Allocating Healthcare During COVID-19

PHIL 334: Pandemic Ethics

Ethics and the Attention Economy

Thursday, March 25th 12:15-1:15pm Pacific Time

They will discuss their paper "Is the Attention Economy Noxious?"

Clinton Castro (Florida International University) and **Adam Pham** (Caltech)

Review:
Fair Innings Aggregation

Review: Fair Innings

Utilitarian Ageism

Suppose you have to choose between giving the life-saving drug to:

(A) a **20-year old** (who will live for **many years** if she gets the drug)
(B) a **70-year old** (who will live for only a **few more years** if she gets the drug)

What should you do?

Utilitarian Ageism:
"Saving a person who has many years ahead of her **does more good**. … Since younger people have greater life expectancies, discriminating in favour of them is justified on **benefit-maximizing** grounds."

Hypothesis 1:
Age matters because life-expectancy matters.

Age & Fairness

Suppose you have to choose between giving the life-saving drug to:

(C) a **20-year old** (who will live for **10 more years** if she gets the drug)
(D) a **70-year old** (who will live for **10 more years** if she gets the drug)

What should you do?

Hypothesis 2:
It's (all else equal) better to prioritize the young.

How Does Age Matter?

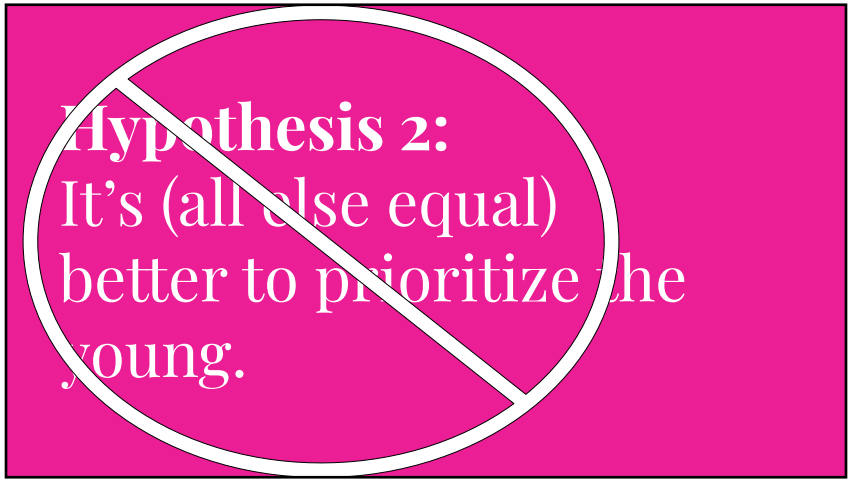
Suppose you have to choose between giving the life-saving drug to:

(E) a **30-year old** (who will live for **10 more years** if she gets the drug)
(F) a **40-year old** (who will live for **10 more years** if she gets the drug)

What should you do?

Doesn't the 30-year old patient have a complaint if she is not given priority compared to the 40-year old patient? After all, she has had less life than the 40-year old. Isn't that unfair?

Verdict:
We shouldn't privilege E over F.



Hypothesis 3:
We should de-prioritize those who've been given their **Fair Innings**.

Fair Innings

Suppose you have to choose between giving the life-saving drug to:

(E) a **30-year old** (who will live for **10 more years** if she gets the drug)
(F) a **40-year old** (who will live for **10 more years** if she gets the drug)

What should you do?

Neither patient has been given **Fair Innings**.

"Death at the end of a complete life is regrettable, but not a tragedy. Death before a life can be complete is a tragedy."

In this case, no matter what we do, it is a **tragedy**.

Fair Innings

Age matters, but only when some of been given their **Fair Innings**.

Suppose you have to choose between giving the life-saving drug to:

(E) a **30-year old** (who will live for **10 more years** if she gets the drug)
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What should you do?

Suppose you have to choose between giving the life-saving drug to:

(C) a **20-year old** (who will live for **10 more years** if she gets the drug)
(D) a **70-year old** (who will live for **10 more years** if she gets the drug)

What should you do?

All else equal, we should choose mere **misfortune** over both **misfortune** and **tragedy**.

Fair Innings?

Suppose you have to choose between giving the life-saving drug to:

(G) a **30-year old** (who will live for **10 more years** if she gets the drug)
(H) a **60-year old** (who will live for **10 more years** if she gets the drug)

What should you do?

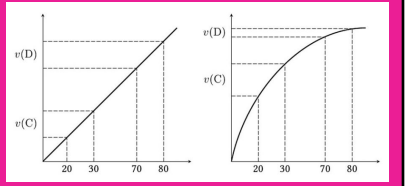
Neither patient has been given **Fair Innings**.

"Death at the end of a complete life is regrettable, but not a tragedy. Death before a life can be complete is a tragedy."

In this case, if you choose H, one person will be given Fair Innings; but, if you choose G, neither will be given Fair Innings.

Should you then choose H?

Prioritarian Ageism



Prioritarian Ageism

Verdicts:

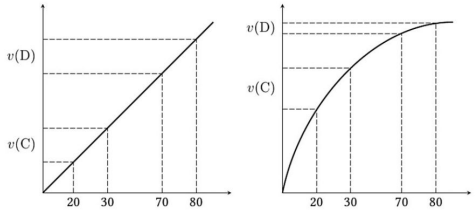
(A) > (B)

(C) > (D)

(E) > (F)

(G) > (H)

Prioritarian Ageism:
The marginal value of additional life-years decreases as one ages.



Prioritarian Ageism

Verdicts:

(A) > (B)

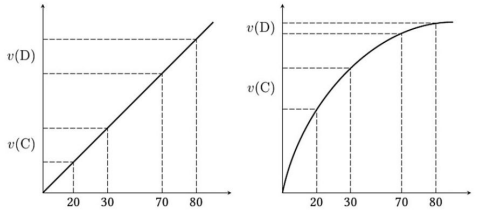
(C) > (D)

(E) > (F)

(G) > (H)

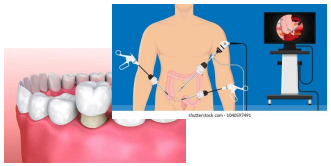
But we didn't think we should prioritize the **30-year old** over the **40-year old**!

Prioritarian Ageism:
The marginal value of additional life-years decreases as one ages.



Review: Aggregation

The Appendectomy/Tooth Capping Case



Aggregation Thesis:
Benefits to different people can be added up and compared across different groups

And it is morally acceptable to make ethical judgments on the basis of such interpersonally aggregated benefits.

We can give a **small** benefit to very **many** people, or

We can give a **large** benefit to very **few** people.

It can be the case that:
small * many > large * few

A greater **sum** of **small** QALY improvements for **many** is better than a smaller **sum** of **great** QALY improvements for a **few**.

Is that true?

The Appendectomy/Tooth Capping Case

Example
Suppose you must choose between the following:

(A) Save David's life with an appendectomy.
(B) Alleviate 1,000 people of toothaches by tooth capping.

What should you do?

Aggregation Thesis (Utilitarianism):
You should choose B over A. Why? Because, in aggregate, that will do the most good.

The Principle of Pairwise Comparison:
You should choose A over B. Why? Because saving David's life minimizes the maximum loss.

The Appendectomy/Tooth Capping Case

Example
Suppose you must choose between the following:

(A) Save David's life with an appendectomy.
(B*) Alleviate *n* people of toothaches by tooth capping.

What should you do?

Aggregation Thesis (Utilitarianism):
You should choose B over A. Why? Because, in aggregate, that will do the most good.

The Principle of Pairwise Comparison:
You should choose A over B. Why? Because saving David's life minimizes the maximum loss.

*What if *n* is really, really large?!

The Number Problem

The Number Problem

The Rescue Case
Suppose you must choose between the following:

(A) Extend the life of 1 patient by 20 years.
(B) Extend the life of 5 patients by 20 years.

What should you do?

Aggregation Thesis (Utilitarianism):
You should choose B over A. Why? Because, in aggregate, that will do the most good.

The Principle of Pairwise Comparison:
You should be indifferent between A and B. Why? Because the gain and loss for each of the six patients are the same; so, extending the life of one patient is just as acceptable as extending the lives of the five.

Aggregation Problem & Number Problem

The Rescue Case
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Aggregation Example
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Aggregation Problem & Number Problem

The Rescue Case
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What should you do?

Aggregation Example
Suppose you must choose between the following:

(A) Save David's life with an appendectomy.
(B) Alleviate 1,000 people of toothaches by tooth capping.

What should you do?

Not obvious that we can support both of these judgments!

Fair Chances

Questions about Rationing During COVID-19

Question:
Should a **lottery** be used rather than some other method (at least in cases of "ties")?

The Number Problem: Tie-Breaking Argument

The Rescue Case
Suppose you must choose between the following:

(D) Extend the life of David by 20 years.
(E) Extend the life of Emily by 20 years.

What should you do?

What Should You Do?
You should be indifferent between D and E.

So, you should flip a *fair coin* to determine where to go.

Both David and Emily have the same chance of being rescued: ½

The Number Problem

The Rescue Case
Suppose you must choose between the following:

(A) Extend the life of 1 patient by 20 years.
(B) Extend the life of 5 patients by 20 years.

What should you do?

What Should You Do?

Should you flip a *fair coin* to determine where to go?

Each person is given the same chance of being rescued: ½

Fair Lottery or a Weighted Lottery?

The Number Problem

The Rescue Case
Suppose you must choose between the following:

(A) Extend the life of 1 patient by 20 years.
(B) Extend the life of 5 patients by 20 years.

What should you do?

What Should You Do?
Should you *roll a die* to determine where to go?

Each person is assigned ⅙ chance.

But if the die favors someone on island B, you should also rescue the other people.

Objection:
This gives an unfair advantage to the people on island B.

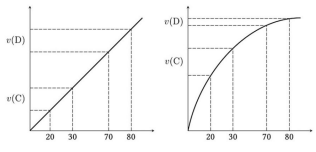
But is that so bad?

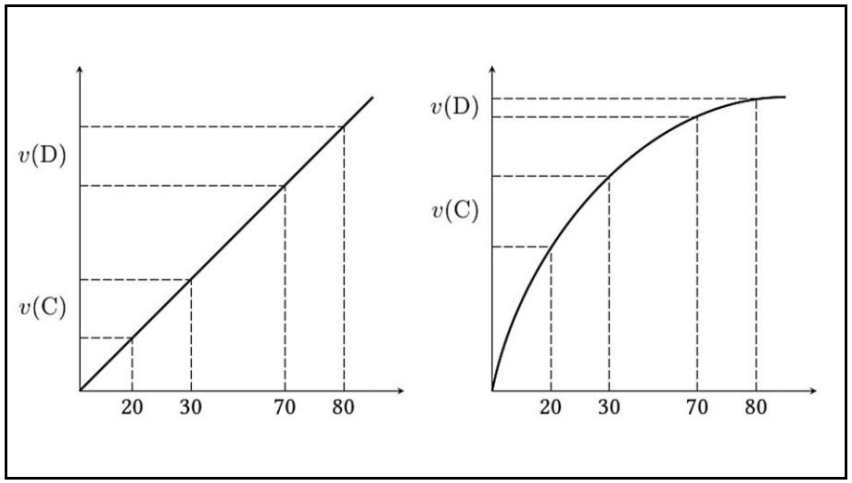
Prioritarianism

5.5 Giving priority to the worse off

Let us go back to the example of appendectomy and tooth capping. Many people find ranking tooth capping above appendectomy counterintuitive. One explanation for their intuitive judgment was the alleged implausibility of the aggregation thesis. But, as we saw, the theoretical cost of giving up the aggregation thesis is huge.

Here is another possible explanation. A patient with appendectomy is more seriously ill than a patient with a toothache. A benefit to a more seriously ill patient should receive a greater moral weight than a benefit





Worse off?

First, a person who has been ill for a longer period of time may be considered worse off than a person who has been ill for a shorter time, even if these two people are equally severely ill at the moment. Suppose there are two patients, A and B, with the exact same condition. Both can derive the same health improvement from an intervention. The only difference between the two patients is that A has been suffering from the condition for many years, whereas B has only recently developed it. Intuitively, A is worse off than B, simply because A has been suffering for a longer period.

Second, a person may be considered worse off when and because her condition could see little improvement. For example, patients with severe chronic obstructive pulmonary disease or with severe chronic schizophrenia are largely resistant to standard pharmacological treatments. The severity of their conditions makes them very badly off. But the fact that they can expect little improvement makes their fate even worse. It makes perfect sense to think that those who can expect little improvement in their condition are truly worst off.

The third sense in which a person may be considered worse off is in terms of overall well-being. Suppose that a concert pianist gets one of her fingers injured. Her career as a concert pianist comes to an end because of the injury. A finger injury is unlikely to be serious or life-threatening as a medical condition, but it is extremely serious for the pianist. It seriously affects her overall well-being.

Discussion Questions

Questions about Rationing During COVID-19

The NEW ENGLAND JOURNAL of MEDICINE

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Fair Allocation of Scarce Medical Resources in the Time of Covid-19

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Covid-19 is officially a pandemic. It is a novel infection with serious clinical manifestations, including death, and it has reached at least 124 countries and territories. Although the ultimate course and fluenza Plan that modeled the potential health care impact of moderate and severe influenza pandemics. The plan was updated after the 2009 H1N1 outbreak and most recently in 2017.[1] It

Questions about Rationing During COVID-19

Question:
Is there a moral difference between **withholding** care and **withdrawing** care from someone in order to give it to someone else?

Questions about Rationing During COVID-19

Because maximizing benefits is paramount in a pandemic, we believe that removing a patient from a ventilator or an ICU bed to provide it to others in need is also justifiable and that patients should be made aware of this possibility at admission.[3,28,29,33,35] Undoubtedly, withdrawing ventilators or ICU support from patients who arrived earlier to save those with better prognosis will be extremely psychologically traumatic for clinicians — and some clinicians might refuse to do so. However, many guidelines agree that the decision to withdraw a scarce resource to save others is not an act of killing and does not require the patient's consent.[26,28,29,33,35] We agree with these guidelines that it is the ethical thing to do.[26] Initially allocating beds and ventilators according to the value of maximizing benefits could help reduce the need for withdrawal.

Questions about Rationing During COVID-19

Question:
Should we be aiming to maximize the sheer **number of lives saved**, ignoring facts about expected life years and quality of life?

Things That (Might) Matter

- What are the patient's **chances of survival**?
- What is the patient's **life-expectancy** (if they survive)?
- What will the patient's **quality of life** be like (if they survive)?
- How **old** is the patient? (Why might this matter?)
- How much **overall happiness** would be produced?

What **else** might matter?

Questions ab

Question:
Should we
lives saved
quality of l

Limited time and information in a Covid-19 pandemic make it justifiable to give priority to maximizing the number of patients that survive treatment with a reasonable life expectancy and to regard maximizing improvements in length of life as a subordinate aim. The latter becomes relevant only in comparing patients whose likelihood of survival is similar. Limited time and information during an emergency also counsel against incorporating patients' future quality of life, and quality-adjusted life-years, into benefit maximization. Doing so would require time-

Questions about Rationing During COVID-19

Question:
Should we prioritize the lives of **healthcare professionals**? What about the police, delivery workers, those involved in the supply chain for food, etc.? What about famous people?

Questions about Rationi

Question:
Should we prioritize
What about the polic
the supply chain for

Recommendation 2: Critical Covid-19 interventions — testing, PPE, ICU beds, ventilators, therapeutics, and vaccines — should go first to front-line health care workers and others who care for ill patients and who keep critical infrastructure operating, particularly workers who face a high risk of infection and whose training makes them difficult to replace.[27] These workers should be given priority not because they are somehow more worthy, but because of their instrumental value: they are essential to pandemic response.[27,28] If physicians and nurses are incapacitated, all patients — not just those with Covid-19 — will suffer greater mortality and years of life lost. Whether health workers who

Questions about Rationing During COVID-19

Question:
Should a **lottery** be used rather than some other method (at least in cases of "ties")?

Recommendation 3: For patients with similar prognoses, equality should be invoked and operationalized through random allocation, such as a lottery, rather than a first-come, first-served allocation process. First-come, first-served is used for such resources as transplantable kidneys, where scarcity is long-standing and patients can survive without the scarce resource. Conversely, treatments for coronavirus address urgent need, meaning that a first-come, first-served approach would unfairly benefit patients living nearer to health facilities. And first-come, first-served medication or vaccine distribution would encourage crowding and even violence during a period when social distancing is paramount. Finally, first-come, first-served approaches mean that people who happen to get sick later on, perhaps because of their strict adherence to recommended public health measures, are excluded from treatment,

COVID-19

than some other method

worsening outcomes without improving fairness.[33] In the face of time pressure and limited information, random selection is also preferable to trying to make finer-grained prognostic judgments within a group of roughly similar patients.

Questions about Rationing During COVID-19

Question:
Should we prioritize **patients with COVID-19** over other patients requiring similar healthcare resources?

Recommendation 6: There should be no difference in allocating scarce resources between patients with Covid-19 and those with other medical conditions. If the Covid-19 pandemic leads to absolute scarcity, that scarcity will affect all patients, including those with heart failure, cancer, and other serious and life-threatening conditions requiring prompt medical attention. Fair allocation of resources that prioritizes the value of maximizing benefits applies across all patients who need resources. For example, a doctor with an allergy who goes into anaphylactic shock and needs life-saving intubation and ventilator support should receive priority over Covid-19 patients who are not frontline health care workers.

-19 over other

ources?

Table 2. Ethical Values to Guide Rationing of Absolutely Scarce Health Care Resources in a Covid-19 Pandemic.

Ethical Values and Guiding Principles	Application to COVID-19 Pandemic
Maximize benefits	
Save the most lives	Receives the highest priority
Save the most life-years — maximize prognosis	Receives the highest priority
Treat people equally	
First-come, first-served	Should not be used
Random selection	Used for selecting among patients with similar prognosis
Promote and reward instrumental value (benefit to others)	
Retrospective — priority to those who have made relevant contributions	Gives priority to research participants and health care workers when other factors such as maximizing benefits are equal
Prospective — priority to those who are likely to make relevant contributions	Gives priority to health care workers
Give priority to the worst off	
Sickest first	Used when it aligns with maximizing benefits
Youngest first	Used when it aligns with maximizing benefits such as preventing spread of the virus