Impact of rapid diagnostic testing on school closures

Nov 22, 2021
Research Objectives

The primary question examined in this review was:

- What evidence exists on rapid diagnostic testing (RDT) for COVID as a tool to limit school closures?

This rapid research synthesis was conducted between Nov 6-21, 2021.
Methods

• A comprehensive search was conducted by an information specialist on Nov 6-8, 2021 to retrieve studies published from Jan 1, 2020 until search date

• Databases searched: Medline, Embase, Web of Science Core Collection

• A targeted grey literature search was also conducted
Results

- 1568 unique published articles were found in the peer reviewed data sets; a number of additional studies were found through review of reference lists, and carried over from previous work
- Screening by title and abstract kept 3 modeling studies and 11 empirical studies
- These papers came from six countries
- Five public members provided responses to a short questionnaire
Key messages

- RDT may be a useful tool for limiting transmission of Covid-19 in schools and more limited interventions such as Test-to-Stay may be particularly worth further study with respect to impact on school closures.

- School RDT as reported in the literature tends to take place on site, using trained staff members rather than health care professionals, which adds burden to those in schools and thus in practice pose practical challenges.

- Access to RDT for at home testing may be a practical approach but this shifts burden to families; there have been no studies on the cost-effectiveness of this approach at home and there may also be equity implications.
Implementation considerations

- RDT for COVID-19 may well be a useful tool to limit school closures but the precise contribution of RDT amongst other public health measures is not yet known.
- Studies reviewed were mostly positive about RDT in schools, as were public members.
- Rather than widespread administration, it is likely that a more nuanced approach focusing in places where there is high prevalence and/or specific uses such as for field trips or with more vulnerable student groups will be most fruitful.
Key Gaps

• More work is needed to tease out the precise contribution of RDT for limiting school closures relative to other common public health measures
Emerging evidence

• Based on limited evidence from the literature as well as input from members of the public, an argument can be made for the benefits of RDT for use in schools K-12 as one tool in the public health toolkit.

• Specific application is likely best contextualized and informed through public engagement noting potential challenges in terms of burden on school staff and equity concerns for take home kits.
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