Virtual Mentor

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ETHICS CASE

Should Age Be a Basis for Rationing Health Care?

Commentary by Haavi Morreim, JD, PhD, Ryan M. Antiel, MD, MA, David G. Zacharias, MD, MPH, and Daniel E. Hall, MD, MDiv, MHSc

Dr. Rossi, an orthopedic surgeon, was recently selected to be a voting member of one of the FutuRx Health Maintenance Organization's (HMO) committees, which is solely responsible for determining covered and excluded services for the various FutuRx HMO plans.

The focus of one of the committee meetings was exclusionary criteria for coverage of replacement arthroplasty. During this meeting, a committee member proposed an absolute cutoff age of 90 for the surgery, according to the rationale that, given the median lifespan of the US adult population, a 90-year old person would not live long enough after the surgery to justify the expense. Proponents of the proposal argued that the cost savings from this exclusion could be shifted towards lower premiums and more comprehensive coverage for others. This particular proposal resulted in a lively discussion among the committee members. There were many valid points raised for and against this proposal, but all Dr. Rossi could think of was his patient, Mr. Turner.

Mr. Turner is 91 years old and a former Olympic marathon runner. He has been seeing Dr. Rossi for his severe right-knee osteoarthritis but is otherwise in excellent health. Even though Mr. Turner continues to enjoy an active life, over the past 6-9 months, the knee pain has limited his ability to do what he loves most, run. Mr. Turner ran his last full marathon 1 year ago and, even with his severe osteoarthritis and advanced age, was able to complete it in less than 4 hours and 45 minutes. Since then, due to his knee pain, Mr. Turner has had to decrease the frequency and the intensity of his runs and more recently has been unable to run at all. Dr. Rossi remembers his multiple conversations with Mr. Turner about how much running means to him and how much enjoyment he gains from this particular activity. Dr. Rossi was considering a knee replacement for Mr. Turner and, even though proposed changes will not affect Mr. Turner directly (he is not part of FutuRx HMO) Dr. Rossi feels uneasy voting for a change that would restrict patients like Mr. Turner from getting a procedure that, in some circumstances, has a high potential for increasing quality of life. On the other hand, Dr. Rossi appreciates the value of limited health care dollars, the larger impact of such cost-saving approaches, and the biological limit on the years of benefit patients like Mr. Turner would gain from undergoing joint replacement.

Commentary 1

by Haavi Morreim, JD, PhD

Fair warning: as the daughter of a healthy, active 99-year-old father, and as a baby boomer who decided long ago that surely middle age does not begin until at least age 60, I bring a certain bias to the conversation. Still, I am younger than Mick Jagger and always will be. That being said, I believe Dr. Rossi's question can be addressed along several dimensions.

Thoughtful commentators have proposed that yes, age does matter when it comes to allocating scarce resources in health care. Bioethicist Daniel Callahan, for instance, proposes that there is such a thing as a natural life span, a full life, and that it may not always be wise to keep "elderly people with chronic diseases expensively alive" [1]. He noted that, as baby boomers retired, Medicare outlays were expected to grow from 3.5 percent of the gross domestic product to 5.8 percent by 2038 [2]. Hence, we must take seriously the idea of age-based limits on medical care. The proposal will be explored along several dimensions: economic, ethical, empirical, and legal.

First, the economics and ethics of scarcity. "Fiscal scarcity" (the general reality that finances are limited, and that we simply cannot afford to provide every health care intervention of conceivable benefit) often seems less pressing than "commodity scarcity" (the absolute shortage of some item, usually a physical object such as organs for transplant or available ICU beds) [3]. With commodity scarcity there is the consolation that, if one patient does not receive the available item, some other patient will. With fiscal scarcity it is tempting to ignore the budget for someone who needs something extra: it's just money, after all, and surely this person's health is more important.

The failure to implement reasonably clear limits on health care spending is a recipe for relentlessly rising expenditures—a familiar phenomenon in US health care. Arguably it has also contributed to our hesitancy to extend health insurance to millions of uninsured people. If spending for the insured is out of control, how can we add so many more people to the pool?

An HMO like FutuRx has obligations to all its members, whose financial contributions comprise the resource pool from which individual needs are then served. That pool must be managed so that the members as a whole can receive the spectrum of benefits they legitimately expect, without permitting excessive demands of a few to deplete unduly what is left for the many. This "contributive justice" [4] becomes increasingly important in the wake of the Affordable Care Act, which hopes to extend health care coverage to millions of uninsured people, many of whom have chronic conditions that previously rendered coverage unavailable or unaffordable.

Cost-conscious resource policies, however, must be medically as well as ethically justified. We turn to empirical factors, because good ethics begins with good facts. Age is at best a crude predictor of medical utility, because people in any age group

differ markedly. Life expectancy varies by gender and by racial group, for instance [5], as well as by underlying health condition.

The Social Security Administration's calculator for life expectancy says Mr. Turner as a 90-year-old man can expect to live another 3.8 years [6]. However, this figure is likely conservative, as it takes no account of the fact that he has no other known health issues, such as heart disease, diabetes, or hypertension—common conditions among his age peers. Thirty-five years ago, at age 65, his life expectancy would have been in the mid-80s [7]. Turner put that number in the rear-view mirror long ago, as one of the healthier members of his cohort. He could live another 15 years.

Thus, it makes less medical sense to focus on age as such than to inquire which factors actually influence longevity of total knee arthroplasty. Preoperative physical function appears to be significantly associated with postoperative outcome, along with such factors as higher education level, higher socioeconomic status, and lower comorbidity [8, 9]. Although the average age of subjects in these studies was distinctly less than 90, age was not identified as a significant component.

Consider also the consequences of failing to intervene. For a healthy, active patient like Mr. Turner, joint replacement could not just lead to a better quality of life, but could potentially avoid costly medical problems such as loss of strength and bone density from markedly reduced activity, leading to problems like fractures with prolonged hospitalization.

Close attention to such medical details lies the heart of the guidelines on which health care increasingly relies to produce evidence-based care and outcomes and to use resources as efficiently and effectively as possible [10]. It is difficult to argue that, medically, economically, or ethically, it is wise to ignore science and rely instead on crude placeholders such as age.

The implications stretch further. Life expectancy tables are a function of gender and race as well as age. If FutuRx decides to set an age threshold for joint replacement, it must logically vary that threshold for race and gender as well as age. Black males, Hispanic women, and white males and females could thus have different cutoffs of eligibility for that as well as other medical investments.

This unsavory specter brings us to legal issues. The Age Discrimination Act of 1975 (the "Age Act") provides that, with certain exceptions, "no person in the United States shall, on the basis of age, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under, any program or activity receiving Federal financial assistance" [11]. The statute is enforced by the Office of Civil Rights, and it carries detailed regulations for implementation [12, 13]. The Affordable Care Act reemphasizes the illegitimacy of age-based discrimination [14].

Age Act regulations expressly apply to organizations that provide health care [15], stating that, barring certain exceptions, such organizations cannot use age

distinctions to deny someone the benefits of any program, service, or activity receiving federal financial assistance. Medicare would seem to be such a federal financial assistance program, and an HMO with Medicare patients would seem to qualify as such an organization.

The regulations provide examples, including one that directly illustrates FutuRx's potential legal trouble. Suppose a local health department refuses to train anyone over 65 to perform CPR, on the assumption that older people lack the strength to perform it [16, 17]. This age-based rule would fail because, although physical ability may be a proper criterion for eligibility to learn CPR, age does not capture physical ability very well. Moreover, physical ability can be measured directly. Age thus could not stand as a proper surrogate for physical ability, and so the age cutoff would violate federal law.

By implication, if FutuRx forbids anyone over 90 to receive total knee arthroscopy, on the assumption that age can suitably stand as a surrogate for likely duration of joint survival, FutuRx would have to show the government that a prognosis for joint survival cannot be directly measured and that age is a legitimate surrogate. FutuRx will likely fail. As discussed above, we already know direct prognostic measures such as preoperative activity level, educational level, and the like. We don't need age as a surrogate marker.

Hence, FutuRx's proposed policy would likely be unlawful. It would probably also be politically inept. During the 1990s, HMOs enacted a wide variety of costcontainment measures, often crudely drawn and implemented. Many of them turned out to be medically and even economically unwise (e.g., gatekeeper arrangements forbidding patients to see a specialist without a prior visit to the primary physician), and the whole situation led not only to widespread system gaming, but also to a huge political backlash and a rollback even of many legitimate cost-containment mechanisms.

FutuRx would be well-advised to reject an age cutoff for joint replacement.

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Commentary 2

by Ryan M. Antiel, MD, MA, David G. Zacharias, MD, MPH, and Daniel E. Hall, MD, MDiv, MHSc

Given the strain that health care costs have placed on the US economy, there has been renewed attention on exclusionary criteria for coverage of various procedures and services. Age is an obvious, albeit controversial, independent exclusionary criterion to explore. This case poses the question of a knee replacement for a 91year-old marathon runner. This is not a common occurrence; the majority of health care spending is for patients who are in their final year of life, and often in their last couple of months. For example, one of us took care of John, a 91-year-old man with a massive ruptured abdominal aortic aneurysm and multiple comorbidities who was rushed by ambulance to the hospital. At his family's request, John underwent surgical repair and was subsequently transferred to the ICU where he remained persistently unconscious on a ventilator with an abdomen full of blood, only to die two weeks later despite continued rescue efforts costing tens of thousands of dollars.

John's familiar story illustrates how health care resources are consumed by intensive rescue efforts at the end of life. From 1960 to 2000, the individual rate of health care spending on those aged 65 and older increased over twice as much as spending on the general population, yet the incremental cost per year of life gained at 65 was four times greater than the incremental cost per year of life gained at birth [1]. In other words, in the last 40 years the United States has spent proportionately more money per capita on the elderly with proportionately less return for that investment. Indeed, the financial solvency of the United States (and other developed nations) requires that we identify and confront the source of these problems [2, 3].

One source is the expectation that science and technology will eventually triumph over sickness and death. Since at least the time of Francis Bacon (1561-1626), medical practitioners and patients have acted on the hope that, if given enough time, science could one day eliminate disease and suffering [4]. The fabulous success of this "Baconian project" is undeniable. Medical technology has increased the number and quality of the years we live. Patient and practitioner alike have become more resolute that the powers of medical science and technology have no limit, and some scientists reinforce this expectation by arguing that it is only a matter of time before death becomes optional.

This prediction of a technological utopia is often dismissed as science fiction, but the fiction is compelling nonetheless. We struggle to know when or how to limit technology as death approaches because the fiction of an optional death lulls us into believing that we can delay the inevitable. Yet death remains an absolute and

unavoidable limit. As Atul Gawande notes, "Our medical system is excellent at trying to stave off death with eight-thousand-dollar-a-month chemotherapy, threethousand-dollar-a-day intensive care, five-thousand-dollar-an-hour surgery. But, ultimately, death comes, and no one is good at knowing when to stop" [5].

The tension between medicine's utopian promise and its limited resources is made apparent by the necessity of health care rationing. Ability to pay remains the de facto criteria for rationing in the United States, and such rationing happens every day, though most Americans don't recognize it as such. Well-intentioned attempts to develop more equitable criteria for rationing typically falter because rationing done by someone to someone else elicits fear of tyranny, such as the false reports of "death panels" in the Affordable Care Act of 2010 [6]. However, ethicist Daniel Callahan points to an alternative approach to rationing that may be more constructive. He exhorts the profession to help people "live out a full and natural life span, not simply more life without discernible end" [7].

Wendell Berry offers a vivid example of what this kind of health care rationing might look like in his novel Hannah Coulter [8]. Hannah's husband, Nathan, returns from World War II to the township of Port Williams, Kentucky, where he takes up farming just as his father and grandfather did before him. Together, Nathan and Hannah care for the land entrusted to them, and from their faithful stewardship grows a bountiful life that is well-lived, full of hard work, and embedded in a community of friends and family who love their land and each other. But in the end Nathan falls sick, very sick. He isn't a "doctor-going" type of man, so his family has to beg him to see the specialist in Louisville who diagnoses advanced cancer with poor prognosis. Not knowing what else to say or do, the specialist recommends intensive therapy. "It was a story we all knew," reflects Hannah, "one that has been lived and told too many times in Port William, a bad story" [9]. But rather than scheduling chemotherapy, Nathan stands up, shakes the doctor's hand, thanks him for his time, and walks out.

Nathan has known he is dying for quite some time, but Hannah needs time to adjust. "Well, what are you planning to do? Just die? Or what?" cries Hannah. "Dear Hannah," Nathan replies, "I'm going to live right on. Dying is none of my business. Dying will have to take care of itself" [10]. Over time Hannah begins to understand: "He wanted to die at home. He didn't want to be going someplace all the time for the sake of a hopeless hope. He wanted to die as himself out of his own life. He didn't want his death to be the end of a technological process." So Nathan goes on living at the farm with his family and community around him until the end. "He was not false or greedy. When the time came to go, he went" [10].

Nathan's approach to health care rationing among the elderly avoids the tyranny of "death panels" because Nathan chooses it for himself, even to the pain of his wife, Hannah. The source of his empowerment is not rooted in "autonomy," but in a thick understanding of a life well-lived. Nathan has accepted death long before it comes.

And when it does come, it is the fitting and proper end to the narrative of his life. He goes on living and leaves death to take care of itself.

Most clinicians probably have experience with patients like Nathan, but the story of John's death at the beginning of this essay is more typical. Any approach to rationing that addresses the false promises of utopian medicine peaceably will require discourse within medicine and society that produces more Nathans and fewer Johns. How this might transpire is not clear, but at the least it will require scrutiny of the entire system we have created [11]. Rather than running yet another randomized controlled trial to test the incremental increase in effectiveness of the newest lipidlowering agent or retrospective study to ascertain the maximally cost-efficient mode of health care delivery, we might rather invest in understanding how medicine might support thicker descriptions of what it means to live well. And most importantly, we need an understanding of how a good death fits within the narrative of a life welllived.

Whether medicine will be able to recover a substantive language for public discourse on what it means to die well remains to be seen. Callahan points out that:

the greatest obstacle may be our almost utter inability to find a meaningful place in public discourse for suffering and decline in life...we have created a way of life that can only leave serious questions of limits, finitude, the proper ends of human life, of evil and suffering, in the realm of the private self or of religion; they are thus treated as incorrigibly subjective or merely pietistic [12].

While it would be great if we could build consensus about the proper ends of human life and the scope of medical technology from universally persuasive principles, that utopian ideal is just as much of a fiction as "optional death." But the stakes are too high to kick the can called "rationing" down the road for another generation. The available resources for the necessary conversation may be subjective, but they are the only resources at hand [13]. Perhaps our meager subjectivities and pieties may be sufficient to begin the necessary conversations in our homes, communities, schools, hospitals, and businesses—conversations that might lead more people to know themselves and the limits of medicine like Nathan Coulter who rationed his own medicine so that he could keep on living until it was time for him to go.

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