Operational Considerations on the American Academy of Pediatrics Guidance for K-12 School Reentry

There is general consensus among experts that K-12 schools should aim to reopen for in-person classes during the 2020-2021 school year. Globally, children constitute a low proportion of coronavirus disease 2019 (COVID-19) cases and are far less likely than adults to experience serious illness. Yet, prolonged school closure can exacerbate socioeconomic disparities, amplify existing educational inequalities, and aggregate food insecurity, domestic violence, and mental health disorders. The American Academy of Pediatrics (AAP) recently published its guidance on K-12 school reentry. However, as many school districts face budgetary constraints, schools must evaluate their options and identify measures that are particularly important and feasible for their communities.

We suggest that school districts engage key stakeholders to establish a COVID-19 task force, composed of the superintendent, members of the school board, teachers, parents, and health care professionals to develop policies and procedures. To implement and evaluate specific measures, the task force should create and oversee a command center for the school district, composed of data analysts and health experts who can liaise with the local health department. Working with the local health department, school districts can provide educational materials and training for students, parents, and school staff on the basics of COVID-19 prevention, applicable to both when children are in school and when they are not in school. School staff will need to be trained in screening for symptoms of COVID-19. Because fever and cough are the most commonly reported symptoms in children, staff should be provided with thermometers and instructed in their proper use.

The AAP guidance emphasizes the importance of physical distancing, while acknowledging that strict adherence may limit academic and social learning outcomes in some cases. Six ft is commonly recommended, but evidence suggests that 3 ft, with face coverings, may achieve similar benefits as 6 ft. School districts can compute the number of circular zones with 3- to 6-ft radii that may be created in each school and thus determine whether teaching spaces are sufficient to allow for proper physical distancing between students. If existing indoor spaces are inadequate, temporary modular buildings may be needed. Costs of these structures range from $40 to $100 per square foot. Physical distancing measures apply to school buses as well. Students should be assigned seats on buses, and school districts will need to assess the need to expand their fleet of buses or develop different pickup schedules. Students taking public transportation should use face coverings.

In terms of protective equipment, schools will need to have a steady supply of hand sanitizer for students and staff each day. In districts where families cannot afford face coverings, schools will need to provide them; they can take the form of disposable surgical masks, reusable cloth masks, or reusable face shields. Disposable masks cost between $0.50 to $1 each and can be used over the course of a day. Cloth masks should be regularly washed between uses. Face shields cost between $5 to $10 and can be used as long as they maintain their shape and remain intact. The decision of which option to adopt and stock will depend on the number of students and the school’s budget. Transparent barriers placed on the sides of students’ desks can further limit the spread of respiratory droplets. Costs of transparent barriers range from $100 to $200 per desk. As the AAP guidance suggests, teachers who must work closely with students with special needs or with students who are unable to wear masks should wear N95 masks if possible or wear face shields in addition to surgical masks. Schools will also need to consider the expenditure of increasing disinfection efforts of all teaching spaces, common areas, and high-touch surfaces such as door knobs, computers, and desks.

The AAP also recommends creating fixed cohorts of students and teachers to limit exposure of students to teachers and students to each other. Fixed cohorts can use the same classrooms consistently and stagger their lunch periods to reduce density of students in the cafeteria. Moreover, if a school’s available teaching spaces are inadequate to accommodate physical distancing for every student, fixed cohorts can facilitate alternate scheduling plans, for example, having different cohorts come on alternate days or alternate times of the day. These scheduling strategies may call for modifications in teaching methods to include more home learning components (such as flipped classroom approaches). However, fixed student-teacher cohorts may require additional teaching staff.

The AAP guidance states the importance of identifying symptoms and signs concerning for COVID-19 but does not discuss operational approaches in depth. To address this, we recommend that schools implement multilevel screening for students and staff. Each morning, parents should report (via an online interface or by an automated telephone-based program) any fever or symptoms concerning for COVID-19 to the school or school district; students with symptoms should stay home. When students arrive at school each day, school staff should also record their temperatures and any alarming symptoms. We urge school districts to link student and staff identification numbers with a central database for rapid identification of...
individuals in need of monitoring. Students who develop symptoms at school are to be immediately isolated until an authorized adult can transport them home or to a health care facility for testing and/or treatment. We also recommend that schools limit the access to school grounds to 1 or 2 entry points. Schools may consider expanding the role of a school nurse or hiring additional personnel to screen and brief school visitors on disease precautions while on school grounds.

The AAP guidance does not include how schools can approach testing for the virus. To this end, we recommend a 3-pronged testing approach, which can be carried out in collaboration with local hospitals. (1) All students with symptoms should be tested. (2) Schools should devise a schedule to randomly select a proportion of students and staff for COVID-19 testing to identify asymptomatic individuals; a pooled testing strategy can significantly reduce costs.8 (3) Students from high-risk households (eg, those residing in zip codes with socioeconomic challenges) should be offered more frequent testing. Costs for individual tests currently vary between $50 to $200 per person.

Even with all the precautions in place, COVID-19 outbreaks within schools are still likely. Therefore, schools will need to remain flexible and consider temporary closures if there is an outbreak involving multiple students and/or staff and be ready to transition to online education. As such, school districts need to invest in developing or acquiring online education platforms and train teaching staff in switching seamlessly from in-person teaching to online education platforms. Schools will need to ensure equitable implementation of online education among students, especially those with limited knowledge of or access to technological resources and consider subsidizing educational technologies for these students. Additional challenges faced by students with learning disabilities can be assessed on an individualized basis, and schools should attempt to provide special education services when appropriate (and in-person, if necessary).

Finally, schools should consider hiring additional nurses, psychologists, or social workers (or sourcing them through partnerships with local health care facilities) not only to assist with screening and managing potential COVID-19 cases but also to provide more support for students and any staff members with emotional or psychiatric concerns.

In summary, to maximize health and educational outcomes, school districts should adopt some or all of the measures on the AAP guidance and prioritize them after considering local COVID-19 incidence, key stakeholder input, and budgetary constraints. Given the increased costs of preparing and operating schools, public schools will require additional funding from the state or the federal government, whereas private schools may need to temporarily increase tuition or seek some assistance from the government. If these are not attainable, schools will need more time to prepare to ensure the safety of students and staff.

ARTICLE INFORMATION
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REFERENCES