Toward Evidence-Based Health Care

Spring Meeting: Positioning Your Institution to Successfully Navigate NIH Grants
May 21, 2024

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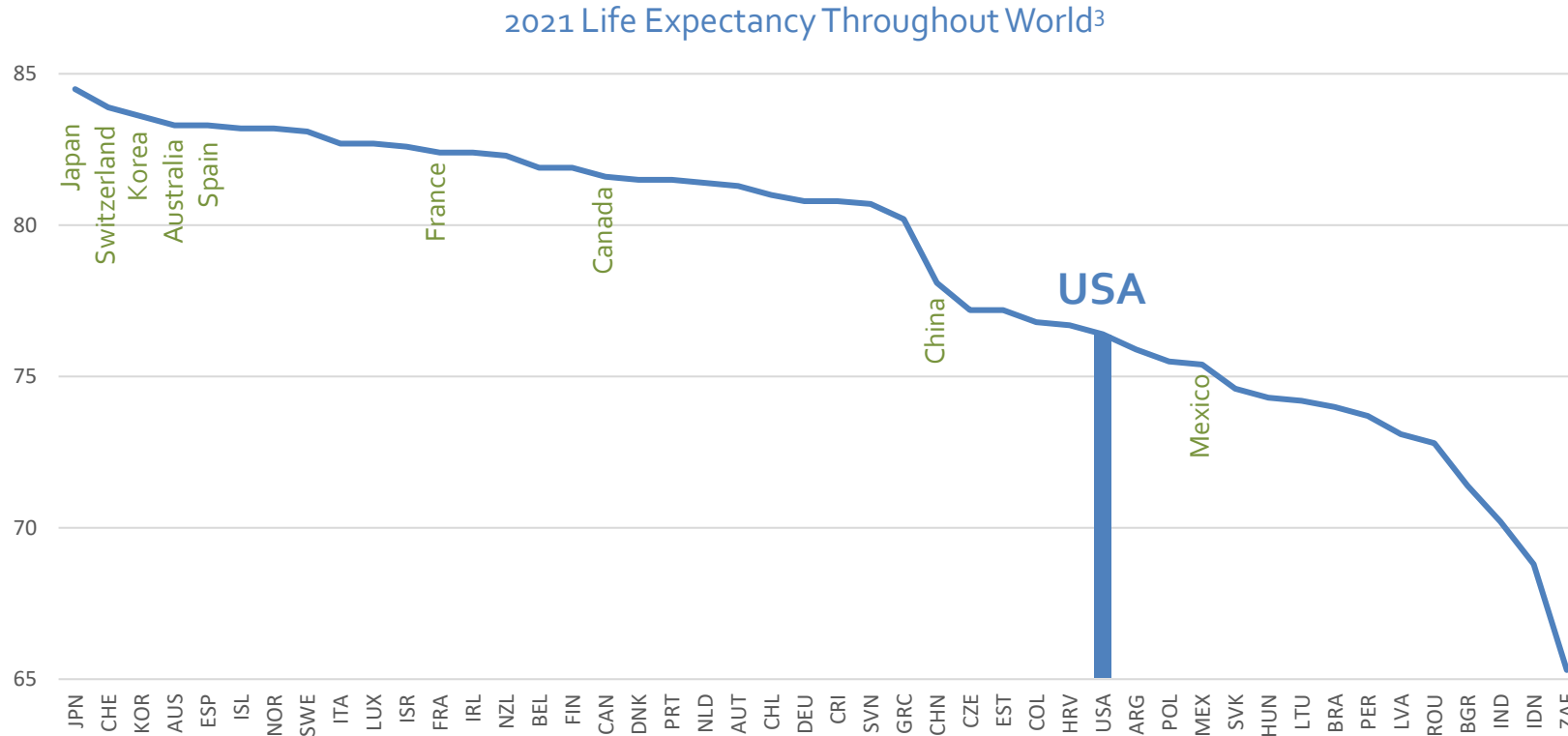Department of Health and Human Services

Today's Discussion

- The Health of the U.S. Population

- Guiding Principles

- What Should NIH Do?

Disturbing Trends in the Health of the U.S. Population

U.S. life expectancy ranks low among peers

2021 Life Expectancy Throughout World[3]

Concerning U.S. life expectancy trends:

- Declined 2014-2017[1]
- Dropped significantly—2.4 years—between 2019 and 2021[2]
- Increased in 2022 by 1.1 years; gain does not make up for pandemic losses.[2]

(1) National Academies of Sciences, Engineering, and Medicine. 2021. *High and Rising Mortality Rates Among Working-Age Adults*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25976.

(2) Arias E, Kochanek KD, Xu JQ, Tejada-Vera B. Provisional life expectancy estimates for 2022. Vital Statistics Rapid Release; no 31. Hyattsville, MD: National Center for Health Statistics. November 2023. https://dx.doi.org/10.15620/cdc:133703.

(3) Chart data: OECD (2024), Life expectancy at birth (indicator). DOI: 10.1787/27e0fc9d-en (Accessed on 10 January 2024)

Life Expectancy vs. Health Expenditures

1970-2018
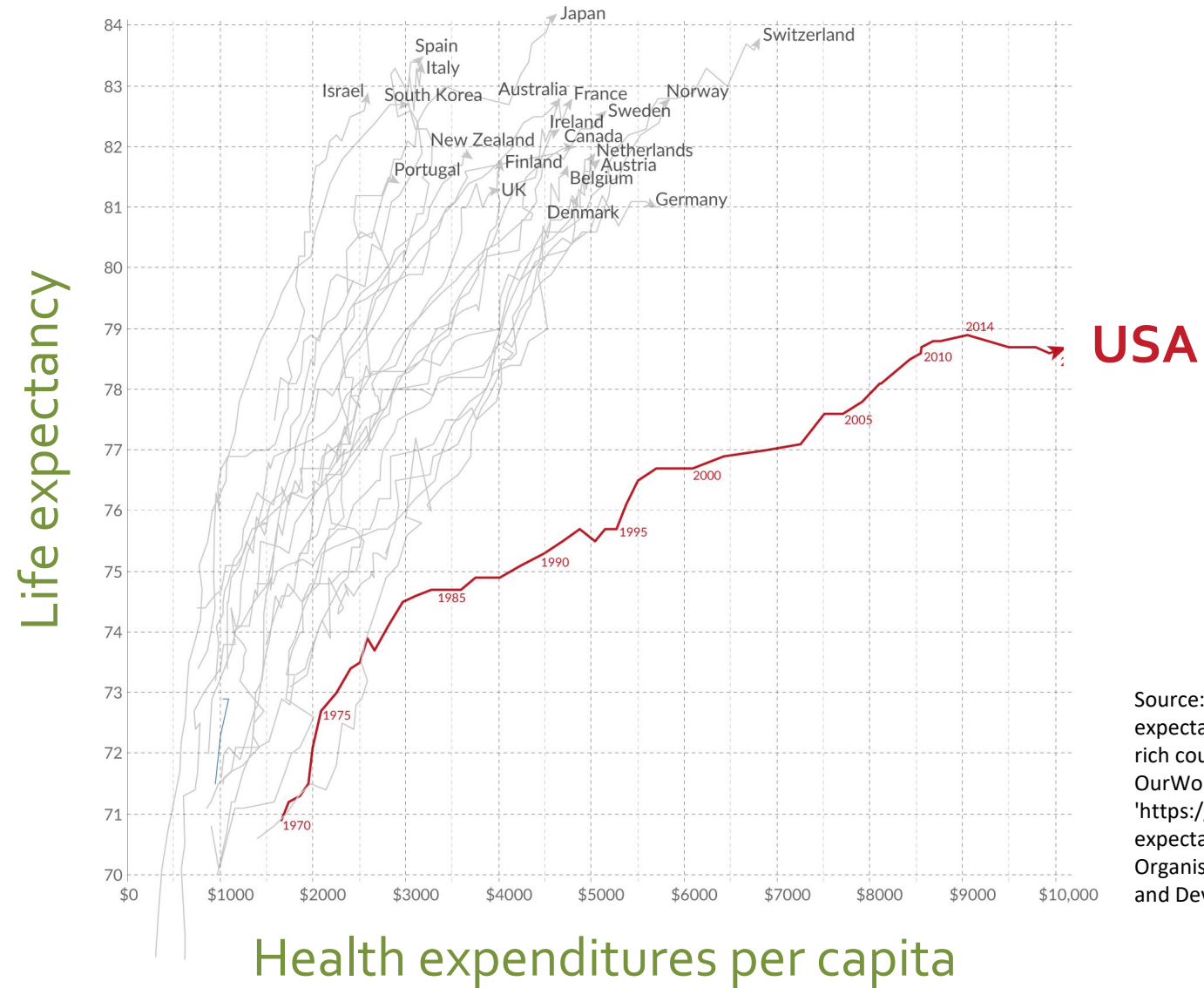
Source: Max Roser (2020) - "Why is life expectancy in the US lower than in other rich countries?" Published online at OurWorldInData.org. Retrieved from: 'https://ourworldindata.org/us-life-expectancy-low' Data source for table: Organisation for Economic Co-operation and Development (OECD)

Working-age adults are dying at higher rates

2021 NAS report: Mortality increased among adults ages 25-64 years from 1990 to 2017.

Main drivers:

- Drug poisonings and alcohol-induced causes
- Suicide
- Cardiometabolic diseases

National Academies of Sciences, Engineering, and Medicine. 2021. *High and Rising Mortality Rates Among Working-Age Adults*. Washington, DC: The National Academies Press. https://doi.org/10.17226/25976.

Guiding Principles

Our work is not finished when we deliver scientific discoveries, our work is finished when all people are living long and healthy lives.
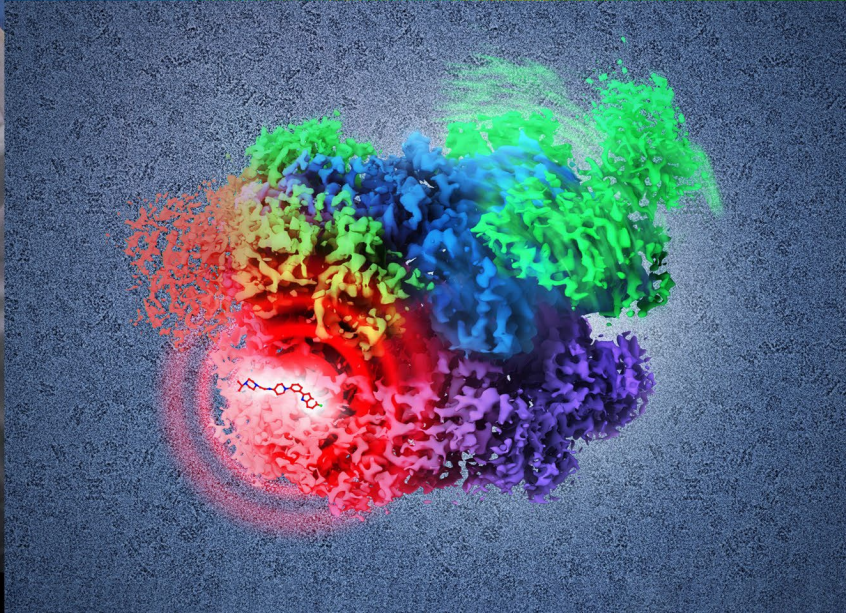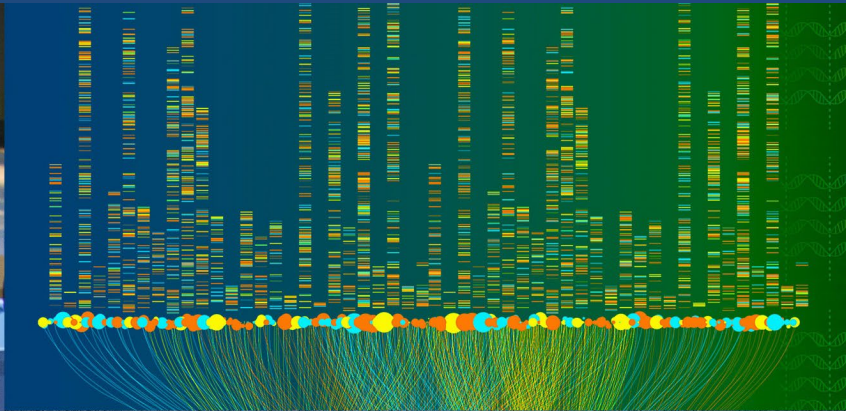
NIH research encompasses the laboratory, the clinic, and the community.

Progress is accelerated when advanced scientific methods, such as new data analytics, are applied to data that includes everyone, and when new discoveries are rapidly and equitably adopted in clinical care.

WHAT SHOULD NIH DO?

Connect research to primary care to optimize outcomes for patients

- Meet people where they already **receive care** to better engage underrepresented communities

- Use **EHR** to engage people in research with their permission

- Increase research capabilities and efficiency with **innovative study designs** that address common health issues, prevention and implementation

- Rapidly **disseminate evidence** to guide patient and provider decisions

NIH National Institutes of Health

Expand biomedical research data use to inform new research and improve health outcomes

- **Integrate** data from basic and social science research, public health, and clinical care

- Increase capacity for data hosting

- Enable low-cost **access** to data using open-industry data standards

- Support broad access to advanced analytics and computational power

- Employ a **federated architecture** for data sharing and use

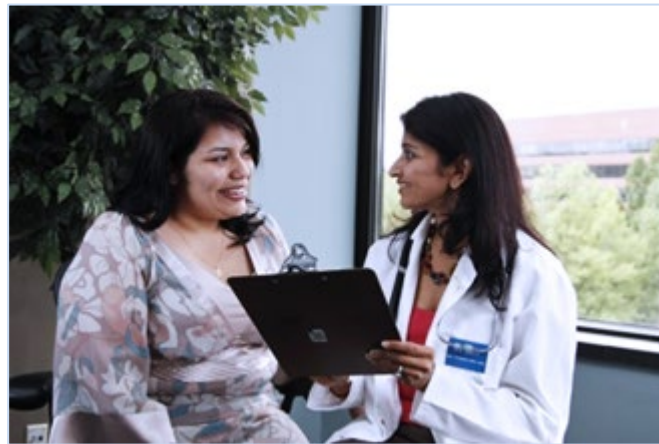- Provide **education** and workforce development
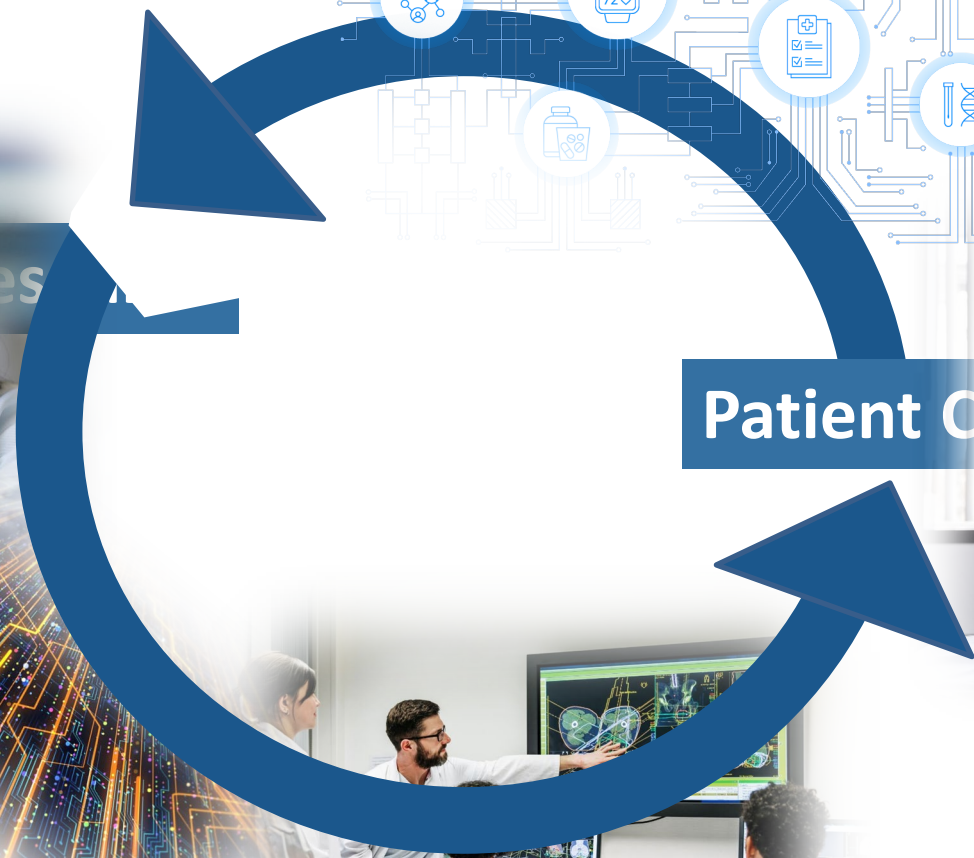
Connect research to primary care

Data Analysis

Patient Ca

NIH...

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Turning Discovery Into Health