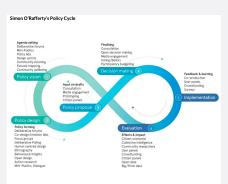
# Policy Analysis Overview

January 23, 2024

#### Policy Analysis - Policy Process



Source: "Policy Process," Centers for Disease Control and Prevention, last reviewed January 2, 2019, https://www.cdc.gov/policy/polaris/policyprocess/index.html. Reused with permission.



Source: Simon O'Rafferty (@simonorafferty), diagram of the policy cycle, Twitter, June 27, 2019, https://twitter.com/simonorafferty/status/1143979896835837952, Reused with permission.

- Bardach Step 2 Assemble Some Evidence
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- What criteria should we use to assess existing evidence?
- How might we contribute to this evidence with our own policy evaluation?

Policy Analysis - Assessing Evidence

• What criteria should we use to assess existing evidence?

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Policy Analysis - Assessing Evidence

• What criteria should we use to assess existing evidence?

Strength of the methodology

- What criteria should we use to assess existing evidence?
  - Strength of the methodology
    - Does the evidence provide a causal interpretation?

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## Bradbury et al. (2020) - Diet and Colorectal Cancer in UK Biobank: A Prospective Study

#### Methods

We used Cox-regression models to estimate adjusted hazard ratios for colorectal cancer by dietary factors in the UK Biobank study. Men and women aged 40-69 years at recruitment (2006-10) reported their diet on a short foodfrequency questionnaire (n = 475 581). Dietary intakes were re-measured in a large sub-sample (n = 175402) who completed an online 24-hour dietary assessment during follow-up. Trends in risk across the baseline categories were calculated by assigning re-measured intakes to allow for measurement error and changes in intake over time.

#### Results

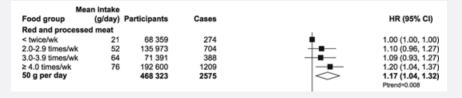
During an average of 5.7 years of follow-up, 2609 cases of colorectal cancer occurred. Participants who reported consuming an average of 76 g/day of red and processed meat compared with 21 g/day had a 20% [95% confidence interval (CI): 4-37] higher risk of colorectal cancer. Participants in the highest fifth of intake of fibre from bread and breakfast cereals had a 14% (95% CI: 2- 2Å) lower risk of colorectal cancer. Alcohol was associated with an 8% (95% CI: 4-12) higher risk per 10 g/day higher intake. Fish, poultry, cheese, fruit, vegetables, tea and coffee were not associated with colorectal-cancer risk.

#### Conclusions

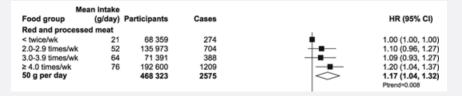
Consumption of red and processed meat at an average level of 76 g/d that meets the current UK government recommendation (590 g/day) was associated with an increased risk of colorectal cancer. Alcohol was also associated with an increased risk of colorectal cancer, whereas fibre from bread and breakfast cereals was associated with a reduced risk.

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# Bradbury et al. (2020) - Diet and Colorectal Cancer in UK Biobank: A Prospective Study



# Bradbury et al. (2020) - Diet and Colorectal Cancer in UK Biobank: A Prospective Study



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Always consider effect magnitudes!

# Bradbury et al. (2020) - Diet and Colorectal Cancer in UK Biobank: A Prospective Study



Always consider effect magnitudes!

▶ 20% increase off of a base of 0.40% [(274/68,359)\*100] = 0.48%

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- What criteria should we use to assess existing evidence?
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- What criteria should we use to assess existing evidence?
  - Strength of the methodology
    - Does the evidence provide a causal interpretation?
    - Is the evidence rooted in the appropriate historical context?

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# Policy Analysis - Strength of the Methodology

ELSEVIER	Contents lists available at ScienceDirect Economics and Human Biology journal homepage: www.elsevier.com/locate/ehb	ECONOMICS & INTERNATIONAL STREET
Kevin Callison <sup>a,*</sup> ,	effects of adolescent athletic participation on women's health Aaron Lowen <sup>b</sup> e of Health Policy and Managament, Schwel of Politic Health and Tropical Medicine, 1440 Canal Sz. New Orient, LA 70112, USA , Jopannen of Zeomania, 32027 LW. Stathan Center, 50 From Are. SW, Grand Rapids, MI 49004, USA	Chose for spouldes
A R T I C L E I N F O JEL Classification: 112 128 130 Koyowrd: Athletic participation Womer's health Title IX	A B S T R A C T Increased athletic opportunities have been shown to improve educational and labor force ou studies have hinded athletic participation to health later in life. We use the implementation baning gender discrimination in educational programs in the U.S., to estimate the effect high school athletic opportunities on women's later life health. Our result indicate that in leads to fewer days in poor mental health, reduced BMI and rates of obesity, lower smol evidence of a reduced likelihood of a dabets datagenois. However, we find no imjact of participation on the number of days in poor physical health and current exercise, and a between participation and atched communities.	of Title IX, legislation of increased access to creased participation king rates, and some high school athletic

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ELSEVI	ER	Contents lists available at ScienceDirect Economics and Human Biology journal homepage: www.elsevier.com/locate/ehb	ECONOMICS & HUMAN EDOLOGY		
The long-run effects of adolescent athletic participation on women's health					
ARTICLI		nsity, Department of Economics, 3027 L.W. Seldman Center, 50 Front Ave. SW, Grand Rapide, MI 49504, USA			
JEL Classification: 112 123 128 128 128 128 128 128 128 128		studies have linked athletic participation to health later in life. We use the implementation of T banning gender discrimination in educational programs in the U.S., to estimate the effect of in high school athletic opportunities on women's later life health. Our results indicate that increa leads to fewer days in poor mental health, reduced BMI and rates of obesity, lower smoking evidence of a reduced likelihood of a diabete diagonsis. However, we find no impact of hig	Increased athletic opportunities have been shown to improve educational and labor force outcomes, however few studies have linked athletic participation to health later in life. We use the implementation of Title IX, legilation banning general discrimination in educational programs in the U.S, to estimate the effect of increased access to high school athletic opportunities on womers' later life health. Our results indicate that increased participation leads to fewer days in poor menant health, reduced BMI and rates of obeity, lower smoking rates, and some evidence of a reduced likelihood of a dathetes diagnosis. However, we find no impact of high school athletic participation on the number of days in poor physical health and current exercise, and a positive relationship between participation and alcohol consumption.		
I	Bene Monequ	and Gender Equity in Sports: Have White and African American Female fited Equally From Title IX? e Walker Pickett, Marvin P. Dawkins, Jomilis Henry Braddock bilehed October 10, 2012   Research Article   @ Genetrosetter	s		

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https://doi.org/10.1177/0002764212458282

Article information ~

- What criteria should we use to assess existing evidence?
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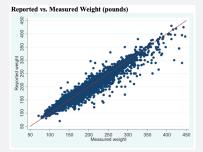
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Quality of the data

Policy Analysis - Data Quality

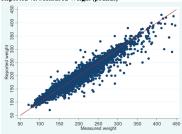
• Cawley et al. (2015) - Reporting Error in Weight and its Implications for Bias in Economic Models

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#### Policy Analysis - Data Quality

# • Cawley et al. (2015) - Reporting Error in Weight and its Implications for Bias in Economic Models



#### Reported vs. Measured Weight (pounds)

#### Highlights

- Reporting error in weight is substantial; its absolute value averages 6 pounds or 3.3%.
- Reporting error in weight is not classical; the extent of underreporting increases with measured weight.
- Roughly 1 in 7 individuals obese according to measurements are misclassified as non-obese by their reported weights.
- · Better educated individuals tend to report their weight more accurately.

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 Reporting error in weight can lead to upward bias in estimates of the healthcare consequences of obesity.

#### Policy Analysis - Data Quality

By Angshuman Gooptu, Asako S. Moriya, Kosali I. Simon, and Benjamin D. Sommers

# Medicaid Expansion Did Not Result In Significant Employment Changes Or Job Reductions In 2014

ABSTRACT Medicaid expansion undertaken through the Affordable Care Act (ACA) is already producing major changes in insurance coverage and access to care, but its potential impacts on the labor market are also important policy considerations. Economic theory suggests that receipt of Medicaid might benefit workers who would no longer be tied to specific jobs to receive health insurance (known as job lock), giving them more flexibility in their choice of employment, or might encourage low-income workers to reduce their hours or stop working if they no longer need employment-based insurance. Evidence on labor changes after previous Medicaid expansions is mixed. To view the impact of the ACA on current labor market participation, we analyzed labor-market participation among adults with incomes below 138 percent of the federal poverty level, comparing Medicaid expansion and nonexpansion states and Medicaideligible and -ineligible groups, for the pre-ACA period (2005-13) and the first fifteen months of the expansion (January 2014-March 2015). Medicaid expansion did not result in significant changes in employment, job switching, or full- versus part-time status. While we cannot exclude the possibility of small changes in these outcomes, our findings rule out the large change found in one influential pre-ACA study; furthermore, they suggest that the Medicaid expansion has had limited impact on labor-market outcomes thus far.

- What criteria should we use to assess existing evidence?
  - Strength of the methodology
    - Does the evidence provide a causal interpretation?
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Quality of the data

- What criteria should we use to assess existing evidence?
  - Strength of the methodology
    - Does the evidence provide a causal interpretation?
    - Is the evidence rooted in the appropriate historical context?

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- Quality of the data
- External validity

#### Policy Analysis - External Validity (Sample)

By Sayeh Nikpay, Thomas Buchmueller, and Helen Levy

# Early Medicaid Expansion In Connecticut Stemmed The Growth In Hospital Uncompensated Care

ABSTRACT As states continue to debate whether or not to expand Medicaid under the Affordable Care Act (ACA), a key consideration is the impact of expansion on the financial position of hospitals, including their burden of uncompensated care. Conclusive evidence from coverage expansions that occurred in 2014 is several years away. In the meantime, we analyzed the experience of hospitals in Connecticut, which expanded Medicaid coverage to a large number of childless adults in April 2010 under the ACA. Using hospital-level panel data from Medicare cost reports, we performed difference-in-differences analyses to compare the change in Medicaid volume and uncompensated care in the period 2007-13 in Connecticut to changes in other Northeastern states. We found that early Medicaid expansion in Connecticut was associated with an increase in Medicaid discharges of 7-9 percentage points, relative to a baseline rate of 11 percent, and an increase of 7-8 percentage points in Medicaid revenue as a share of total revenue, relative to a baseline share of 10 percent. Also, in contrast to the national and regional trends of increasing uncompensated care during this period, hospitals in Connecticut experienced no increase in uncompensated care. We conclude that uncompensated care in Connecticut was roughly one-third lower than what it would have been without early Medicaid expansion. The results suggest that ACA Medicaid expansions could reduce hospitals' uncompensated care burden.

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#### Policy Analysis - External Validity (Method)

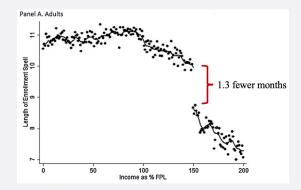
- Dague (2014) The Effect of Medicaid Premiums on Enrollment
  - Beginning in 2008, Wisconsin charged a monthly premium for Medicaid coverage for non-elderly, non-disabled, childless adults at 150% FPL and above.

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#### Policy Analysis - Bardach

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## • Steps for conducting a quantitative policy analysis.

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1. Develop a research question (hypothesis).

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  - 1a. Assess the existing evidence.

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- 1. Develop a research question (hypothesis).
  - 1a. Assess the existing evidence.
  - 1b. What is your contribution?

# • Steps for conducting a quantitative policy analysis.

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- 1. Develop a research question (hypothesis).
  - 1a. Assess the existing evidence.
  - 1b. What is your contribution?
- 2. Develop a research strategy.

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- 2. Develop a research strategy.
  - 2a. Empirical methodology.

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  - 2b. Cost effectiveness/benefit/utility analysis.

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- 3. Identify appropriate data.

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  - 3a. Primary vs. secondary data.

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- 3. Identify appropriate data.
  - 3a. Primary vs. secondary data.
  - 3b. Cross-sectional vs. panel (longitudinal) data.

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3c. Power analysis?

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- 3c. Power analysis?
- 4. Engage funders/stakeholders.

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  - 3c. Power analysis?
- 4. Engage funders/stakeholders.
- 5. Construct an analytic sample (i.e., data management).

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  - 5a. STATA, SAS, R, SQL, Excel, etc.

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6. Conduct data analysis.

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  - 3c. Power analysis?
- 4. Engage funders/stakeholders.
- Construct an analytic sample (i.e., data management).
   5a. STATA, SAS, R, SQL, Excel, etc.

- 6. Conduct data analysis.
- 7. Report findings.

• Urban Institute's 6 Steps:

- Urban Institute's 6 Steps:
  - Capture Learnings (and not just effects or impacts)

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  - Capture Learnings (and not just effects or impacts)

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Evaluate Indigenous Interventions

- Urban Institute's 6 Steps:
  - Capture Learnings (and not just effects or impacts)

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- Evaluate Indigenous Interventions
- Apply Critical Race Theory to Policy Research

- Urban Institute's 6 Steps:
  - Capture Learnings (and not just effects or impacts)

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- Evaluate Indigenous Interventions
- Apply Critical Race Theory to Policy Research
- Engage Practitioners in Research Design

- Urban Institute's 6 Steps:
  - Capture Learnings (and not just effects or impacts)
  - Evaluate Indigenous Interventions
  - Apply Critical Race Theory to Policy Research
  - Engage Practitioners in Research Design
  - Coproduce Research with Community Members

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Rethink the Role of Funders