

Ethics, public health, and antiviral medication strategies in pandemic influenza

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Topics

- n Ethical principles at stake
- n Six-step framework for considering ethics of any proposed plan
- n Ethics challenges that arise specifically for allocation of *antivirals*
- n Alternative priority schemes
- n Proposed scheme?



Ethical principles/values at stake in making allocation decisions

n Utility

n Reciprocity

n Respect

– Engagement, transparency,
reasonableness

n Fairness in distribution and process

n Integrity



Utility – “greatest good” – many interpretations

- n Greatest # of lives saved
- n Functioning society, now and in future
- n Particular functions, symbols of our society preserved
- n Public health benefit sometimes may trump individual interests



Reciprocity

- n If society asks individuals to put themselves at risk for the common good, then society owes those individuals special protection and care
 - Priority with vaccination or prophylaxis
 - Treatment if becoming sick
 - Prophylaxis or treatment for family?
 - Financial compensation to family if become disabled or die?



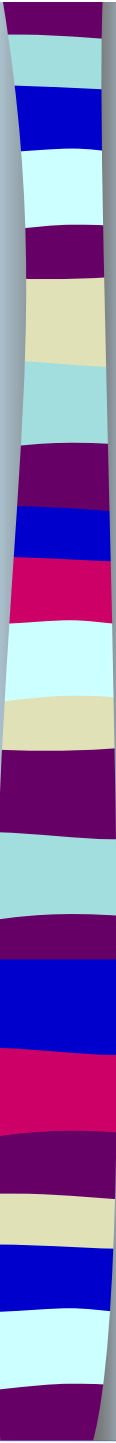
Respect

- n **Engagement** with stakeholders in designing plan and setting priorities
 - What are *their* definitions of utility, of “the good”?
- n **Transparency**
 - Disclosing content of plans
 - Disclosing reasoning behind plans
- n **Reasonable**
 - Public will feel respected if plans seems sensible, credible, responsive to compelling societal interests, has criteria for restrictions and freedoms
- n **Acknowledges/addresses differences**
 - in personal circumstances, educational background, housing, language, literacy, disability, etc.



Fair distribution

- n Allocation according to reasonable scheme; not arbitrary (many definitions of “fair”)
 - Societal contribution
 - Medical need
 - Future life potential
 - Risk of contagion to others
- n Accounts for least well off (social justice)
 - Generational vulnerability (Minnesota)
 - Homeless; severely disabled
 - Acknowledges equal moral worth of all humans
 - Preparedness/stockpiling by those who can afford to be self-sufficient allows resources to be better directed to most vulnerable; minimizes social chaos



Fair procedures to determine plans, policies, allocation

- n Engagement (beyond transparency)
- n There will be disagreement; but attention given to systematic minority views



Integrity

- n Attention to evidence
- n Non-discrimination
- n Honesty
- n Resistance to corruption
- n Consistency in following rules
- n Attention to other ethical principles



Six-step framework PH ethics

1. What are public health **goals in responding to pandemic influenza?**
 - Controversial for pandemic influenza
 - Minimize # hospitalizations and deaths?
 - Minimize transmission/target vectors?
 - Keep some infrastructure operational?
 - Global vs. domestic?



Possible PH goals when allocating antivirals for pandemic influenza

- n Minimize death overall
 - Treat the sick; treat those at greatest risk of death;
 - Prophylax vulnerable household contacts?
- n Reduce global spread
 - Treatment and prophylaxis at epicenter
- n Reduce local spread
 - Prophylaxis for those with significant social contact pre-vaccine (or incompletely effective vaccine)
 - Prophylaxis for those with household/other contact with the sick
- n Maintaining societal infrastructure: those in “essential functions”
 - HCW, EMS, Communications, food, trucking, police, oil refinery, energy, water
- n **Equity or equality**
 - Deliberate attention to age, race, class, gender, vulnerability as explicit (even partial) goal
- n Allocation and response plans based on choice of goal; all attentive to all goals – but to differing degrees



2. Evidence that plan actually will fulfill goals?

- n Reasonable idea not enough
 - Plans must be as evidence-based as possible
- n **Proportionality:**
 - the greater the burden of plan, the greater the need for evidence;
 - the greater or more imminent the threat, the more compromises one must make to evidence standard
- n Evidence will be incomplete, emerging, shifting
 - Public trust may be threatened when directives and policies change in response to shifting or new information
 - Transparency to *prepare* public that evidence will be incomplete and may shift priorities and strategies of response



3. What are potential/known burdens of proposed plan?

- n Some predictable loss of life
- n Threats to privacy and confidentiality
- n Personal liberty constraints
- n Some will disagree/view as unfair
- n Secondary threat of lack of cooperation; social chaos



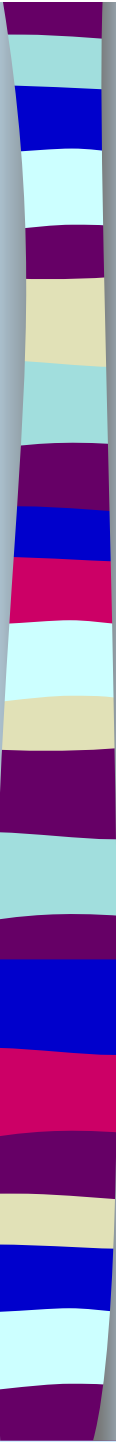
4. How can burdens of proposed approach be minimized?

- n Must choose **least restrictive** approach to goals
- n **Engagement** makes citizenry part of the decision makers; goal is for them to help create the broad goals of the plan
- n **Transparency** helps citizens believe
 - they are partners in achieving the goals;
 - authorities can be trusted (?)
 - Understand why privacy/confidentiality/liberty are compromised
 - Understand circumstances under which old standards will be resumed
- n Implement **fairly**



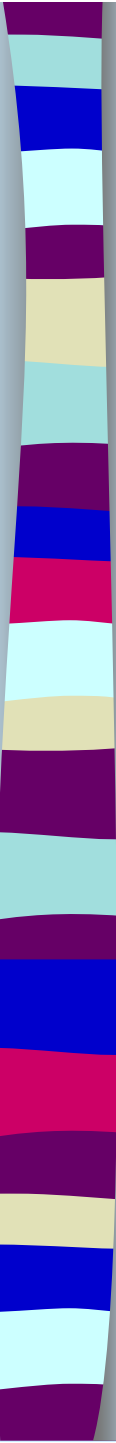
5. Are burdens/benefits distributed fairly?

- n Who wins? Who loses? No arbitrary discrimination
 - Again, many definitions of fair. Must be sensible, reasonable; defensible in hindsight
- n Attention to least well off
 - Engagement to determine how to address needs of most vulnerable



6. Fair procedures to resolve and move forward

- n Engagement and transparency
 - Opportunity to disagree during planning stage
- n There will be disagreement
- n Attention to systematic disagreement from class of citizens, minority, etc.



Ethics/allocation questions raised with antivirals (if limited supply):

- n Can prophylaxis for essential personnel trump treatment of sick?
 - Before vaccine is available
 - If vaccine is available but seems to be less than 100% effective (especially for those with significant exposure)
- n Prophylaxis for essential personnel **without** *known* exposure but with significant, ongoing social contact??
 - E.g., Truck drivers, police, supermarket personnel, hospital janitors, hospital food service
- n Tx or prophylaxis for families of above? For families of sick citizens? (contain spread vs. maintain essential functions)



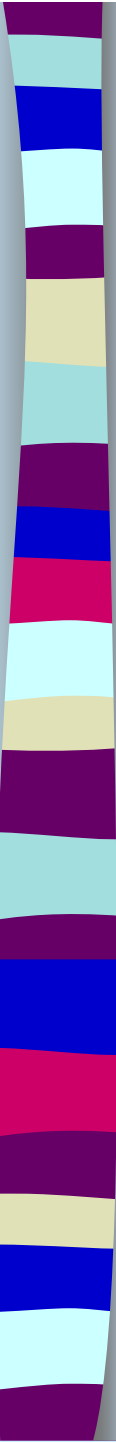
Existing allocation schemes

- n Most give priority to:
 - Health care workers
 - Those involved with manufacturing or distribution of vaccines
- n Next priority
 - Those at greatest risk of hospitalization and death from influenza (babies and older persons)
 - Those with significant contact with others and/or contagious
- n Implicit goal: saving the largest number of lives



Alternative goal (or framing of goal?)

- n Maintaining a minimal societal infrastructure
 - a minimally functioning society
 - SOME health care workers but **not all**
 - Police, fire, EMS
 - Utility workers (water, energy)
 - Communication
 - Oil refinery
 - Truck drivers (food, gasoline, gloves, disinfectant)
 - Ancillary hospital staff (janitors, food service, laboratory)



Rationale: Minimize death and disability from *secondary* consequences of broken infrastructure

- n Neither health care infrastructure nor individual families can function for more than a few days without food, water, and new supplies
- n Grocery stores have 1-3 day supply of food
 - How much food is in hospitals for staff and patients??
- n Oil refineries operate at 94% capacity
- n Gas stations have 1-3 day supply
- n Water treatment plants have 1-2 weeks of chlorine for water treatment
- n 80% raw materials for *other* drugs come from overseas; little stock in US stores
- n Effect of no cell phone, communications, waste removal, clean water, heat, internet, food in stores??
 - Widespread infectious disease
 - Mental health breakdown
 - Social disorder; no longer following public directives



Closing thoughts

- n Allocation schemes must be mindful of “big picture”
- n Public must be viewed as a **partner** in determining what is right