AAMC approach to analyzing NIH grant terminations data

May 5, 2025

Data Sources:

Terminated grants:

For the most up-to-date data on NIH grant terminations AAMC downloaded the complete <u>NIH Grant Terminations in 2025</u> data as a CSV file on May 5th, 2025. This dataset is managed by Noam Ross and Scott Delaney and draws from self-reported grant terminations submitted by impacted researchers, as well as from other sources including Doge.gov, USASpending.gov, NIH's X feed, NIH RePORTER, and the HHS TAGGS system. For more information on their methodology, visit this page.

To ensure that the dataset and analysis only included NIH grants awarded to US institutions, grants awarded to institutions outside of the US were dropped. To ensure that the dataset only included grants awarded by the NIH, grants awarded to agencies outside of the NIH were dropped. Duplicate observations were also identified and dropped.

The number of grants does fluctuate over time due to incomplete reporting as well as the reinstatement of some grants as the result of lawsuits or other activities.

Clinical Trials:

For the most up-to-date information on clinical studies associated with terminated NIH grants, AAMC downloaded the Clinical Studies CSV file from NIH EXPORTER on May 5th, 2025, which includes interventional clinical trials and observational clinical studies registered with an NCT number, and matched it with terminated grants using the NIH core project number. To ensure that the AAMC was only counting clinical trials impacted by grant terminations, the AAMC kept and counted only clinical studies that met the following criteria:

- 1. The clinical study was listed as an interventional study (a clinical trial) and not an observational study. Only interventional studies are included in the analysis of clinical trials.
- 2. The clinical trial had one of the following statuses: Not yet recruiting; Active, not recruiting; Recruiting; Enrolling by invitation OR the study was terminated, withdrawn, or suspended after the NIH grant to which it was matched was terminated. Date of termination, suspension, or withdrawal was determined through a manual review of the clinicaltrials.gov page of each terminated/suspended/withdrawn grant. Clinical trials that were completed, terminated, suspended, or withdrawn prior to the grant termination were not included.
- 3. The terminated NIH grant to which the clinical trial was matched was a full grant OR the terminated NIH grant was a supplement, and the clinical trial title and description matched the aims of the supplement. This was determined through a manual review of the NIH RePORTER page for each terminated supplement and a review of the ClinicalTrials.gov page for each clinical trial associated with the supplement.

Identifying US medical schools, hospitals, and academic societies:

All grants where the organization type ("org_type" in the Airtable dataset) was "Schools of Medicine," "Schools of Medicine & Dentistry," "Overall Medical," or "Independent Hospitals" were coded as 1 on an

indicator variable indicating that the organization was a medical school, hospital, or academic society ("medical_institution"). To make sure that no terminated grants that ought to be attributed to a medical school, hospital, or academic society were missed, the "org_name," "org_type," and "dept_type" fields of all grants that were not yet coded as being awarded to a medical institution were reviewed. The review found several grants where the institution was not coded as a medical institution but should have been (<u>list of medical schools</u>). In these cases, the grant was recoded to correctly identify the grantee institution as a medical school, hospital, or academic society.

Identifying IDeA states:

IDeA states are 23 states and Puerto Rico that have historically had low success rates in obtaining NIH grant funding. As a result, these states and Puerto Rico became part of a program (The Institutional Development Awards program) first authorized by Congress in 1993 to boost the competitiveness of institutions within these geographic areas. An indicator variable for IDeA states (1=yes, 0=no) was generated using the "org_state" variable. The following states were coded as IDeA states: the Commonwealth of Puerto Rico, Alaska, Arkansas, Delaware, Hawaii, Idaho, Kansas, Kentucky, Louisiana, Maine, Mississippi, Montana, Nebraska, Nevada, New Hampshire, New Mexico, North Dakota, Oklahoma, Rhode Island, South Carolina, South Dakota, Vermont, West Virginia, and Wyoming.

Identifying topic areas:

To understand the breadth of the health outcomes and diseases that terminated NIH grants studied, the research analyst reviewed "project_title," "project_abstract," and "project_terms" to identify key topic areas and the associated key terms. The "project_terms" field was then searched for terms related to the following topics: alzheimer's; cardiovascular diseases, diabetes, and other chronic conditions; cancer; COVID-19; environmental health; HIV/AIDS; infectious diseases (general); mental health; obesity; reproductive health; substance use disorders; and vaccination. The terms searched were:

Alzheimer's: "dementia" "alzheimer's"

Cancer: "cancer" "malignant" "tumor" "oncology"

Cardiovascular diseases, diabetes, and other chronic conditions: "cardiovascular" "atherosclerosis" "heart disease" "lupus" "chronic disease" "diabetes" "t1d" "t2d"

COVID-19: "COVID-19" "SARS-COV-2" "COVID" "2019-NCOV"

Environmental health: "climate" "environmental justice" "air pollution" "environmental exposure" "environmental health sciences"

HIV/AIDS: "hiv" "aids" "hiv/aids"

Infectious Diseases (General): "epidemic" "pandemic" "communicable diseases" "infection rate" "sexually transmitted diseases" "viral"

Mental health: "mental health" "mental depression" "mental disorders" "psychologic" "suicide" "suicidal" "suicidality" "anxiety" "moods"

Obesity: "obesity" "adipose tissue" "excessive weight gain"

Reproductive health: "reproductive health" "maternal mortality" "maternal morbidity" "menstrual" "menstruation" "reproductive"

Substance use disorder: "substance use disorder" "substance misuse" "addiction" "opioid use" "drug addiction" "overdose" "alcohol dependence" "alcohol use disorder" "alcoholic"

Vaccination: "vaccine hesitancy" "vaccination" "vaccine" "unvaccinated"

Identifying key study populations:

In order to understand the key study populations on which terminated NIH grants were focusing, the "project_terms" field was searched for terms related to LGBTQ populations, racial and ethnic minority populations, women, and low-income populations:

LGBTQ: "assigned at birth" "assigned male at birth" "assigned female at birth" "gender diversity" "gender identity" "gender affirming care" "non-binary" "nonbinary" "transgender" "transgender" "homosexuality" "men who have sex with men" "msm" "sexual minority" "gender minority" "lesbian" "gay" "bisexual" "queer" "sexual and gender" "two spirit"

Racial and/or ethnic populations: "asian" "african american" "black" "latinx" "latino" "latina" "racism" "ethnic" "indigenous" "people of color" "raciall" "racially"

Women: "women" "woman"

Low-income/low-resource populations: "poverty" "socioeconomic disparity" "resource-limited" "low income"

All data cleaning, matching, and variable recoding was completed in Stata 14.2. Once the final dataset was complete, it was exported as an excel file and pivot tables were utilized to produce key summary tables and figures.