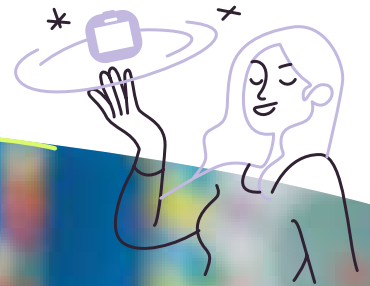




# The guide to a **successful** **school-based** **virtual care program**



# Foreword

This guide is the product of extensive dialogue with leading experts in school health across the United States. We've had the privilege of learning from those who manage and innovate school-based healthcare programs nationwide. These insights were further enriched through our 2024 School Health Virtual Summit, where we welcomed industry experts:



**Dr. John Jenkins**  
Medical Director  
School-Based Care



**Sam McGinnis**  
Administrative Director



**Patsy Fisher**  
Senior Manager,  
School-Based Virtual Care



**Sheila Freed**  
Director School Health



**Tamara Perry**  
Senior Director of  
Virtual Health Operations



**Lindsey Gardner**  
Manager of Clinical Services



During the summit, attended by over 400 professionals, we delved into the challenges and opportunities within school-based virtual care. This guide draws from those discussions and other conversations we've had with leaders in the field. It is not only a collection of best practices, but a comprehensive roadmap informed by those who understand the unique needs and realities of school health programs. These practical, real-world learnings aim to help you create effective, sustainable telehealth initiatives that truly make a difference for students and their communities.

# Telehealth: The future of school healthcare

Over the past several decades, school-based healthcare has become central to the wellbeing of American schoolchildren. This is especially true in rural or underserved communities, where every day tens of thousands of students are provided with healthcare opportunities through their schools which they would otherwise struggle to access.

Between 1998 and 2017 alone, the number of such programs more than doubled from 1,135 to 2,584 – representing 6.3 million students across 10,629 schools nationwide.<sup>1</sup> Since then, that number has only continued to grow.

Between 1998 and 2017 alone, the number of school programs more than doubled from **1,135 to 2,584** – representing **6.3 million students across 10,629 schools nationwide**.<sup>1</sup>

But despite these great strides, there are still many limitations to school-based healthcare. For example, even today, only 40% of schools have full-time nurses, while 25% have none at all<sup>2</sup>. Unsurprisingly, these shortages of available, qualified medical staff disproportionately impact disadvantaged and more isolated communities.

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In some of our schools, our school nurses are stretched very, very thin. Our school nurses struggle to be there 2 days a week in our schools.

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**Dr. John Jenkins**  
Medical Director School-Based  
Care, Cone Health

Only **40%** of schools have full-time nurses, while **25%** have none at all.<sup>2</sup>

Increasingly, schools are turning to telehealth programs to overcome these gaps, in line with a broader, nationwide adoption of telehealth. Between 2019 and 2021, the number of telehealth claims rose exponentially: from representing less than 0.1% of all healthcare claims, to 5%. This dramatic rise was driven largely by the COVID-19 epidemic and the significant regulation changes it catalyzed – particularly the decision by Centers for Medicare & Medicaid Services (CMS) to provide full reimbursements for telehealth services, comparable to in-person visits, as face-to-face was often difficult or impossible. Other factors also played a part, including the increased availability of the technology, and the fact that the general public was more familiar with – and therefore open to – the idea of telehealth.

Healthcare providers can create effective and sustainable telehealth programs that **truly benefit** their schools and the students they serve.

More fundamentally, this shift is occurring because for many Americans, telehealth offers a more accessible and convenient alternative to clinic-based care. This need for more efficient, convenient and immediately-accessible healthcare is at least as true for school healthcare as it is for private households – perhaps more so given the larger number of potential patients at schools compared to an average household.

But as with any innovation or new technology, despite all the benefits, the road to implementing such a program is not always smooth. To ensure the success of a school telehealth program, healthcare providers must approach implementation with a clear plan of action. In this guide, we'll be outlining just such a strategy, as well as highlighting the potential pitfalls and how to avoid them – so healthcare providers can create effective and sustainable telehealth programs that truly benefit their schools and the students they serve.

<sup>1</sup> Source: <https://www.healthaffairs.org/doi/10.1377/hlthaff.2018.05472>

<sup>2</sup> Source: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC9035352/>

# The 6 main benefits of school telehealth programs

Incorporating telehealth programs in schools offers numerous advantages, not only for pupils but also for schools and healthcare staff, as well as the wider community. In all, we've highlighted six key ways everyone benefits from school telehealth programs:



## 1 Decreased absenteeism

One of the most immediate benefits of school telehealth programs is a reduction in student absenteeism – an urgent priority for schools nationwide. In 2022, one-third of all students were chronically absent from school; while that could be partially attributed to COVID, the following year saw no drop in absenteeism, indicating a wider problem. While numerous factors contribute to this trend, early dismissals for health reasons is a major contributor.

In 2022, one-third of all students were chronically absent from school.

Telehealth services can help bring down that number, by empowering schools to address minor health issues promptly, without the need for students to leave school either due to misdiagnosis or a lack of capacity to deal with a potentially sick child in the first place. Some school telehealth providers have reported a return-to-class rate as high as 90%.<sup>3</sup>

**89%** of students returned to school once checked with TytoCare

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"With our telemedicine program, we're able to really see the student, to listen to the heart and lungs, and look in the throat. Our average return to class rate is 90%."

”



**Sheila Freed**  
Director School Health  
Avel eCare



## 2 Improved behavioral health

Telehealth services can extend beyond physical health to encompass behavioral and mental health support, helping students struggling with anxiety, depression, or other behavioral issues to receive timely counseling and intervention. Early detection and treatment of behavioral health issues reduce classroom disruptions and create a more conducive learning environment. This benefits not only the students who struggle with these conditions, but also the entire class – whose studies will be less disrupted – and by extension the school at large.

This is particularly true when considering that behavioral health problems usually require regular, long-term treatment. By providing the opportunity for that treatment to be given at school, in many cases a patient will miss a single lesson rather than a half or full day of school for treatment that would take place off-campus and require travel time.

Moreover, young children in particular are more likely to experience behavioral issues when they feel physically unwell – so a child who is sent back to class or left untreated, despite being genuinely unwell, is more likely to be disruptive. By addressing both behavioral and physical health promptly via telehealth, schools can foster a supportive atmosphere that promotes better mental health and emotional well-being among students, and minimizes classroom disruptions and disciplinary problems.

Early detection and treatment of behavioral health issues reduce classroom disruptions and create a more conducive learning environment.



## 3 Higher academic performance

Aside from behavioral and emotional health, poor physical health can also directly impact the behavior and performance of students. Numerous studies have shown that even the common cold can negatively impact mood, alertness, working memory, and overall brain performance – even with minor symptoms.<sup>4</sup> A sick child who remains in class due to a lack of resources or on-site nurses to examine them is more likely to be disruptive and infect other children. Moreover, failure to address symptoms early can result in a more severe illness, causing the child to ultimately miss more school once they are finally diagnosed.

By contrast, when students have access to consistent and immediate healthcare, their overall well-being improves, directly influencing their academic performance. Healthy students are more attentive, engaged, and capable of performing well in their studies, while reduced absenteeism and fewer behavioral issues mean that students spend more time in the classroom, benefiting from continuous instruction. Furthermore, addressing health issues quickly prevents prolonged absences, ensuring that students do not fall behind in their work.

Even the common cold can negatively impact mood, alertness, working memory, and overall brain performance – even with minor symptoms.<sup>4</sup>

<sup>4</sup> Source: <https://www.sciencedirect.com/science/article/abs/pii/S0889159112001547>

And: <https://pubmed.ncbi.nlm.nih.gov/11134688/>



## 4 Cost savings

Telehealth programs can result in significant cost savings for families, schools, and healthcare providers alike.

Families can benefit financially from telehealth in several ways, depending on their medical coverage and socio-economic status. For example, parents whose children are not covered by Medicaid can avoid costly emergency room visits. But even parents whose children are covered by Medicaid can benefit from cost savings. Such families are often lower-income, and parents are more likely to work in jobs that don't grant paid medical leave for children - avoiding even one day of unnecessary unpaid leave is a major benefit. Additionally, early intervention through telehealth can prevent minor issues from escalating into more severe and expensive health problems, further driving down costs.

For schools and healthcare providers, telehealth reduces the need for physical visits to a doctor or to the Emergency Department (ED), lowering costs and thereby reducing overheads. This economic benefit is particularly crucial for underfunded schools that need to allocate their resources judiciously.

Early intervention through telehealth can prevent minor issues from escalating into more severe and expensive health problems.

**4.3X** more schools covered with TytoCare with the same budget as prior to TytoCare implementation

“

Over time, we've seen a 32% reduction in avoidable ER visits with students who use our virtual care clinic. We estimate that to be over \$320,000 in savings to families.



**Sam McGinnis**  
Administrative Director,  
Atrium Health

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## 5 Trickle-down benefits within the community

Some of the more overlooked advantages of school telehealth programs extend beyond the school and benefit the wider community. In most of these cases, these benefits are particularly acute for disadvantaged neighborhoods.

### A. Reduced workday disruptions and time off for parents

With telehealth services, parents don't need to take time off work to take their children to medical appointments, or take care of them at home. This reduces the economic strain on families and supports parental job stability and productivity.

### B. Ensuring the supervision and safety of children

In many cases when children are sent home, their parents aren't available during the day – leaving them unsupervised for hours on end. This poses numerous safety risks, and can also contribute to a child's feelings of isolation. Even where parents can pay for a babysitter, this adds a financial burden – one which disproportionately harms low-income families. By reducing unnecessary early dismissals, telehealth programs prevent parents from having to choose between leaving their children unsupervised or paying for additional childcare they can't afford.

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### C. Providing children with an insight into wellness and healthcare

Telehealth programs can also serve as an educational tool, helping children to understand their own bodies, improve their personal wellbeing – and maybe even inspire future careers in medicine!

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It gives providers a break from in-person visits and long chronic visits. It helps parents from missing work. It helps with transportation issues.

”



**Lindsey Gardner**

Manager of Clinical Services  
Southern Indiana Community Health Care



## 6 Ensuring equal access to quality healthcare

Perhaps the most critical benefit of school telehealth programs is the ability to provide equal access to quality healthcare for all students, particularly those in underserved communities. Many children from low-income families or rural areas face significant barriers to accessing healthcare, with a growing number of areas designated as “healthcare deserts”. Some 30 million Americans today live at least a sixty-minute drive from a hospital with trauma care, while 80% of rural America is considered “medically underserved”.<sup>5</sup>

80% of rural America is considered “medically underserved.”

Telehealth bridges this gap by bringing medical services directly to schools, ensuring that every child, regardless of their background or socioeconomic status, has the opportunity to receive the necessary care.

**This commitment to health equity is not just a practical consideration but a moral imperative.** By ensuring that all children have access to quality healthcare, schools play a crucial role in promoting fairness and opportunity for every student. This benefit alone is a compelling reason for schools to adopt telehealth programs.

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<sup>5</sup> <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5292279/>

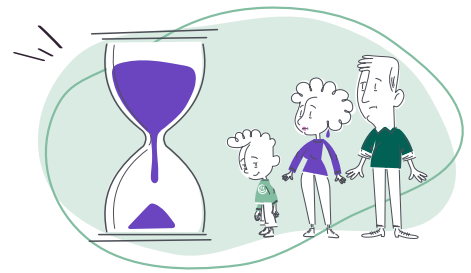


# The top 3 obstacles to a successful telehealth program – and how to avoid them

Despite the many advantages of telehealth programs, it can sometimes be challenging to implement them in practice – as with any new methodology or technology. Common pitfalls include inadequate infrastructure, insufficient training for staff, and a lack of engagement from students and parents. These issues can hinder the effectiveness of telehealth services and lead to disappointment among stakeholders.

Fortunately, none of these challenges are unique to telehealth programs, and there are some simple steps you can take to avoid them and ensure the success of your initiative.

## Obstacle #1: Slow or minimal adoption rates



Naturally, parents need to opt their children into a telehealth program – and sometimes this itself is the biggest challenge. But with such obvious benefits and no real downsides, why would parents hesitate to sign their children up?

Usually the reason is simply a communication issue. Parents might not be aware of the existence of such a program at all; or perhaps they heard about it but don't understand what it is or how to sign up. Maybe they have misconceptions about telehealth. Or, just as likely, they didn't know how to register, or became frustrated and gave up along the way.

**The solution** is to ensure you are getting clear, concise information in front of parents in the right way, at the right time. For example, work with school administrators to ensure any forms and other literature are delivered to parents together with other start-of-year forms – parents are much more likely to fill them out if they are already going through other, mandatory bureaucracy.

**Above all:** make it clear and simple! For many people, this will be their first experience with telehealth. Don't confuse or frustrate them with unnecessary information or bureaucracy. Emphasize the benefits and clearly delineate what they need to do.

## Obstacle #2: Technical issues



According to a recent study of telehealth nationwide, technical issues are one of the main causes of disappointment or frustration by patients. Specifically, 34% cited “issues with connectivity or technical problems such as audio, video, or interface issues for physicians.”<sup>6</sup> Typically, the reasons for telehealth devices not working are either due to poor internet connections (or areas with no coverage at all); or due to new unrecognized devices being blacklisted by IT teams.

The solution here is to get the school’s IT administrator involved as early as possible, before the implementation phase. Work with them to ensure adequate Wi-Fi coverage and have them whitelist your devices ahead of time. Some telehealth providers will give “ownership” of the devices to the school’s IT team, so they can handle firmware upgrades and other maintenance. This is a very wise approach and can avoid future problems by incorporating the technology into the school’s existing IT processes.

Another option – particularly in schools that lack basic IT infrastructure or are in remote areas with poor internet coverage – is to ensure telehealth operators have a backup remote hotspot available, and know how to activate it if necessary. This could be something as simple as using a smartphone for a local hotspot.

Incidentally, Wi-Fi coverage is another compelling reason to establish schools specifically as telehealth centers. Even in rural communities or other areas with poor internet coverage, schools tend to have more robust internet connections – making them the ideal place for children to access telehealth.

“

The IT at the schools actually owns the TytoCare devices and the Apple EID, so they can manage the updates and make sure that we're continuously whitelisted.

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**Dr. John Jenkins**

Medical Director School-Based Care,  
Cone Health

## **Obstacle #3:** **The technology itself doesn't meet the requirements**



Not all telehealth technologies are created equally. What often passes for “telehealth” is just a 2-way video call between the student and school healthcare worker, and a doctor. But in most cases, there is no way to diagnose a child over video alone. The doctor can’t check vital signs or even look inside a child’s throat or ear to check for an infection. So, in many cases, neither the school healthcare worker nor the doctor are any wiser after the visit, rendering it essentially useless.

A “true” telehealth solution must include remote examination tools that enable a doctor to provide an accurate diagnosis. Doctors need to be able to listen to heart and lung sounds, look into the ear canal and throat, measure blood pressure, blood oxygen levels, weight, and more. On the other hand, this equipment should be simple enough for a non-medical professional to confidently use, and mobile and convenient enough to be stored in a non-medical environment.

It’s also important to give parents or guardians the option of joining remotely, for a number of reasons. Firstly, many parents will feel more comfortable being “present” – even virtually – during a medical examination of their child. Providing this would increase trust in the program, and likely increase adoption rates. Moreover, for younger children, the presence of a parent will help to calm them, and can encourage them to participate more willingly.

# Launching a school telehealth program - Your 4-step checklist to success

Implementing a school telehealth program can seem like a daunting task, but with a clear roadmap it's very achievable. Here's a four-step checklist we've compiled, based on TytoCare's work with dozens of school healthcare providers, to guide you through the process of launching a successful school telehealth program.

## Step 1: Clearly define your goals

Before diving into the logistics, it's crucial to clarify the purpose of your telehealth program. What are your primary goals? Consider the benefits discussed earlier and determine which are most important to your school, parents, the wider community, and financial sponsors such as local government and NGOs. Common goals include:



Reduced absenteeism



Fewer early dismissals



Improved academic performance



Reduced behavioral issues



Financial savings



Improved access for underserved communities

All of these are worthy goals, but understanding which objectives are most important for your specific program will help ensure that it addresses the needs of all stakeholders.

## Step 2: Set expectations

Once you've identified your goals, formalize them by determining the specific metrics you'll use to measure success. This is vital for demonstrating the program's impact and securing ongoing support. Specifically, create a clear Memorandum of Understanding (MOU) that outlines these goals and metrics, setting expectations for all parties involved. Consider metrics like:



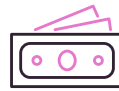
Attendance rates



Academic performance indicators



Behavioral health assessments



Cost savings for families and the school



Number of telehealth visits and follow-up appointments

By establishing clear, measurable objectives, you'll be able to track progress and make data-driven adjustments to improve the program.

## Step 3: Involve the right stakeholders at the right time

School telehealth programs touch on many different personal, medical, and legal areas, so successful implementation requires careful collaboration with various stakeholders. Here's a list of key groups to engage, and how to pitch the program to them:



**Local government:** Highlight the potential for improved public health outcomes and cost savings. Emphasize the program's ability to reduce healthcare disparities.



**Public health:** Stress the importance of accessible healthcare and preventive care for children.



**Social work:** Point out the holistic benefits for families, including reduced stress and improved family dynamics.



**Healthcare partners:** Highlight opportunities for collaboration and community impact.



**School district:** Focus on academic benefits, reduced absenteeism, and the program's alignment with educational goals.



**Behavioral health:** Discuss how the program can address mental health needs and reduce behavioral issues in schools.



**Parents/Guardians:** Emphasize convenience, reduced time off work, and better health outcomes for their children, while addressing any questions or doubts.



**Philanthropic partners:** Focus on the long-term benefits for the community and the opportunity to support an innovative, impactful program. Here in particular – as any fundraiser will tell you – deep, meaningful, and long-term relationships with potential donors are more likely to generate larger, more regular donations.

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"We have a Memorandum of Understanding with the county government, with the Health Department, and with the school system, that allow us to be delegated partners in delivering healthcare in the school, based upon our school nursing statutes."

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**Dr. John Jenkins**  
Medical Director School-Based Care,  
Cone Health

**Engaging these stakeholders early and effectively – and making a purposeful effort to maintain those relationships – ensures broad support and resources for your telehealth program not only at its launch but in the long-term.**

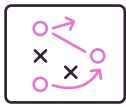
## Step 4: Secure buy-in from school nurses

School nurses are essential to the success of a telehealth program, and many will enthusiastically take part, being well aware of the benefits. But some might be skeptical about the new technology, fearing disruption or job displacement. To avoid resistance, it's important to take the time to address these concerns directly and preemptively.



### Highlight the benefits

Emphasize how telehealth can reduce their workload by handling minor issues remotely and allowing them to focus on more complex cases.



### Involvement in planning:

This is perhaps the most important. Be sure to involve nurses in the planning and adoption process, to ensure their insights and expertise shape the program. This will both help increase their understanding of the benefits, as well as giving them a sense of ownership – rather than being shunted aside in favor of technology.



### Education & training:

Provide comprehensive training on telehealth technology and demonstrate how it can enhance their work rather than replace it.



### Support & resources:

Ensure that nurses have the necessary support and resources to integrate telehealth smoothly into their routine.

By addressing their concerns and demonstrating the benefits, school nurses can become the strongest advocates for your program.

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"Sometimes our nurses are a medical island in a sea of education. We need to support those nurses so that we can keep them on-site, keep them doing what they're doing. Because they're saving those children's lives."



**Sheila Freed**

Director School Health,  
Avel eCare

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# Embracing the future: **Actualizing the promise of school telehealth**

Telehealth is undoubtedly the future of school healthcare. By embracing this innovative approach, schools can address gaps in healthcare access, reduce absenteeism, improve academic performance, and create a healthier, more equitable learning environment.

But as with any new technology, successful implementation requires a clear strategy, and a sober awareness of potential pitfalls such as technical issues, minimal adoption rates, and insufficient training, in order to prevent them in advance. By having a clear and well-defined plan, engaging the right stakeholders, and ensuring robust infrastructure, you can navigate these challenges effectively.

With careful planning and execution, the benefits of school telehealth programs are profound. From providing timely medical care and supporting mental health to reducing healthcare costs and enhancing educational outcomes, telehealth can transform the way we support our students. The future is bright, and with telehealth, schools can ensure that every child has access to the quality healthcare they deserve.

## **About TytoCare**

TytoCare is a virtual healthcare company that enables leading health plans and providers to deliver remote healthcare to the whole family through its Home Smart Clinic. Combining a cutting-edge, easy-to-use, FDA-cleared device with AI-powered guidance and diagnostic support, TytoCare's Home and Pro Smart Clinic solutions enable the whole family to conduct remote physical exams with a doctor, no matter where they are – at home, or in settings like school, the workplace, urgent care clinics, and more.

TytoCare serves over 250 major health systems and health plans in the U.S., Europe, Asia, Latin America, and the Middle East. For more information, visit us at [tytocare.com](https://www.tytocare.com).