

# Healthcare Rationing and Medical Insurance



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# Background



- ▶ Belding Scribner developed a shunt that would enable people with kidney failure to be hooked up to a dialysis system.
- ▶ There were many more people who needed dialysis than were systems. A committee was established with two subcommittees (one to judge medical need and the other to judge social worth).
  - ▶ Decisions were made on a case by case basis for over 12 years.
  - ▶ The committee was widely criticized
    - ▶ James Childress advocated for a lottery system
    - ▶ Nicholas Rescher advocated for a solely Utilitarian system
  - ▶ In 1972 the US government ended the problem by funding treatment via Medicare.
- ▶ Unique example because only known example
- ▶ Government has not acted in other areas.

# Rationing

- Introduction to rationing
- What does rationing mean?
  - Rationing is the controlled distribution of scarce resources, goods, or services.
  - Rationing is the artificial restriction of demand.
- Examples:
- Civilian rationing during the WW2
- Military rationing
- Gasoline
- Drugs
- Medical Treatment

F.R.—7D.] **TEA AND SUGAR PERMIT** *H. O. Bullough*  
The Rationing Emergency Regulations 1942. (Staffs of Shops, Offices, Factories, &c.) No. 8868

Name of Consumer: *Dunedin City Corporation*  
Address: *Roslyn Quay, Stone Street, DUNEDIN*

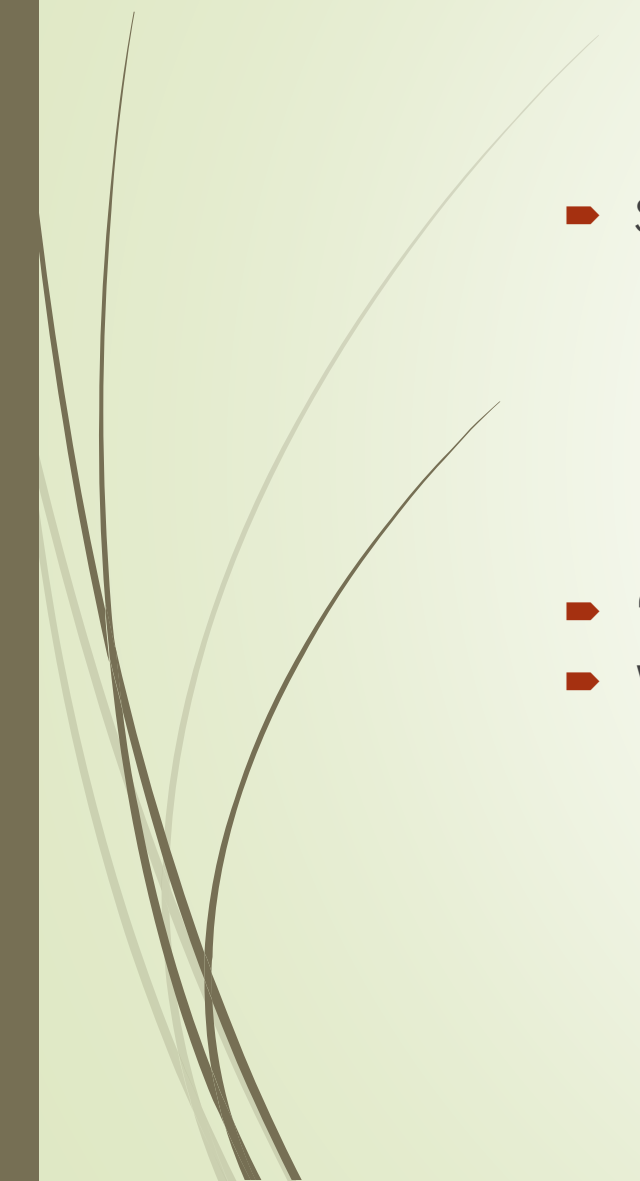
Number of Staff: *7* Total Monthly Quantity Authorized: Tea: *1 1/2* lb. Sugar: *4 1/2* lb. Office Date-stamp: *30 APR 1948*  
*R. S. St. John* Rationing Officer.

NOTE.—This permit must be presented to the supplier, who is required to cut out the appropriate coupon when each sale is made. Should the number of the staff vary to the extent of 25% of the number declared, the permit must be returned to the Rationing Office for adjustment. The form of application overleaf must be completed before a further permit can be issued.

Sub-permit No. 4 VALID for AUG., 1948 SUGAR <i>4 1/2</i> lb. <i>Four and a half</i> (Quantity in words.)	Sub-permit No. 5 VALID for SEPT., 1948 SUGAR <i>4 1/2</i> lb. <i>Four and a half</i> (Quantity in words.)	Sub-permit No. 6 VALID for OCT., 1948 SUGAR <i>4 1/2</i> lb. <i>Four and a half</i> (Quantity in words.)
Sub-permit No. 4 VALID for AUG., 1948 TEA <i>1 1/2</i> lb. <i>One and a half</i> (Quantity in words.)	Sub-permit No. 5 VALID for SEPT., 1948 TEA <i>1 1/2</i> lb. <i>One and a half</i> (Quantity in words.)	Sub-permit No. 6 VALID for OCT., 1948 TEA <i>1 1/2</i> lb. <i>One and a half</i> (Quantity in words.)



# Supply Side

- ▶ Supply in healthcare
    - ▶ What does supply mean in the context of healthcare?
    - ▶ Knowledge/research
    - ▶ Workforce (doctors, nurses, etc.)
    - ▶ Infrastructure (hospitals, ambulances, networks, etc.)
    - ▶ Consumables (pharmaceuticals, etc.)
  - ▶ “Health is priceless, but it comes at a cost”
  - ▶ What are the drivers to healthcare supply?
    - ▶ The budget of the government for health care
    - ▶ Insurance
    - ▶ Individual’s financial capacity (out-of-pocket)
    - ▶ Healthcare system management
- 



# Demand

- Demand in healthcare
  - Healthcare demand can be defined as healthcare needs
- How do you know what you need?
  - Healthcare knowledge and research
  - Diagnosis/tests (requiring techniques, knowledgeable professionals and facilities)
- How are healthcare needs different from any other product demands?
  - Individuals do not necessarily know what they need
  - Before a diagnosis, a patient is not aware of his/her needs
  - An external actor – the doctor – informs people of their healthcare needs

# Medicaid/Medicare

- Medicare
  - **83,195,041** June 2021
- Medicaid
  - **76,302,278** June 2021
- CHIP
  - **6,892,763** June 2021
    - provides low-cost health coverage to children in families that earn too much money to qualify for Medicaid but not enough to buy private insurance
- Medicaid funding
  - The formula is designed so that the federal government pays a larger share of program costs in poorer states.

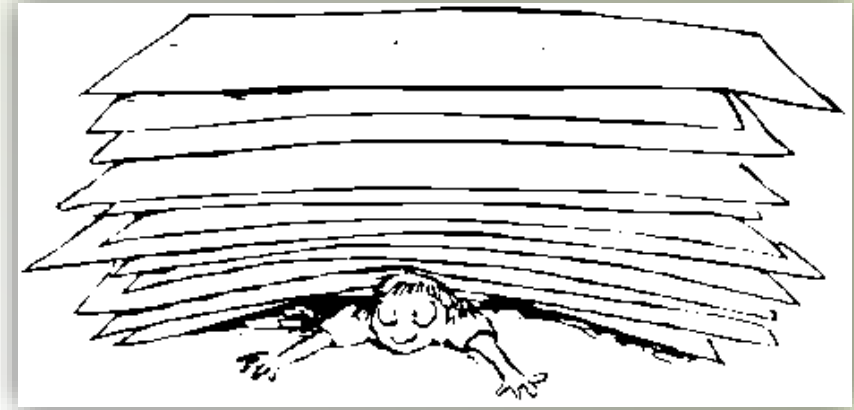
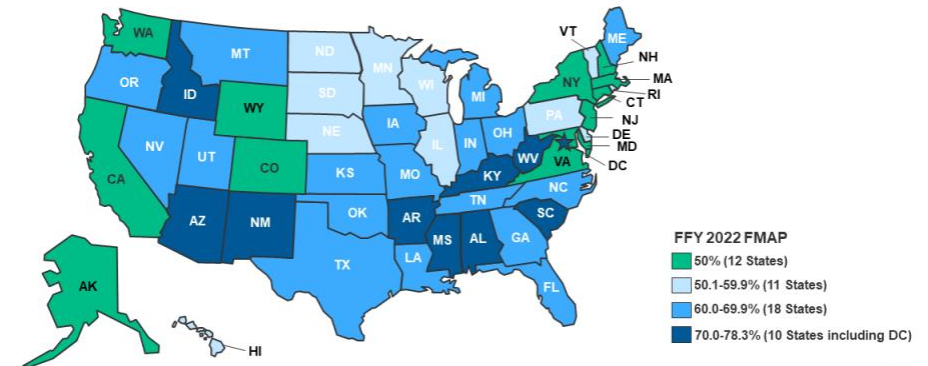


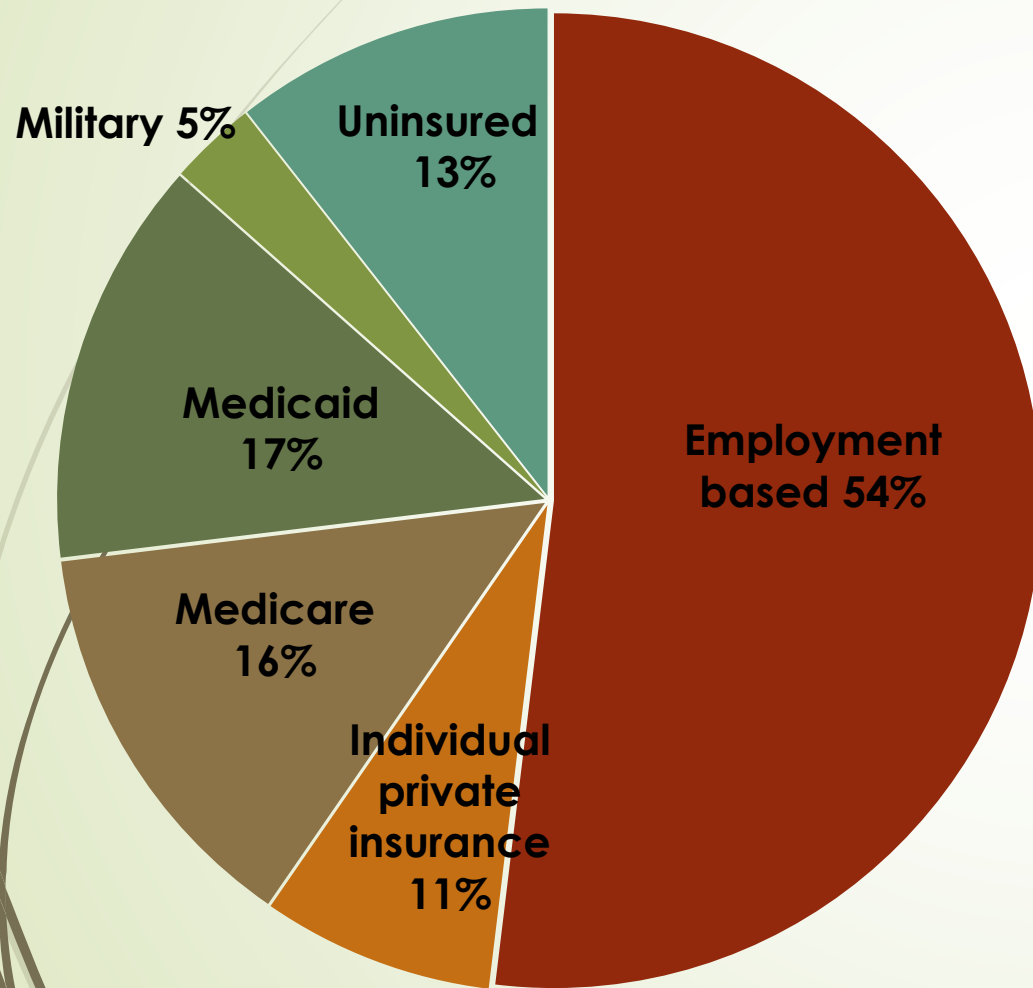
Figure 1

States with lower per capita incomes have a higher federal matching rate for Medicaid.



NOTE: FMAP percentages are rounded to the nearest tenth of a percentage point. These rates are in effect Oct. 1, 2021-Sept. 30, 2022.  
SOURCE: Federal Register, November 30, 2020 (Vol 85, No. 230), pp 76586-76589, available at: <https://www.govinfo.gov/content/pkg/FR-2020-11-30/pdf/2020-26387.pdf>

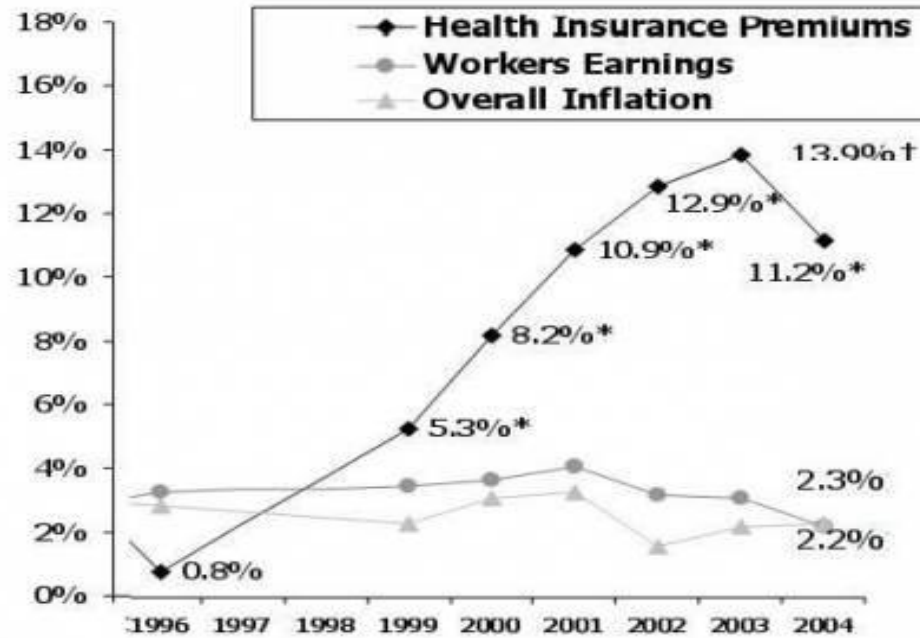
# Sources of Health Insurance (2013)



- Medicare and Medicaid spending
  - 39% of national health spending
  - 23% of federal budget
  - 43% of hospital revenues

Chart #1

## Increases in Health Insurance Premiums Compared to Other Indicators, 1988-2004



\* Estimate is statistically different from the previous year shown at  $p < 0.05$ .

† Estimate is statistically different from the previous year shown at  $p < 0.1$ .

Note: Data on premium increases reflect the cost of health insurance premiums for a family of four.

Source: KFF/HRET Survey of Employer-Sponsored Health Benefits: 1999-2004; KPMG Survey of Employer-Sponsored Health Benefits: 1993, 1996; The Health Insurance Association of America (HIAA): 1988, 1989, 1990; Bureau of Labor Statistics, Consumer Price Index (U.S. City Average of Annual Inflation (April to April), 1988-2004; Bureau of Labor Statistics, Seasonally Adjusted Data from the Current Employment Statistics Survey (April to April), 1988-2004.



# Health Imbalance

Most U.S. health-care spending is for a small number of very expensive patients.

Most expensive 1% of patients

**21% of health spending**

Most expensive 5%

**49%**

Most expensive 10%

**65%**

Most expensive 15%

**75%**

Most expensive 20%

**82%**

Most expensive 50%

**97%**

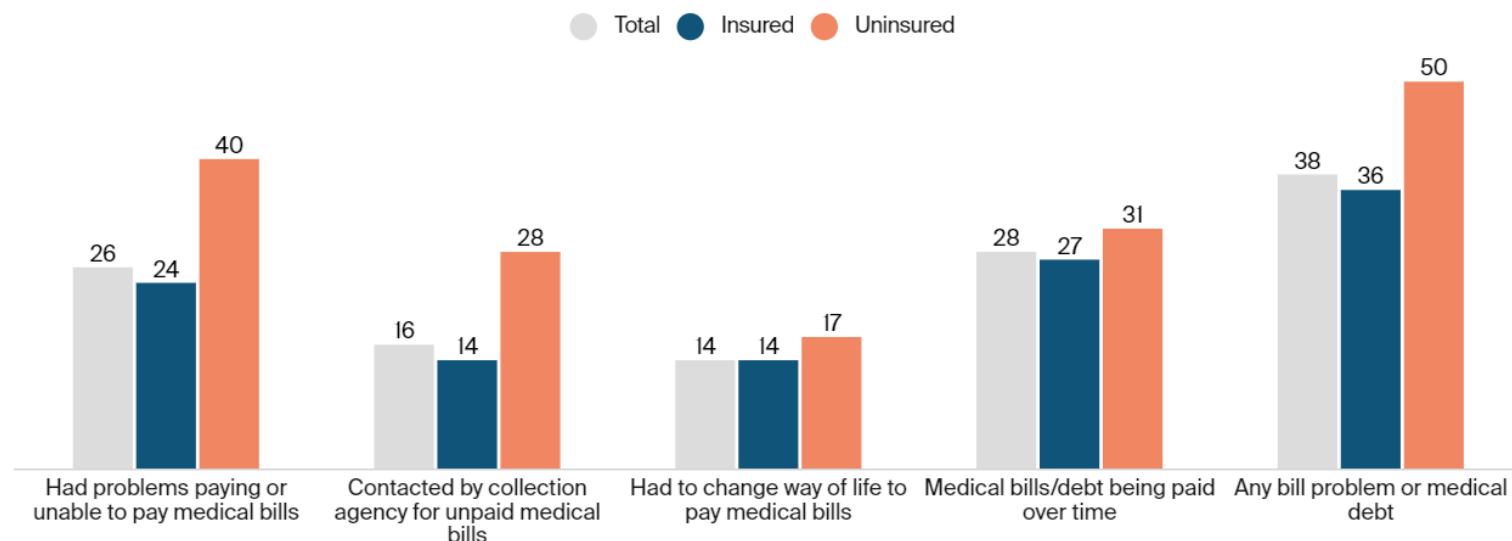
Note: For 2013

Source: Kaiser Family Foundation

THE WALL STREET JOURNAL.

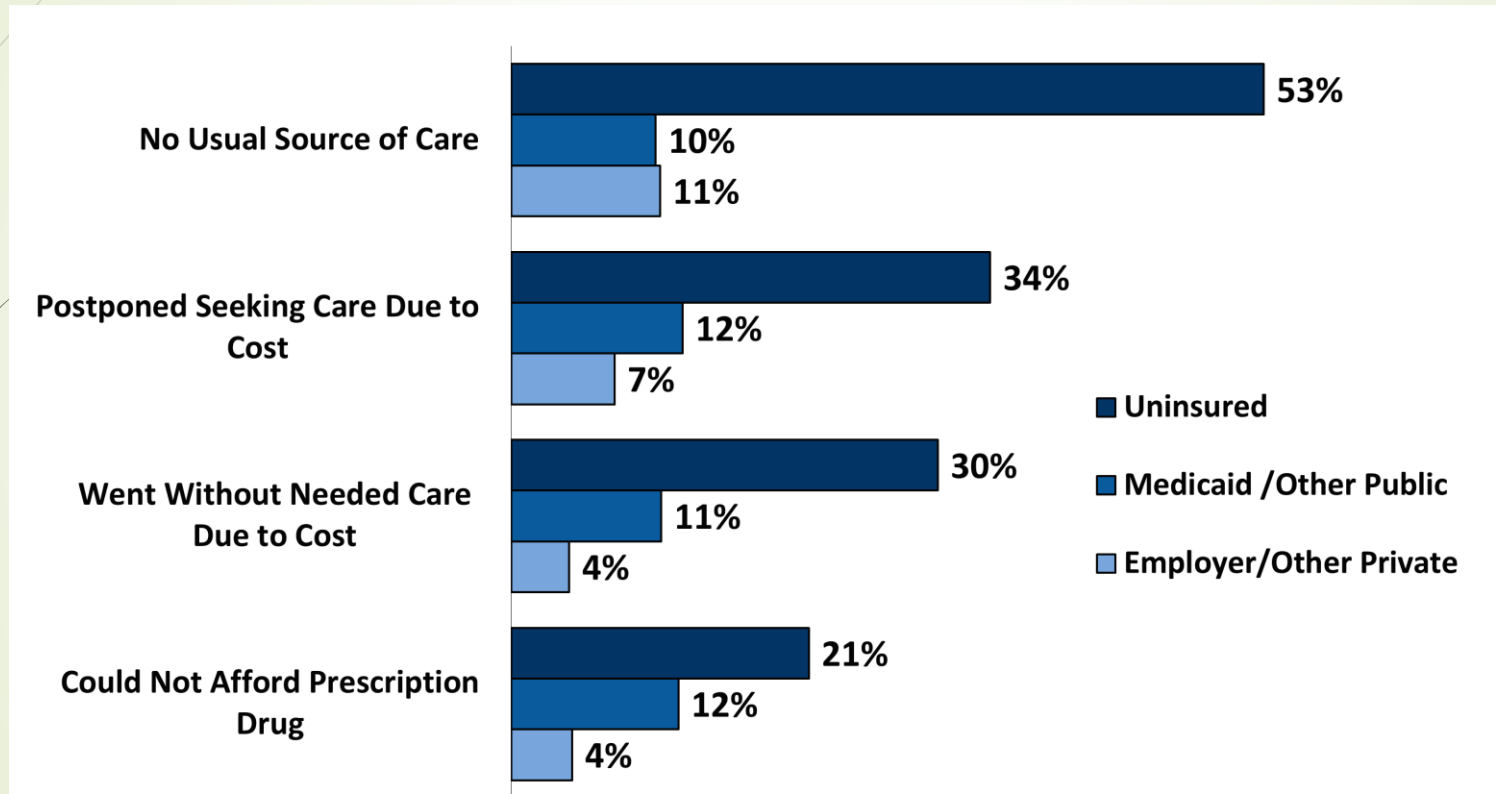
More than one-third of insured adults and half of uninsured adults said they had a medical bill problem or were paying off medical debt.

Percent of adults ages 19–64 who had medical bill or debt problems in the past year



Source: Sara R. Collins, Gabriella N. Aboulafia, and Munira Z. Gunja, As the Pandemic Eases, What Is the State of Health Care Coverage and Affordability in the U.S.? Findings from the Commonwealth Fund Health Care Coverage and COVID-19 Survey, March–June 2021 (Commonwealth Fund, July 2021)

# Access to Health Care<sup>6</sup>



In past 12 months.

Respondents who said usual source of care was the emergency room were included among those not having a usual source of care.

All differences between uninsured and insurance groups are statistically significant ( $p < 0.05$ ).

SOURCE: KCMU analysis of 2014 NHIS.



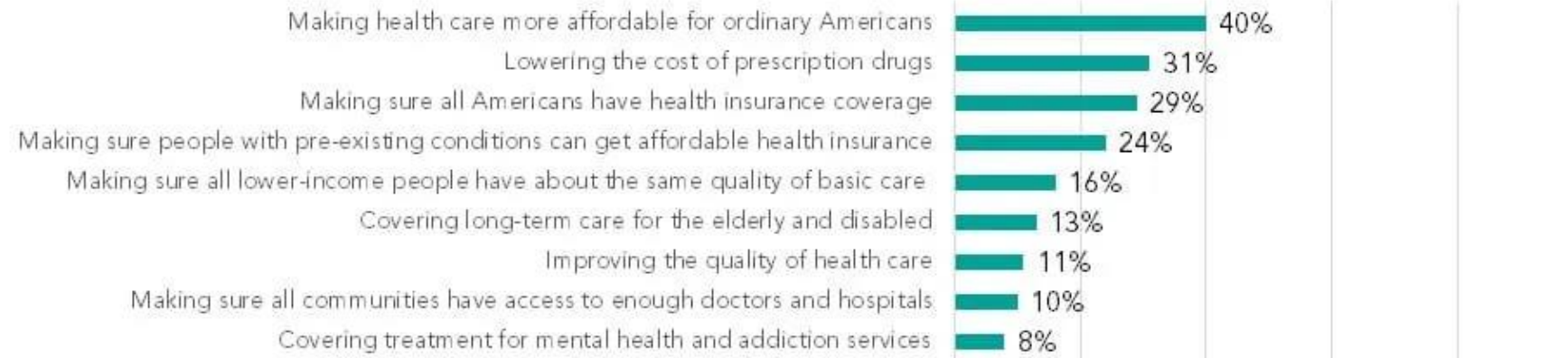
# Does Health Insurance Make a Difference?

## Uninsured

- ▶ Fewer regular medical visits and preventive health screening tests
  - ▶ Higher rates of undiagnosed and uncontrolled HTN, diabetes, and hypercholesterolemia
  - ▶ Lower survival rates for breast and colorectal cancers
- ▶ Increased mortality (likely owing to greater morbidity from chronic medical conditions like diabetes, HTN, and cardiovascular disease)
- ▶ Worse clinical outcomes during hospitalization
  - ▶ May lead to underuse and/or overuse
  - ▶ Higher in-hospital mortality rates

## Making health care more affordable is the biggest priority for Americans.

**Figure 3.** Percent of Americans who say the following should be one of the two biggest priorities for improving health care in the United States



**Base:** All respondents, N=1,020

Numbers do not add up to 200 percent as respondents who did not select a priority or only selected one are included in the figure.

Public Agenda/USA Today/Ipsos Hidden Common Ground Survey – Health Care

# Justice Perspective

*Table 1 Substantive principles of justice in health care rationing*

<i>Class of principle</i>	<i>Variants that have been proposed in the literature</i>	<i>Recommendation in our exercise*</i>
A. Need principles	Distribute in proportion to degree of immediate threat to life	Daniel, Joanne
	Distribute in proportion to degree of immediate ill-health	Daniel, Marinder & Steve equal, Joanne
	Distribute in proportion to degree of lifetime ill-health	Daniel, Joanne, Steve, Marinder
	Distribute in proportion to immediate capacity to benefit	Daniel, Marinder & Steve equal, Joanne
	Distribute in proportion to lifetime capacity to benefit	Steve, Daniel & Marinder equal, Joanne
	Distribute in proportion to cost of exhausting capacity to benefit	Equal chance for all four patients
B. Maximising principles	Maximise health	Steve, Marinder, Daniel, Joanne
	Maximise wellbeing (including non-health aspects)	? Depends on non-health factors
C. Egalitarian principles	Equalise lifetime health expectancy (“fair innings” argument)	Daniel, Joanne, Steve, Marinder
	Equalise opportunity for lifetime health expectancy	Daniel, Steve, Joanne, Marinder
D. Combination principles	Combine maximise health with equalise lifetime health expectancy	Steve, Daniel, Marinder, Joanne
	Combine a need principle with a maximising principle	? Depends on which versions of the principles and what weights

\*This is based on various working assumptions described in the main text of this paper, in particular (1) that Steve and Marinder have an equal degree of immediate ill-health, (2) that Steve will gain the most health from treatment (over his entire lifetime), that Joanne will gain the least, and that Daniel and Marinder will gain the same amount, (3) that treating Marinder would have a substantial indirect health benefit for others by freeing up long term care resources; and (4) that Joanne had more choice about her health predicament than Steve.

# Rationing Approaches by Health Insurance Providers

- ▶ Denial of claims
  - ▶ denial rate averages between 5 and 10%.
- ▶ Exclusions
  - ▶ Specific services
    - ▶ Mental health
  - ▶ Pre-existing conditions
- ▶ Deductibility rates
- ▶ Reimbursement caps
- ▶ Limiting access
  - ▶ Preauthorization
  - ▶ which physicians you can use
  - ▶ Excluding expensive drugs
- ▶ Delaying treatment
  - ▶ "step therapy" or "fail first" policies
    - ▶ Use cheaper drug and if it fails then use more effective expensive drug
- ▶ Inpatient and outpatient care



# Commonly used rationing Reasons

- ▶ Behavior: priority to those who have not become ill by own fault.
- ▶ • Instrumental value: priority to those who have essential roles for keeping society operational (e.g., hospital staff).
- ▶ • Monetary: substantial contribution to the costs of the treatment.
- ▶ • Order: according to the order of registration.
- ▶ • Random: random selection, e.g., via a lottery.
- ▶ • Service: contribution in the past to the common good (e.g., by volunteering).
- ▶ • Sickest first: the sickest individuals to be given priority.
- ▶ • Survival: the likelihood to survive the longest.
- ▶ • Youngest: prioritizing young individuals.
- ▶ • Combination: a combination of criteria including age (youngest first), and prognosis (longest survival with intervention).

Percentage (%)	Sickest First	Order	Survival	Behavior	Young first	Random	Combination	Service	Monetary	N
<b>Scenario 1. Organ donation for transplant</b>										
Religion scholars	60.0	10.0	6.7	3.3	3.3	3.3	13.3	0	0	30
Physicians	33.1	11.4	14.5	3.0	3.6	0.6	33.1	0.6	0	166
Medical Students	48.8	7.4	14.2	1.9	1.2	1.2	24.7	0.6	0	162
Allied Health	51.6	7.4	11.5	4.9	2.5	0	22.1	0	0	122
Lay people	55.1	9.5	12.0	1.8	2.2	2.2	16.4	0.4	0.4	274
Total	48.5	9.2	12.7	2.7	2.4	1.3	22.7	0.4	0.1	754
<b>Scenario 2. Flu epidemic</b>										
Religious Leaders	54.2	0	25.0	20.8	0	0	0	0	0	24
Physician	44.5	3.6	20.4	8.8	13.9	0	7.3	0.7	0.7	137
Medical Students	53.3	6.6	16.7	4.4	12.4	1.5	4.4	0.7	0	137
Allied Health	59.0	2.0	12.0	9.0	7.0	1.0	10.0	0	0	100
Lay people	58.3	6.9	12.9	9.3	4.2	1.4	6.9	0.0	0	216
Total	54.1	5.0	15.8	8.5	8.5	1.0	6.7	0.3	0.2	614
<b>Scenario 3. Expensive cancer medication</b>										
Religious Leaders	60.9	13	13.0	0	4.3	0	4.3	0	4.3	23
Physician	41.2	5.1	21.3	3.7	0.7	0	27.2	0	0.7	136
Medical Students	55.2	7.5	16.4	1.5	0	1.5	17.2	0	0.7	134
Allied Health	56.8	6.3	15.8	4.2	1.1	1.1	12.6	0	2.1	95
Lay people	55.0	8.0	17.5	2.0	1.5	2.0	12.5	0.0	1.5	200
Total	52.4	7.1	17.7	2.6	1.0	1.2	16.7	0.5	1.4	588

Table 2. Percentages of respondents who chose each allocation principle as the most important one among the study group.

<https://www.frontiersin.org/articles/10.3389/fmed.2020.603406/full>