

# Health Research Alliance Grants by Health Research Area

Doris Duke Foundation Commissioned Report  
by Betsy Myers, Consultant

# About HRA Analyzer

- > \$18 Billion in grants
- >60,000 grants from 2006 to present
- Known limitations from data audit (2010-2019)
  - Completeness of data entry varies year to year
  - 77% of member organizations entered some data over this 10 year period
  - Only 50% of organizations submitted data consistently

# About This Analysis

- Goals:
  - To identify trends over time in type of research supported by HRA
    - Is support for basic biomedical research declining?
  - To determine trends with and without the largest funder of patient outcomes research
- Used ***health research area*** classification (Dimensions machine-learning algorithm)
  - Biomedical
  - Clinical
  - Health Services & Systems
  - Population & Society

# HRA Analyzer Download

- Accessed on 4/2/24 to export data
- Analysis limited to entries with ***health research area*** classification—59K entries (69% of all grant entries)
- Key variables:
  - Funding amount (dollars committed in start year)
  - Start year
  - Grant duration
  - Funder
  - Health research area
  - Title and abstract (used to determine health research area)
- Screening data for missing values, outliers, duplicates took ~ 5 hours

# Core Dataset

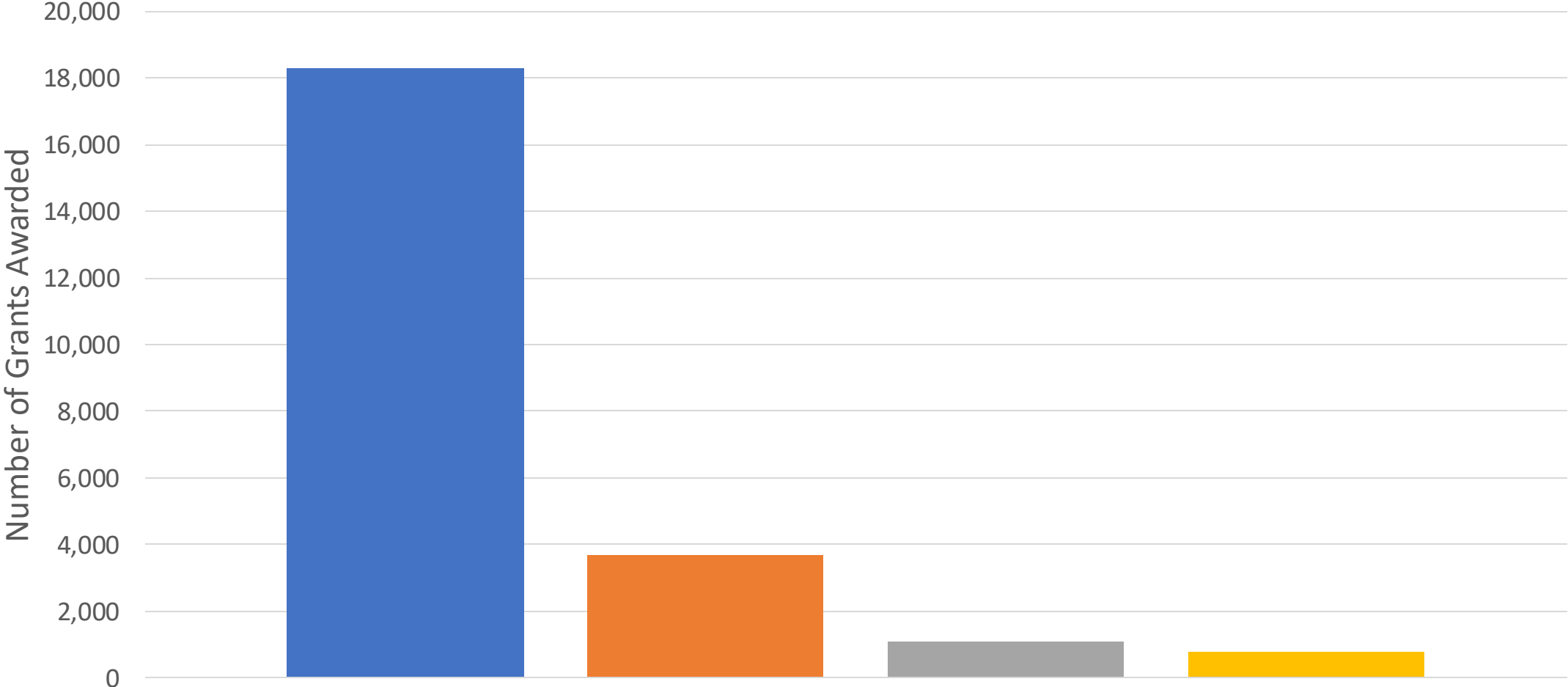
- Needed same set of funders over time
- Used organizations that had grants entered in Analyzer with start dates from 2012 to 2022
- 34 organizations
- 23,846 awards
- Totaling \$9.1 billion or 80% of dollars recorded in HRA Analyzer over that time frame for awards with health research classification

Alzheimer's Association  
American Association For Cancer Research  
American Brain Tumor Association  
American Cancer Society  
American Federation for Aging Research  
American Heart Association  
Arnold and Mabel Beckman Foundation  
Arthritis Foundation  
Autism Science Foundation  
Burroughs Wellcome Fund  
Conquer Cancer Foundation  
Crohn's and Colitis Foundation  
Donaghue Foundation  
Doris Duke Foundation  
Fanconi Anemia Research Fund  
Foundation Fighting Blindness  
Foundation for Physical Therapy Research

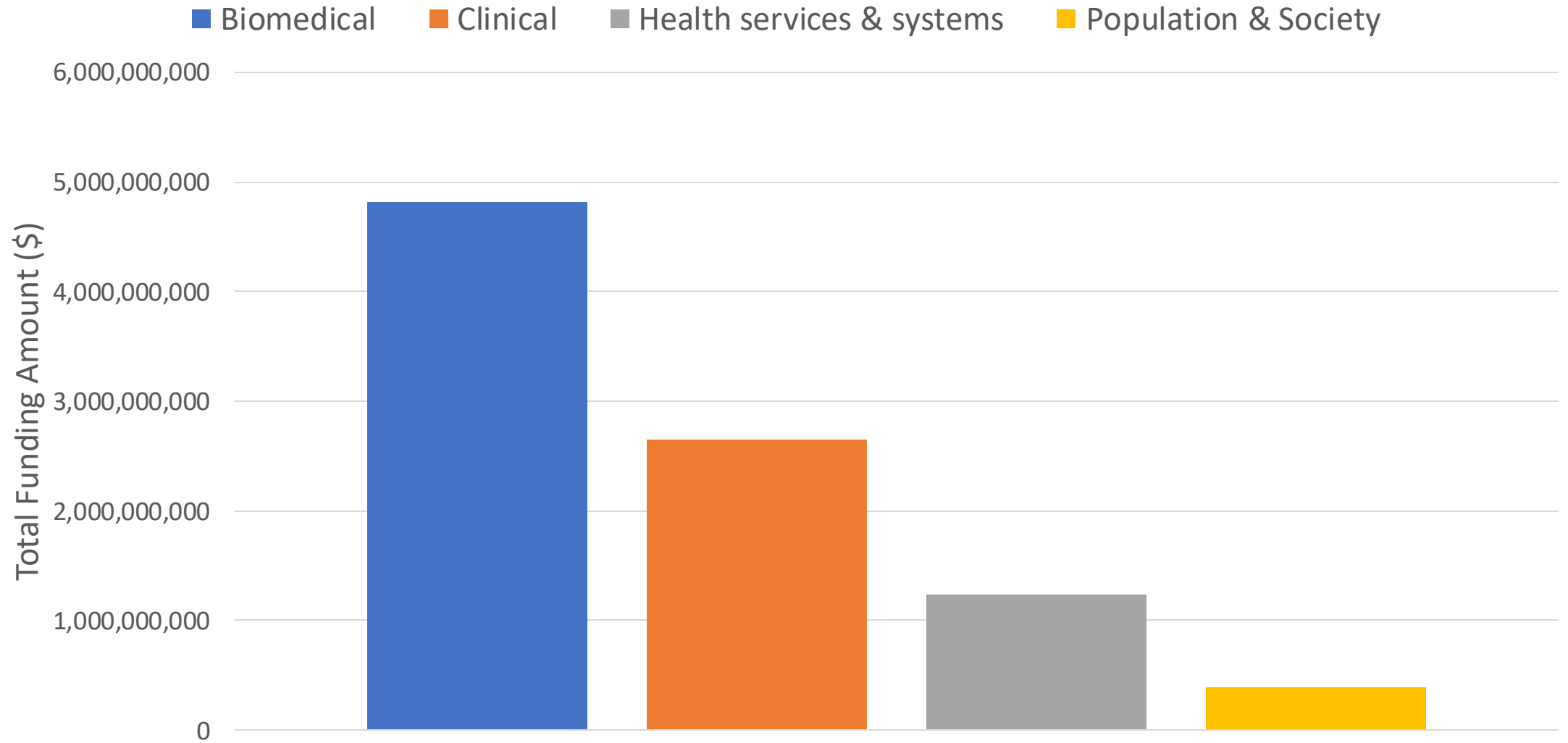
Gerber Foundation  
Juvenile Diabetes Research Foundation  
Leukemia and Lymphoma Society  
LUNGevity Foundation  
Lymphoma Research Foundation  
Melanoma Research Alliance  
Muscular Dystrophy Association  
Neuroendocrine Tumor Research Foundation  
Ovarian Cancer Research Alliance  
Patient-Centered Outcomes Research Institute  
Rita Allen Foundation  
Scleroderma Foundation  
Simons Foundation  
St. Baldrick's Foundation  
Susan G. Komen Breast Cancer Foundation  
Templeton World Charity Foundation  
V Foundation for Cancer Research

# Number of Grants Awarded to each Health Research Area

■ Biomedical   ■ Clinical   ■ Health services & systems   ■ Population & Society

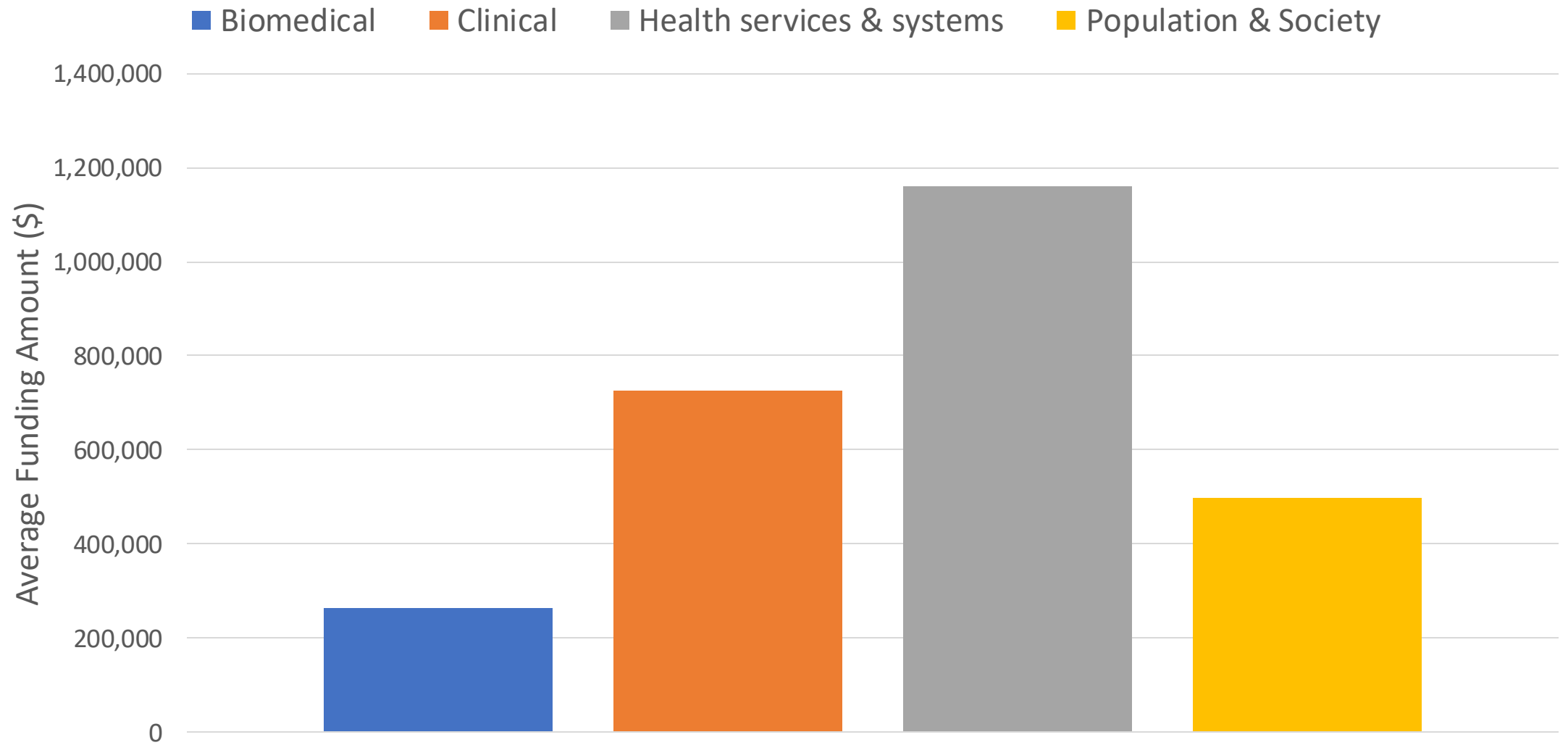


## Total Funding Amount by Health Research Area



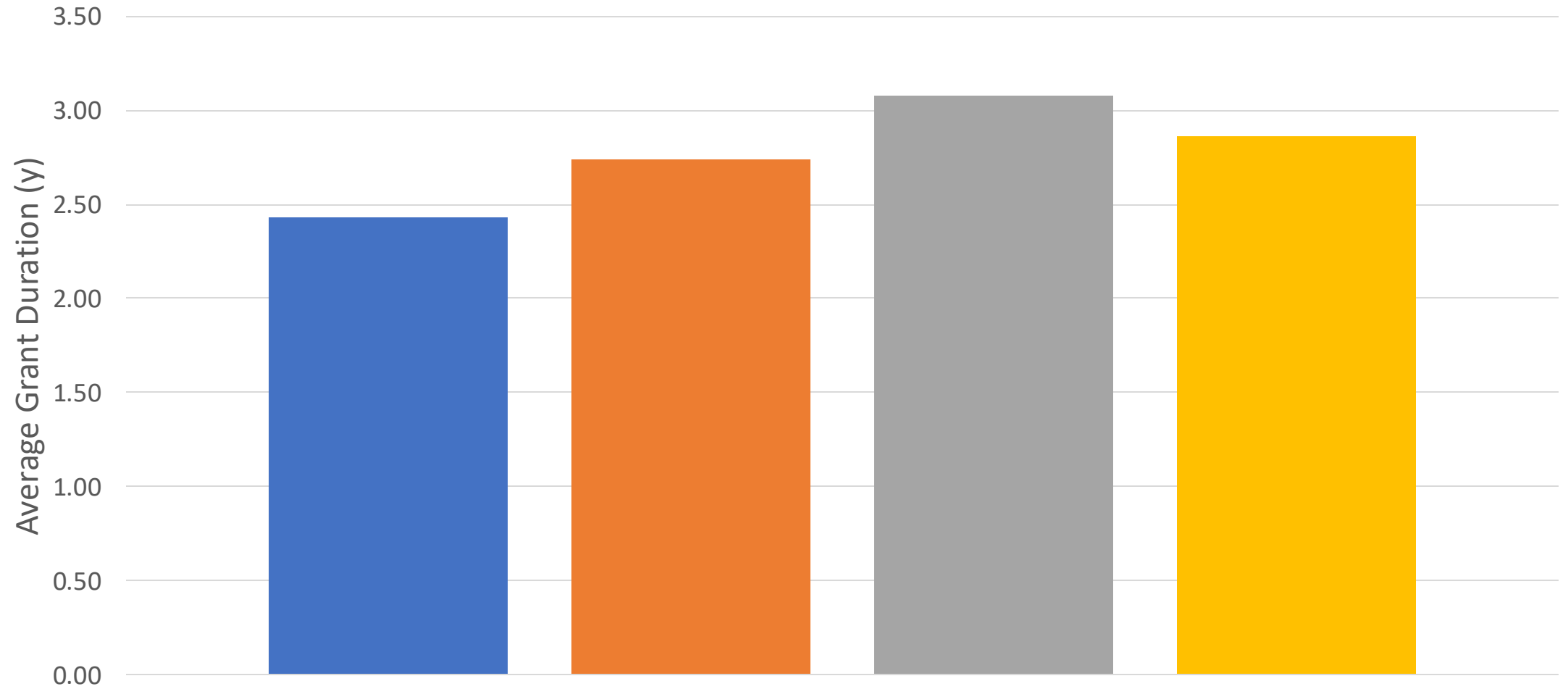


Average Funding Amount by Health Research Area



## Average Grant Duration by Health Research Area

■ Biomedical   ■ Clinical   ■ Health services & systems   ■ Population & Society



# Top funders in each area

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## **Biomedical**

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American Heart Association

American Cancer Society

Juvenile Diabetes Research Foundation

Leukemia and Lymphoma Society

Simons Foundation

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# Top funders in each area

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## **Clinical**

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Patient-Centered Outcomes Research Institute

American Heart Association

Juvenile Diabetes Research Foundation

American Cancer Society

Alzheimer's Association

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# Top funders in each area

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## **Health Services & Systems**

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Patient-Centered Outcomes Research Institute

American Cancer Society

American Heart Association

Donaghue Foundation

Templeton World Charity Foundation

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# Top funders in each area

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## **Population & Society**

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Patient-Centered Outcomes Research Institute

American Cancer Society

American Heart Association

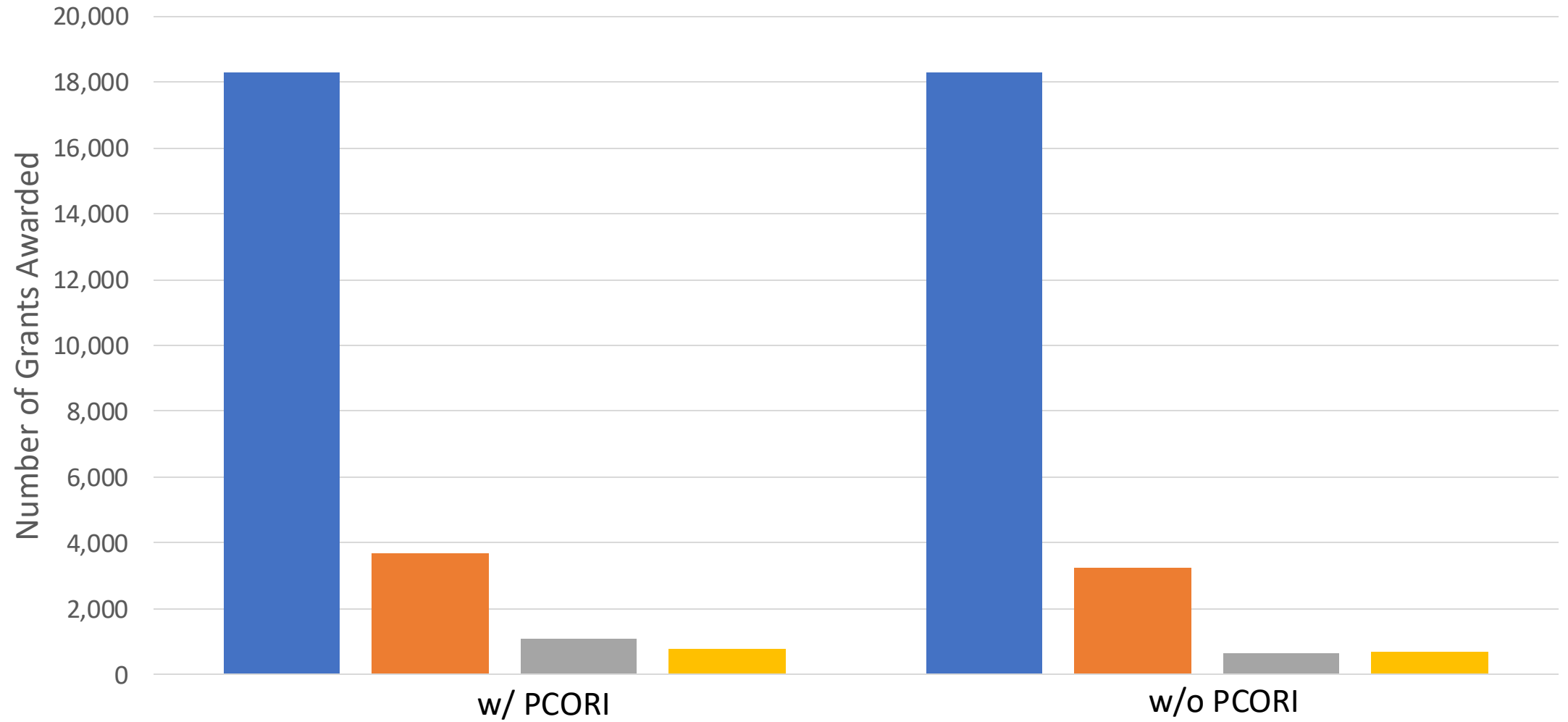
Templeton World Charity Foundation

Susan G. Komen Breast Cancer Foundation

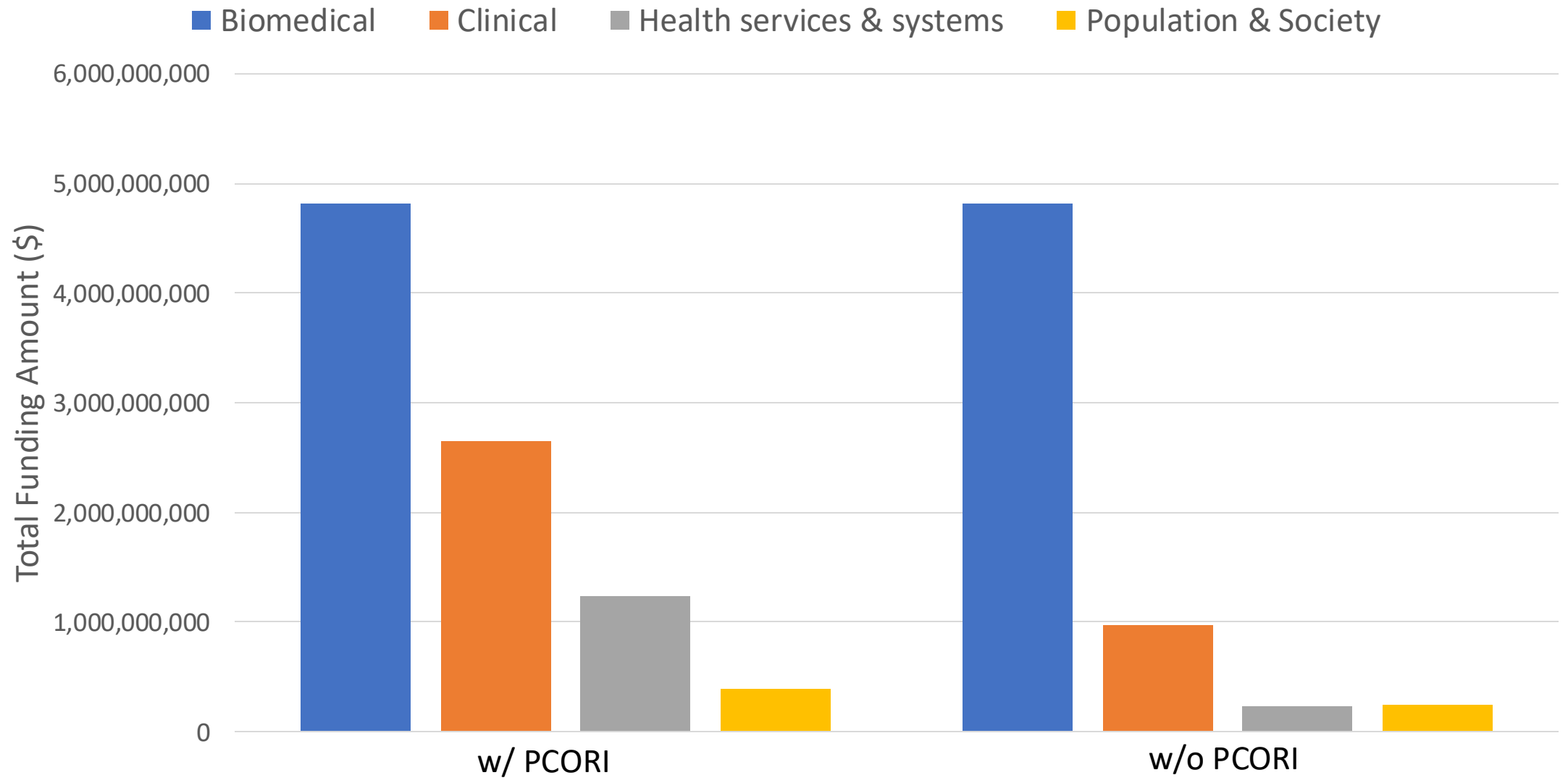
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Number of Grants Awarded to each Health Research Area w/ and w/o PCORI

■ Biomedical   ■ Clinical   ■ Health services & systems   ■ Population & Society

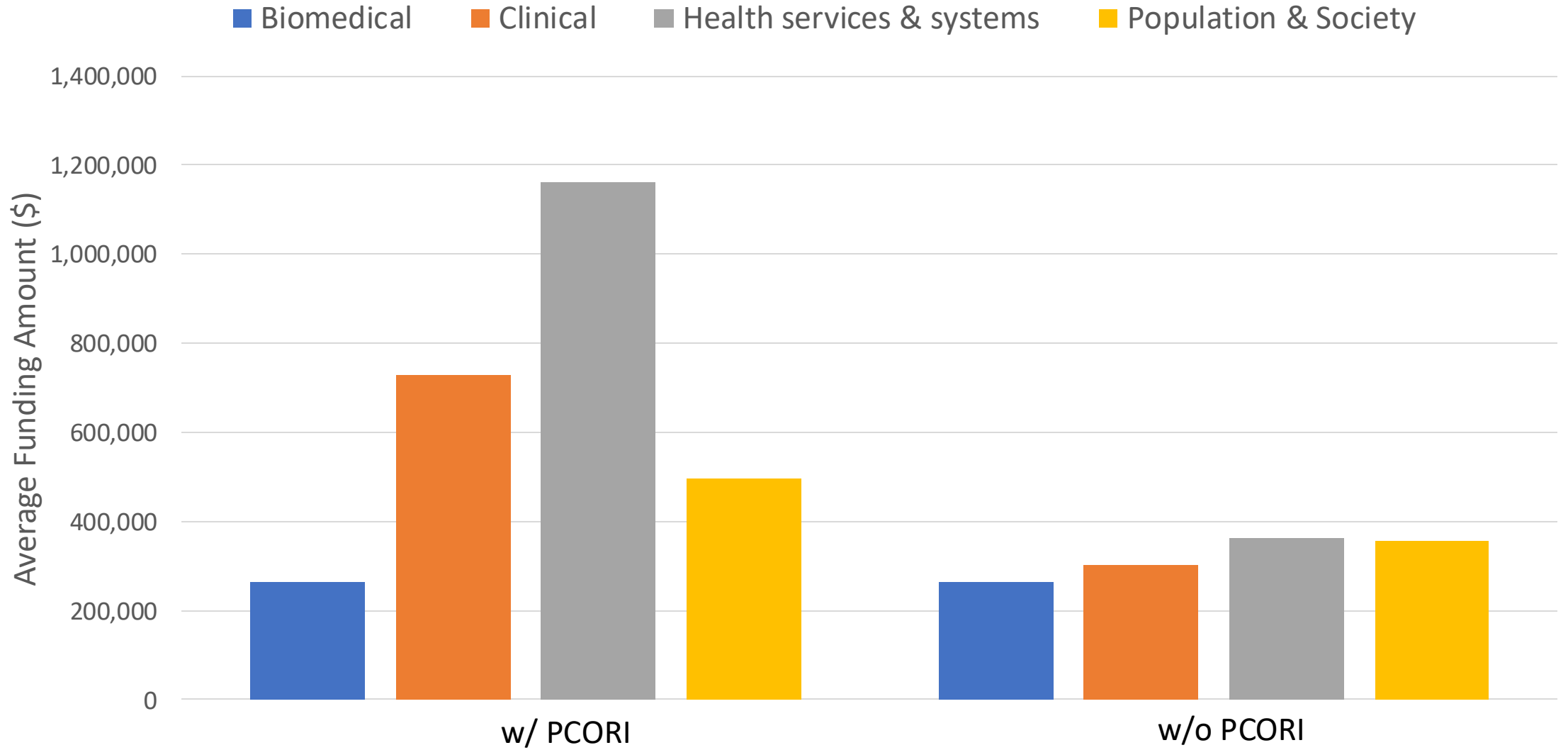


Total Funding Amount by Health Research Area w/ and w/o PCORI

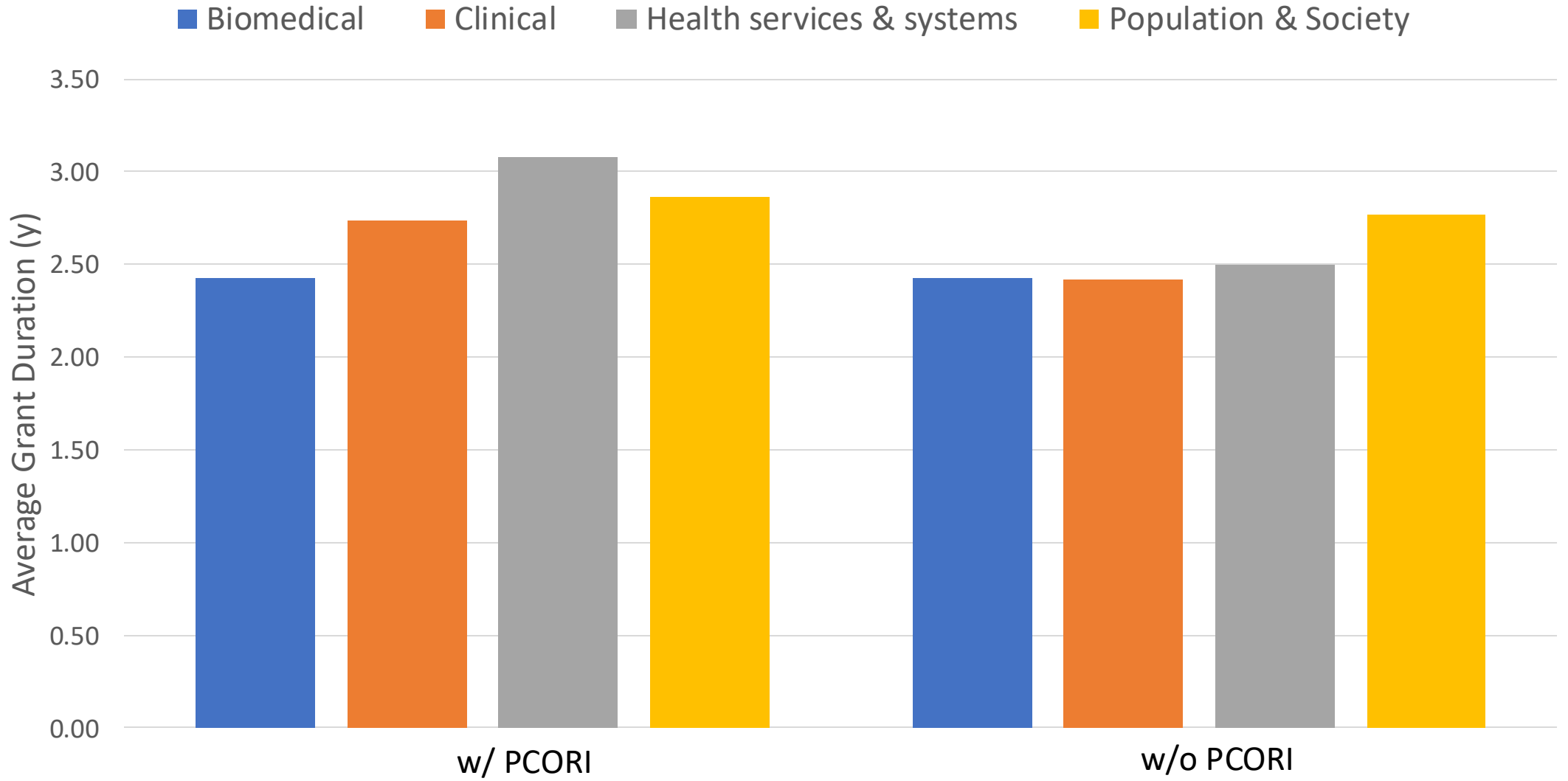




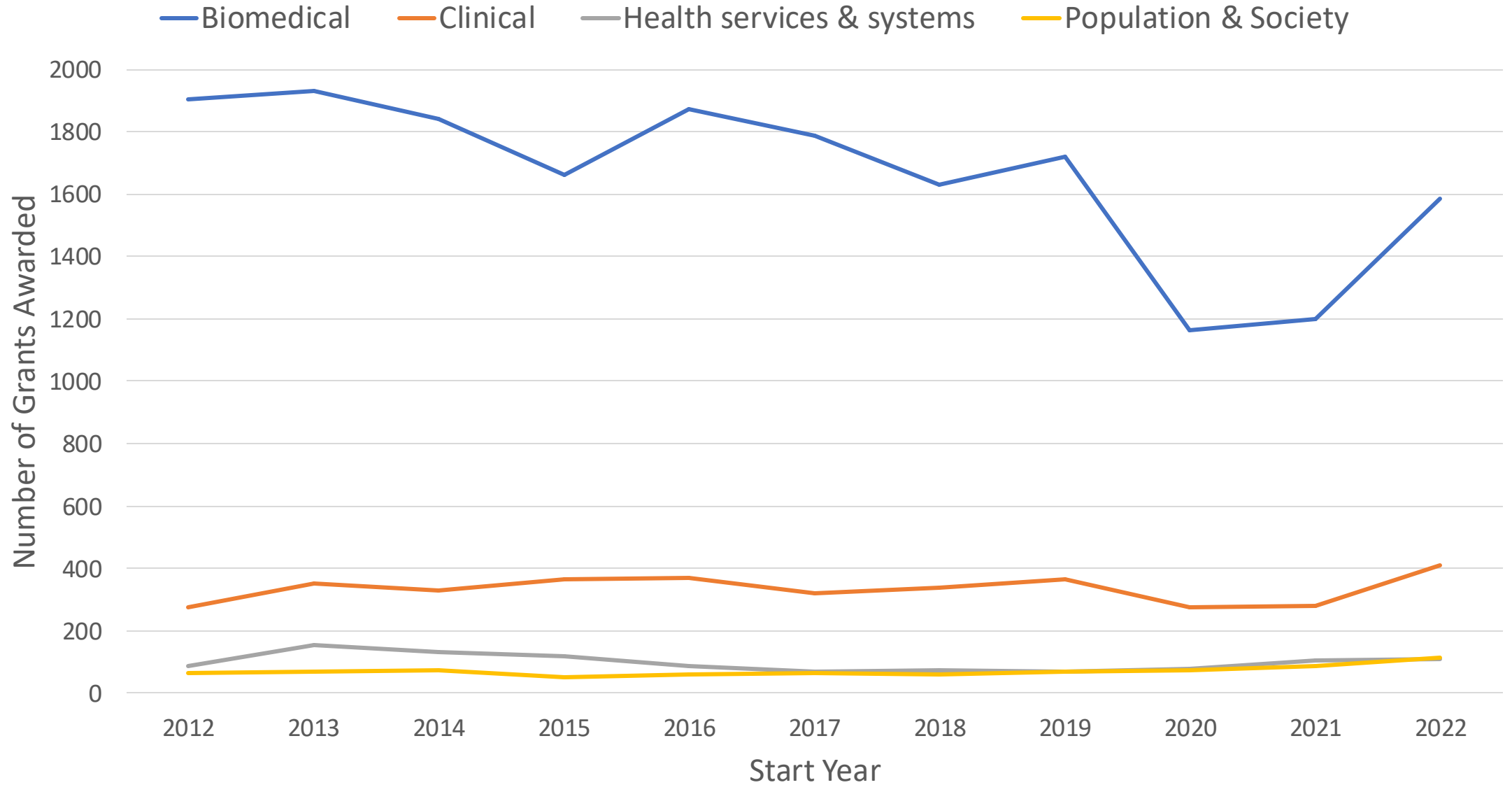
Average Funding Amount by Health Research Area w/ and w/o PCORI



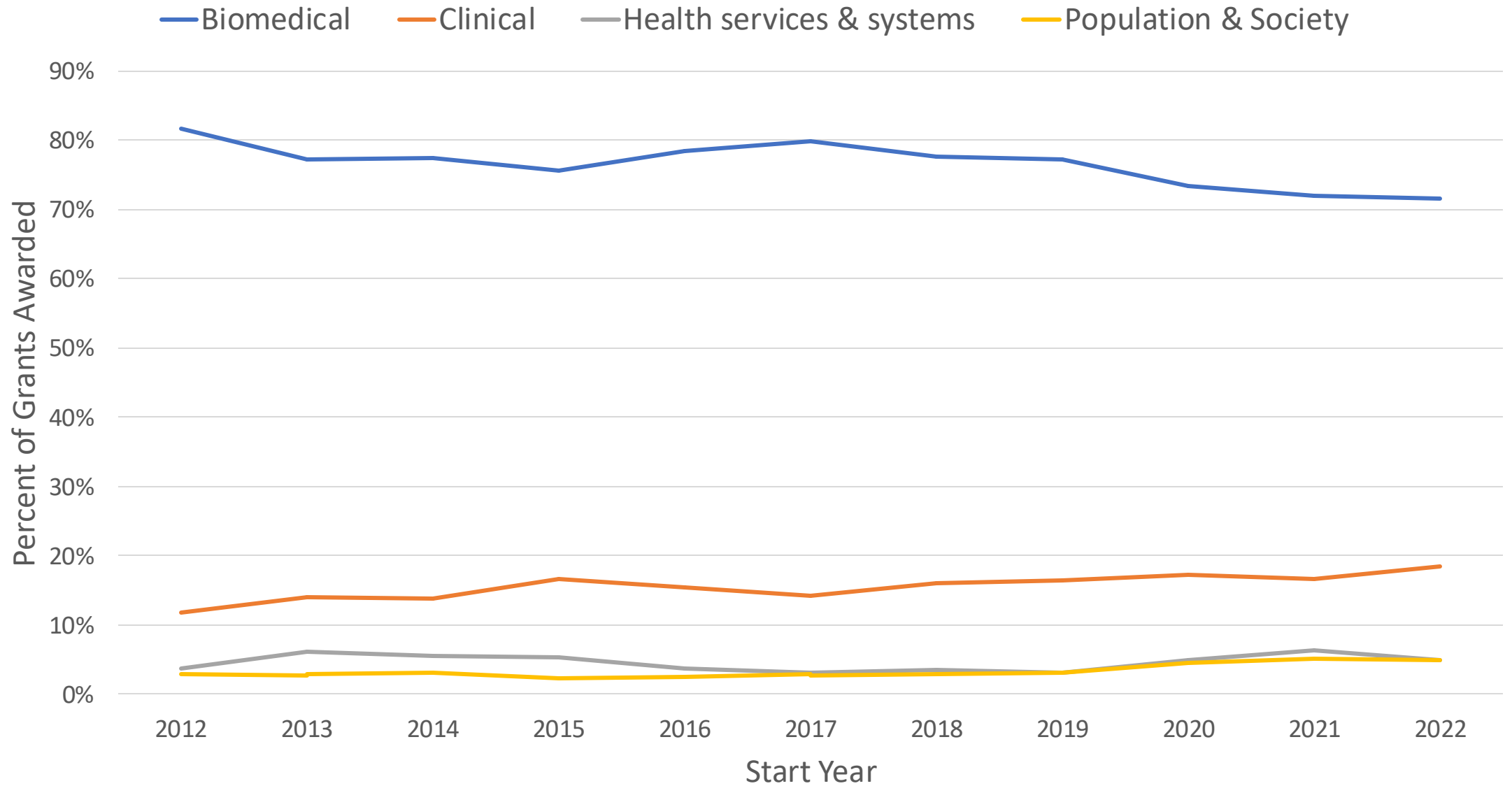
Average Grant Duration by Health Research Area w/ and w/o PCORI



Number of Awards Over Time Categorized by Health Research Area

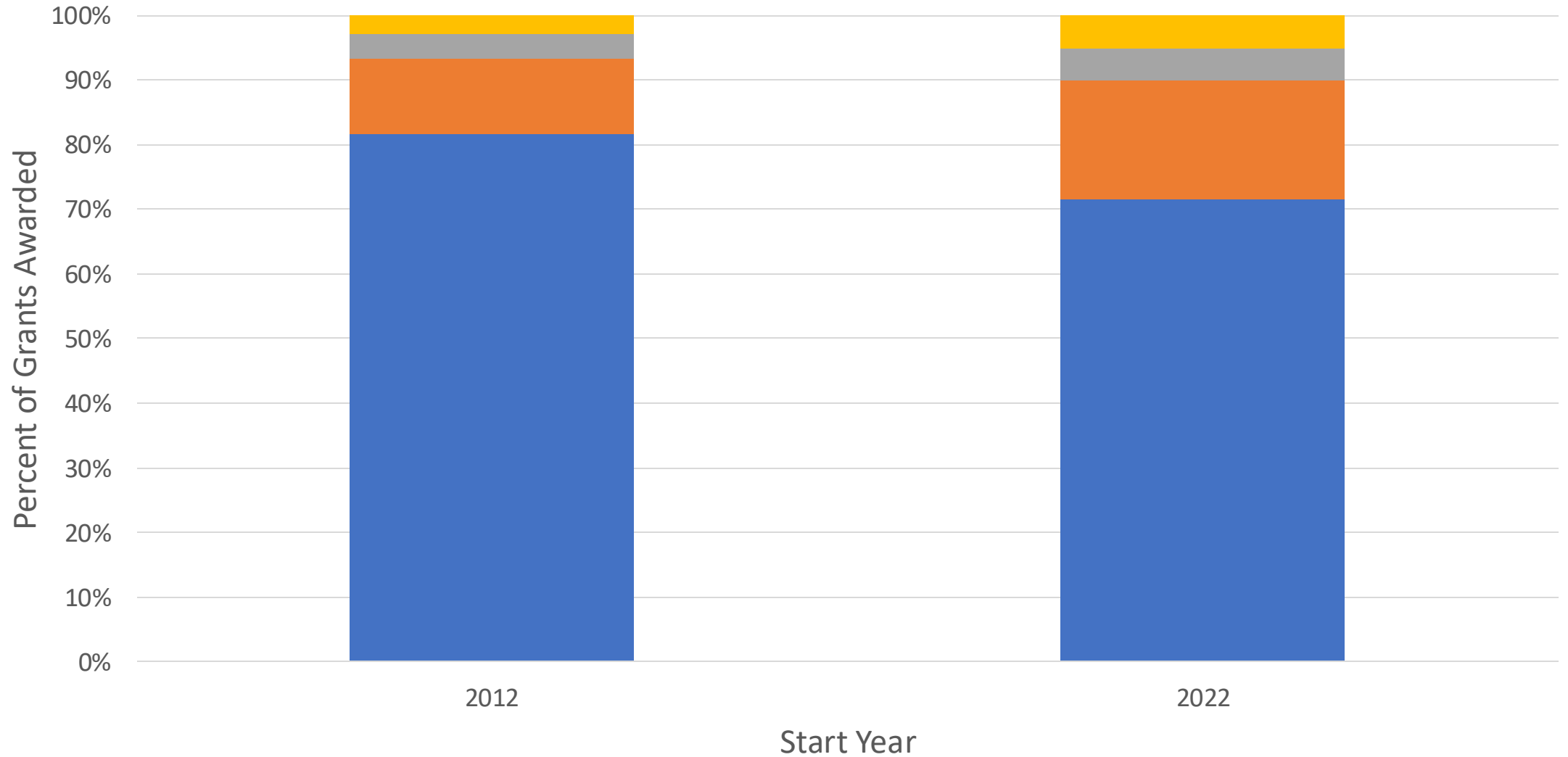


Percent of Awards Over Time Categorized by Health Research Area

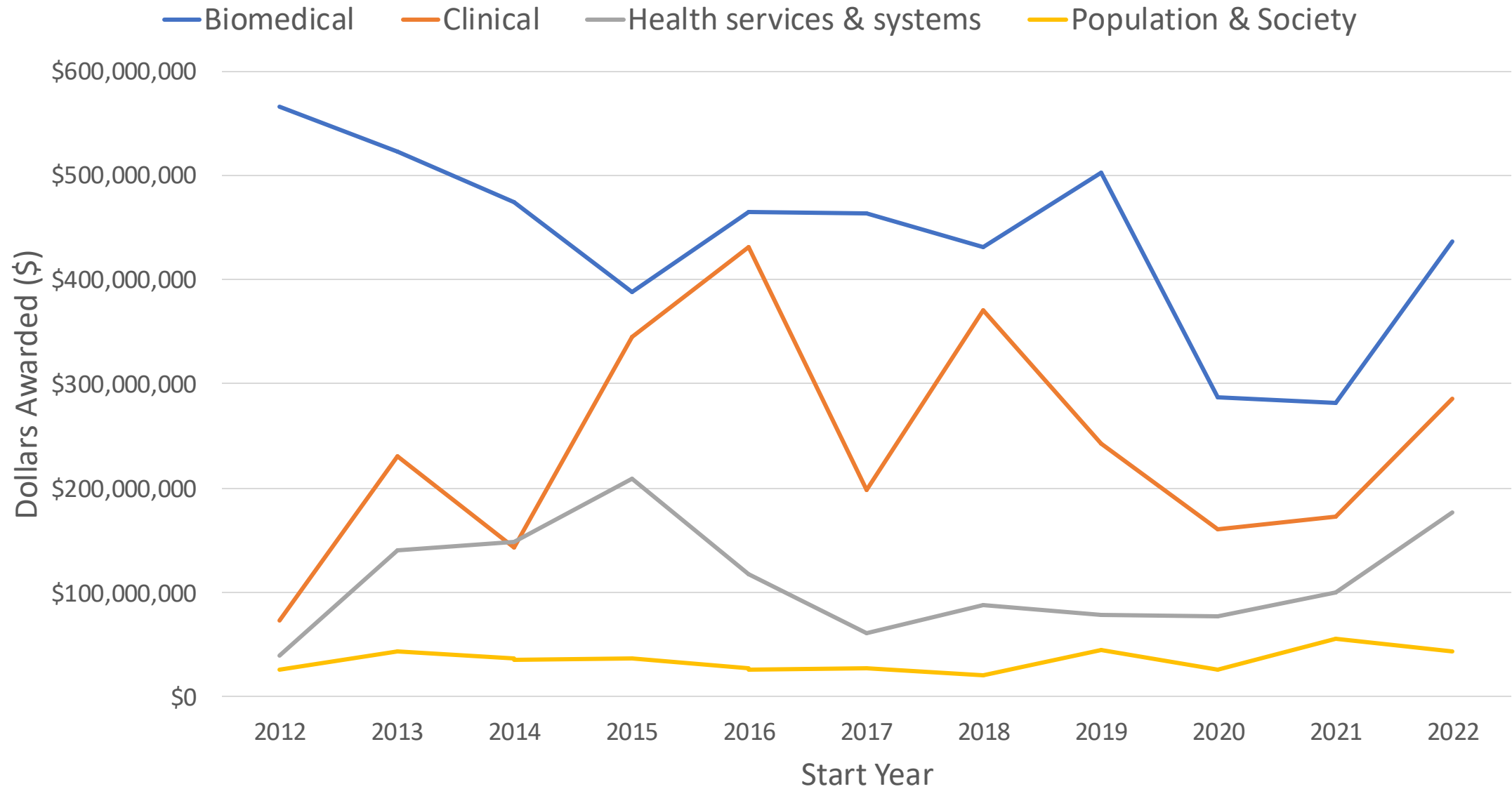


# Percent of Awards Over Time Categorized by Health Research Area

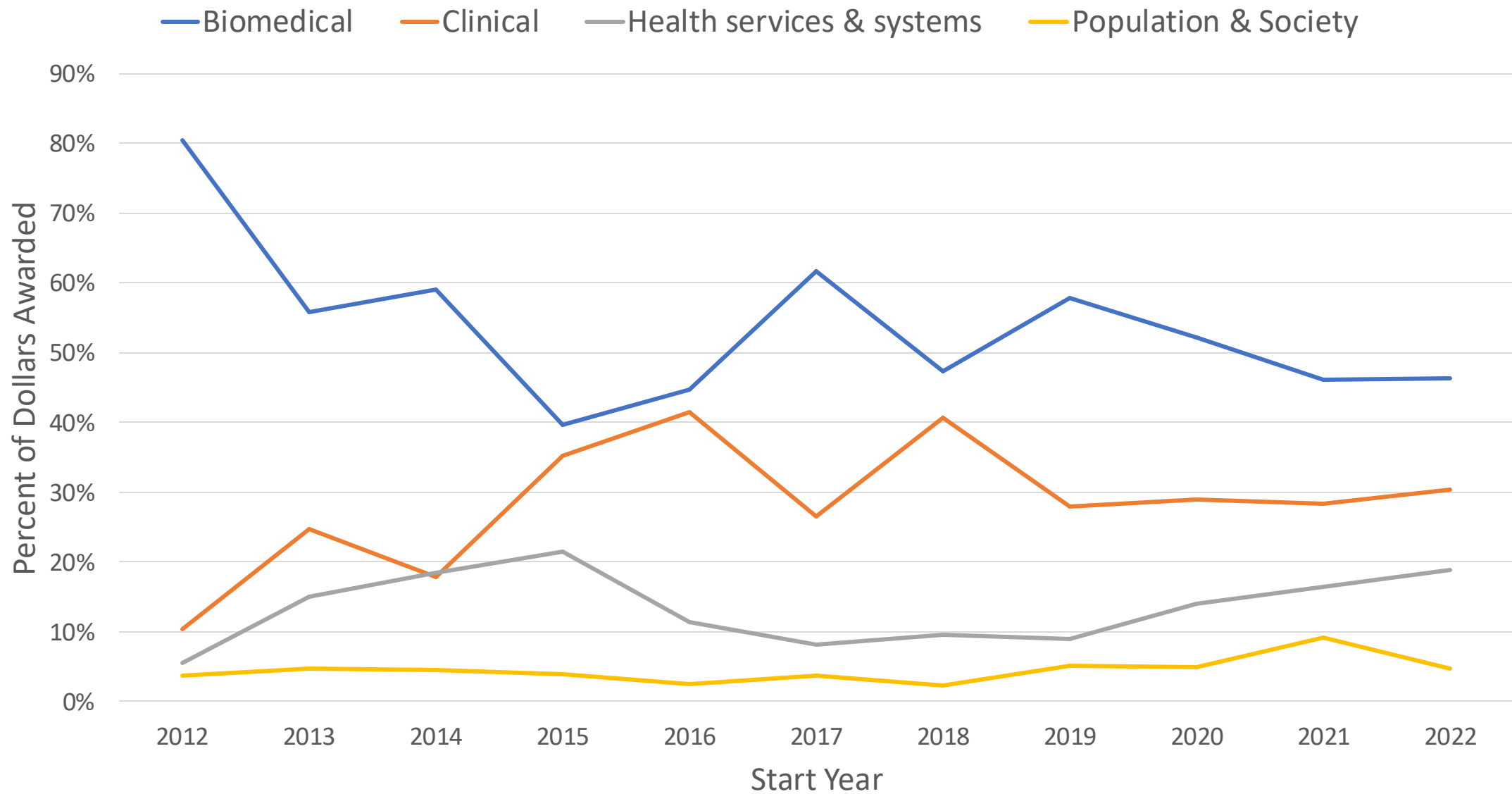
■ Biomedical   ■ Clinical   ■ Health services & systems   ■ Population & Society



Dollars Awarded Over Time Categorized By Health Research Area

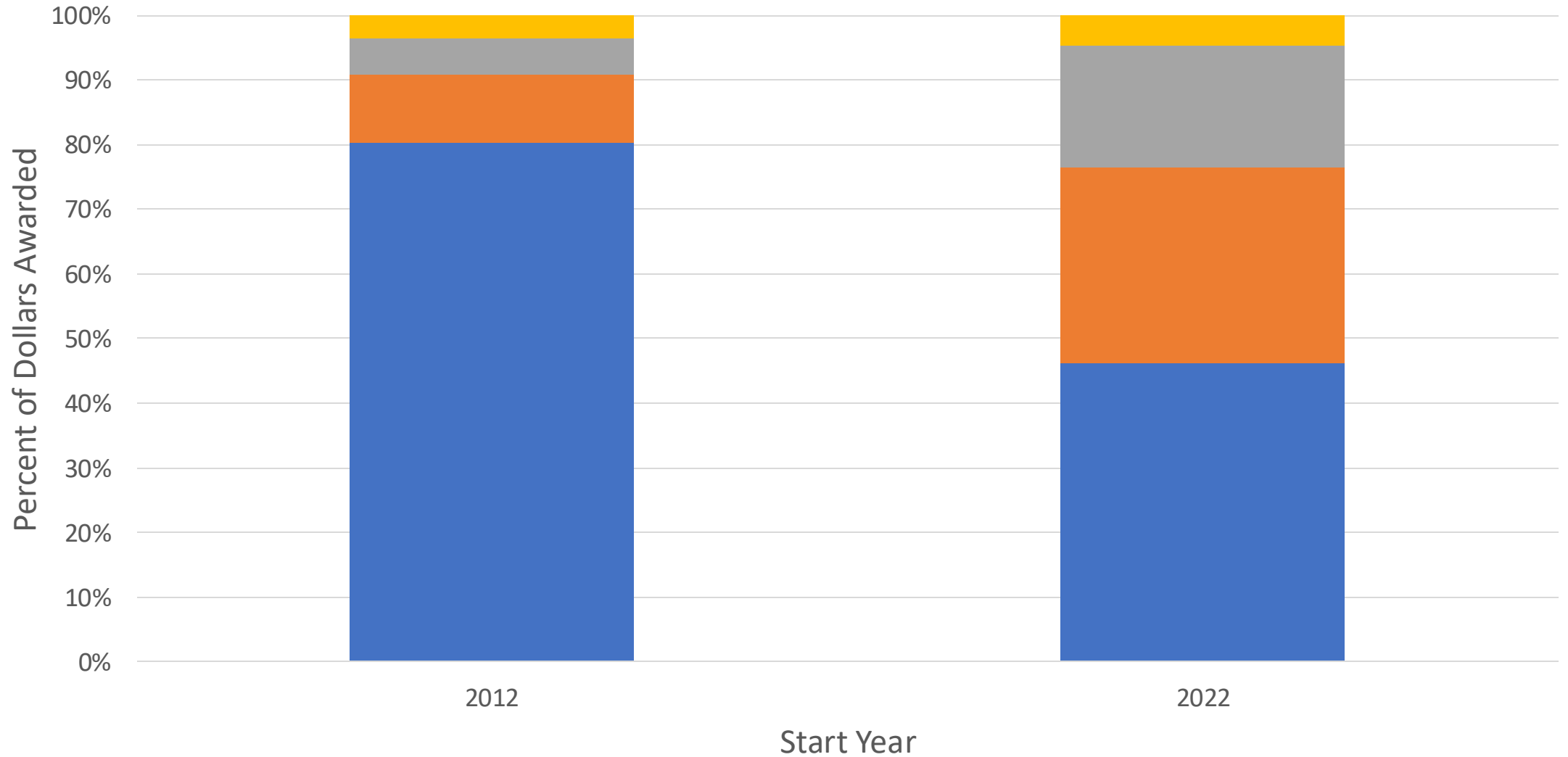


Percent of Dollars Awarded Over Time Categorized by Health Research Area



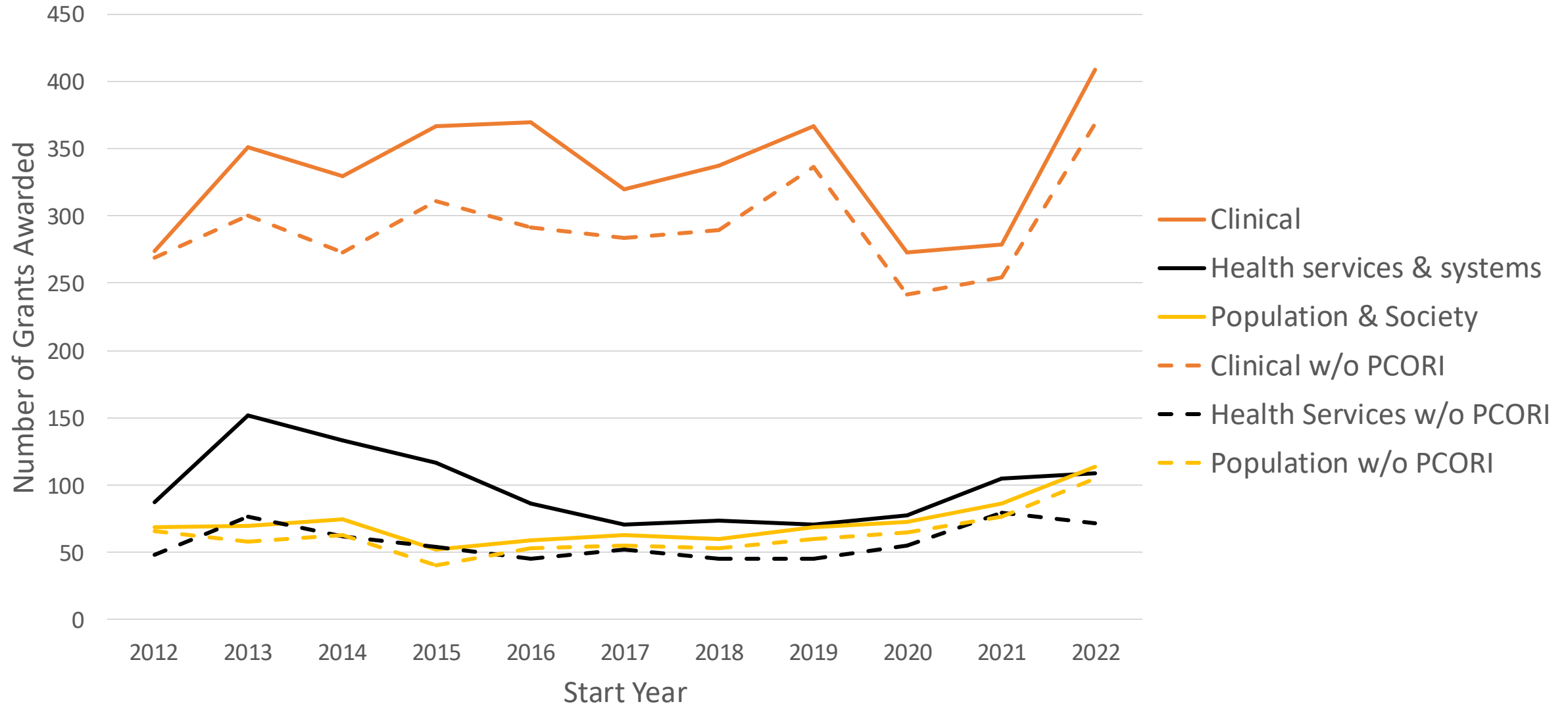
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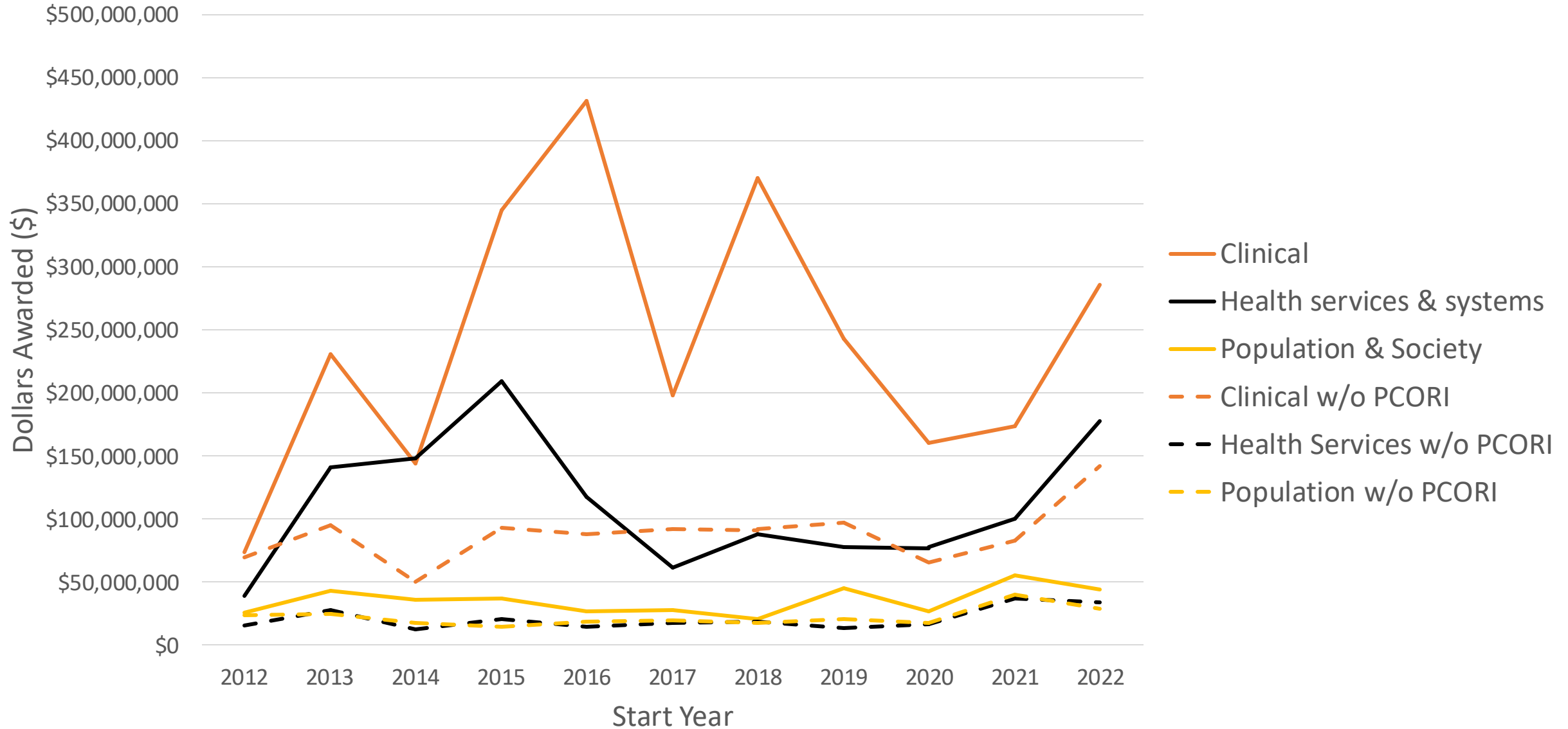




Number of Awards Over Time Categorized by Health Research Area w/ and w/o PCORI



Dollars Awarded Over Time Categorized By Health Research Area w/ and w/o PCORI



# Some Conclusions

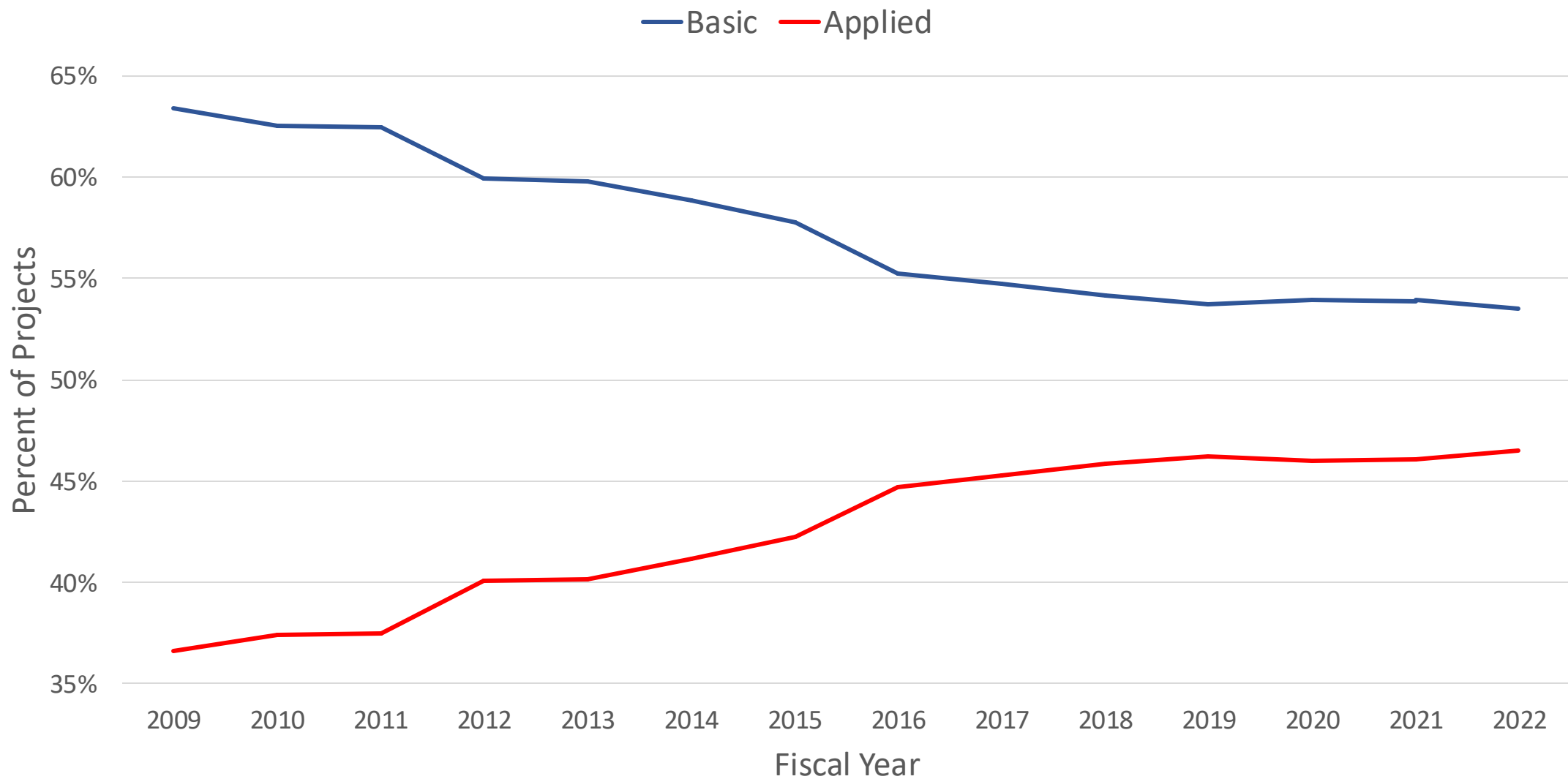
- HRA members as a group support biomedical research more than clinical, health services, and population & society
- Grants to support clinical, health services, and population research are typically more expensive than biomedical
- Trends over time: decrease in percent of dollars awarded for biomedical; increase in clinical; population & society relatively flat; health services fluctuates
- Substantial drop in grant numbers and dollars during COVID
- PCORI has a major role in support of clinical and health services research

Thank you

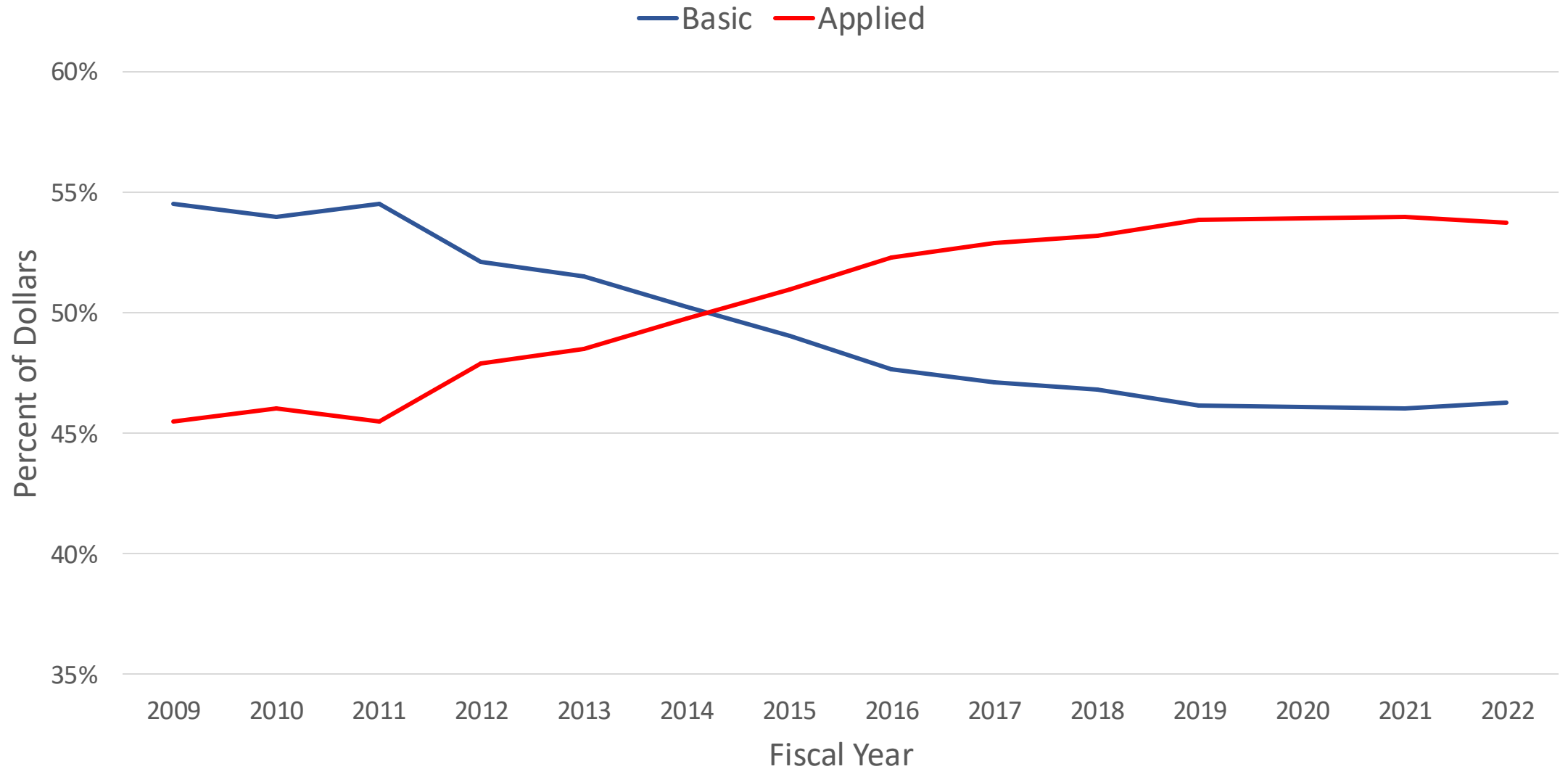
# NIH Grants by Health Research Area

Kevin Sia

# National Institutes of Health Funding for Basic and Applied Research Over Time



# National Institutes of Health Funding for Basic and Applied Research Projects Over Time



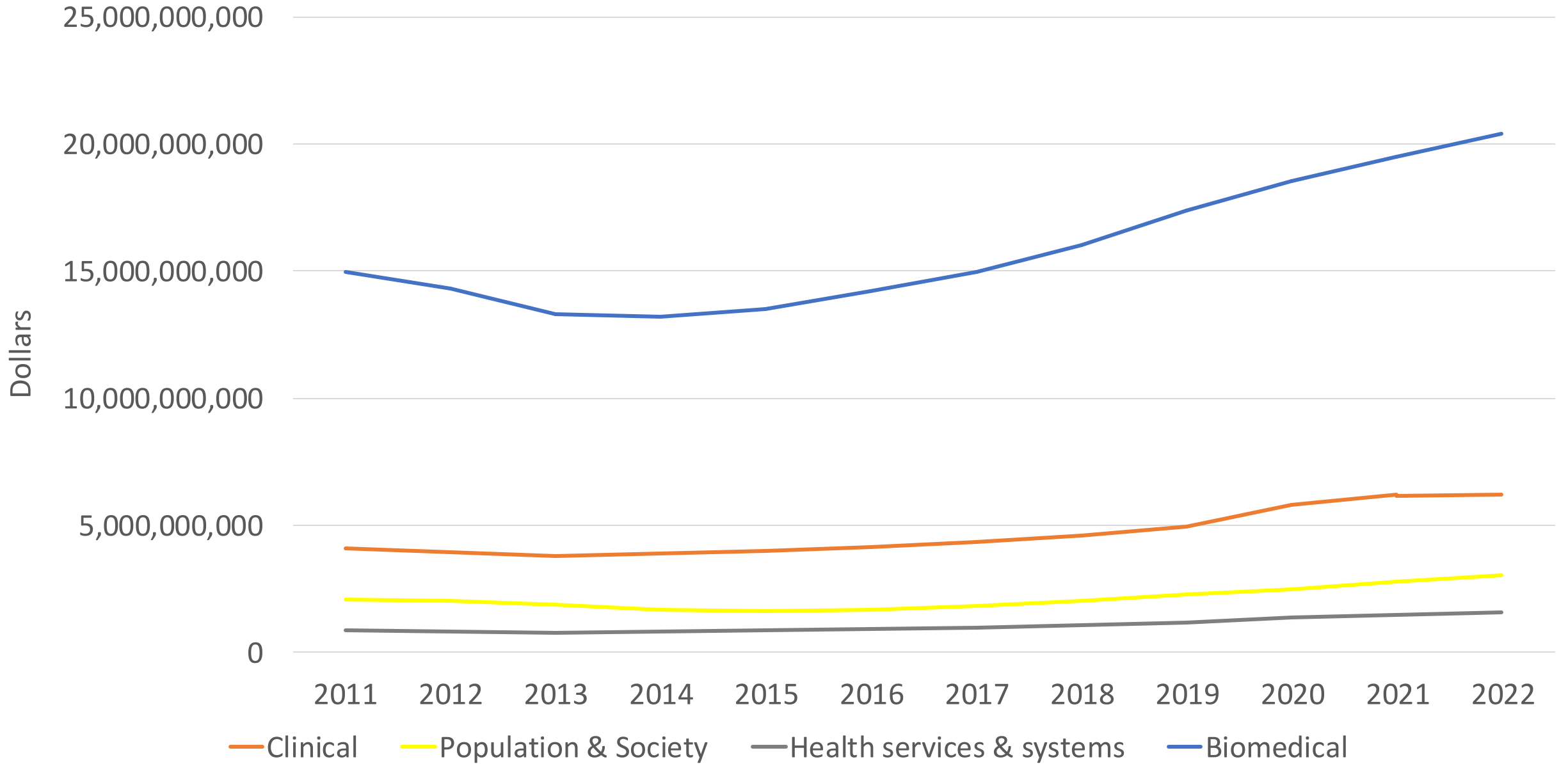
Source: <https://nexus.od.nih.gov/all/2023/10/31/trends-in-nih-supported-basic-translational-and-clinical-research-fys-2009-2022/>, Replotted by BM

# Health Research Area for NIH

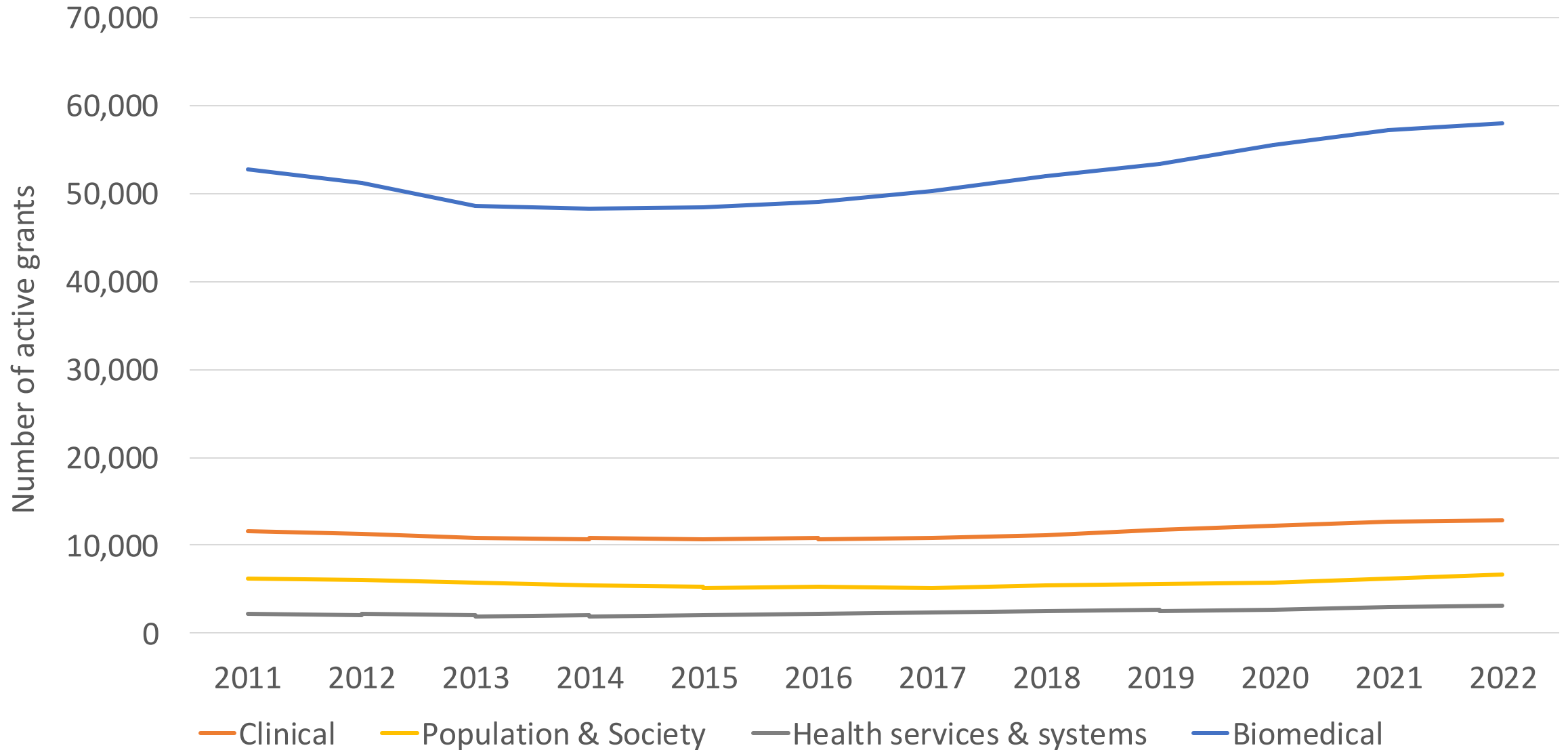
- Published analysis depended on the Research, Condition, and Disease Classification (RCDC) system
- HRA Analyzer data on NIH:
  - Funding amount (USD) and Active NIH grants
  - Grants from 2011-2022
  - Classification: Health Research Area



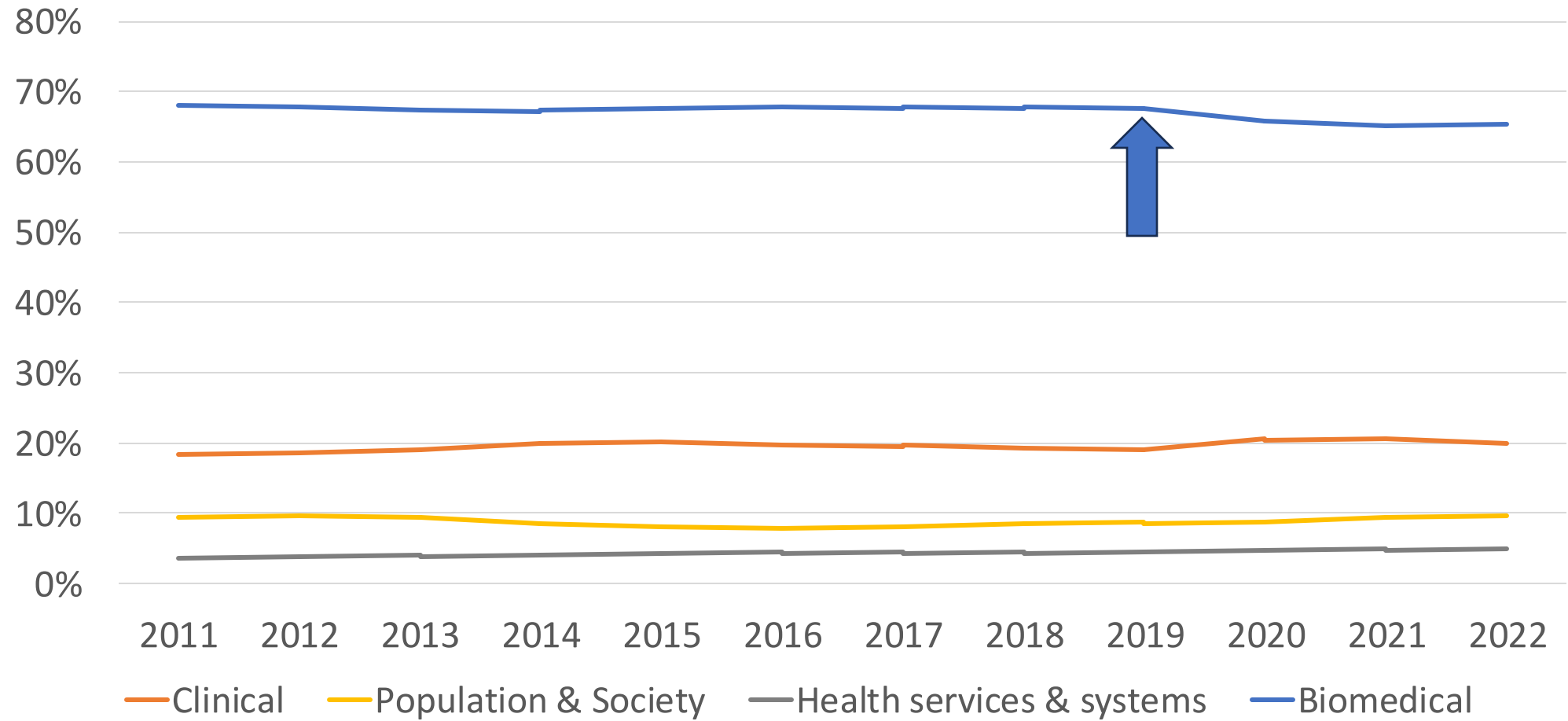
National Institutes of Health Grant Dollars Over Time by Health Research Area



National Institutes of Health Number of Grants Over Time by Health Research Area



National Institutes of Health Proportion of Dollars Award by Health Research Area



# Additional conclusions

- Similar trends of awards and dollars granted with NIH as with Health Research Alliance
- Interpretation of trends may differ based on the classification system used (e.g., Health Research Area compared to RCDC)