Kerstein and Bognar (2010) differ from us on three major issues: (1) They support sickest-first allocation, (2) they use quality-of-life considerations, and (3) they offer a different basis for prioritizing adolescents over infants. Nonetheless, their proposal diverges from ours less than it might seem. We continue to think that our complete lives framework offers meaningful, though not exact, guidance, and that its principles have adequate, if not uncontroversial, moral foundations. Notwithstanding our minor disagreements, we ultimately believe that we and Kerstein and Bognar agree on the idea that just allocation can only proceed by openly discussing, analyzing, and refining multi-principle systems, and we believe that this dialogue advances that goal.

THE COMPLETE LIVES SYSTEM PROVIDES MEANINGFUL GUIDANCE

The complete lives system was not designed to offer precise answers, but to identify the principles that should be used in making allocation decisions: Standard-like frameworks that guide but do not precisely specify decisions are frequently used in decision making (Solum 2009). That our proposal does not provide a determinate answer in all cases is not a failure. Indeed, we are pleased that it has generated new research questions. We believe Bognar and Kerstein’s proposal complements our project by suggesting an algorithm balancing two important principles, those of prognosis and saving the most lives.

We believe that the complete lives system provides several forms of guidance in the three cases Kerstein and Bognar discuss. It identifies the relevant principles and counsels against using only one principle or including flawed principles such as first-come, first-served. It also would rule out giving one principle “five or even ten times” the weight of another. Such an algorithm would effectively reduce to an inadequate single-principle system.

Additionally, the core idea of a complete life provides substantive guidance in at least two of Bognar and Kerstein’s three cases. In the first, only one of the 18-year-olds has a chance at a complete life; the other two do not. We should thus give the organs to the person who can live to 70. In the third case, only the infant, who will live to 80 if saved, has a chance at a complete life. While the 20-year-old’s death is tragic, 5 more years will not enable her to realize her life plans or fulfill much investment. The hardest case is the second, between saving one 20-year-old for 4 years or two 55-year-olds for 2 years each: Neither choice will make the difference between having and lacking a complete life. We would favor the 20-year-old, but this is the sort of case that falls within “a range of permissible allocations,” and where a lottery might be appropriate.

Although Bognar and Kerstein’s algorithm recognizes important principles, its balancing approach is not unproblematic. When deciding between saving two people for 30 years each, or 80 people for a week each, Bognar and Kerstein’s proposal directs us to save the 80, which seems not just controversial but counterintuitive. This objection highlights that any appealing algorithm will have surprising implications.

Address correspondence to Govind C. Persad, Stanford University, Department of Philosophy, Building 90, Main Quad, Stanford, CA 94305-2155, USA. E-mail: gpersad@stanford.edu

1. Applying Bognar and Kerstein’s algorithm, regarding prognosis, the proportion between the values possessed by the two versus the group is 60/1.6 (2 × 30 years versus 80 × 0.02 years.) Thus, on the prognosis principle, the two are favored. In contrast, the proportion between the values possessed by the group and the one regarding life-saving is 80/2 (80 lives saved versus 2 lives saved). On this principle, the group is favored. The second proportion is equivalent to a number (40) that is greater than that yielded by the first proportion (37.5). So, according to Bognar and Kerstein’s method, we should save the 80 rather than the 2.
THE PRINCIPLES COMPRISING THE COMPLETE LIVES SYSTEM HAVE SOUND MORAL FOUNDATIONS

Our system’s foundation is the idea of reflective equilibrium, which begins with our considered moral judgments (Rawls 1999). Incorporating both the investment modification and the youngest-first principle reconciles the two principles, as reflective equilibrium would counsel, rather than undermining either. The investment modification recommends a steady increase in priority with age, leveling off at young adulthood, while the youngest-first principle recommends a steady decrease in priority with age. Giving investment stronger weight than the youngest-first principle, but considering both, generates a priority curve like ours.

Similarly, the idea of a complete life is compatible with recognizing the importance of life plans. While Kerstein and Bognar are right that we believe a complete life “might vary depending on the typical lifespan in a given society,” a complete life is important because of its importance to carrying out a life plan, not instead of recognizing the importance of life plans.

Should we have built “quality of life” into our system? We continue to think not. Using the simpler metric of life-years avoids intrusive and socially loaded judgments about people’s lives: Life-years are a primary good that we can all agree are valuable (Rawls 1999). This advantage outweighs life-year-based systems’ inability to recognize quality values. Bognar and Kerstein’s example of a candidate for scarce resources who “would spend all of his additional life unaware of his surroundings” can be handled by using a metric like “adequate conscious life” (Kamm 1993), rather than resorting to problematic QALY and DALY metrics that disadvantage disabled people and favor the socially popular.

Finally, Bognar and Kerstein’s claim that the investment modification should prioritize a “diplomat or business leader” misunderstands its justification. The investment modification is based on “the social and personal investment that people are morally entitled to have received at a particular age” (Persad et al. 2009), not on what they happen to have received. Diplomatic and business training are not entitlements, whereas basic sustenance and education are. This is why the investment modification levels off after adolescence.

SICKEST-FIRST REMAINS INHERENTLY FLAWED IN ABSOLUTE SCARCITY

Kerstein and Bognar defend sickest-first allocation even in absolute scarcity. They claim that “it would be invidious if a health care system did not treat you when you are in pain because you are considered to be ‘too well off overall’ to have an urgent medical need.” But we consider health-related well-being, not “overall” well-being. And even a healthy person should receive treatment absent scarcity. Nonetheless, where there is absolute scarcity, denying treatment to a sick patient can be justified if someone else is or will be sicker and we cannot treat both.

They also criticize the argument that “the pain you are experiencing now is ‘compensated’ by full health at other times in your life.” But such arguments are common and correct: A dentist, for instance, might argue that future health will compensate for the present pain of a root canal. Similarly, people have reason to prefer an allocation that will best reduce pain throughout each person’s life, rather than one that relieves pain right now but will lead to people experiencing more total pain throughout their lives.

Furthermore, the procedures we discussed are life-extending, not pain-relieving. So, we could alternatively argue that regardless of whether pain relief should automatically go to those in the most pain right now, life extension using an absolutely scarce medical resource should not automatically go to those about to die right now (Callahan 1995).

Kerstein and Bognar also charge that “if the principle of sickest-first is inherently flawed, then apparently doctors need not care about who has the greatest medical need at the time.” This argument straightforwardly begs the question by asserting that the sickest right now have the greatest medical need. While this might be true absent scarcity, we would argue that, in absolute scarcity, those who have greatest medical need are those who have not yet had complete lives and who can benefit substantially. Kerstein and Bognar offer no argument for their implicit definition of medical need.

PERSONHOOD DIFFERENCES ARE THE WRONG BASIS FOR PRIORITIZING ADOLESCENTS

Kerstein and Bognar are willing to prioritize adolescents over infants in absolute scarcity situations, as we recommend, but offer a different justification from ours. Their approach, grounded in the idea that infants are not persons, is in tension with their defense of the sickest-first principle on the grounds that an acceptable system must be perceived as legitimate. Their characterization of infants as non-persons—a metaphysical claim that would extend far beyond scarcity situations—would be much more difficult for the public to accept (Rawls 1985).

Bognar and Kerstein’s approach confuses allocation decisions based on differences in personhood with those based on differences in distributive priority. The inevitable decision to save some individuals rather than others in an absolute scarcity situation does not deny the unsaved individuals’ personhood: Scarcity has the deeply wrenching feature that any choice will leave some person or persons unsaved. In contrast, deciding to give a scarce vaccine to a person rather than a pig, a choice based on differences in personhood, is much less morally wrenching. Deciding between an adolescent and an infant is deeply wrenching—it is an inherently tragic choice—which indicates that the decision is based on investment-based differences in distributive priority, not on differences in personhood.

CONCLUSION

Notwithstanding the disagreements we have noted, our broad agreement with Kerstein and Bognar overshadows
our differences. Kerstein and Bognar stand with us in criti-
cizing the claim that fair procedures, on their own, can en-
sure just allocation (Daniels 2008). Even more importantly,
they disagree with those popular critics of our paper who
see the allocation of absolutely scarce medical interventions
as a frightening or disgusting enterprise to be evaded at
all costs. We and Kerstein and Bognar both believe that
reflection on multi-principle allocation systems is neces-
sary “if we are to make progress toward answering the
troubling and urgent” problems of allocation of absolutely
scarce medical interventions. We look forward to seeing that
discussion go forward here and elsewhere.

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Balancing Principles, QALYs, and the
Straw Men of Resource Allocation

John McMillan, Flinders Medical Centre
Tony Hope, University of Oxford

THE SCOPE OF RESOURCE ALLOCATION
Kerstein and Bognar (2010) and Persad, Wertheimer, and
Emanuel (2009) defend specific principles for the allocation
of health care resources, but their choice of principles is
influenced by the examples that they discuss. Kerstein and
Bognar are clear that they’re discussing the allocation of
“scarce life-saving interventions.” Persad, Wertheimer, and
Emanuel, on the other hand, are less careful and describe
their paper as being about the allocation of scarce resources.
In any case, all of the examples that they discuss are scarce
life-saving interventions.

While life-and-death cases are important, they are not
the only kinds of situation where scarcity occurs in systems
such as the National Health Service. Scarcity can be caused
in a number of ways: It can simply be because there are a
finite number of organs available, or it might be due to a
budget holder having a finite amount of money to spend
on health care. This matters because those charged with
determining who should be treated have to make judg-
ments about whether treatments are sufficiently beneficial
to be funded. Because Kerstein and Bognar and Persad,
Wertheimer, and Emanuel focus on scarce life-saving inter-
ventions they miss the relevance that quality of life and tools
to measure it, such as those used in quality-adjusted life year
(QALY) assessments, can have for cost-effectiveness and re-
source allocation. And because the cases they consider are
somewhat abstract they ignore the probabilistic nature of
much medical prognosis.

Restricting the scope of allocation makes the QALY look
less plausible than it is and the whole lives approach less
implausible than it is. QALYs tend to produce their most
counterintuitive and stark implications when they are the
only factor considered for scarce life-saving interventions.
On the other hand, if we have to choose between funding
two expensive drugs, which will make people better but
not have any impact upon mortality, then quality of life is a
central consideration.

THE PROBABILISTIC NATURE OF MEDICAL
PROGNOSIS
It is typical of medicine that prognosis for an individual,
both with and without interventions, is uncertain.