Priority vaccination for mental illness, developmental or intellectual disability

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ABSTRACT
Coronavirus vaccines have made their debut. Now, allocation practices have stepped into the spotlight. Following Centers for Disease Control and Prevention guidelines, states and healthcare institutions initially prioritised healthcare personnel and elderly residents of congregant facilities; other groups at elevated risk for severe complications are now becoming eligible through locally administered programmes. The question remains, however: who else should be prioritised for immunisation? Here, we call attention to individuals institutionalised with severe mental illnesses and/or developmental or intellectual disabilities—a group highly susceptible to the damages of COVID-19, recent research shows, and critical to consider for priority vaccination. The language describing both federal-level and state-level intentions for this population remains largely vague, despite the population’s diversity across age, diagnosis, functional status and living arrangement. Such absence of specificity, in turn, leaves room for confusion and even neglect of various subgroups. We review data stressing this group’s vulnerability, as well as select state plans for priority vaccination, highlighting the importance of clarity when describing intentions to vaccinate, or even generally care for, diverse populations composed of distinct subgroups in need.

With coronavirus vaccine distribution in process worldwide, pressing questions around optimal allocation continue to surface. In the USA, vaccine roll-out has generally been slow, and jostling for priority access fierce. States and hospitals initially prioritised healthcare personnel and elderly residents of nursing facilities; other high-risk groups are now becoming eligible through state-administered and county-administered programmes. One population drawing insufficient attention includes those with severe mental illnesses or developmental or intellectual disabilities—especially those who are institutionalised.

Recommendations for initial vaccine prioritisation from the Centers for Disease Control and Prevention (CDC) and its Advisory Committee on Immunization Practices (ACIP)—as well as initial state adaptations of those guidelines—focused on ‘health care personnel and long-term care facility (LTCF) residents’ for first-round immunisation.’ Both federal and state language defining the ‘LTCF resident’, however, remains vague. The CDC/ACIP proposed priority vaccination for ‘adults who reside in facilities that provide a range of services, including medical and personal care, to persons who are unable to live independently’, stressing how the ‘communal nature…and the population served (generally older adults often with underlying medical conditions) puts facility residents at increased risk.’ Such broad guidance—while perhaps necessary to accommodate local variation—does little to highlight the diversity of LTCF residents across age, medical diagnosis and illness severity, among other parameters. LTCFs house the elderly, of course—but also younger patients with mental illnesses (including substance abuse disorders) and/or intellectual or developmental disabilities, who, by age and medical comorbidity standards, might not superficially appear to meet priority vaccination criteria. Moreover, ‘long-term care’ varies in extent and acuity, ranging from round-the-clock residential to more independent housing. Absence of precise criteria defining LTCF residents thus leaves room for confusion, and even neglect, as vaccine administration continues.

Recent scholarship and advocacy work support prioritisation of individuals with severe mental illness and/or intellectual or developmental disabilities. According to a nationwide study, ‘recently diagnosed with schizophrenia, bipolar disorder, major depressive disorder or attention-deficit/hyperactivity disorder [show] very high odds ratios…of being infected with COVID-19, as compared to patients without mental disorders, even after adjustment for age, gender, ethnicity and…medical conditions.’ Similarly, these individuals display increased susceptibility to COVID-19 complications and death, with ‘delays in getting medical attention, medical comorbidities, and a variety of socioeconomic and disease-related factors’—as well as increased homelessness, crowded living, impaired functional status and suboptimal health maintenance practices—all likely contributing. Another easily overlooked dimension of this group’s risk includes any inability or unwillingness to ‘protect themselves against COVID-19 due to apathy, depression, paranoia or other psychiatric symptoms.’ A recent viewpoint in Lancet Psychiatry corroborating these ideas extends the discussion even further, implying that, regardless of the ethical distribution framework applied—egalitarian, utilitarian or Rawlsian—individuals with ‘severe functional impairment’ secondary to mental illness are deserving of priority vaccination. These individuals are at a relative disadvantage navigating COVID-related challenges (as discussed above), and, given the relatively high incidence of virus-mediated morbidity and mortality in this population, their prioritisation has potential to ‘[save] more lives’ in line with consensus opinion on scarce resource allocation in pandemic times.

Moving to consider individuals with developmental and/or intellectual disabilities, a recent report states that, across all age groups, patients with developmental disorders display the ‘highest odds of dying from COVID-19’, intellectual disabilities and chromosomal anomalies (including Down syndrome) similarly
confers elevated risk for COVID-19-related mortality.\textsuperscript{10} According to another study, individuals with Down syndrome are ‘five times more likely to be hospitalized and ten times more likely to die than the general population’; Syracuse University’s Lerner Center for Public Health Promotion, in turn, revealed that in New York, individuals with intellectual and developmental disabilities ‘living in group homes had a case rate 4 times higher, and case-fatality rate 1.9 times higher than the overall state population’.\textsuperscript{11,12}

Clearly, there is compelling scientific evidence to support priority vaccination of individuals with severe mental illness and/or intellectual or developmental disabilities—even younger individuals, or those who do not live in long-term care settings. Notably, the CDC/ACIP recommends subprioritisation of LTCF residents if faced with insufficient vaccine supply, with ‘skilled nursing facilities’ (likely caring for the most medically vulnerable and elderly) coming before ‘assisted living facilities, intermediate care facilities for individuals with developmental disabilities, residential care facilities, and state veterans homes’.\textsuperscript{13} Although not explicitly named, psychiatric and intellectually disabled populations are presumably included in the latter set.

The details available on state plans for these populations vary widely and shift rapidly as new coronavirus-related data emerge. As of February 2021, Kentucky, for instance, published updated plans to include ‘disadvantaged and vulnerable populations’ in phase 2, but did not specify who—across age, type of disadvantage, medical or psychiatric diagnoses—was included in this category.\textsuperscript{14} In December 2020, Texas published intent to prioritise ‘residents of long-term care facilities’ without additional clarification.\textsuperscript{15} New York planned to vaccinate residents of congregate state addiction recovery centres, leaving some to question prioritisation of this largely younger population; later, in February, the state added taxi drivers, restaurant workers and residents of facilities for the developmentally disabled.\textsuperscript{16}

California and New Jersey published more specific plans up front. As of December 2020, per the California Department of Public Health, the state’s phase 1a covered ‘residents of skilled nursing facilities, assisted living facilities, and similar long-term care settings for older or medically vulnerable individuals’, with subprioritisation—following the aforementioned CDC/ACIP recommendations—into three tiers.\textsuperscript{17} Each tier is concretely defined, with tier 1 including personnel staffing acute care, psychiatric and correctional facility hospitals, skilled nursing facilities, assisted living facilities and ‘similar settings for older or medically vulnerable individuals’—and, ‘in concordance with ACIP, residents in these settings’.\textsuperscript{17} In its phase 1a, New Jersey covered residents of ‘skilled nursing facilities’ as well as group homes like residential care homes, adult family homes, adult foster homes, and institutional and developmental disabilities group homes, plus ‘institutional settings like psychiatric hospitals’.\textsuperscript{18}

As vaccination efforts accelerate, so too will evolution of questions about who is most in need. Virtually uniformly across available data—and frameworks for just distribution—individuals with severe mental illness and/or intellectual or developmental disabilities, especially those residing in congregate LTCFs, are recognised as worthy of priority vaccination. It is critical to remember, however, that this population is diverse in age, diagnosis, illness severity, functional status and living arrangement. Clarity and specificity of language, therefore, are critical when describing allocation plans for their necessary, and merited, immunisation.

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REFERENCES

1 Leatherby L, Walker AS. After a sluggish start, vaccine Rollout is improving in every state. The New York Times, 2021.
2 Dooling K, Marin M, Wallace M, et al. The Advisory Committee on Immunization Practices’ Updated Interim Recommendation for Allocation of COVID-19 Vaccine – United States, December 2020. MMWR Morb Mortal Wkly Rep 2021;69(512):1657–60.
3 CDC. Importance of COVID-19 vaccination for residents of long-term care facilities, 2021. Available: https://www.cdc.gov/coronavirus/2019-ncov/vaccines/recommendations/LTCF-residents.html
4 De Hert M, Mazerelle V, Detraru J. Prioritizing COVID-19 vaccination for people with severe mental illness. World Psychiatry 2020.
5 Wang Q, Xu R, Volkov N. Increased risk of COVID-19 infection and mortality in people with mental disorders: analysis from electronic health records in the United States. World Psychiatry 2020.
6 Stewart DE, Appelbaum PS. COVID-19 and psychiatrists’ responsibilities: a WPA position paper. World Psychiatry 2020;19(3):406–7.
7 Mazerelle V, Van Aschke K, Detraru J, et al. COVID-19 vaccination for people with severe mental illness: why, what, and how? The Lancet Psychiatry 2021;8(9):696–700.
8 Lamont J, Favor C. Distributive justice. Stanford encyclopedia of philosophy, 2017.
9 Emanuel EJ, Persad G, Upshur R, et al. Fair allocation of scarce medical resources in the time of COVID-19. N Engl J Med 2020;382(21):2049–55.
10 Fair Health, West Health Institute, Makary M. Risk factors for COVID-19 mortality among privately insured patients: a claims data analysis, 2020. Available: /3.amazonaws.com/media2.fairhealth.org/whitepaper/assets/Risk%20Factors%20for%20 COVID-19%20Mortality%20among%20Privately%20Insured%20Patients%20-%202020Claims%20Data%20Analysis%20-%202019%20FAIR%20Health%20White Paper.pdf
11 Wadman M. COVID-19 is 10 times deadlier for people with Down syndrome, raising calls for early vaccination. Science 2020.
12 Landes SD, Turk MA, McDonald KE. Less Worthy Lives? We must prioritize people with intellectual and developmental disabilities in COVID-19 vaccine allocation. Lerner Center for Public Health Promotion, 2020: 42–1. 3 https://lenercenter.ucr.edu/wp-content/uploads/2020/12/Landes_Issue Brief_IDDCOVIDVaccines_Final.pdf.
13 CDC. Interim considerations for COVID-19 vaccination of healthcare personnel and long-term care facility residents, 2020. Available: https://www.cdc.gov/vaccines/hcp/acip-recs/vacc-spec/covid-19/covid-19-clinical-considerations.html
14 Kentucky Public Health. Kentucky’s COVID-19 Vaccination Plan, 2020. Available: https://chfs.ky.gov/agencies/dph/covid19/DraftKentuckyVaccinationPlan.pdf
15 Texas Department of State Health Services, Hellerstedt J. COVID-19 vaccine allocation guiding principles and health care workers definition, 2020. Available: https://dshs.texas.gov/COVID19VaccinePrinciples_HC_W_Definition.pdf
16 Jones B, Colangelo L, Newsday Staff. Cuomo: local governments can give vaccine to restaurant workers, taxi drivers and people with developmentlal disabilities. Newsday, 2021. Available: https://www.newsday.com/news/health/coronavirus/covid-19-virus-long-island-new-york-vaccines-1.50139778
17 California Department of Public Health. CDPH allocation guidelines for COVID-19 vaccine during phase 1A: recommendations, 2020. Available: https://www.cdph.ca.gov/Programs/CID/DCID/Pages/COVID-19CDPH-Allocation-Guidelines-for-COVID-19-Vaccine-During-Phase1ARecommendations.aspx
18 New Jersey Department of Health, New Jersey COVID-19 Information Hub. Who is eligible for vaccination in New Jersey? Who is included in the vaccination phases? 2021. Available: https://covid19.nj.gov/faq/np-information/sloowing-the-spread-who-is-eligible-for-vaccination-in-new-jersey-who-is-included-in-the-vaccination-phases--#:~:text=Vaccination%20Phases%2C%20eligible%2Dto%20Congregate%20Settings