introductory lectures in bioethics –

Justice and Health Care Resources

Paul Menzel

Pacific Lutheran University (philosophy, emeritus)
Visiting Professor of Bioethics, Chinese University of HK

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Some Issues of Distributive Justice

- Does justice require that those who are well share the burdens of illness? Share the much higher insurance premiums for the likely ill?
 - Related to this: Is there a right to HC?
- Who should get scarce resources such as organs for transplant?
- If preventive services can accomplish more in health benefit than acute care can, should prevention come first?
- Can the age of recipients be used in a fair and just allocation of health care resources?

Overview

- Philosophical views of distributive justice
- Access to a basic minimum of health care
- Allocation of organs for transplant
- Allocation of other HC resources
 - On basis of age?
 - By aggregate efficiency?
 Prevention vs. treatment
- Social determinants of health
- Global justice

Section I.

theories of justice and the question of universal access

Utilitarian Distributive Justice

- Whatever distribution maximizes the aggregate individual well-being. E.g.:
 - Allow some to earn much more than others, providing incentives that end up boosting enough people by enough that aggregate wellbeing rises.
 - Health care (example)
 - good dental care for everyone may create more total good than low-yield "rescue" care for a few.
 - More cost-effective preventive and public health measures should have priority.
 - All units of health are of equal value & count equally.

Egalitarian Health Justice

- Equal <u>health</u> is not feasible, but <u>equal health</u> <u>care</u> for <u>equal health care needs</u> is.
- To accomplish this, we should have either a national health service or single-payer insurance for all reasonable health care
 - Every citizen/resident is covered
 - Funded by fairly graduated taxes or mandatory premiums
- Objections:
 - Line between <u>needs</u> and <u>desires</u> is ambiguous
 - Poor would benefit more from using resources from higher tiers of HC to meet other needs

Libertarian Justice

- "Negative" rights to life, personal security, bodily integrity, one's own labor.
- People produce goods and services with their creativity and labor, and should then be free to buy and sell them – <u>markets</u>!
- Minimal social structures necessary to protect such rights and processes can be provided by state collective action when they cannot be efficiently provided by voluntary association.
- Profits from free production & trade may be kept by owner no matter how unequal the resulting distribution of wealth may become.

Libertarian Justice in Health

- Health rights are limited to "negative" ones:
 - freedom from damaging products and pollutants
 - right of informed refusal of medical treatment
 - right of informed consent to experimentation
- No "positive" rights to health care.
 - Purchase of insurance on a competitive market can provide financial protection to the degree it is desired. (For many, minimal insurance will be a reasonable choice.)
- No obligation of the well to assist the likely ill unless the well have harmed them.
 Voluntary compassionate aid is laudatory.

Complication for Libertarians: "Market Failure" in Insurance

- Insurance, not care, is the market good.
- Competitive markets for voluntary private health insurance segment into "high risk" and "low risk" pools. The ill and likely ill get priced out of the market by exclusions or much higher premiums.
- Yet the likely ill are the people who most need insurance. A market for a good that fails to deliver the good to those who most need it constitutes a failed market.

Market Failure (cont'd)

- One might say: So what? Let the ill and likely ill go uninsured.
- But this conflicts with the principle of

JUST SHARING: the financial burdens of medical misfortune ought to be shared by well and ill alike, unless the ill created these burdens by their own unreasonable choices.

Moderate Egalitarianism

- Convictions re equality vary.
 - Arch-libertarian: I'm not obligated to help anyone whose misfortune I've not caused.
 - Arch-egalitarian: equal resources for all. If I have more, I should help others.
- Middle ground. Equal <u>Opportunity</u> for Welfare (EOW):
 - it's unjust for people to be worse off than others due to outcomes of choices it is not reasonable to expect them to avoid (Segall, Health, Luck & Justice 2010).
 - Applied to the financial burdens of illness, this yields previous principle of *Just Sharing*.

Implication: Universal Insurance

- Premium variation, pre-existing condition exclusions – all strategies that create market failure – must be banned to get Just Sharing.
 Result: "community rated" premiums.
- But then the healthiest bow out of insurance (for them, no longer a "good deal"). Premiums for remaining rise further. More drop out "Death spiral" for insurance BIGTIME market failure!
- Solution: mandate insurance for basic care.
- Ironic: to take markets seriously, we can't leave health insurance to individual choice.

Another Moderate Egalitarian View

- Daniels (following Rawls): <u>fairness</u> requires transcending perspective of real individuals, with all their arbitrary differences (lucky, unlucky). Discern principles of justice from "original position" with a "veil of ignorance."
- Thus: equal opportunity to realize potential.
 Fair equality of opportunity (FEO).
- Special role for health in realizing FEO: necessary for realizing other goods of life.
- Therefore, everyone should have access to basic <u>effective</u> health care – "just <u>health</u>."

Options for a Just Health Care System

- Mandatory insurance with common and affordable (subsidized) premiums. Germany, Switzerland, Netherlands, (U.S.).
- Single payer: everyone belongs to one insurance pool, funded by taxes and some premiums, with many providers, some private.
 Canada, France, Taiwan, (U.S.).
- <u>National health service</u>: public provider.
 Great Britain, (U.S.).

All systems will face this question: FOR WHAT CARE should everyone be covered? All systems exclude some things people want.

Section II.

challenges of justice for all health care systems

A Universal Challenge: Cost Control

1. The insurance effect

Once patient is insured, neither she nor provider has an incentive to attend to the value/cost relationship (e.g., Avastin for metastatic BrCA, or surgery for glioblastoma). Prices get ignored.

- Need for volume control: prioritizing of some sort.
- Scope of insurance becomes important issue.

2. Personal vs. interpersonal perspectives

To *someone*, any item of care with chance of benefit will be important. Should we compare benefits & costs across different individuals?

One method: Quality-Adjusted Life Years (QALYs)

Challenges for HC Justice

(my view) Every theory of distributive justice, even free-market libertarianism, ends up endorsing a health care system with universal care of some sort. Then:

- Scope of insurance: what goes into the "basic minimum" for which everyone is covered?
- To what extent should we compare benefits and costs of care across individuals?
 - One person's life saved might be 2 QALYs, another's 20. But does that mean that the life at stake for former is any less valuable to her, compared to death, than the longer years of life at stake for the latter are to him? (NO!)
- Can care be prioritized justly by age?

Challenges for HC Justice (cont'd)

- Whose lives should we save/improve in situations of stubborn scarcity? E.g.:
 - Organs for transplant
 - Confined budget, as in UK NHS
- Should efficiency of prevention give it priority over medical treatment of existing disease?
 - Is "rescue" of an identifiable individual in trouble a more valuable preservation of life than preventing the same disease in advance by lowering risk for a large group, saving numerous "statistical" lives?

Section III.

allocating transplant organs

Scarce Transplant Organs

- Waitlist > supply: U.S., 30,000+ die annually
- Average success rate now >80% for most Tx, though ind. prognosis varies considerably.
- Assume a pool of organs, for a defined population of potential recipients. Allocate by:
 - Urgency (nearness to death)
 - Time on waiting list
 - Regional/local proximity to donor
 - Prognosis for recipient (near opposite of urgency)
 - Deservingness (previous)
 - Age
 - Equal chance or maintenance of hope

How Many Lives Are We Willing To Forgo Saving To Maintain Hope?

Suppose a transplant survival rate

for Group A 75%

for Group B 25%

Size of Groups A and B: 100 persons each

Question: what % of 100 organs would you allocate to each group?

Median response: give 80 organs to group A give 20 organs to group B

Ubel & Loewenstein, "Distributing...Livers...," SocSciMed 42: 1049 (1996). [related: Ratcliffe, "Public Preferences...Donor Liver...," H Econ 9: 2: 137 (2000)]

Results Implied by Responses

Lives saved if 100 organs go to A: 75 Lives saved if 80 to A and 20 to B:

60 + 5 = 65

Reduction in lifesaving odds: 13%

Lives not saved to maintain hope: 10

for whom hope is maintained: 200

Should We Maintain Hope By Sacrificing Some Lives?

Is maintaining hope for 200 patients worth losing 10 of their lives?

- NO: the hope is <u>for</u> longer life, so it would seem irrational to sacrifice life to maintain hope.
- Might we test these responses on those entering a waitlist? Allocating all organs to group A will maximize every person's chances.

Section IV.

age-based prioritizing and equal opportunity

Age-Based Prioritizing

Implausible version:

 Life-extending and quality-of-life enhancing care should have lower priority after age ... ("complete life" age, "reasonably long life," "fair innings," etc).

Plausible version:

 Quality-of-life enhancing care should be provided on an equal basis whatever one's age, but <u>life-extending</u> care may have <u>gradually decreasing</u> <u>priority</u> after age _____.

'Fair Innings' Account (Alan Williams)*

- The claim: Everyone is entitled to a 'fair innings' (adequate period of time) in life, but not to more.
- Common intuitions/feelings/sayings behind this:
 - It is always a misfortune to die when one wants to live, but in old age the misfortune is not a tragedy.
 - Anyone failing to achieve a normal span of life has been "cheated." Anyone getting more than this is "living on borrowed time."
- Creates case for age-weighting in QALY comparisons.

"Intergenerational Equity: An Exploration of the 'Fair Innings' Argument," *Health Economics* 6 (1997): 2: 117-132.

Prudential Lifespan Account*

- FEO warrants "prudential lifespan" thinking the distribution of health resources across a <u>lifetime</u> that would be in one's interest.
- More important to get to age 30 first than to get to 70 once one is 60. Same for getting to 50 first, etc.
- For life-extending care, age-based prioritizing over the whole adult lifespan is in <u>everyone's lifetime</u> interest.
- Fair all who are old were once young. EVERY-ONE HAS TO BE YOUNG TO GET OLD.

^{*} Norman Daniels, Am I My Parents' Keeper? 1988)

Section V.

perceiving accurately the value of what gets distributed:

should acute medical treatment have priority over prevention?

Is the <u>Value</u> of Life Higher in Treatment than in Prevention?

Baseline risk is typically higher in treatment than in prevention:

a woman with recently discovered BrCA faces far higher risk than a healthy woman who might be screened – she perceives herself to be "in trouble."

And we value life <u>disproportionately</u> more highly as baseline risk rises.

Variation of Preference Value with Baseline Risk

Baseline Risk at Moment	Willingness to Pay to Eliminate	Implied Value of Life
1:2	\$1,000,000	\$2,000,000
1:10	\$ 100,000	\$1,000,000
1:100	\$ 5,000	\$ 500,000
1:1000	\$ 100	\$ 100,000
1:10,000	\$ 0	\$ 0

Impact of Baseline Risk on the Value of Life Saved – the "Rescue" Effect

To a person who is still well, the death which might be avoided by prevention is not as bad as the death that might be avoided by treatment is for someone living under higher risk. This difference in value holds even when the marginal benefit from treatment – the improvement in a person's chances - is no greater than from prevention.

Crux of The Dispute

Everything comes down to perspective. For the <u>individual</u>, how much we value life certainly does vary. It's higher when we are already in trouble, lower when it's not yet threatened.

But standing back, viewed either objectively or from the larger and impersonal perspective of society, the values of the lives at stake seem equal.

A Possible Reconciliation

If people accurately imagine the real life lost from lack of prevention despite its location in a sea of dispersed risk, then even subjectively as individuals, they will likely value the life as highly here as in higher-risk treatment settings.

Example: reaction to the 2009 USPSTF recommendations re mammography. Vivid identification with 1 life in 1900.

Incremental Benefit of Routine Annual BrCA Screening, 40's & 50's

age group		screenings needed for saving one life	false positives
40-49	lower	1900*	1 in 2**
50-59	higher	1340	

Report of U.S. Preventative Services Task Force, 2009

- * 6000 when compared, not with no screening 40-49, but with TF's recommendation of <u>non-routine</u> screening then.
- ** 60% of the total # of false positives for all ages.

Section VI. Bigger Questions

primordial prevention: the social determinants of health

global health justice: the first place for prevention & treatment?

Social Determinants of Health

- Should we be spending much on HC at all?
 Greater total impact on health is from social determinants
 - distribution of income (relative equality)
 - education
 - workplace stress and control
- 10% of the U.S. 18% of GDP spent on HC is for prevention. Retain that, keep 10% of remainder still for acute care, and re-allocate remaining 80% (14+% of GDP) to social determinants of health. That would be primordial prevention, but much less on HC.

Global Health Care Justice

- Huge differences in what \$10b produces in lifesaving and quality-of-life by preventing and treating conditions like diarrhea in developing nations compared to spending that money on either prevention or treatment in developed countries.
- Influential cutting-edge work of the Global Burden of Disease project (WHO), and now the Disease Control Priorities reports.*
- Inter-societal justice always more difficult.
- *DCP³, Institute of Health Metrics & Evaluation: http://dcp-3.org/disease-control-priorities-third-edition

Summary Observations

- "Moderate egalitarian" views of justice dominate.
- Even free-market advocates are driven to support universal insurance for basic care.
- What should be included in "basic care" is a continuing controversy about justice everywhere.
 - Difficult decisions about relationship between value to individual and aggregate value in society. Accurate perception of real values is crucial. E.g., in prevention.
- Allocation trade-offs most explicit in transplant'n.
- Age-based priorities distasteful but persistent.
- Stakes probably highest in global HC justice.
- Maybe HC should have much less priority.

Supplementary slides if follow-up questions and discussion could use them

Expensive Cancer Drugs

Avastin: \$90,000; adds 1.5 mo (\$720k / YoL)

Erbitux: \$80,000; adds 1.2 mo (\$800k / YoL)

Provenge: \$93,000 for 4.0 mo (\$279k / YoL)

Erbitux (e.g.), if used for all of the 550,000 who die annually of CA, would cost \$440b (18% of current \$2.4T for health care).

- D. Callahan, "The Fine Line Between Waste and Marginal Benefits." Health Care Cost Monitor, The Hastings Center, 2009 (on-line).
- J. Geyman, "Cancer and Comparative Effectiveness Research." Health Care Cost Monitor, The Hastings Center, 2009 (on-line).
- T. Fojo & C. Grady, "How Much Is Life Worth: Cetuximab, Non–Small Cell Lung Cancer, and the \$440 Billion Question." *Jr Nat Cancer Inst* 101: 15 (2009).

Advanced Glioblastoma

Ted Kennedy, e.g.: discovered 2008, age 76. Prognosis w/ 1980's treatment: 4.5 months (average, with a 2-12 month range). Prognosis, standard radiation: 9 mo. average Prognosis with added chemo: 14.6 month average (5-20 month range, TK got 15 mo.) Prognosis, surgery: no known improvement

(same average, slightly wider range)

Costs (glioblastoma, cont'd)

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Radiation: $100,000 (ca. $260k per YoL)
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Chemo: + $150,000 (ca. $360k per YoL)
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Rad + chemo: \$250,000 (ca. \$300k per YoL)

Surgery: + \$250,000 (\$????? per YoL)

Is our willingness often to spend such resources a reflection of the "real" value of life and hope in these circumstances, or is it primarily a function of a medical system culturally and economically structured toward "when in doubt, do"?

Cost-Effectiveness of Some Preventions and Treatments

	Measure	Cost
Prevention	Hib vaccination, toddlers	Cost-saving
	1x colonoscopy, men 60-64	Cost-saving
	DM screening ≥65 for all vs. HBP	\$590,000/QALY
	Amoxicillin for children w cardiac lesions before urinary procedure	Raises cost or worsens health
Treatment	Cochlear implants, profoundly deaf kids	Cost-saving
	ART for HIV-infected patients	\$29,000/QALY
	Implant of defibrillator vs. medical mgmt	\$52,000/QALY
	Prostate CA Surgery 70 YO vs. watchful waiting	Raises cost or worsens health