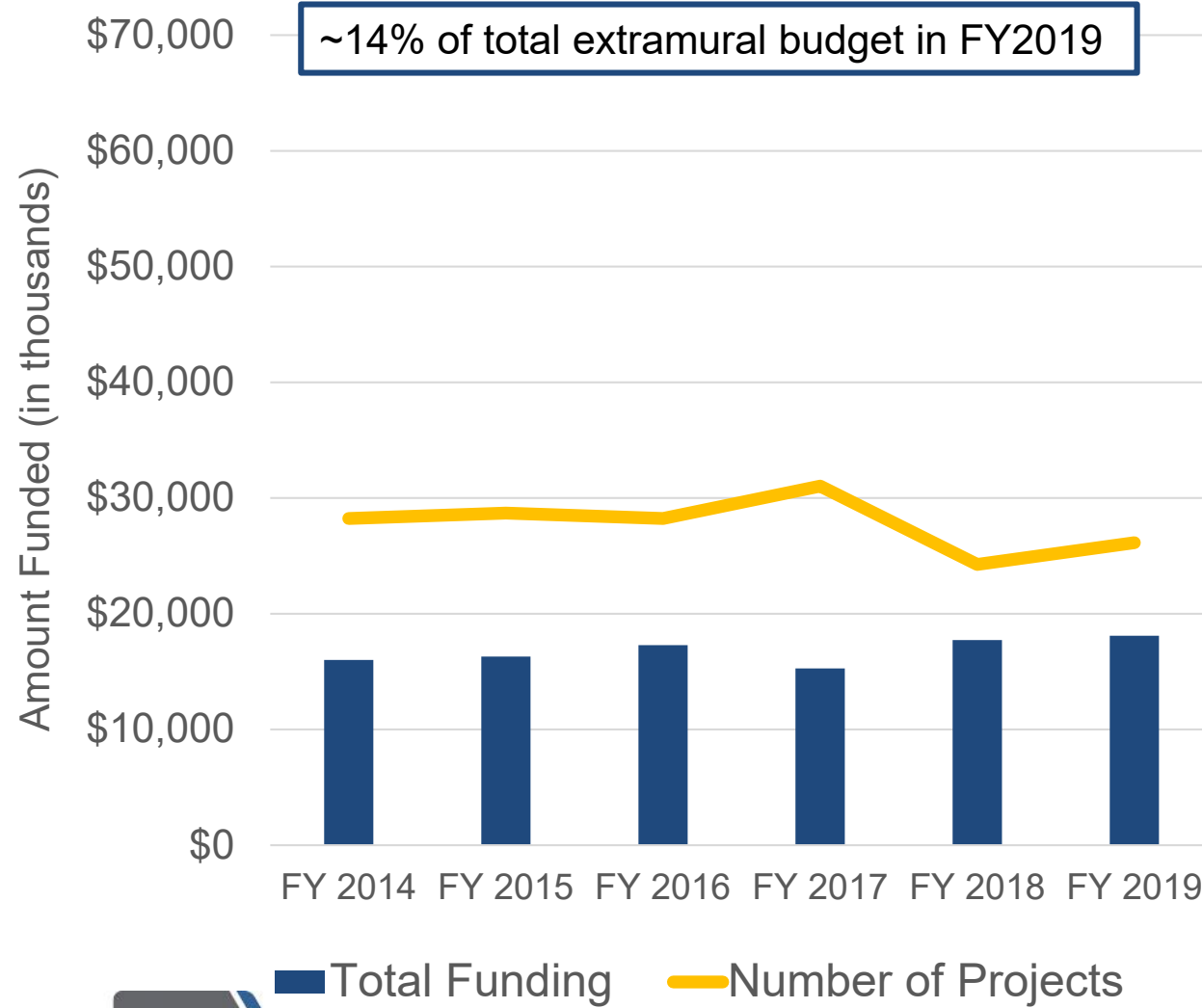


NINR Internal Data  
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**NIH/RCDC PVIZ  
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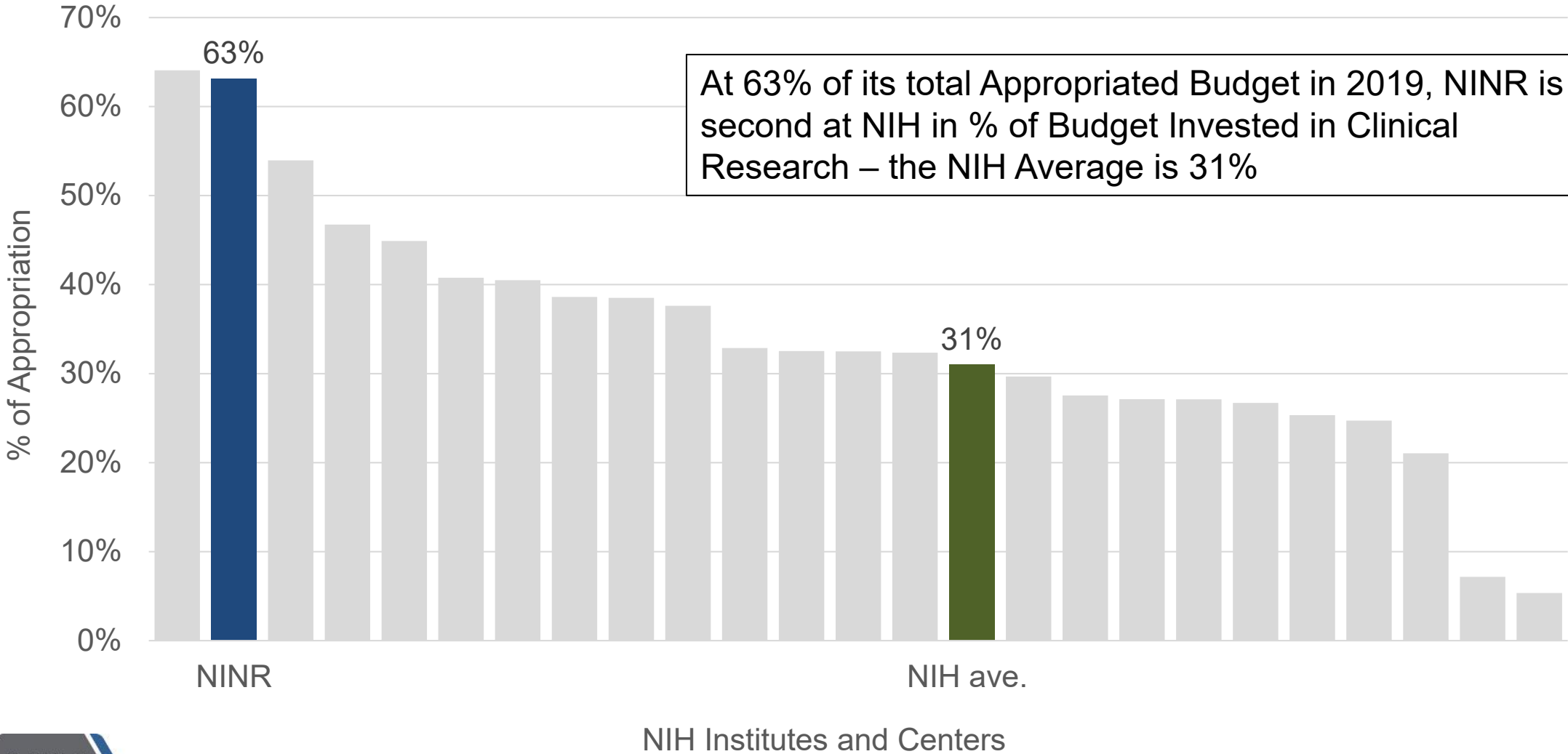
# Training and Career Development



NINR Internal Data  
\*Award count includes supplements and co-funded projects

**NIH/RCDC PVIZ  
Tool**

# Clinical Research at NIH and NINR as a Percent of Total Budget by IC in 2019



Source: NIH RePORT and NIH OB Data

# NINR Publications by Major MeSH Topics: 2015 - 2019

## Major Research Topics 2015-2019

- Heart/heart diseases
- Brain/brain diseases
- HIV
- Critical/Palliative/Terminal/ Hospice Care
- Mental disorders
- Sleep & related disorders
- Health behavior/status/policy
- Neoplasms/Tumor Supp. Proteins
- Caregivers
- Quality of Life



National Institute  
of Nursing Research

Articles per Major MeSH topic per year<sup>a</sup>

Major Research Topic	2015	2016	2017	2018	*2019	Grand Total
Heart/heart diseases	66	69	71	76	17	299
Brain/brain diseases	83	76	47	57	24	287
HIV	68	66	66	61	24	285
Critical/Palliative/Terminal/Hospice Care	43	50	68	59	15	235
Mental disorders	51	51	48	50	16	216
Sleep & related disorders	47	40	42	51	11	191
Health Behavior/status/policy	46	42	44	37	15	184
Neoplasms/tumor suppressor proteins	38	29	40	50	17	174
Caregivers	34	36	41	37	16	164
Quality of Life	28	27	41	35	13	144
Behavioral Symptoms	33	29	35	35	9	141
Physical activities	19	35	30	42	14	140
Parent/Parent-Child Relations	28	26	40	32	13	139
Lung/lung diseases	30	30	35	26	11	132
Stress, Physiological	22	24	27	28	15	116
Nurses/Nursing Staff	24	29	25	23	11	112
Obesity	26	19	18	31	11	105
Diabetes	23	19	23	20	18	103
Diet & Nutrition/nutritional diseases	22	20	27	28	6	103
Nursing/Nursing specialties	20	23	25	25	10	103
Pain & pain management	29	21	19	25	4	98
Patient Care	15	22	27	22	11	97
Social environment & behavior	21	22	22	27	5	97
Chronic diseases & pain	28	17	27	22	1	95
Health Education	26	23	17	23	2	91
Family & family relations/characteristics	14	23	24	24	5	90
Clinical decision support systems	18	15	16	29	9	87
Body weights, measures, & changes	18	21	20	16	9	84
Aging	25	21	13	17	7	83
Self Care	20	22	19	20	2	83

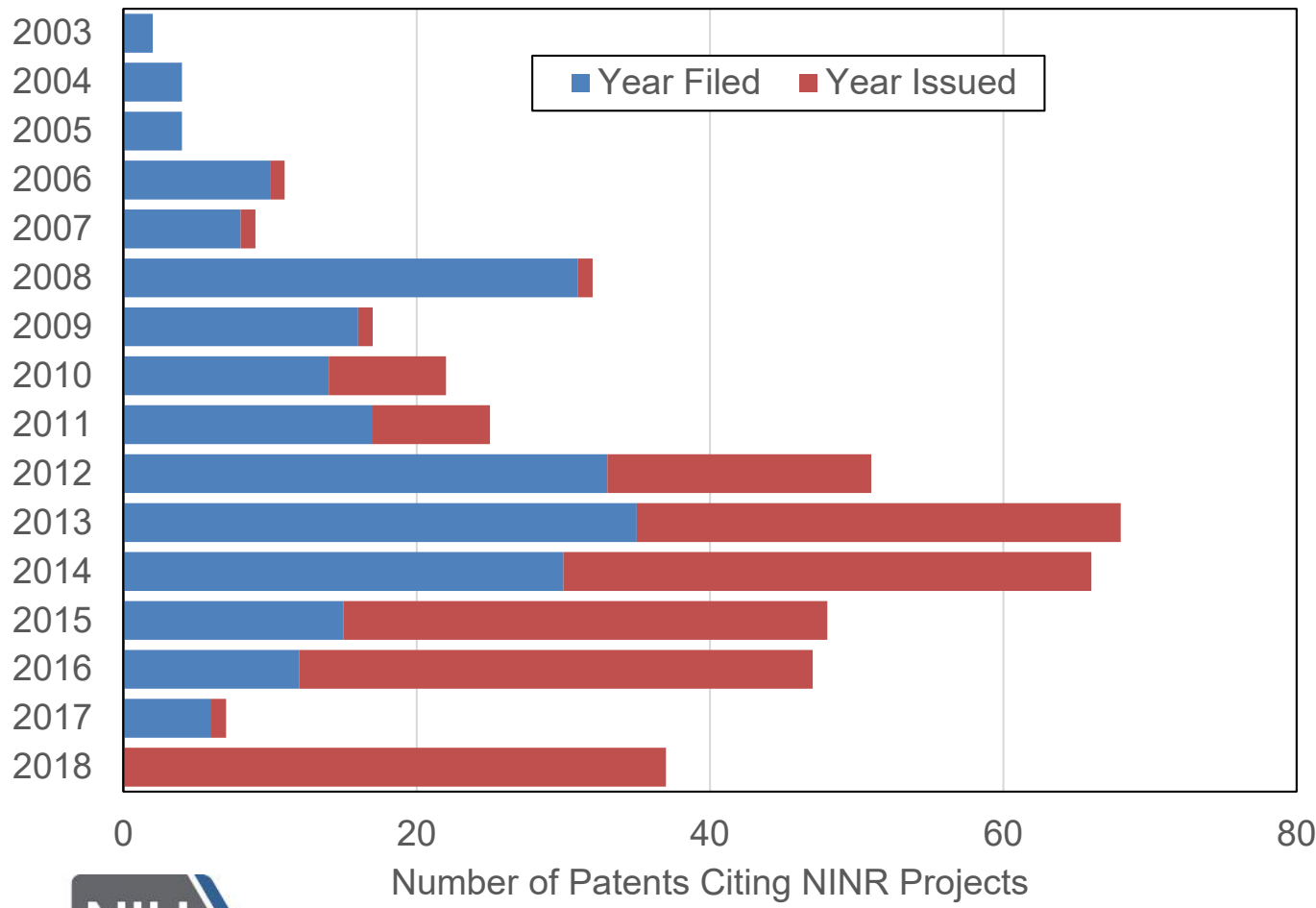
<sup>a</sup>483 (or 61%) of the 787 articles published in 2019 have not been indexed with MeSH terms yet, so the numbers for Y2019 may be skewed.

Source: NIH Library Analysis, Ya-Ling Lu, February 2020

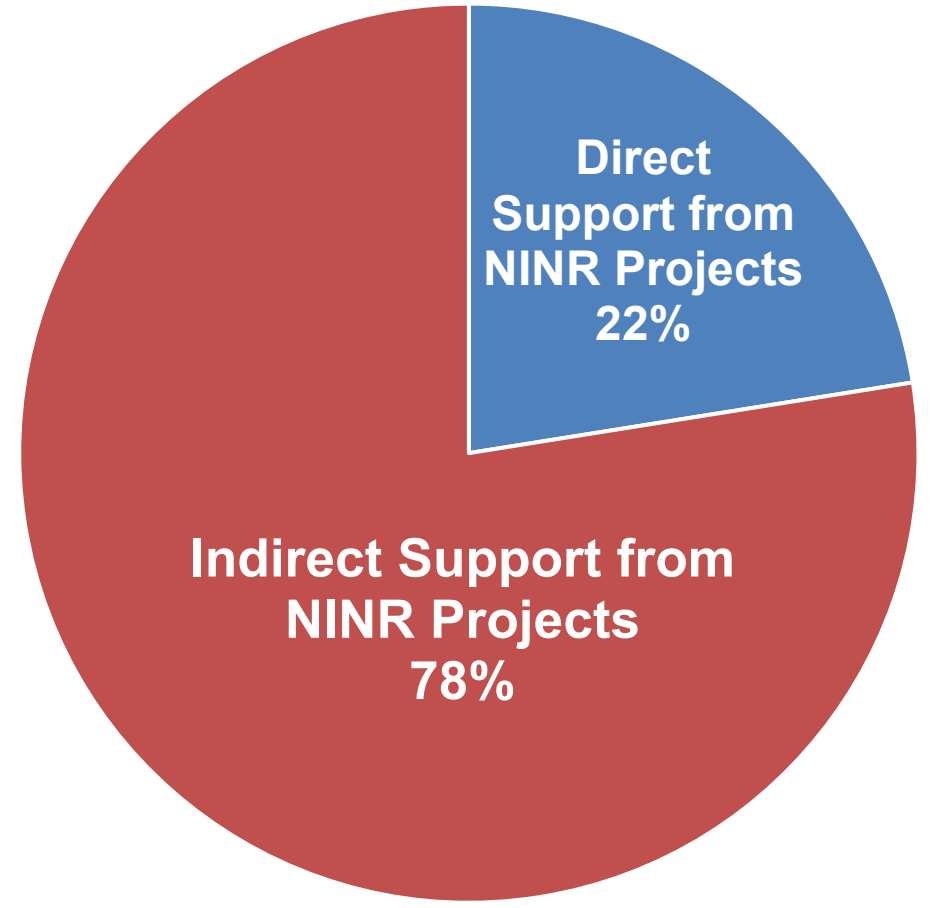


# NINR Clinical Guidelines and Patent Outcomes

**Patents Linked to 2000-2018 NINR Grants**



**Clinical Guidelines Linked to 2000-2018 NINR Grants**



**213 Patents linked to NINR support were filed and issued (2003-2018)**  
**22% of 169 Clinical Guidelines were linked to direct NINR support (2011-2017)**

Source: iRePORT  
 Patent and Clinical  
 Guidelines Widgets

# Conclusions

- Support for almost all focus areas has been relatively consistent over the 4 years since the previous plan was released
- Focus areas are broad, encompassing a broad range of diseases and conditions, and there is a significant amount of overlap between the areas
- Subtopics found within each of the focus areas often appear in more than one focus area and include many diseases, conditions, ages, and systems



# Development Process and Timeline

planning

~~Plan A~~  
~~Plan B~~  
Plan C



## Process and Considerations:

- Seeking ideas from experts in the nursing science community across all career stages and research areas
- Obtaining input from experts outside of nursing science, and the general public
- Deciding how best to organize our focus areas to maximize our ability to assess success
- Presenting a broad vision vs. enumerating specific research topics



# NIH Common Template

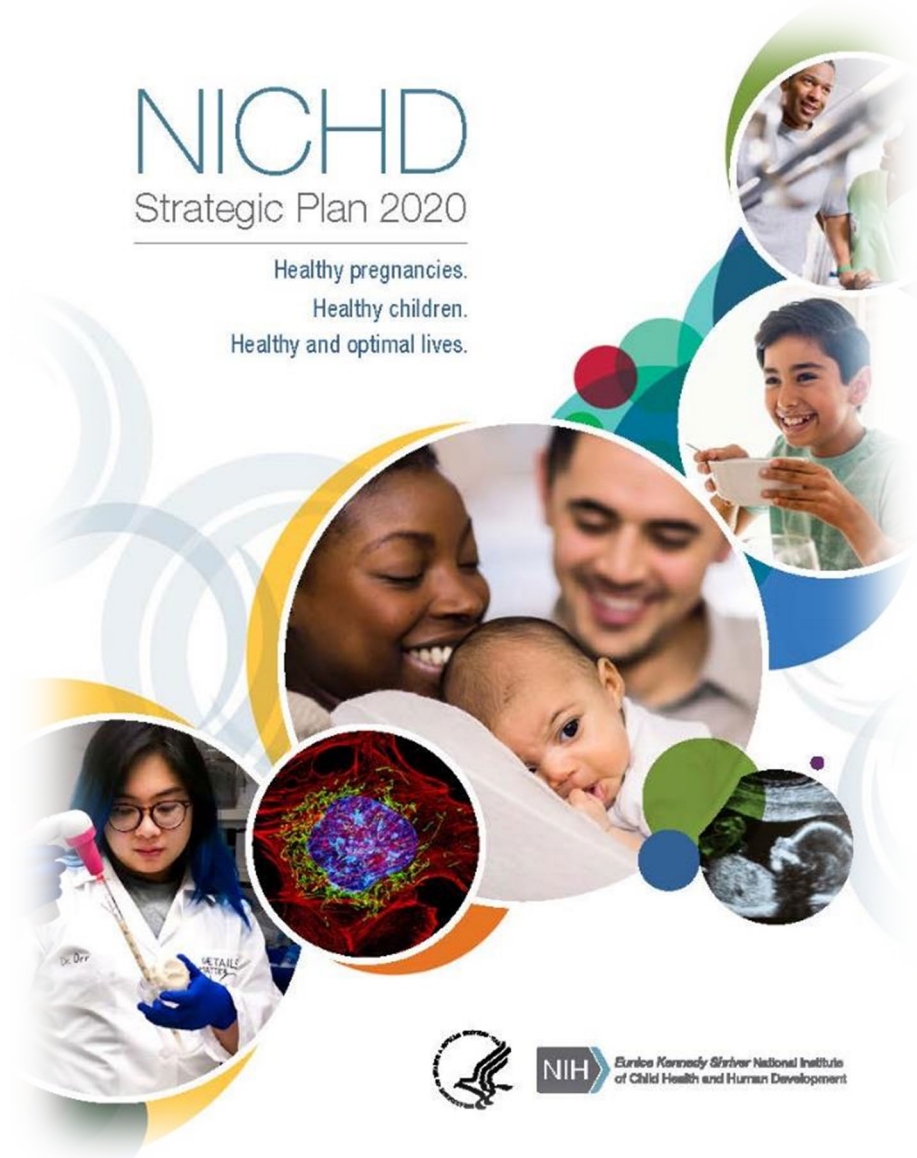
- New requirement established by the 21<sup>st</sup> Century Cures Act
- Common template similar to our current Plan
- Additional information required:
  - Sections addressing women's health and health disparities research
  - Stewardship (scientific/management)
- Metrics / Management



# Examples of Recent Strategic Plans – NICHD (2020)

## Research Themes and Objectives

- 1) Understanding the Molecular, Cellular, and Structural Basis of Development
- 2) Promoting Gynecologic, Andrologic, and Reproductive Health
- 3) Setting the Foundation for Health Pregnancies and Lifelong Wellness
  - a) *Understanding human gestational clock and causes of preterm birth*
  - b) *Improving survival of infants born pre-term or at LBW*
  - c) *Pre-pregnancy and pregnancy factors that raise risk of adverse maternal outcomes*
  - d) *Elucidating role of placenta in outcomes and long-term health*
  - e) *Prevention of and response to labor and delivery complications*
- 4) Improving Child and Adolescent Health and Transition to Adulthood
- 5) Advancing Safe and Effective Therapeutics and Devices for Pregnant and Lactating Women, Children, and People with Disabilities





# Examples of Recent Strategic Plans – ORWH (2019)

## Strategic Goals

- 1) Advancing rigorous **research** that is relevant to the health of women
  - a) Basic biological differences between females and males
  - b) Influence of sex and gender on prevention, management, and outcomes
  - c) Immediate, mid-, and long-term effects of exposures on health outcomes
  - d) Influence of sex and gender on the connection between the mind and body and its impact on health and disease
  - e) Female-specific conditions and diseases
- 2) Developing **methods** and leveraging data sources
- 3) Enhancing **dissemination and implementation** of evidence
- 4) Promoting **training and careers** to develop a well-trained, diverse workforce
- 5) Improving **evaluation** of research





# Congressional Authorization

## Subpart 17—National Institute of Nursing Research

### PURPOSE OF THE INSTITUTE

SEC. 464V. [285q] The general purpose of the National Institute of Nursing Research (in this subpart referred to as the “Institute”) is the **conduct and support of, and dissemination of information respecting, basic and clinical nursing research, training, and other programs in patient care research.**

### SPECIFIC AUTHORITIES

SEC. 464W. [285q–1] To carry out section 464V, the Director of the Institute may provide research training and instruction and establish, in the Institute and other nonprofit institutions, research traineeships and fellowships in the study and investigation of the prevention of disease, health promotion, and the nursing care of individuals with and the families of individuals with acute and chronic illnesses. The Director of the Institute may provide individuals receiving such training and instruction or such traineeships or fellowships with such stipends and allowances (including amounts for travel and subsistence and dependency allowances) as the Director determines necessary. The Director may make grants to nonprofit institutions to provide such training and instruction and traineeships and fellowships.

# Strategic Plan Timeline

<b>Timeframe*</b>	<b>Action</b>
December 2019	Initial staff discussions
January 2020	Convene trans-NINR working group
May 2020	Presentation to NACNR
Summer 2020	Development of draft Framework
September 2020	Draft Framework discussed with NACNR
Fall, 2020	RFI to gather public input on draft Framework
Winter 2021– Spring 2021	Full text of plan is drafted, incorporating feedback from RFI
January 2021	Update on plan presented to NACNR
Spring – Summer 2021	Plan released

\*Tentative – Subject to Change

# Today's Discussion

## *Issues to consider*

- Building on past success while embracing the future
- Assessing our strengths and identifying places for improvement
- Anticipating the next big areas of opportunity
- Ensuring the future of the nursing science workforce

