Covid-19, Disability and the Ethics of Distributing Scarce Resources

James B. Gould

McHenry County College jgould@mchenry.edu

ABSTRACT: The Covid-19 pandemic provides a real-world context for evaluating the fairness of disability-based rationing of scarce medical resources. I discuss three situations clinicians may face: rationing based on disability itself; rationing based on inevitable disability-related comorbidities; and rationing based on preventable disability-related comorbidities. I defend three conclusions. First, in a just distribution, extraneous factors do not influence a person's share. This rules out rationing based on disability alone, where no comorbidities decrease a person's capacity to benefit from treatment. Second, in a just distribution, undeserved luck does not influence a person's share. This rules out rationing for biologically caused comorbidities that decrease capacity to benefit. Third, in a just distribution, social injustice does not influence a person's share. This rules out rationing for socially caused comorbidities that decrease capacity to benefit.

Introduction

During pandemics there are not enough healthcare resources for everyone who needs them. Medical professionals implement crisis standards of care, using triage to choose which patients receive treatment. Rationing is distributing important but limited resources. Healthcare rationing is denying a potentially beneficial treatment to a patient because of scarcity. Disability-based healthcare rationing is downgrading the priority of people with disabilities. Rationing must meet two ethical criteria. The first is the principle of utility and efficiency—scarce resources should be distributed in a way that delivers the greatest benefit to the greatest number of people. The second is the principle of fairness and equality—limited resources should be distributed in a way that respects the moral dignity of all persons. In a pandemic these goals conflict, Jeffrey Kirby (2010, 459) notes: "providing 'fair chances' of receiving health benefits to all individuals is likely to interfere with promotion of the well-being of the majority."

The ethics of disability-based rationing is usually discussed in the abstract, using hypothetical examples. Covid-19, however, provides a real-world context for evaluating its fairness. There are three situations triage teams may face:

- 1. situations where disability does not decrease a person's capacity to benefit from treatment;
- 2. situations where disability inevitably decreases capacity to benefit; and
- 3. situations where disability preventably decreases capacity to benefit.

These three situations create three forms of disability rationing:

- 1. explicit rationing based on disability itself;
- 2. medical rationing based on inevitable disability-related comorbidities; and

3. social rationing based on preventable disability-related comorbidities.¹

All, I argue, are *prima facie* unfair—in each case, efficiency should yield to equality. I consider, in particular, deprioritizing people with intellectual and developmental disabilities (IDD). I begin by describing Covid-19 triage protocols in the United States, followed by an overview of one aspect of distributive justice. I then evaluate each type of disability-based rationing by comparing a person with and a person without IDD, both of whom require ventilation that can only be provided to one. I end by addressing an objection to my position.

Covid-19 and Fear of Disability Rationing

Covid-19 is a respiratory syndrome whose pneumonia-like symptoms create breathing difficulties. During the pandemic, severely ill people are placed in intensive care units (ICUs) where they require ventilators to breathe. If the number of patients outpaces supply, doctors will need to decide how to distribute life-saving resources. An ethical concern is that triage protocols emphasizing clinical outcomes—saving the most lives or life years—prioritize sociallyprivileged groups with better health and deprioritize marginalized groups with lower life expectancy. Comorbidities correlate with disadvantage, Angela Ballantyne (2020, 54) notes, so "when you plug the clinical status of individuals into an ICU triage tool aimed at maximizing population survival rates you will get results that reflect these social and ethnic divisions." People of color fear being ranked lower because, due to years of systemic inequity, they live in lowincome neighborhoods that are unsafe, polluted, without healthy food or adequate medical facilities and, as a result, have more underlying health problems and less likelihood to survive.²

Triage protocols that attempt to save the most lives may also exclude people with disabilities from life-saving efforts. At the start of

¹ The labels 'medical comorbidities/medical rationing' and 'social comorbidities/social rationing' parallel medical and social models of disability.

² 6 months into the pandemic, Latinos and African Americans were hospitalized at rates more than 4.5 times that of white Americans—and blacks were dying at rates at least twice as high as whites (Figueroa 2020; Villarosa 2020).

the Covid-19 outbreak, numerous states had rationing policies that disability advocates criticized (Hellman and Nicholson 2020; Mello 2020). In response, the Office of Civil Rights (OCR 2020) at the Department of Health and Human services prohibited triage discrimination. States amended their protocols and issued guidance requiring non-discrimination. Senator Ben Sasse called for legislation protecting Americans with disabilities who may be disadvantaged by rationing policies (DeSanctis 2020).

Despite these reassurances, concerns about discriminatory rationing remain. There is a long history of people with disabilities being devalued by healthcare providers. Nazi clinicians murdered 300,000 people with disabilities. In the 1950s, individuals with disabilities living in American institutions were used as involuntary subjects for medical experiments and to test vaccines for diseases like polio (Jirik 2020). At the beginning of life, genetic counseling is often biased when a fetus tests positive for disability. This is because, David Wasserman (2015, 235) explains, "many health professionals . . . believe that being born with a disability is almost always damaging and often disastrous for the child." Throughout life, ableism—inaccurate assumptions about quality of life of people with disabilities—exposes them to medical error and affects the quality of care they receive (Peña-Guzman and Reynolds 2019). At the end of life, Carol Gill (2009, 263) says, people with disabilities "are offered few viable alternatives to death," and organizations like Not Dead Yet oppose assisted suicide. Too often, pessimistic professional views about the quality of disabled lives shape medical decisions.

Government requirements notwithstanding, people with disabilities fear being denied critical care should there be insufficient resources during the Covid-19 pandemic. Deborah Hellman and Kate Nicholson (2020, 4) observe that OCR guidance requiring protection of their civil rights "exists at a level of abstraction . . . that leaves open [many] complicated legal and moral questions that rationing creates." It is clear that "protocols which expressly single out disability as a basis for denying care are inherently problematic." Explicit disability rationing is unjust, and the American Association of People with Disabilities (2020) was right to ask Congress to prohibit triage based on "assessments of . . . quality of life." But, Hellman and Nicholson assert, equally problematic are "facially-neutral rationing practices

which will also predictably disadvantage people with disabilities. These are the harder cases because reliance on these policies will likely save the most lives. These twin facts make these policies morally and legally complex and in need of . . . careful evaluation." To that end, I argue that rationing based on disability-related comorbidities, both medical/inevitable and social/preventable, while efficient, are unjust. The American Association was right to ask Congress to prohibit triage based on "the relative survival probabilities of patients deemed likely to benefit from medical treatment."

Covid-19 Triage Protocols

Pandemics like Covid-19 require a shift from individual to collective interests, from personal health to public health. Rationing of scarce resources occurs through triage protocols.

When will triage occur? Crisis standards of care are enacted when a healthcare system has insufficient resources to simultaneously treat everyone needing attention. The American College of Chest Physicians (2020) notes that a "triage system would only be deployed as a last resort . . . after all attempts to surge, move patients or shift resources from regions with greater availability have been made." For individual patients, initial triage determines admission to ICU, and ongoing triage determines whether to continue or discontinue care for those in ICU (O'Laughlin and Hick 2008, 194).

What does triage involve? While I focus on them, triage means more than distributing mechanical ventilators and ICU beds. It also includes rationing of equipment (e.g. dialysis machines), diagnostic test kits, medications, supplies (e.g. personal protective equipment) and human resources (e.g. staff with ICU training).

Who makes triage decisions? Triage is initiated, the American College (2020) states, "by an identified regional authority with situational awareness of regional healthcare demands." When all critically ill patients cannot be treated, local hospitals decide who to admit. 'Blinded triage' decisions are made by a team not involved in the care of patients being sorted (Kirby 2010, 461).

How are triage decisions made? Triage protocols use decision tools that predict survival probabilities and compare expected benefit among different individuals. They divide patients into three groups: those who can recover without treatment, those who cannot recover

even with treatment, and those who will be saved by treatment but will otherwise die. Patients in the third group are prioritized, and people with a very poor prognosis or advanced underlying illness are excluded from triage altogether (American College 2020; Iserson 2020). Sorting uses clinical criteria—acute illness scores (such as Sequential Organ Failure Assessment—SOFA), frailty measures and other comorbidity indices that predict probable outcome.³ Decisions ignore non-clinical criteria such as 'first come first served' or random lottery which are unrelated to likelihood of survival. Decisions are also made without reference to race, sex, religion, sexual orientation or socioeconomic status—including quality of life based on the presence or absence of disability. Preferential allocation may, as a tie-breaker, be given to healthcare workers and parents of young children. Patients admitted to ICU are reassessed every 48 hours to determine if care should be continued or discontinued.

Why may triage be necessary? Triage is done because of the benefits it brings. The justification, Jonathan Leider and colleagues (2017) assert, "is one of necessity. Given resource and staffing constraints, healthcare providers may not be able to adequately provide care to all patients who need it." The American College (2020) identifies the costs of not rationing: "the absence of a triage system . . . may lead to unnecessary deaths, increased moral distress for frontline physicians and a lack of public confidence in the fairness of scarce resource allocation."

Under a model framework (White and Lo 2020) adopted by many hospitals, patients are assigned a priority score . . . based on (1) [their] likelihood of surviving to hospital discharge, assessed with an objective measure of acute illness severity; and (2) [their] likelihood of achieving longer-term survival based on the presence or absence of comorbid conditions that influence survival. In addition, individuals who perform tasks

³ Clinical scoring systems should predict amount of resource use as well as expected outcome. SOFA is the typical tool in triage protocols—it describes and predicts malfunction in six organ systems. Experts recommend that triage assessment not rely on a single measure but be multi-dimensional, which increases predictive accuracy.

vital to the public health response are given heightened priority In the event that there are ties in priority scores between patients, life-cycle considerations are used as a tiebreaker, with priority going to younger patients, who have had less opportunity to live through life's stages.

Covid-19 triage protocols employ clinical measures of survivability, with the overall goal of maximizing the number of lives saved. Priority is given to those most likely to die without treatment and most likely to recover with it. Pandemic guidelines focus on short-term (i.e. 1 year) survival and do not rely on life years or quality adjusted life years (QALYs)—such rationales have been removed as crisis care policies were updated.

Distributive Justice and Relevant Factors

"The ethical principle that guides rationing is distributive justice," Kenneth Iserson (2020, 481) points out. *Justice* is outcomeoriented; it means giving people what they are due and entitled to expect as a matter of right, not as a favor. *Distributive justice* concerns proper allocation of goods among people, using principles such as need, merit or social utility. *Distributive social justice* is fairness in how a society apportions benefits (like healthcare) and burdens (like taxes) to individuals.⁴

"Society has a duty to provide basic necessities and some degree of ongoing care for the seriously intellectually disabled," Samuel Freeman (2018, 174–175) asserts. "This societal duty has often been regarded as a duty of beneficence or charity and not as a duty of justice that is grounded in the rights of the mentally disabled and their claims against society." But "charitable duties of beneficence do not seem sufficiently robust to account for the stringency of our moral duties of justice owed to the severely disabled." Justice is defined, most basically, in terms of desert. To deserve something is to have a right to it—a justified claim that other people act in certain ways toward someone. Rights are entitlements to some good that is deserved for a

⁴ Procedural theories of justice are concerned with the fairness of the process through which a distribution occurs. Outcome theories of justice consider how resources are actually distributed.

legitimate reason. Rights impose duties on other people. Rights are more than privileges that may be given or withheld at will—they are owed and must be respected.

Contract theories ground duties of justice in a hypothetical agreement among cooperating members of society.⁵ Non-contract theories ground duties of justice in inherent human worth (the equal dignity possessed by all persons) or basic human interests (the fundamental needs necessary for well-being).⁶ I do not settle whether justice to people with IDD can be accounted for within a contractarian framework of rational cooperators. I assume instead that they have natural moral rights and claims against society simply because of their equal worth as human persons and their foundational interests that, when blocked, cause serious harm (Gould 2020a).

There are many ways to construct theories of justice, and recent scholarship addresses numerous aspects of justice and disability (Putnam 2019). But in what follows I draw on a single insight derived from Aristotle. Formal justice, Kirby (2010, 459) says, "requires us to treat individuals and groups of persons the same unless we can demonstrate a relevant difference(s) between/among them that justifies different treatment." Relevant equals should be treated equally and relevant differences treated differently. As Aristotle (1984, 11–14) states, "justice... is equality—however, not for all, but only for equals. And inequality . . . is justice; neither is this for all, but only for unequals." *Fairness* has two aspects: treating people the same when they are the same in relevant ways—and treating people differently when they differ in relevant ways. *Unfairness* takes two corresponding forms: treating people differently when they are the same in relevant ways—and treating people differently when they differ in relevant ways.

When selecting patients for scarce medical resources, the question is whether the allocation standards are relevant. Medical criteria (probability of success, life expectancy, resource commitment)

⁵ Rawls (1971) is the most important modern contractarian. There is much debate about whether a Rawlsian framework can account for the rights of people with IDD—see Putnam (2019).

⁶ Kittay (2019), for example, offers a dignity-based account of equal rights, while Feinberg (1984) gives an interest-based account.

are *prima facie* relevant differences between patients, and non-medical criteria (race, gender, sexual orientation, religion, wealth, celebrity) are irrelevant. 'First come first served' is irrelevant: it favors the sickest people, not those most likely to benefit. Except as a tie-breaker, random lottery is irrelevant—it, too, ignores chance of recovery (Emmanuel 2020). Age can be relevant: the fair innings argument asserts that the elderly had the chance to achieve a full life, while the young have not (Miller 2020). What, then, about disability? In particular, is IDD relevant to healthcare rationing? This is the question I turn to examine.

Types of Disability Rationing

In classifying and evaluating disability-based rationing, it is important to distinguish between situations where disabilities are unrelated to medical effectiveness and where disabilities involve comorbidities that reduce capacity to benefit. In the first there is no conflict between efficiency and equality, while in the second there is. It is also important to distinguish internal sources of comorbidity (biological impairments) from external sources (social injustices). This creates the three forms of disability-based rationing mentioned earlier:

- 1. explicit rationing based on disability itself;
- 2. medical rationing based on inevitable comorbidities of disability;
- 3. social rationing based on preventable comorbidities of disability.

The OCR (2020) Covid-19 triage bulletin states that

the laudable goal of providing care quickly and efficiently must be guided by the fundamental principles of fairness, equality and compassion that animate our civil rights laws. This is particularly true with respect to the treatment of persons with disabilities . . . as they possess the same dignity and worth as everyone else Persons with disabilities should not be denied medical care on the basis of stereotypes, assessments of quality of life or judgments about a person's relative "worth" based on the presence or absence of disabilities. Decisions . . . concerning whether an individual is a candidate for treatment should be based on an individualized assessment of the patient based on the best available objective medical evidence.

This guidance clearly prohibits 1—explicit disability rationing. Disability, as such, is not a health condition that reduces a person's capacity to benefit from treatment. Triage policies involving explicit rationing constitute discrimination by intent, and have been updated. Whether OCR prohibits 2 and 3—non-explicit disability rationing—is less clear. On the one hand, it may not. It allows medical decisions "to be based on an individualized assessment of the patient based on the best available objective medical evidence." To factor comorbidities which hinder treatment into rationing decisions may not be discriminatory. In this restrictive reading of the OCR bulletin efficiency takes priority over equality. On the other hand, it may forbid both 2 and 3. While chronic diseases among people with IDD reduce their capacity to benefit, they are not responsible for these comorbidities which occur by biological necessity or social oppression. People should not be penalized for things they do not choose or that are done to them—so to factor these health difficulties into treatment decisions may constitute discrimination by effect. In this expansive reading of the OCR statement equality takes precedence over efficiency.

I defend the broad reading: OCR guidance should be understood to reject all disability-based rationing, explicit and non-explicit. I take it as given that disabilities themselves are irrelevant and that explicit disability rationing is unjust. Nonetheless, I pause to spell out why the subjective bias of QALY-based triage is problematic. I then address the more controversial rationing based on medical and social comorbidities. I explain why, despite treatment being less effective, triage centered on clinical measures of survivability is troubling and often unjust.

Explicit Disability Rationing

Brett has Down syndrome.⁷ He follows sports, especially football—the Chicago Bears are his favorite team. Brett watches John Wayne movies and is a fan of James Bond. He performs a remarkable

 7 I have changed the man's name in order to protect confidentiality, but other details are basically accurate.

karaoke of Elvis—'Hound Dog' is his specialty. Halloween is Brett's favorite holiday—especially visiting haunted houses. He is a warm, affectionate person—when I see him, he always bubbles with things to tell me. Brett is exactly my age.

Case 1. Brett and Jim—that is, me—both contract Covid-19 and arrive at the hospital needing ventilation. Each is healthy, and with similar treatment would survive and enjoy the same number of life years. But there is only one machine. Explicit disability rationing would treat Jim but not Brett. He receives lower priority, not because he will benefit less, but simply because he is disabled. Explicit disability rationing is unjust: disability in and of itself is not a relevant difference between individuals. Where there is no conflict between efficiency and equality, scarce resources should be distributed equally (i.e. randomly).

Actual Covid-19 triage is not QALY-based—OCR guidance excludes quality of life as a selection criterion, and states have rescinded such standards. But hypothetically, if medical care was denied because of disability alone then it would be QALY-based. In case 1 both Jim and Brett are healthy, and with treatment would enjoy the same number of life years. The reason for deprioritizing Brett is that when we look, not at life years but at the quality of those years, Jim (allegedly) has a higher quality of life—and so more benefit, more quality-of-life gain, is produced by saving him. Given the history of discrimination against people with IDD in healthcare, this counterfactual scenario is worth addressing.

Rationing because of disability alone is QALY-based. In the 1980s, health economists developed the concept of QALYs as a way to measure the cost-effectiveness of medical interventions and to make allocation decisions. Eric Matthews and Michael Menlowe (1992, 40) explain: "the idea is that we can judge different treatments in terms of the number of years of extra life enjoyed by a successfully treated patient, multiplied by the quality of each of those years." A year of good health has a value of 1—a year of poor health has a value of <1 (with death being 0). Utilitarian ethicists such as Peter Singer and colleagues (1995) believe that healthcare resources should be prioritized to maximize QALYs and that QALYs are higher in people without disabilities and lower in people with disabilities.

Using QALYs to prioritize patients for medical treatment is problematic since quality of life is hard to measure and has multiple meanings. A person's objective quality of life (mobility, freedom from pain, social interaction and performance of activities of daily life) does not account for their subjective quality of life (self-reported well-being and life satisfaction). Jerome Bickenback (2016) notes that there is good empirical evidence that "people with disabilities tend to be happier and assess their lives to be of considerably higher value" than non-disabled people think. Being unable to function in a typical manner does not mean being unable to flourish—people with IDD like Brett have meaningful lives in spite of limitations.

Explicit disability rationing assumes what OCR warns against—stereotypes, assessments of quality of life and judgments about a disabled person's worth. Research consistently shows that medical professionals see quality of life for people with disabilities as less than that for non-disabled people, and rate quality of life of people with disabilities significantly below the person's own rating.8 Clinicians may hold negative views of IDD because they unconsciously accept ableism—defined by Elizabeth Barnes (2016, 5) as "social prejudice and stigma directed against the disabled in virtue of the fact that they are disabled." David Peña-Guzman and Joel Reynolds (2019) establish that epistemic errors rooted in ableism—inaccurate clinical perceptions of quality of life of people with disabilities—expose them to a higher risk of preventable medical error and harm. Hellman and Nicholson (2020, 23) agree: "there is ample evidence that health care providers have conscious and unconscious biases related to disability, and that these biases create barriers to care, contribute to the provision of substandard services and lead to poorer health outcomes." Clinicians may also internalize an essentialist medical view of IDD (that disadvantages are inherent in impaired bodies and minds) rather than a constructionist social view (that difficulties reside, at least partly, in unjust environments). Hannah Pelleboer-Gunnink and colleagues (2017) report that stereotyped perceptions and "stigmatizing attitudes towards people with IDD appear to be present among mainstream healthcare professionals." These ableist assumptions can affect clinical evaluations and treatment decisions.

It is easy to think that disability means poor quality of life,

⁸ See Klein 2011, Morin 2018, Pelleboer-Gunnink 2017, Ryan and Scior 2014 and Skotko 2011.

perhaps even a life not worth living. Numerous studies, however, show that the link between objective impairment and subjective well-being is tenuous, and that non-disabled people are very poor at accurately judging the quality of life of people with disabilities (Amundson 2005; Ubel 2003). Reliable, positive testimony from people with disabilities indicates that they live full lives and experience life satisfaction similar to that of people without disabilities. Brian Skotko's research team (2011), for example, finds that 99 percent of people with Down syndrome are happy with their lives. We should not assume that these good quality of life ratings are delusional or dismiss them as adaptation. To reject the testimony of people with IDD is arrogant and demeaning.

The common belief is that disability creates poor quality of life. By contrast, some disability philosophers—Barnes (2016), Stephen Campbell and Joseph Stramondo (2017), for example—assert that disability has little impact on how well a person's life goes. My own view (Gould 2020b) falls between these positions—to use Tom Shakespeare's (2005, 224) words, disability is neither tragic nor irrelevant. I take IDD to be comparatively bad (it makes a person's life worse) but not overridingly bad (it does not ruin life on the whole).

I do not need to settle the debate about the nature of disability in order to reject explicit disability rationing. If disabilities do not reduce quality of life, then explicit rationing is self-evidently unjust ableist discrimination. Alternatively, if disabilities do reduce quality of life, explicit rationing is still unjust—so long as they are not overridingly bad. In order to reject explicit rationing, one need not adopt a 'mere difference' model in which disability has no negative quality of life impacts. It is also problematic on a 'bad difference' model where quality of life with disability, while lower, is sufficiently good to make life worth living.

Hellman and Nicholson (2020, 32) summarize the problem with explicit rationing: it "undervalues and mischaracterizes the quality of life of a person with a disability. A large body of scholarship supports the argument that life with a disability is not qualitatively worse than life without a disability. Yet, a quality of life-based approach is likely to judge life with disability as worse due to the misperceptions of nondisabled people about life with disabilities that rest on inaccurate information [and] stereotypes"—which OCR disallows in patient selection.

Marilyn Solomon and colleagues (2020) state that "a

commitment to equal worth" requires that "patient characteristics not directly related to clinical outcomes . . . should not be used in decision making." Disability itself is medically and ethically irrelevant. Brett's life is as meaningful to Brett as Jim's life is to Jim, and so deprioritizing Brett based on his IDD alone is unjust. As Bickenback (2016) says, to "allocate [a] resource to [a] non-disabled individual solely or automatically in terms of the presence of a disability in the other candidate would be the very essence of prejudicial." If Brett will recover just as well as Jim and live just as long, the fact that Brett has IDD should play no role in allocating Covid-19 ventilators. As Hellman and Nicholson (2020, 33) note, the "[quality of life] rationing principle is . . . clearly prohibited by both the [Americans with Disabilities Act (ADA)] and widely-shared moral principles None of the state [Covid-19 triage] protocols expressly ration based on quality of life measures. But quality of life considerations are still important in a discussion of rationing because perceptions about the quality of life of a person with a disability may inform decisions in invisible or invidious ways, especially if they stem from unconscious bias on the part of decisionmakers."

OCR guidance prohibits explicit disability rationing where there is no conflict between efficiency and equality. Let me turn, then, to harder cases where these values do clash.

Non-explicit Disability Rationing

The ADA provides that "no individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages or accommodations of any place of public accommodation." Legislation and litigation history require an equal opportunity for people with disabilities to obtain the same results as others. Discrimination on the basis of disability includes acts that are intentionally discriminatory, so the ADA forbids explicit disability rationing (Hellman and Nicholson 2020, 15).

Discrimination on the basis of disability also covers acts which have the effect of disadvantaging individuals. This includes, Hellman and Nicholson (2020, 17) point out, apparently impartial measures like eligibility criteria that screen out people with disabilities. "The express

language of the ADA, its implementing regulations and court decisions . . . all proscribe discrimination based on neutral policies or practices that have a disparate impact on individuals with disabilities These protections apply to healthcare, and disabled persons are entitled to meaningful access to health services." The ADA challenges rationing based on disability-related comorbidities. Where explicit disability rationing is disparate treatment on the basis of disability, non-explicit medical and social rationing for disability-related comorbidities causes disparate impact on people with disabilities. Having discussed the former, I turn to the latter.

While some disabilities are distinct from, other disabilities are related to, particular healthcare needs. Disability itself is distinct from capacity to benefit—the mere fact that someone has IDD does not mean they cannot be helped as much as someone who is not disabled. But sometimes disability is related to capacity to benefit. If a person with IDD has comorbidities, they may be unable to benefit equally to someone who is not disabled. As a population, people with IDD suffer co-existing conditions that reduce effectiveness of treatment, make positive outcomes less certain and tilt efficiency calculations against them (Bickenback 2016; Scully 2020).

Case 2. Brett and Jim come to the hospital requiring breathing support for Covid-19. Jim is in good health, but Brett has health conditions that accompany his disability. There is only one ventilator. Unlike case 1, where Brett and Jim will have equal medical benefit, in case 2 there is differential benefit: Jim can be returned to complete health while Brett can only be given a lower level of health. The rationale for downgrading Brett's priority is efficiency. In a pandemic, scarce resources should be allocated to people who can benefit most from them. Given his comorbidities, treatment will be less effective for Brett, while Jim can benefit more. Where explicit rationing is based on QALYs, non-explicit rationing is based on comorbidities. The Centers for Disease Control (2020) point out that people with disabilities are 3 times more likely to have hypertension, cardiovascular disease, chronic lung disease, diabetes and cancer than the general population. Many people with IDD have underlying medical conditions that put them at a higher risk of severe illness from Covid-19.

With non-explicit disability rationing, Greg Bognar (2010, 396) observes, "there need not be any intention to discriminate: the discrimination is merely a consequence of how costs and benefits work

out in practice." Comorbidities which limit the effectiveness of treatment are the direct reason for downgraded priority of people with IDD—disability is merely an indirect reason. F.M. Kamm (2009) adds that while it is unfair to let a disability itself influence allocation decisions, it might be permissible to take into account the disability's effects—health problems that influence clinical benefit. As noted, Covid-19 triage policies ignore non-medical criteria and look at medical criteria (like acute illness scores). While protocols avoid disparate treatment discrimination by prohibiting explicit disability rationing, they may sanction disparate impact discrimination by allowing rationing based on comorbidities.

In considering comorbidities, we must ask about their etiology. According to the medical explanation, some health ailments are biologically inevitable aspects of IDD conditions. According to the social explanation, some health problems are preventable results of the socioeconomic conditions in which people with IDD live. There are, then, two types of non-explicit disability rationing for comorbidities.

- 1. Medical disability rationing focuses on inevitable, biologically-caused comorbidities. Disability is directly responsible for (or, in the case of a syndrome, inseparably correlated with) health complications.
- 2. Social disability rationing focuses on preventable, socioeconomically-caused comorbidities. Disability is only accidentally related to health problems that occur apart from it through environmental origins.

Medical comorbidities, to use Bognar's (2010, 402) terms, are dependent on disability, while social health complications are independent of disability.

It may be impossible in practice to distinguish a disability from its effects, to identify which comorbidities are essential/intrinsic and which are accidental/extrinsic, or to separate biological and social causes of poor health. Still, the distinction is important in theory. Medical comorbidities are a natural evil, social comorbidities a moral evil. Both have disparate impact on people with disabilities. I now consider each type of non-explicit disability rationing.

Medical Disability Rationing for Inevitable Comorbidities

Some health complications of disability are essential, and the medical explanation points to these biological determinants of health. Many disabilities, especially those caused by genetic disorders, involve inherent comorbidities that make individuals susceptible to severe illness from Covid-19. People with Down syndrome, for example, are more at risk for heart weaknesses, infections due to immune system malfunctions, hypothyroidism and blood disorders like leukemia (National Institute of Child Health n.d.). These inevitable complications compromise treatment effectiveness in a way that is intrinsic to the disability. Medical disability rationing for inevitable comorbidities is based on these biologically-caused comorbidities.

Case 3. Brett and Jim, having contracted Covid-19, require ventilation—but there is only one ICU bed available. Brett's potential for benefitting from treatment might be diminished in three ways. First, comorbidities mean that he has a lower chance of surviving the acute episode itself. Second, each will survive, but with different life extensions: Brett, because of poorer health, will live less years—Jim, because of better health, will live more years. Third, while treatment may be equally effective, Brett's comorbidities make it more complex and extended. Disability rationing based on medical comorbidities—which considers survivability, life expectancy and resource usage—gives Jim the ventilator.

Rationing based on medical comorbidities is not overtly discriminatory in the way that rationing based on disability alone is. It is, however, unjust in a more subtle way. Triage protocols that are disability-neutral may have an adverse impact on people with disabilities. and the OCR requirement of evidence-based, individualized assessment may not prevent this. The unconscious epistemic errors rooted in ableism that Peña-Guzman and Reynolds (2019) identify may influence 'objective' clinical judgment. Misconceptions about people with disabilities may create inaccurate evaluation of their survival probability and life expectancy, resulting in wrongful denial of care. Even if correctly diagnosed, comorbidities are irrelevant to resource allocation when the individual is not responsible for them. Brett did not choose his Down syndrome or the poorer health that accompanies it, so rationing based on comorbidities that are part of his IDD is unjust. In this conflict between efficiency and equality,

we should favor equality.

Luck egalitarian theories of distributive justice, which emphasize three points, explain why. First, there is the fact of brute luck which is not due to individual choices but occurs by random chance (Dworkin 2000, 73). Second, inequalities caused by brute luck are unjust. For an outcome to be just it must be deserved, as Kasper Lippert-Rasmussen (2018) states: if item X is not the result of a choice made by person A, then A does not control X and is not responsible for X—and thus does not deserve X. Morally arbitrary internal factors (the medical conditions with which they are born) and external factors (the socioeconomic circumstances into which they are born) are undeserved. Third, individuals should be compensated for bad brute luck. "Justice requires the nullification of all differential effects of brute luck," Lippert-Rasmussen (2018) says, since "it cannot be just that some people are worse off than others simply because they have been unfortunate, say, to have been born with bad genes."

Daniel Putnam and colleagues (2019) observe that disability is "a paradigm example of unchosen disadvantage." Disability-related comorbidities are also due to the natural lottery. But brute luck is irrelevant to who deserves what, so an equal chance at Covid-19 treatment should not be refused to people whose capacity to benefit is lower through no fault of their own. Brett has no control over having IDD and its related comorbidities, so neutralizing luck would mean not taking them into account when allocating ventilators. Egalitarians, who weigh the well-being of all individuals equally, would compensate Brett's bad luck by drawing lots. Prioritarians, who give preference to individuals that are worse off, would compensate by giving extra weight to his claim. This might be done, Hellman and Nicholson (2020, 40–46) suggest, by reserving some percentage of scarce resources for people with disabilities. Either way, fairness takes precedence over utility maximization. Medical rationing based on inevitable comorbidities, while efficient, is unequal—it causes disparate impact, and is unjust. OCR guidance should be understood to prohibit it.

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⁹ Arneson (2004) defends this view. Pogge (2004), by contrast, claims that justice need only correct inequalities caused by social institutions, while ignoring those due to natural differences.

Social Disability Rationing for Preventable Comorbidities

Many people with IDD have accidental health conditions that are not biologically correlated with their disability but are caused by oppressive environments. The social explanation points to social determinants of health. These, the World Health Organization (n.d.) states, "are the conditions in which people are born, grow, work, live and age, and the wider set of forces and systems shaping the conditions of daily life. These forces and systems include economic policies and systems . . . , social norms, social policies and political systems. The social determinants of health are mostly responsible for health inequities."

The American healthcare system contains structural injustice that causes some people to have worse health outcomes than others. Bickenback (2016) notes that "part of [the] burden [of poorer health for people with disabilities] is the result of the social stigma, discrimination and lack of opportunities that characterizes the disabled life." Lynda Anderson and colleagues (2013) summarize reports from the Surgeon General and the Institute of Medicine: "people with IDD [experience] health disparities related to several factors including: a lack of access to high quality medical care, inadequate preparation of health care providers to meet their needs, the social determinants of health (e.g. poverty, race and gender), and the failure to include people with IDD in public health efforts and other prevention activities There are currently few health and wellness interventions that include the training of support staff and the creation of health-promoting environments in residential and vocational settings." As a result, Strong Center for Developmental Disabilities (n.d.) concludes, the health of people with IDD "is worse than the general population in preventable ways."

Case 4. Brett and Jim both need the only ventilator available in order to recover from Covid-19. Disability rationing based on social comorbidities would treat Jim rather than Brett because Jim has a better chance of long-term survival while Brett has a lesser chance of good outcomes. But Brett's comorbidities were preventable, if the publicly-funded disability service system had made his good health a priority (rather than ignoring it in the ways just described). Social comorbidities are only contingently linked to being disabled, so the effectiveness of medical treatment is only contingently compromised by the person's IDD. Because the effectiveness of medical treatment is preventably

weakened, in this conflict between efficiency and equality we should favor equality. Rationing based on social comorbidities that are extrinsic to a disability is unjust.

Chris Kaposy and Sarah Khraishi (2012, 78–79) argue that basing triage decisions on SOFA scores and likelihood or length of survival reinforces oppression of vulnerable groups by denying them critical care. ¹⁰ This is because protocols based on clinical data overlook social determinants which cause poor health and reduce treatment effectiveness. Comorbidities do not occur randomly across populations, but are produced in particular groups through socioeconomic inequities which increase health problems, decrease chance of recovery and lower triage priority.

The social factors [which play a significant role in illness and survivability], and the oppression that is their cause, are certainly morally relevant But triage protocols designed to ignore the social circumstances of patients and assign priority only on the basis of clinical outcome of treatment do not recognize such factors as morally relevant Patients who have underlying illnesses that compromise [treatment] when critically ill—illness that may be linked to social determinants of poor health, which may in turn be linked to living in oppressive social circumstances—may be filtered out for [denial or] discontinuation of treatment by SOFA-based triage protocols.

It is unjust that Brett has social comorbidities which make it more likely that he will receive an unfavorable triage score and less likely that he will be given scarce life-saving resources. To base rationing decisions on socially-caused poor health is, in fact, doubly unjust. As Hellman and Nicholson (2020, 32) put it: "if the lower [probability of success] that some disabled people experience results from societal injustice, then refusing them life-saving treatment, because life with disability yields [worse clinical outcomes], compounds this injustice." 11

¹⁰ Kaposy and Khraishi reference aboriginal groups in Canada. Ballantyne (2020) makes a similar point about the Maori of New Zealand.

¹¹ Harris (1987, 119) first made this 'double jeopardy' analysis of QALYs.

Social institutions have a moral obligation *not to compound* past wrongdoing—they also have a duty *to correct* it by making amends. Corrective justice, Ernest Weinrib (2001) says, "is the principle that a person responsible for another's wrongful losses has a duty to repair them" by restoring what rightfully belongs to the victim. Weinrib references Aristotle, who "likens the parties' initial positions to two equal lines. The injustice upsets that equality by adding to one line a segment detached from the other. The correction removes that segment from the lengthened line and returns it to the shortened one. The result is a restoration of the original equality of the two lines." When the loss to the victim and the gain to the wrongdoer (or those benefiting from the wrong) cannot be cancelled, it must at least be compensated.

Society must take special measures to undo the harm done to the health of people with IDD by inadequate social services. Since government contributed to Brett's worse health, it should correct this injustice by prioritizing his treatment. "Extra weight could be given for being a member of a vulnerable or oppressed group," Kaposy and Khraishi (2012, 85) suggest, "by adding a 'Must Include' list of such groups alongside [clinical] criteria for triage." People with IDD also might be exempted from reassessment 48 hours after admission—"they could not be withdrawn from ICU care . . . even if their SOFA scores were poor." Amending Covid-19 triage protocols in these ways would take into account, rather than ignore, social comorbidities of ill patients. At the very least, a random lottery should be used to give Brett an equal chance of being selected for care.

Social disability-related health complications are the result of socioeconomic injustice. But it is irrelevant that Brett has worse health than Jim and less capacity to benefit from treatment because of unjust social arrangements. He should not be given lower priority for a Covid-19 ventilator because of health problems for which society, not he, is responsible. Social rationing based on preventable comorbidities, while efficient, is unequal—it causes disparate impact on people with IDD, and is unjust. OCR guidance should be understood to prohibit it.

An Objection: Is Clinical Benefit Always Irrelevant to Allocation?

It might be thought that my position on non-explicit disability rationing rejects the idea that clinical benefit can ever be relevant to triage considerations—perhaps to any decision about limiting medical interventions, even outside a pandemic. This, of course, would be a radical revision of medical practice and would result in wasting resources which are always scarce.¹²

I do not reject all rationing based on medical benefit. There is a difference between futile and effective treatment, and I deny scarce Covid-19 services to disabled individuals with a low probability of survival. But if expected outcomes are sufficiently good, I do not exclude those with worse chances and only include those with better chances. Once above the 'reasonable benefit' threshold, all disabled patients—those with and those without comorbidities—are treated equally. This may mean giving a resource to someone with lower probability of survival, and may result in resources not being used as efficiently as possible. But efficiency (i.e. saving the most lives) must be balanced against equality (i.e. insuring that people with IDD are not left out). Some inefficiency, Hellman and Nicholson (2020, 45) say, "is the price we pay for inclusion."

I have claimed that denying life-saving medical treatment to people with IDD is problematic because it is unjust for them to fare worse as a result of factors not within their control. The efficiency rationale for favoring Jim and deprioritizing Brett ignores brute luck (which causes medical comorbidity) and social injustice (which causes social comorbidity), and thereby perpetuates inequalities. But a prudent qualification applies here—treatment must have a sufficiently good outcome. If there is a 3 percent chance of saving Brett and an 85 percent chance with Jim, or if Brett would live 6 months and Jim 40 years, those differences are relevant. Assuming, however, that the variances are not that great and that clinical outcomes are sufficiently good, then additional likelihood of success or life expectancy is what Kamm (2009) calls 'irrelevant goods.'

In defending the idea of sufficiently good outcomes, Kamm creates a series of comparisons in which person 1 has some deficit that person 2 does not, so 2 enjoys a better outcome. Both individuals require treatment that will be successful, but only one can be helped. Person 1 is missing a hand while person 2 is not; 1 is paraplegic while 2 can use all limbs; 1 will live 10 years while 2 will live 15; 1 has IDD

¹² I thank an anonymous reviewer for the journal who prompted me to consider this concern.

while 2 has typical cognitive function. None of the additional gains enjoyed by person 2 matter morally—they are irrelevant goods.

The reason extra quantity or quality of life is irrelevant is that, with treatment, each person would achieve the outcome they want—a good life. Kamm (2009, 160) gives a non-medical analogy: if we can help either person 1 or person 2 escape grinding poverty, with 1 becoming extremely wealthy and 2 becoming moderately wealthy, we should toss a coin since the difference between their final incomes does not matter. What matters is avoiding destitution and being financially comfortable, which both achieve equally. So suppose that if saved from Covid-19, Jim will live 30 years of excellent quality while Brett will live 20 years of mediocre quality. Compared to death, Brett's life (with a poorer outcome) and Jim's life (with a better outcome) are both worth living—this positive outcome, not the additional goods Jim would enjoy, is what is morally relevant. If Brett's chance of survival is very low, however, then he can be denied resources, even if his comorbid conditions are beyond his control.

It might be objected that the concept of sufficiently good outcomes is vague and that the line between futile and beneficial treatment is imprecise. In practice, of course, the distinction is necessary. Clinicians and patients regularly choose to forgo or accept aggressive measures depending on chance of recovery. Triage protocols distinguish persons too well to benefit from critical care, too sick to benefit and sick enough to benefit. Sufficiently good outcomes for Covid-19, Solomon and colleagues (2020) argue, should be defined as living 1 year after treatment. Merely living to hospital discharge is not a sufficiently good outcome, and living 5 years after treatment is more than a sufficiently good outcome. Triage decisions should not be based on number of life years saved, Hellman and Nicholson (2020, 35) state, because "prioritizing those with longer life expectancy . . . is likely to have a disparate impact on people with disabilities." 13 Most Covid-19 triage protocols emphasize short-term (i.e. 1 year), not longterm (i.e. 5 year), survival.

¹³ Solomon and colleagues (2020) as well as Mello and colleagues (2020) state that long-term survival is an inappropriate standard because many disadvantaged populations have reduced life expectancy, and triage protocols should not exacerbate health inequities. Furthermore, short-term survival can be assessed more accurately, while long-term survival is more uncertain and harder to predict.

In theory, the fact that the line between futile and beneficial treatment (i.e. sufficiently good outcomes) may be difficult to discern does not make the distinction invalid. It is true that medical outcomes can vary widely and that there are vagueness worries concerning categories of effectiveness. But this does not mean that there is no reality to the futile/beneficial distinction—only that it is a standard sorites problem. While many concepts are vague and distinctions between groupings difficult to make, we can draw lines between things on a continuum. As Tony Hope (2004, 73) says, "the precise drawing of the line is arbitrary, but it is not arbitrary that a line is drawn." While there are no strict cutoff points that define the threshold of sufficiently good outcomes, and while we may have trouble classifying borderline cases, there are clear differences between futile and beneficial interventions. The line is, in most situations, ascertainable. If Brett has a high SOFA score, severe congestive heart failure and a high mortality risk, then he would be a low priority for treatment since he is unlikely to survive 1 year. But if he has a low SOFA score, a small risk of death and is expected to live at least 5 years, then he would be a high priority. Vagueness and indeterminacy do not threaten the distinction between sufficiently and insufficiently good outcomes.

Concluding Remarks

Rationing faces a dilemma between fair chances and best outcomes. As Bognar (2010, 396) observes, "it would be unfair if some groups were systematically discriminated against in the healthcare system because of their diminished capacity to benefit; but . . . capacity to benefit [should] be taken into account in resource allocation to avoid gross inefficiencies. Fairness matters, but so does efficiency." While triage protocols based on probability of success, life expectancy and level of resource commitment will save more lives, Hellman and Nicholson (2020, 8) add, they "are likely to limit the ability of people with disabilities to access care. This tension gives rise to the legal and moral question of how best to balance utility and inclusion."

In *explicit disability rationing* there is a non-medical ground for downgrading the priority of people with IDD. Efficiency and equality do not conflict since both individuals, abled and disabled, benefit equally from treatment. To favor Jim and make Brett a lower priority

because he is disabled is ableist discrimination. Equality calls for distributing resources with respect for the value of each potential recipient, and this means choosing randomly between Jim and Brett. In non-explicit disability rationing there is a medical reason for deprioritizing someone with disabilities—the medical grounds are a combination of inevitable biological factors and preventable social factors. Utility and inclusion conflict because abled and disabled individuals benefit differentially. Efficiency calls for using resources to maximum effectiveness, and this means giving Jim the ventilator. But even here, equality should prevail: to deny critical care to people with IDD during Covid-19 is morally problematic because medical and social comorbidities, being beyond personal control, are irrelevant to allocation decisions.

I have defended three principles and three conclusions.

- 1. In a just distribution, *extraneous factors* do not influence a person's share. This rules out explicit rationing where there are no comorbidities. Disabilities by themselves are not a relevant basis for deprioritizing people with IDD (since disability *per se* does not diminish their capacity to benefit from health resources).
- 2. In a just distribution, *undeserved luck* does not influence a person's share. This rules out rationing for inevitable comorbidities. Medical conditions associated with particular disabilities are not a relevant basis for deprioritizing people with IDD. While these necessary biological complications, for which nature is responsible, diminish their capacity to benefit, they should not be denied treatment on that basis.
- 3. In a just distribution, *social injustice* does not influence a person's share. This rules out rationing for preventable comorbidities. Socially-caused poor health is not a relevant basis for downgrading the treatment priority of people with IDD. These contingent social complications diminish their capacity to benefit—but since society is responsible for them, it cannot turn around and use them to deny treatment.

When outcomes are sufficiently good, Jim and Brett are relevant equals, and their different cognitive capacities and potential to benefit from treatment are irrelevant.

"Can the conflict between fairness and efficiency be resolved?" Bognar (2010, 397) wonders. Perhaps not. "Fairness and goodness are different moral considerations Fairness requires that health care

resources be distributed in a way that avoids unfair discrimination; goodness requires that health benefits be allocated in the most efficient manner." Ballantyne (2020, 52) concludes that "we cannot simultaneously prioritize utility (saving the most lives) and equity (avoiding unjust discrimination). These values are direct trade-offs. We can save more lives or we save a more diverse group of lives." When utility and inclusion conflict, as with Covid-19 ventilator shortages, disabled patients have an equal claim to be treated. To deprioritize those with IDD is to fail to acknowledge their equal moral worth as persons.

References

American Association of People with Disabilities. (2020). "Letter to Congress." Online at www.aapd.com.

American College of Chest Physicians. (2020). "Triage of scarce critical care resources in Covid-19: An implementation guide for regional allocation." Online at www.journal.chestnut.org.

Amundson, R. (2005). "Disability, ideology and quality of life." In D. Wasserman et al., eds., *Quality of life and human difference*, 101–124. Cambridge: Cambridge University Press.

Anderson, L. et al. (2013). "The state of the science of health and wellness for adults with intellectual and developmental disabilities." *Journal of Intellectual and Developmental Disability* 5: 385–398.

Aristotle. (1984). *Politics*. In J. Barnes, ed., *The complete works of Aristotle*. Princeton: Princeton University Press.

Arneson, R. (2004). "Luck egalitarianism interpreted and defended." *Philosophical Topics* 32: 1–20.

Ballantyne, A. (2020). "ICU triage: How many lives or whose lives?" In M. Schwartz, ed., *The ethics of pandemics*, 52–56. Peterborough: Broadview.

Barnes, E. (2016). *The minority body*. Oxford: Oxford University Press.

Bickenback, J. (2016). "Disability and healthcare rationing." *Stanford Encyclopedia of Philosophy*. Online at www.plato.stanford.edu.

Bognar, G. (2010). "Does cost effectiveness analysis unfairly discriminate against people with disabilities?" *Journal of Applied Philosophy* 27: 394–408.

Campbell, S. and Stramondo, J. (2017). "The complicated relationship of disability and well-being." *Kennedy Institute of Ethics Journal* 27: 151–184.

Centers for Disease Control and Prevention. (2020). "People with disabilities." Online at www.cdc.gov.

Centers for Disease Control and Prevention. (n.d.). "Social determinants of health." Online at www.cdc.gov.

DeSanctis, A. (2020). "Sasse calls to protect Americans with disabilities in Covid-19 legislation." Online at www.nationalreview.com.

Dworkin, R. (2000). *Sovereign virtue*. Cambridge: Harvard University Press.

Emmanuel, E. et al. (2020). "Fair allocation of scarce medical resources in the time of Covid-19." *New England Journal of Medicine* 382: 2049–2055.

Feinberg, J. (1984). Harm to others. Oxford: Oxford University Press.

Figueroa, J. et al. (2020). "Community-level factors associated with racial and ethnic disparities in Covid-19 rates." Online at www.healthaffairs.org.

Freeman, S. (2018). "Contractarian justice and severe cognitive

disabilities." In A. Cureton and T.E. Hill, eds., *Disability in practice*, 174–203. Oxford: Oxford University Press.

Gill, C. (2009). "Suicide intervention for people with disabilities." In R. Baird, ed., *Disability: The social, political and ethical debate*, 255–270. Amherst: Prometheus.

Gould, J. (2020a). "Duty, not gratuity: The ethics of social support for people with intellectual disabilities in the United States." *Disability and Society*. Online at www.tandfonline.com.

Gould, J. (2020b). "The complicated but plain relationship of intellectual disability and well-being." *Canadian Journal of Bioethics* 3: 37 –51. Online at www.cjb-rcb.ca. Harris, J. (1987). "QALY fying the value of life." *Journal of Medical Ethics* 13: 117–123.

Hellman, D. and Nicholson, K. (2020). "Rationing and disability: The civil rights and wrongs ofclinical triage protocols." *Virginia Public Law and Legal Theory Research Paper No. 2020:33*. Online at www.papers.ssrn.com.

Hope, T. (2004). *Medical ethics: A very short introduction*. Oxford: Oxford University Press.

Iserson, K. (2020). "Healthcare ethics during a pandemic." *Western Journal of Emergency Medicine* 21. Online at www.westjem.com.

Jirik, K. (2020). "Disability and rationing of care amid Covid-19." Online at www.blog.petrieflom.law.harvard.edu.

Kamm, F.M. (2009). "Aggregation, allocating scarce resources, and the disabled." *Social Philosophy & Policy* 26: 148–197.

Kaposy, C. and Khraishi, S. (2012). "A relational analysis of

pandemic critical care triage protocols." *International Journal of Feminist Approaches to Bioethics* 5: 70–90.

Kirby, J. (2010). "Enhancing the fairness of pandemic critical care triage." *Journal of Medical Ethics* 36: 758–761.

Kittay, E.F. (2019). *Learning from my daughter*. Oxford: Oxford University Press.

Klein, D. (2011). "Medical disparagement of the disability experience: Empirical evidence of the 'expressivist objection." *AJOB Explicit Research* 2: 8–20.

Leider, J. et al. (2017). "Ethical guidance for disaster response, specifically around crisis standards of care: A systematic review." *American Journal of Public Health* 109: e1–e9. Online at www.ajph.aphapublications.org.

Lippert-Rasmussen, K. (2018). "Justice and bad luck." *Stanford Encyclopedia of Philosophy*. Online at www.plato.stanford.edu.

Matthews, E. and Menlowe, M. (1992). *Philosophy and health care*. Aldershot: Avebury.

Mello, M. et al. (2020). "Respecting disability rights—toward improved crisis standards of care." *New England Journal of Medicine* 383: e26. Online at www.nejm.org.

Miller, F. (2020). "Why I support age-related rationing of ventilators for Covid-19 patients." In M. Schwartz, ed., *The ethics of pandemics*, 63–65. Peterborough: Broadview.

Morin D. et al. (2018). "Attitudes of healthcare professionals toward people with intellectual disability: A comparison with the general population." *Journal of Intellectual Disability Research* 62: 746–758.

National Institute of Child Health and Human Development. (n.d.). "What conditions or disorders are commonly associated with Down syndrome?" Online at www.nichd.nih.gov.

Office for Civil Rights, Department of Health and Human Services. (2020). "Bulletin: Civil rights, HIPAA and the coronavirus disease 2019." Online at www.hhs.gov.

O'Laughlin, D. and Hick, J. (2008). "Ethical issues in resource triage." *Respiratory Care* 53:190–200.

Pelleboer-Gunnink H. et al. (2017). "Mainstream health professionals' stigmatizing attitudes towards people with intellectual disabilities: A systematic review." *Journal of Intellectual Disability Research* 61: 411–434.

Peña-Guzman, D. and Reynolds, J. (2019). "The harm of ableism: Medical error and epistemic injustice." *Kennedy Institute of Ethics Journal* 29: 205–242.

Pogge, T. (2004). "Relational conceptions of justice: Responsibilities for health outcomes." In S. Anand et al, eds., *Public health, ethics and equity*, 135–162. Oxford: Clarendon Press.

Putnam, D. et al. (2019). "Disability and justice." *Stanford Encyclopedia of Philosophy*. Online at www.plato.stanford.edu.

Rawls, J. (1971). A theory of justice. Harvard University Press.

Ryan T. and Scior K. (2014). "Medical students' attitudes towards people with intellectual disabilities: A literature review." *Research in Developmental Disabilities* 35: 2316–2328.

Scully, J.L. (2020). "Disablism is a time of pandemic." In M. Schwartz, ed., *The ethics of pandemics*, 57–60. Peterborough: Broadview.

Shakespeare, T. (2005). "The social context of individual choice". In D. Wasserman et al., eds., *Quality of life and human difference*, 217–236. Cambridge: Cambridge University Press.

Singer, P. et al. (1995). "Double jeopardy and the use of QALYs in healthcare allocation." *Journal of Medical Ethics* 21: 144–150.

Skotko, B. et al. (2011). "Self-perceptions from people with Down syndrome." *American Journal of Medical Genetics* Part A 155: 2360–2369.

Solomon, M. et al. (2020). "Covid-19 crisis triage: Optimizing health outcomes and disability rights." *New England Journal of Medicine* 383: e27. Online at www.nejm.org.

Strong Center for Developmental Disabilities. (n.d.). "Health disparities." Online at

www.urmc.rochester.edu.

Ubel, P. et al. (2003). "Whose quality of life? A commentary exploring discrepancies between health state evaluations of patients and the general public." *Quality of Life Research* 12: 599–607.

Villarosa, L. (2020). "A terrible price': The deadly racial disparities of Covid-19 in America." Online at www.nyt.com.

Wasserman, D. (2015). "Disability perspectives." In J. Galst and M. Verp, eds., *Prenatal and preimplantation diagnosis*, 229–245. Dordrecht: Springer.

Weinrib, E. (2001). "Corrective justice.' *Routledge Encyclopedia of Philosophy*. Online atwww.rep.routledge.com.

White, D.B. and Lo, B. (2020). "A framework for rationing ventilators and critical care beds during the Covid-19 pandemic." *Journal of the American Medical Association* 323: 1773–1774. Online at www.jama.org.

World Health Organization. N.d. "Social determinants of health." Online at www.who.int