Aggregation

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What is the Issue?

- Utilitarianism and standard CEA aggregate overall health benefits to all affected.
  - Distribution of the benefits matters only to the extent it affects total benefits (or costs).
- Health benefits typically vary across a very broad range of size or importance
  - Life saving—e.g. liver and heart transplants
  - Prevention of significant disability
  - Minor benefits—treatment of colds or very mild asthma

Cont.

- For utilitarians and CEA all of these different size benefits are aggregated together
  - Goal is maximum health benefits for the population, given available resources

Why is aggregation problematic?

- The Oregon example
  - Oregon undertook to revise its Medicaid program around 1990.
  - Increase number of poor covered to FPL
  - With budget constraints—provide most CE services to all in program
  - So, ration services, not people.
  - OHSC tasked with evaluating list of treatment/condition pairs
    - And ranking them by their relative CE.

Oregon

- Two results:
  - Tooth capping ranked just above surgery for ectopic pregnancy
  - Splints for temporomandibular joint disorder ranked just above appendectomy
- These rankings were unacceptable—why did they occur?
  - In each case the higher ranked service is much cheaper than the lower ranked.
  - So can give many Pts the cheaper service for what it costs to give the costly service to one

Oregon

- Why was this result unacceptable?
  - Many people say should not get lower priority for treatment just because your disease is more expensive to treat
  - Ordinary people's priorities are based on a one to one comparison, which ignores differences in costs.
  - This implicitly rejects aggregation of small benefits to many outweighing large benefits to a few.
  - Oregon changed its methodology radically from CE to roughly relative effectiveness

Contractualist Moral Theories

- Fundamental feature is that distributive principles must be justified to each individual on basis of how they affect them.
  - This seems to support the one-to-one comparison.
  - Cannot justify to the PT that let die that did so in order to cure colds in a great many Pts.

Conflicting Cases

- Seems wrong to reject all aggregation and only use one-to-one comparisons
  - Better to save 100 Pts from quadriplegia than one Pt from dying?
  - Better to save 100 Pts from paraplegia than one Pt from quadriplegia?
- So the Aggregation problem is **when**, and **for what reasons**, is aggregation ethically acceptable in health resource prioritization?
- Does this issue arise in our 3 cases?

Expensive Cancer Drugs

- Some argue, a few months life extension at the cost of $100,000 is too small a benefit to warrant its great costs
  - Could use those resources to improve primary care screening for many Pts, extend time of many Pt visits, etc.
  - Plausible that the benefits from these alternative resource uses greater overall
  - This argument employs aggregation

Dialysis in Middle Income Country

- Should RRT be Funded at All?
- Estimate of cost effectiveness of RRT for UC members
  - Cost per QALY gained from RRT 17,500 USD or >8 times GNI per capita
    - 2-3 times is a common standard
  - CEA of RRT: estimated it was 29.5 times more expensive than ART ($592 per life year saved)
  - So plausible were probably other improvements to HC system with greater overall benefits

Cont.

- Difficulty in rejecting a life saving intervention for identified Pts supports rejecting aggregation

Pneumococal Vaccine in Mexico

- Here, appears aggregative reasoning is accepted?
  - Eliminating the 3rd booster results in more death and disability
  - Cost of booster $26.50 dollars, but only CE below $7.
  - So savings can be used to improve other more CE interventions
  - Why is aggregative reasoning OK here?

Conclusion

- See the aggregation problem does arise in each of the 3 case studies
- Hope that philosophical work on the aggregation problem can help us with the aggregation issue in these real world cases.