

Caregiver perceptions of in-home COVID-19 testing for children with medical complexity: A qualitative study

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Research has shown that **in-home direct antigen rapid testing (DART)** has helped increase access to testing and reduce viral spread within the adult population. Nevertheless, there is a lack of research studying perceptions of DART use among children with multiple medical conditions. These children are more vulnerable to severe COVID-19 symptoms, hospitalization, and death. This research studied the benefits, limitations, and caregiver's perceptions of in-home COVID-19 DART use.

WHERE

Pediatric Complex Care Program (PCCP) at the University of Wisconsin



WHEN

May to August 2021



WHO

20 caregivers of children with medical complexities (aged 5-16 yrs old)



THE POPULATION

Caregivers who lived in Wisconsin, spoke English, and had a device with internet access.



Caregivers with children who attended school in-person before the pandemic.

Caregivers of children with medical complexity in the PCCP. Children with medical complexity in the PCCP:

- Have 10 or more annual clinic visits or 5 or more annual hospital days
- See 3 or more specialists
- Have 3 or more organ systems affected by chronic disease

80% of caregivers had children with neurologic conditions.

60% of caregivers had children who used home oxygen.

55% of the caregivers' children were assigned male at birth.

KEY FINDINGS

Caregivers' main reasons to test their child:

1. Get early treatment after a positive test
2. Let the school know it's safe for the child to attend



Caregivers' main reasons not to test their child:

1. Child could still get COVID-19 later
2. Need for officials to reach out to close contacts

Four themes to describe caregivers' thoughts on in-home DART:

1. Opinions of sample ranged from benign to traumatic.
2. Perceptions of in-home DART ranged from simple to complex.
3. Access to in-home DART increased peace of mind
4. Test results have implications for children

WHAT HAPPENED

Researchers trained caregivers how to use the BinaxNOW Rapid Antigen Self-Test.



Caregivers administered the BinaxNOW test twice per week for 3 months.

Researchers held 60-minute interviews with caregivers and asked about their perceptions of in-home COVID-19 testing.

Caregivers completed a survey that asked about their motivations for testing.

CONCLUSIONS/ RECOMMENDATIONS

Although research on in-home **direct antigen rapid testing (DART)** with children with medical complexity is limited, the results of this study align with existing research on healthy adults. Invasiveness, ease of administration, and cost contribute to perceptions of testing. Additionally, in-home DART gave most participants peace of mind. However, because many people with medical complexities have experienced some form of medical trauma, it is important to acknowledge, empathize, and troubleshoot strategies to avoid a traumatic response to testing. Additionally, test kit designs and instructions, along with public health messaging, need to account for this population of high-risk individuals for whom in-home DART may be more challenging. Finally, future research should explore ways to safely leverage DART in order to support safe school attendance and to reduce burden on caregivers of children with medical complexities.



This summary was performed in January 2023. This summary includes only the results of a single study. Other studies may find different results. The study was supported by the NIH RADx® Underserved Populations (RADx-UP) initiative.

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