Lowering the Age of Consent for Vaccination to Promote Pediatric Vaccination: It's Worth a Shot

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Abstract: This paper challenges historically preconceived notions surrounding a minor's ability to make medical decisions, arguing that federal health law should be reformed to allow minors with capacity as young as age 12 to consent to their own Centers for Diseases Control and Prevention (CDC)-approved COVID-19 vaccinations. This proposal aligns with and expands upon current exceptions to limitations on adolescent decision-making. This analysis reviews the historic and current anti-vaccination sentiment, examines legal precedence and rationale, outlines supporting ethical arguments regarding adolescent decision-making, and offers rebuttals to anticipated ethical counterarguments.

accines are safe, effective preventative tools against the risk of future illness, both for individuals and communities. They inherently involve a degree of uncertainty. For many considering vaccination for themselves or their children, questions may arise: Will I/they be exposed to the disease? Will I/they become sick? Will the vaccine work if I am/they

are exposed in the future? This uncertainty may lead some to think that vaccination is unethical "experimentation" given there is no definite certainty to vaccines' usefulness or effect, despite scientific evidence.¹ While all medical innovation is subject to some degree of uncertainty, the fear and controversy surrounding vaccination is complex and intensifying.²

Vaccines have dramatically decreased the incidence and subsequent morbidity and mortality of infectious diseases. For instance, vaccines have enabled the eradication of smallpox and near eradication of polio.3 However, even though many in the science community view vaccines among the greatest successes in modern medicine, rates of vaccination in the US are precipitously dropping.4 This drop is most apparent in adolescents. Adolescent rates of vaccination lag rates of all younger age groups, and about 35 million American adolescents fail to receive at least one recommended vaccine.⁵ A 2011 national immunization survey showed that in a cross-sectional sample of 13-17-year-old adolescents, only 78% got their Tdap booster dose and 71% got their meningococcal booster dose compared to over 90% of children aged 19-35 months who had received these respective vaccines.6 Only 53% of adolescent girls aged 13-17 received 1 dose of the Human Papilloma Virus (HPV) vaccine and a mere 35% had completed the 3-dose series, though these rates may be compounded by stigma.⁷

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In a current lens, where the large burden of the COVID-19 pandemic seems behind us, the growing anti-vaccination sentiment is worrisome and threatens public health. Vaccinating against COVID-19 no longer seems important to many and moreover the hesitancy from the peak of the pandemic continues to find its way into all vaccination rates. In March of 2023, about 31% of American adults were still not fully vaccinated.⁸ Pediatric vaccination lags significantly behind: as of April 2023, 88% of children aged 6 months to 5 years, 68% of children aged 5-11 and 42% of children aged 12-17 were not fully vaccinated.⁹ Further, 30% of parents of American teenagers aged 13 to 17 said their child was "definitely not" going to get the COVID-19 vaccine.¹⁰

The solution to promote vaccination is multipronged. Communication with vaccine-hesitant parents is not always effective. Stricter federal vaccine mandates are wrought with ethical dilemmas Academy of Pediatrics (AAP), the consensus is that these sensitive issues are important to address with the minor without parental involvement because otherwise the minor may not seek care. ¹³ Similarly, vaccination could be regarded as a similar sensitive issue in the pediatric population and an acceptable extension of adolescent decision-making.

There is precedent for lowering the age of consent to improve vaccination rates. The District of Columbia (D.C.) Council passed a bill that became law on December 23, 2020, allowing patients in DC as young as 11 to obtain Center for Disease Control (CDC)-approved vaccinations without their parents' consent. Responding to the recent US measles outbreaks, D.C. council members hope to improve adolescent vaccination rates. Under this law, if the minor in DC demonstrates capacity, they can consent to their own vaccinations, even if their parent(s) object for religious, personal, or philosophical reasons.

Therefore, it is argued that it is both ethically important and permissible to change federal law to allow minors with capacity, as young as age 12, to consent to their own CDC-approved COVID-19 vaccinations in the case of parent/guardian refusal. Part A of this analysis discusses the historic and current anti-vaccination sentiment, Part B outlines the current state of minor vaccination, Part C outlines supporting ethical arguments, and Part D concludes the discussion by addressing potential ethical counterarguments.

around patient autonomy and freedom to choose. One approach to improve vaccination rates in adolescents involves re-examining consent, namely the age at which one can consent to their own vaccination. Lowering the age of consent draws from and aligns with existing laws allowing minors to consent to mental and sexual health services and treatment without parental consent or involvement. It is an accepted ethical pillar in pediatrics that adolescents can provide consent for care related to sexual and mental health.11 The law supports this tenet: in 1967 the Supreme Court emphasized that minors have constitutional rights, albeit limited ones. Moreover, the 1977 case of Carey vs Population Services International made it illegal to prohibit the sale of legal contraceptives to minors and supported a minor's rights to privacy regarding decisions about reproduction.12 As a result, minors can make decisions about their sexual and mental health to varying degrees in all states, although confidentiality is not always protected. Supported by the American

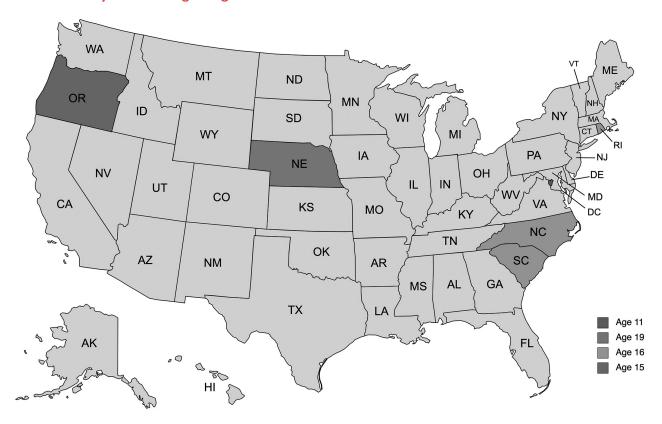
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Part A: Anti-Vaccination Sentiment Historically and Today

History can provide an invaluable lens to better understand the current anti-vaccine sentiment. Hesitancy surrounding modern vaccinations is largely attributed to Dr. Wakefield's 1988 *Lancet* article, which linked the Measles-Mumps-Rubella (MMR) vaccine to autism in children. ¹⁵ This study, deeply problematic and biased in design, has long been debunked and the

Figure Ia

Selected laws by US state regarding minors and consent.



lack of association between the measles vaccination and autism has been robustly demonstrated. ¹⁶ Even after the study was retracted, its detrimental impact has since eroded public trust in pediatric vaccines. For example, the measles outbreaks in the early 2000s in the US, Canada and UK have been at least partially attributed to the non-vaccination of children. ¹⁷ The anti-vaccine movement has since grown and spread through hundreds of websites, with an estimated 58 million followers on various social media platforms. ¹⁸

Historic examples of unethical research have contributed to public mistrust and hesitancy. For many, especially minorities, the 1930s Tuskegee experiment still lingers as a painful memory. A horrific example of uninformed consent and abuse of power, Black men with syphilis were given placebo instead of penicillin, while researchers unethically studied the natural history of the disease. 19 Another example of unethical research is the Willowbrook hepatitis study. Starting in 1956 and lasting for 14 years, mentally disabled children at the Willowbrook State School were intentionally given hepatitis to study the virus's development. 20 Understandably, the history of human experimentation in America has left many wary of medical treat-

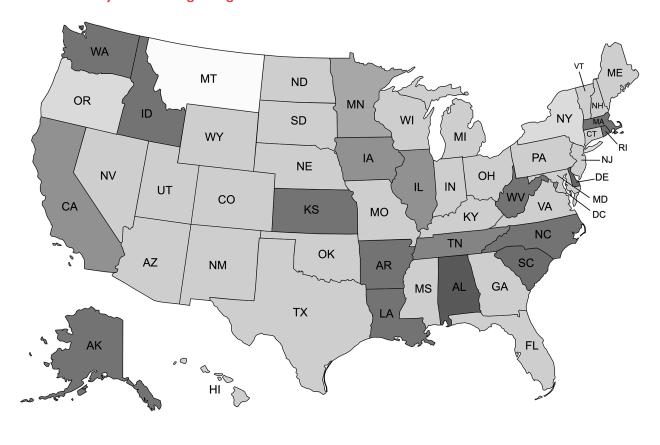
ment, such as vaccinations, especially those mandated by the government.

Unfortunately, this mistrust has continued into the COVID-19 pandemic and post-pandemic eras. Exaggerated conspiracy theories surrounding COVID-19 vaccination have emerged, such as the use of the COVID-19 vaccine to implant a tracking device into billions of people or that the vaccines turn people into monkeys.²¹ Beyond these theories, others more metered, yet nonetheless false, ideas have circulated, such as that COVID-19 vaccines irreversibly change people's DNA or that the vaccine's development was unsafely rushed.²²

To understand why some have chosen to decline the COVID-19 vaccine, Derek Thompson, a staff writer for the *Atlantic*, took to Twitter inviting those not planning to get the COVID-19 vaccine to explain their reasoning. Recognizing selection bias here, many of the anti-COVID vaccine respondents were not opposed to *all* vaccines. Many regarded this vaccine as rushed, did not want to risk "being a guinea pig," and feared a slippery slope regarding civil rights.²³ The dangers and consequences of the anti-vaccination movement have grown; in 2020 alone, anti-vaxxers have increased their following by 7-8 million.²⁴

Figure 1b

Selected laws by US state regarding minors and vaccine consent.



- Minors over age 14 can consent to all vaccinations
- "Mature Minor" doctrine: Minors of any age can consent to receive all health care services, theoretically including vaccination
- Minors over age 12 can consent to HPV + Hep B vaccination, but no other vaccinations
- Minors over age 12 can consent to all vaccinations
- Minors over age 11 can consent to all vaccinations
- Minors of any age can consent to Hep B vaccination, but no other vaccinations
- Minors of any age can consent to all vaccinations, except HPV vaccination; once the minor graduates from high school they can also consent to HPV vaccination
- Minors of any age can consent to HPV vaccination, but no other vaccinations
- Minors over age 15 can consent to all vaccinations
- Minors over age 16 can consent to all vaccinations
- Minors over age 14 can consent to all vaccinations

Part B: Legal Precedence & Rationale

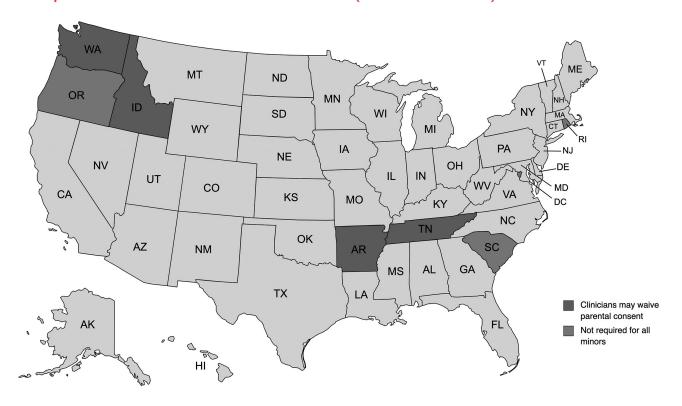
As previously discussed, the recently passed D.C. Council bill set the precedent for minor consent to vaccinations. The bill allows patients in D.C. as young as 11 years old to obtain vaccinations without parental/guardian consent, or even over their objection for religious or other reasons. The bill was initially proposed in early 2019 during the US measles outbreak that swept across 31 states, causing 1,282 cases nation-

wide.²⁵ The bill, which was approved 12 to 1, was strongly supported by the D.C. chapter of the AAP and passed into law December of 2020.

Furthermore, there are also already multiple states that allow minors of varying ages access to certain vaccines. **Figures 1a and 1b** depict by state the various eligibilities for consent (**1a**) and vaccine consent (**1b**) by minors.²⁶ **Figure 2** depicts by state the more specific eligibility for COVID-19 vaccine consent by minors.²⁷

Figure 2

State parental consent laws for COVID-19 vaccination (as of November 2021).



How well these stipulations are followed or known by clinicians in these situations is not well appreciated. The state-by-state heterogeneity of consent laws poses challenges for clinicians and patients in understanding what is permitted. A unique aspect of this proposal includes a unifying federal law, which would provide consistent policy and hopefully reduce confusion for adolescents and clinicians.

Federal law currently does not explicitly require parental consent for vaccination. Moreover, minors can consent to their own health care if pertains to mental or sexual health, or they are married, living apart from parents, in the armed forces, pregnant, or incarcerated.28 The concept of the "mature minor" was affirmed in several court decisions and is widely accepted among US medical clinicians in many states.²⁹ A mature minor possesses sufficient intellect and autonomy to provide informed consent for medical care. When the legal concept of mature minor is evoked, it is necessary to consider chronological age and developmental maturity, degree of autonomy, ability to adhere to medical care, seriousness of illness, and risks of therapy. However, even though the mature minor principle exists, clinicians typically limit its invocation. As a result, currently minors generally

cannot receive care for routine, nonemergent healthcare, such as vaccinations, without parental consent.

There is additional rationale to support why the age of 12 was chosen for this proposal. To start, the concept of a "federal age of consent" is an arbitrary number. For instance, the statutory age of consent to treatment varies between countries from age 12-19 years.³⁰ Many American minors, if they found themselves in other countries, would be able to consent to their own medical procedures. To further support age 12 objectively, a study using the MacArthur Competence Assessment tool for Clinical Research found that children 11.2 years and above were decision-making competent, whereas children below 9.6 years were not.³¹ Moreover, as the CDC recommends ages 11-12 for the HPV vaccine series, allowing 12-year-olds to consent may increase HPV vaccination rates, and others.

The vaccines recommended by the CDC and AAP that could be affected by this policy change include HPV, Tetanus/Pertussis/ Diphtheria (Tdap), Meningococcal, Influenza and, most timely, the COVID-19 vaccine. Adolescents often also need catch up doses for vaccines missed in childhood. Overall, in the US, the CDC recommends at least 13 doses of 4 different vaccines from the ages of 11-17.³²

Part C: Ethical Arguments for Lowering the Age of Consent for Vaccination

This proposal would fundamentally change pediatric healthcare policy, yet aligns with and expands upon current exceptions to limitations on adolescent decision-making. While there exists legal precedent for this proposal, law should not inform ethics. As such, it is integral that the ethical arguments first be examined. The ethical arguments can be distilled to two major ethical principles: the principle of autonomy and the principle of utilitarianism.

The concept of consent is derived from the principle of autonomy, a core tenet in medical ethics. Autonomy requires two elements: liberty, or freedom from controlling influence, and agency, or capacity for selfrule.33 In pediatrics, where children do not yet possess capacity, parents (or guardians) have authority and responsibility as surrogate decision-makers for providing informed parental permission or consent for their child.34 Decisions are made in the child's best interest, attempting to maximize benefit and minimize harm, and are generally accepted if they do not fall below the harm threshold. With developmental maturation during childhood and adolescence, shared decisionmaking and the provision of assent is the cornerstone of optimal pediatric care until decisions can be made autonomously at the arbitrary age of majority. The criteria for capacity, particularly in adolescent medicine, have moved away from age and more towards individual experience and understanding. Accepted exceptions to limitations placed on adolescent decision making include 1) specific categories, such as sexual and mental health, 2) 'mature minor' exception, and 3) emancipated minors.35 This acknowledges an adolescent's developing autonomy, fundamentally empowers minors to act independently in this context, and aligns with and expands upon existing exceptions to limitations on adolescent decision-making. Importantly, this proposal only allows individuals to consent to CDC-approved vaccinations if they have capacity for informed consent on a case-by-case basis, determined by a clinician familiar with the patient.³⁶ Ultimately, allowing minors to consent to their own vaccinations promotes individual and public health, and further aids in the transition from child to responsible, autonomous adult when making medical decisions.

Moreover, consent to vaccination is a relatively low risk decision and thus more appropriate for the tenant of autonomy to be applied. CDC- and AAP-recommended vaccines have been rigorously studied in large clinical trials, found to be safe and efficacious in children and adolescents. Allowing a child to receive a vaccination is very unlikely to result in death or any long-term morbidity.³⁷ By comparison, medical decisions involving a higher level of risk or complexity, for instance decisions around life-sustaining treatment, require adolescents to demonstrate a higher level of capacity or decision-making maturity.³⁸ While minors should not have free reign over all medical decisions, allowing minors to consent to their own vaccinations appropriately balances medical autonomy and responsibility.

A second ethical argument central to this proposal is the utilitarian argument surrounding public health good. Allowing minors to consent to their own vaccination should help increase vaccination rates, which is inherently beneficial to the health of society. Public health measures, such as vaccination, are supported by the central moral justification to prevent poor health outcomes and advance good health outcomes.³⁹ Given the minimal scientific safety concerns around the vaccinations for which adolescents are eligible, allowing more individuals to consent and thus receive vaccinations promotes a "good outcome" of increasing both individual and public immunity of potentially morbid diseases. While the magnitude of the potential increase in vaccination rates resulting from this policy remains unknown, allowing minors to consent to vaccination supports patient autonomy and promotes the greater health of society.

Another angle through which the utilitarian argument can be applied is protecting the vulnerable. Increasing vaccination rates is especially important in protecting others who do not have the choice to vaccinate for medically valid reasons. For instance, infants who are too young, pregnant persons, or immunocompromised patients cannot receive live vaccines. If enough of the population is immunized however, these individuals may still be protected by proxy due to herd immunity. The immunization rates needed to confer herd immunity depend on how contagious the illness is: For a more contagious disease, like pertussis or measles, vaccination of 95% of the population is necessary, while a less contagious disease, like mumps or rubella, only need 85%.40 Therefore, when parents refuse vaccines for children who are medically able to receive the vaccine, they are not only potentially harming their child, but also those unable to vaccinate because of medical conditions or circumstances.

Lastly, this proposal is extremely relevant to COVID-19, and potentially others in the future. While in the US and globally, fewer cases of COVID-19 have been reported in children aged 0-17 compared with adults, there is evidence that children and adolescents have acted as vectors promoting spread.⁴¹ A recent systemic review estimated that 16% of children with COVID-19

are asymptomatic, but evidence suggests that asymptomatic pediatric infections may be as high as 50%.⁴² Thus, COVID-19 incidence is likely underestimated among children and adolescents. Moreover, the testing volume in age groups under 18 is lower than adults, but the rate of positive tests is generally higher among these groups, particularly those aged 11-17.⁴³ Another misconceived notion is that children are not getting as sick as adults. Even though children are hospitalized at lower rates, about 1 in 3 children hospitalized with COVID-19 in the US are admitted to the ICU, which is comparable to adult ICU admissions.⁴⁴ While the global priority remains vaccinating adults against COVID-19, those at highest risk for death and serious

gatherings because of their unvaccinated status.⁴⁶ Thus, parental refusal may not only risk infection, but also preclude a child's participation, potentially compromising academic and social development.

Another possible counterargument against this proposal is that it potentially exposes minors to coercion to be vaccinated. Some may argue that a clinician could rely on the power dynamic in the relationship to convince a minor to vaccinate. This argument holds less weight because the persuasion is not with malicious intent but instead reflects the clinician's larger obligation to promote health. In medicine, generally improving vaccination rates is objectively positive. Acknowledging the "slippery slope" argument,

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Part D: Potential Ethical Counterarguments & Rebuttals

Counterarguments to expanding vaccine consent to minors include whether public health goals should supersede individual autonomy, in this case parental authority.⁴⁵ Providing more individuals the choice to be vaccinated is in the best interest of the general public but may cause individuals' rights, namely those of the parent and minor, to clash with one another.

To start, some may argue that the minors who disagree with their parents' refusal of their vaccinations can simply wait until they are 18 to be vaccinated without parental consent. While waiting does solve the narrow problem, the COVID-19 vaccination should not wait. Waiting years may pose significant individual and community risk and perpetuate disease. Furthermore, COVID-19 vaccination is explicitly required to attend school or certain extracurricular activities (or even an informal requirement that peers/families create among themselves). In a poignant *New Yorker* interview, an anonymous 16-year-old, who wanted to be vaccinated against COVID-19 and whose parents forbid it, describes how they were left out of social

encouraging vaccination to the point of coercion may be in the best interest of the population's health in the eyes of some healthcare professionals.47 Those that would support this claim cite the stringent scientific testing and objective benefits of these vaccinations. Moreover, clinicians are likely already trying to convince hesitant parents to vaccinate their child, so persuasion already exists. Again, minors will only be able to decide to vaccinate themselves against parental objection if they demonstrate appropriate capacity to understand and weigh the options being presented. It would also be necessary to include safeguards, such as specifying what licensed clinicians (i.e., pediatricians, school nurses, etc.) will be able to receive this consent from the minor, to ensure that these individuals are well trained in capacity evaluations and appropriate informed consent.

Another ethical qualm with the proposal might be that opting out of vaccination is not permissible if parental permission has been obtained. Although dissent must be acknowledged and carry appropriate weight depending on the proposed treatment, minors in general cannot refuse treatments to which their parents have consented (parental permission), such as vaccination. Thus, the adolescent right to consent to vaccination is really the right to agree with parents, clinicians and the government, which is ethically charged. From an ethical standpoint, the principle of respect for individual rights and developing autonomy should theoretically allow adolescents to express both viewpoints. If a minor is judged competent to accept, then they should also be competent to refuse. However, as Wood points out in his discussion about HPV vaccination minor consent, immaturity is more likely to play a role in adolescent vaccine refusal.48 Immaturity could manifest as needle phobias, attention seeking behavior, and other emotionally driven behavior and could result in a competent minor refusing vaccination. Because immaturity does not mean that a minor does not have capacity, it is important to protect against immature behaviors and thus only enable a minor to opt-in to vaccination and not opt-out. Furthermore, given anticipated benefits outweigh potential risks in the case of vaccination, parents and clinicians may choose to pursue a treatment over a minor's objection or dissent.

Some may find fault with this proposal because it de-emphasizes parental or guardian authority over minors. Parental/guardian authority and the age of consent exist as a means of protection because historically it is thought that an adult parental perspective will have foresight to make decisions in the best interest of their child, both in the short-term and long-term. However, there already exist many court-supported medical decisions that minors can make without parental input, such as those surrounding sexual and mental health. Further, minor consent laws aim not to prevent parental involvement in health decisions, but instead to protect children who cannot have productive dialogue with their parents.⁴⁹ Some clinicians may worry that going against parental wishes could erode trust between clinicians and parents. The clinician's primary patient remains the minor, and care should be taken to maintain open and respectful communication with families for their benefit.

Connected to the prior counterargument, others may argue that children cannot make medical decisions because they cannot understand decisions in the wider context of their lives. There are arguments that minors cannot evaluate information with lasting personal values.⁵⁰ This proposal does not disregard this need to respect a minor's vulnerability. To start, minors will only be able to consent to vaccination if they are deemed to have capacity. By evaluating one's capacity, the clinician is in essence trying to determine if a minor's values are *mature* enough to evaluate the decision of vaccination as it pertains to their life both currently and in the long-term. Additionally, it is important to highlight that the decision of vaccination is not a health-restricting decision or a decision with

immense ramifications. Thus, even if a minor's values are not completely *mature*, this decision does not result in pronounced or lasting consequences, such as refusing treatment that results in significant harm or death. Therefore, minors with capacity — especially adolescents — should have the right to consent to highly beneficial, low-risk treatments.⁵¹

There is potential concern that vaccination may lead to riskier behavior when enabled minors make their own decisions. This has been directly refuted in studies on the HPV vaccination. Historically, it was believed that HPV vaccination would increase promiscuous activity, especially since it is recommended to be given to an age group that typically is not yet sexually active.⁵² In a large study comparing HPV vaccinated and unvaccinated girls, there was no difference in rates of other sexually transmitted infections, and that HPV vaccine does not promote unsafe sexual behavior, such as decreased condom use.⁵³ Moreover, the HPV vaccine may be associated with increased protective health behaviors, such as higher Pap smear screening and condom use.⁵⁴ Those motivated enough to get the HPV vaccine are more likely to be health conscious and thus display other protective behaviors, although this may be association and not causation. While there are no studies evaluating COVID-19 vaccination and behavioral changes, it is possible that increased protective behavior seen with the HPV vaccine may extend to the COVID-19 vaccine.

Finally, there is also concern that changing the landscape of vaccination consent could potentially lead to a reactionary increase in anti-vaccination dialogue. Amidst vaccine hesitancy and conspiracy, lowering the age of consent for all vaccinations could result in significant anti-vaccination lobbying efforts. However, decisions should not be driven by the fear of irrational disagreement, especially if they have the potential for good. Policy and medical decisions should be made with public health in mind, rather than charting a path of least resistance to avoid criticism.

Conclusion

Respect for parental authority and developing patient autonomy in the pediatric context is complex. Maturity and foresight develop with age and experience, along a continuum; capacity does not simply appear at 18 years, the arbitrary age of majority. This proposal challenges historically preconceived notions surrounding a minor's ability to make medical decisions about vaccinations yet aligns with and expands upon current exceptions to limitations on adolescent decision making. Minors from age 12 onwards should be allowed to consent to their own COVID-19 vaccinations if there

is parental or guardian refusal. Although this paper limited this ethical discussion to the COVID-19 vaccine, the ethical and public health concerns addressed here are not restricted to these vaccines. By taking the step to allow minor consent for the COVID-19 vaccines, this could be an important step forward in promoting individual and public health while recognizing developing adolescent autonomy and fostering change in this current post-pandemic and in the future. While acknowledging potential counterarguments, it is ethically important and beneficial to give this right to minors. At the end of the day, it's worth a shot.

Note

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References

- A. Whelan, "Lower the Age of Consent: Pushing Back Against the Anti-Vaccine Movement," *Journal of Law, Medicine and Ethics* 44, no. 3 (2016): 462–473.
- 2. See Whelan, supra note 1.
- 3. A. R. Hinman, W. A. Orenstein, and A. Schuchat, "Vaccine-Preventable Diseases, Immunizations, and MMWR-1961-2011," Morbidity and Mortality Weekly Report Supplements 60, no. 4 (2011): 49-57.
- D. Schlenoff, What are the 10 Greatest Inventions of Our Time? (2013), Scientific American, available at https://www.scientificamerican.com/article/inventions-what-are-the-10-greatest-of-our-time/> (last visited November 28, 2024).
- Society for Adolescent Health and Medicine, "Adolescent Consent for Vaccination: A Position Paper of the Society for Adolescent Health and Medicine," *Journal of Adolescent Health* 53 (2013): 550–553; J. Little, "25 million teens missing recommended vaccines," *American Academy of Pediatrics News* 17, no. 3 (2000): 81.
- Centers for Disease Control and Prevention, "National and State Vaccination Coverage Among Children Aged 19-35 Months — United States, 2010," Morbidity and Mortality Weekly Report 60 (2011): 1157-1163; Centers for Disease Control and Prevention, "National and State Vaccination Coverage Among Adolescents Aged 13 through 17 Years – United States, 2011," Morbidity and Mortality Weekly Report 61 (2012): 671-677.
- See id, "National and State Vaccination Coverage Among Adolescents Aged 13 through 17 Years United States, 2011."
- 8. Centers for Disease Control and Prevention, COVID-19 Vaccinations in the United States (March 2023), available at https://covid.cdc.gov/covid-data-tracker/#vaccinations_vacc-total-admin-rate-pop12> (last visited April 19, 2024).
- 9. American Academy of Pediatrics, Children and COVID-19 Vaccination Trends (March 2023), available at https://www.aap.org/en/pages/2019-novel-coronavirus-covid-19-infections/children-and-covid-19-vaccination-trends/> (last visited April 19, 2024).
- G. Sparks, A. Kirzinger, L. Hamel, M. Stokes, A. Montero, and M. Brodie, KFF COVID-19 Vaccine Monitor: February 2022 (March 2022), available at https://www.kff.org/coronavirus-covid-19/poll-finding/kff-covid-19-vaccine-monitor-february-2022/ (last visited April 19, 2024).
- AMA Code, "AMA Code of Medical Ethics' Opinion on Adolescent Care," AMA Journal of Ethics: Virtual Mentor 16, no. 11 (2014): 901–902; A. L. Katz, S. A. Webb, and the Committee

- on Bioethics, "Informed Consent in Decision-Making in Pediatric Practice," *Pediatrics* 138, no. 2 (2016): e20161484.
- M. Moon, "Adolescents' Right to Consent to Reproductive Medical Care: Balancing Respect for Families with Public Health Goals," AMA Journal of Ethics: Medicine and Society 14, no. 10 (2012): 805–808.
- S. Agrawal and S. Morain, "Who Calls the Shots? The Ethics of Adolescent Self-Consent for HPV Vaccination," *Journal of Medical Ethics* 44, no. 8 (2018): 531–535.
- 14. Council of the District of Columbia, D.C. Law 23-193:

 Minor Consent for Vaccination Amendment Act of 2020
 (December 2020), available at https://code.dccouncil.gov/us/dc/council/laws/23-193#:~:text=%22(a)%20A%20minor%2C,accordance%20with%20ACIP's%20recommended%20immunization> (last visited April 19, 2024).
- L. Eggertson, "Lancet Retracts 12-Year-Old Article Linking Autism to MMR Vaccines," Canadian Medical Association Journal 182, no. 4 (2010): E199-E200.
- 16. See A. Whelan, supra note 1.
- 17. See L. Eggertson, supra note 15.
- P. Hotez, "COVID Vaccines: Time to Confront Anti-Vax Aggression," Nature 592, no. 7856 (2021): 661.
- A. McVean, 40 Years of Human Experimentation in America, McGill Office for Science and Society (January 2019), available at https://www.mcgill.ca/oss/article/history/40-years-human-experimentation-america-tuskegee-study (last visited November 28, 2024).
- E. J. Emanuel, C. C. Grady, R. A. Crouch, R. K. Lie, F. G. Miller, and D. D. Wendler, eds., *The Oxford Textbook of Clinical Research Ethics* (New York: Oxford University Press, 2008): at 80–85.
- 21. B. Lovelace Jr, Biden's next fight: Anti-vaxxers jeopar-dize plans to protect U.S. against Covid (February 2021), CNBC: Health and Science, available at https://www.cnbc.com/2021/02/10/biden-covid-vaccine-anti-vaxxers-us.html (last visited April 19, 2024); I. Ahmed, "Dismantling the Anti-Vaxx Industry," Nature Medicine 27 (2021): 366.
- 22. D. Thompson, "Millions are Saying No to the Vaccines. What Are They Thinking?" (May 2021), The Atlantic, available at https://www.theatlantic.com/ideas/archive/2021/05/the-people-who-wont-get-the-vaccine/618765/ (last visited April 19, 2024).
- S. Stecklow and A. Macaskill, "The ex-Pfizer scientist who became an "anti-vax" hero" (March 2021), Reuters, available at health-coronavirus-vaccines-skeptic/> (last visited April 19, 2024).
- 24. T. Burki, "The Online Anti-Vaccine Movement in the Age of COVID-19," *The Lancet: Digital Health* 2, no. 10 (2020): E504–E505.
- M. Austermuhle, D.C Activists Want Bowser to Veto Bill That Would Allow Minors to Consent to Vaccines (December 2020), NPR: WAMU 88.5, available at https://www.npr.org/local/305/2020/12/07/943882721/d-c-activists-want-bowser-to-veto-bill-that-would-allow-minors-to-consent-to-vaccines>(last visited April 19, 2024).
- 26. Ohio Young Physician Section, Resolution 1(A19): Model Legislation for "Mature Minor" Consent to Vaccination (April 2019), AMA-YPS Reference Committee, available at https://www.ama-assn.org/system/files/2019-05/a19-yps-resolution-01.pdf> (last visited April 19, 2024); VaxTeen, Consent Laws by State (2020), available at https://www.vaxteen.org/consent-laws-by-state (last visited April 19, 2024).
- 27. Kaiser Family Foundation, State Parental Consent Laws for COVID-19 Vaccination, available at (last visited April 19, 2024).
- A. English, F. Shaw, M. McCauley, and D. Fishbein, "Legal Basis of Consent for Health Care and Vaccination," *Pediatrics* 121 (2008): S85–S87; R. S. Olick, Y.T. Yang, and J. Shaw, "Ado-

- lescent Consent to COVID-19 Vaccination: The Need for Law Reform," *Public Health Reports* 137, no. 1 (2022): 163-167, doi: 10.1177/00333549211048784, Epub 2021 Sep 21, PMID: 34546811; PMCID: PMC8721754.
- S. Maslyanskaya and E. Alderman, "Confidentiality and Consent in the Care of the Adolescent Patient," *Pediatrics in Review* 40, no. 10 (2019): 508–516.
- P. Alderson, "Competent Children? Minors' Consent to Health Care Treatment and Research," Social Science and Medicine 65, no. 11 (2007): 2272–2283.
- I. M. Hein, M. C. De Vries, P. W. Troost, G. Meynen, J. B. Van Goudoever, and R. J. L. Lindauer, "Informed Consent Instead of Assent is Appropriate in Children from Age of 12: Policy Implications of New Findings on Children's Competence to Consent to Clinical Research," BMC Medical Ethics 16, no. 1 (2015): 76.
- 32. See Society for Adolescent Health and Medicine, supra note 5.
- 33. See S. Agrawal and S. Morain, supra note 13.
- 34. World Health Organization, Considerations Regarding Consent in Vaccinating Children and Adolescents Between 6 and 17 Years Old (May 2014), available at https://www.who.int/publications/i/item/considerations-regarding-consent-in-vaccinating-children-and-adolescents-between-6-and-17-years-old (last visited April 19, 2024).
- See P. Alderson, supra note 30; L. K. Mihaly, N. A. Schapiro, and A. English, "From Human Papillomavirus to COVID-19: Adolescent Autonomy and Minor Consent for Vaccines," Journal of Pediatric Health Care 36, no. 6 (2022): 607-610, doi: 10.1016/j.pedhc.2022.06.007, Epub 2022 Aug 6, PMID: 35941049; PMCID: PMC9356615.
- G. D. Zimet, R. D. Silverman, R. A. Bednarczyk, and A. English, "Adolescent Consent for Human Papillomavirus Vaccine: Ethical, Legal and Practical Considerations," *The Journal of Pediatrics* 231 (2021): 24–30.
- 37. Centers for Disease Control and Prevention, Vaccine Safety Dataline (October 2022), available at https://www.cdc.gov/vaccinesafety/ensuringsafety/monitoring/vsd/index.html (last visited April 19, 2024); J. M. Glanz, S. R. Newcomer, M. L. Jackson, S. B. Omer, R. A. Bednarczyk, J. A. Shoup, and M. F. Daley, White Paper on Studying the Safety of the Childhood Immunization Schedule (2014), CDC: Vaccine Safety Datalink, available at https://www.cdc.gov/vaccinesafety/pdf/WhitePaperSafety_WEB.pdf (April 19, 2024).
- 38. R. Giffith, "What is the Gillick Competence?" *Human Vaccines and Immunotherapy* 12, no. 1 (2016): 244–247.
- 39. See S. Agrawal and S. Morain, supra note 13.
- 40. P. A. Offit, Deadly Choices: How the Anti-Vaccine Movement Threatens Us All (New York: Basic Books, 2011).
- E. K. Stokes, L. D. Zambrano, K. N. Anderson, E. P. Marder, K. M. Raz, S. E. B. Felix, Y. Tie, and K. E. Fullerton, "Coronavirus Disease 2019 Case Surveillance United States, January 22—May 30, 2020," Morbidity and Mortality Weekly Report 69, no. 24 (2020): 759–765; N. Williams, T. Radia, K. Harman, P. Agrawal, J. Cook, and A. Gupta, "COVID-19 Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Infection in Children and Adolescents: A Systematic Review of Critically Unwell Children and the Association With Underlying Comorbidities," European Journal of Pediatrics 180 (2021): 689–697; Centers for Disease Control and Prevention, Information for Pediatric Healthcare Providers, available at https://www.cdc.gov/coronavirus/2019-ncov/hcp/pediatric-hcp.html> (last visited April 19, 2024).
- 42. R. Assaker, A. E. Colas, F. Julien-Marsollier, B. Bruneau, L. Marsac, B. Greff, N. Tri, C. Fait, C. Brasher, and S. Dahmani, "Presenting Symptoms of COVID-19 in Children: A Meta-Analysis of Published Studies," *British Journal of Anaesthesia* 125, no. 3 (2020): e330–e332; J. Poline, J. Gaschignard, C. Leblanc, F. Madhi, E. Foucaud, E. Nattes, A. Faye, S. Bonacorsi, P. Mariani, E. Varon, M. Smati-Lafarge, M. Caseris, R. Basmaci, N. Lachaume, and N. Ouldali, "Systematic Severe Acute Respiratory Syndrome Coronavirus 2 Screening at

- Hospital Admission in Children: A French Prospective Multicenter Study," *Clinical Infectious Diseases* 72, no. 12 (2021): 2215–2217.
- E. Leidman, L. M. Duca, J. D. Omura, K. Proia, J. W. Stephens, and E. K. Sauber-Schatz, "COVID-19 Trends Among Persons Aged 0-24 Years United States, March 1 December 12, 2020," Morbidity and Mortality Weekly Report 70, no. 3 (2021): 88–94.
- L. Kim, S. Garg, A. O'Halloran, M. Whitaker, H. Pham, E. J. Anderson, I. Armistead, N. M. Bennett, L. Billing, K. Como-Sabetti, M. Hill, S. Kim, M. L. Monroe, A. Muse, A. L. Reingold, W. Schaffner, M. Sutton, H. K. Talbot, S. M. Torres, K. Yousey-Hindes, R. Holstein, C. Cummings, L. Brammer, A. J. Hall, A. M. Fry, and G. E. Langley, "Risk Factors for Intensive Care Unit Admission and In-hospital Mortality among Hospitalized Adults Identified through the U.S. Coronavirus Disease 2019 (COVID-19)-Associated Hospitalization Surveillance Network (COVID-NET)," Clinical Infectious Diseases 72, no. 9 (2021): e206-e214; L. Kim, M. Whitaker, A. O'Halloran, and the COVID_NET Surveillance Team, "Hospitalization Rates and Characteristics of Children Aged <18 Years Hospitalized with Laboratory-Confirmed COVID-19-COVID-NET, 14 States, March 1-July 25, 2020," Morbidity and Mortality Weekly Report 69, no. 32 (2020): 1081-1088.
- 45. G. Zimet, S. M. Perkins, L. A. Sturm, R. M. Bair, B. E. Juliar, and R. M. Mays, "Predictors of STI Vaccine Acceptability Among Parents and their Adolescent Children," *Journal of Adolescent Health* 37, no. 3 (2005): 179–186.
- 46. D. Remnick, When Parents Forbid the COVID Vaccine (June 2021), The New Yorker, available at https://www.newyorker.com/news/q-and-a/when-parents-forbid-the-covid-vaccine>(last visited April 19, 2024).
- R. Patryn and A. Zagaja, "Vaccinations Between Free Will and Coercion," Human Vaccines and Immunotherapeutics 12, no. 8 (2016): 2204–2205.
- F. Wood, L. Morris, M. Davies, and G. Elwyn, "What Constitutes Consent When Parents and Daughters Have Different Views About Having the HPV Vaccine: Qualitative Interviews with Stakeholders," *Journal of Medical Ethics* 37, no. 8 (2011): 466–471
- 49. See S. Agrawal and S. Morain, supra note 13.
- 50. See P. Alderson, supra note 30.
- L. Morgan, J. L. Schwartz, and D. A. Sisti, "COVID-19 Vaccination of Minors without Parental Consent," *JAMA Pediatrics* 175, no. 10 (2021): 995–996; J. R. Delgado and L.N. Mansfield, et al., "Adolescent Self-Consent for COVID-19 Vaccination: Views of Healthcare Workers and Their Adolescent Children on Vaccination Autonomy," *Journal of Adolescent Health* 72, no. 5 (2023): 674-681, doi: 10.1016/j.jadohealth.2022.12.018, Epub 2023 Feb 10, PMID: 36775750; PMCID: PMC9916604...
- 52. See F. Wood et al., supra note 48.
- A. B. Jena, D. P. Goldman, and S. A. Seabury, "Incidence of Sexually Transmitted Infections After Human Papillomavirus Vaccination Among Adolescent Females," *Journal of Ameri*can Medical Association Internal Medicine 175, no. 4 (2015): 617–623.
- 54. E. V. Kliewer, S. M. Mahmud, A. A. Demers, and P. Lambert, "Human Papillomavirus Vaccination and Pap Testing Profile in Manitoba, Canada," Vaccine 32, no. 1 (2013): 33–38; N. C. Liddon, J. S. Leichliter, and L. E. Markowitz, "Human Papillomavirus Vaccine and Sexual Behavior Among Adolescent and Young Women," American Journal of Preventative Medicine 42, no. 1 (2012): 44–52; L. Sadler, S. A. Roberts, G. Hampal, D. McManus, D. Mandal, and L. Brabin, "Comparing Risk Behaviors of Human Papillomavirus-Vaccinated and Non-Vaccinated Women," Journal of Family Planning and Reproductive Health Care 41, no. 4 (2015): 255–258.

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