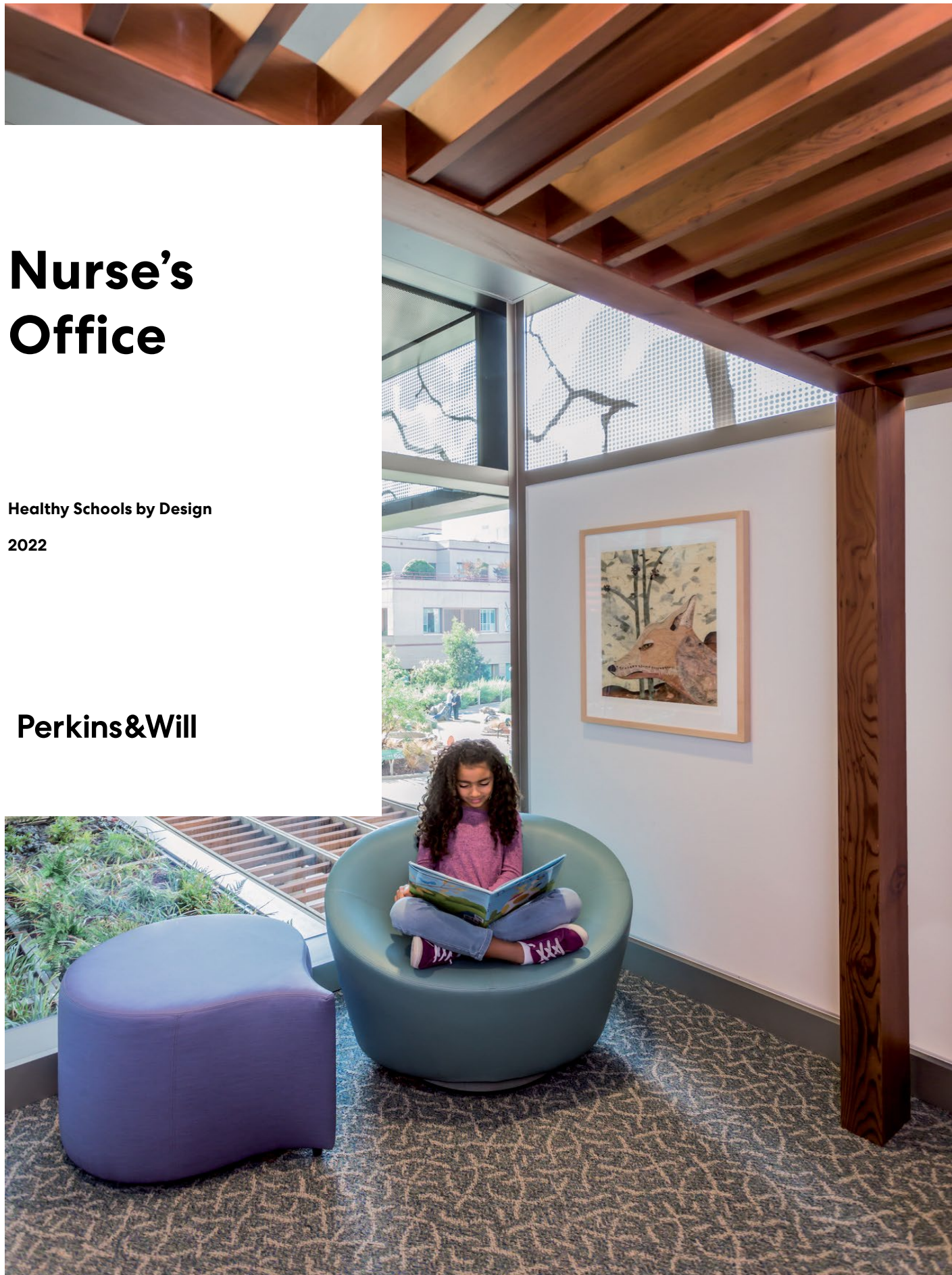


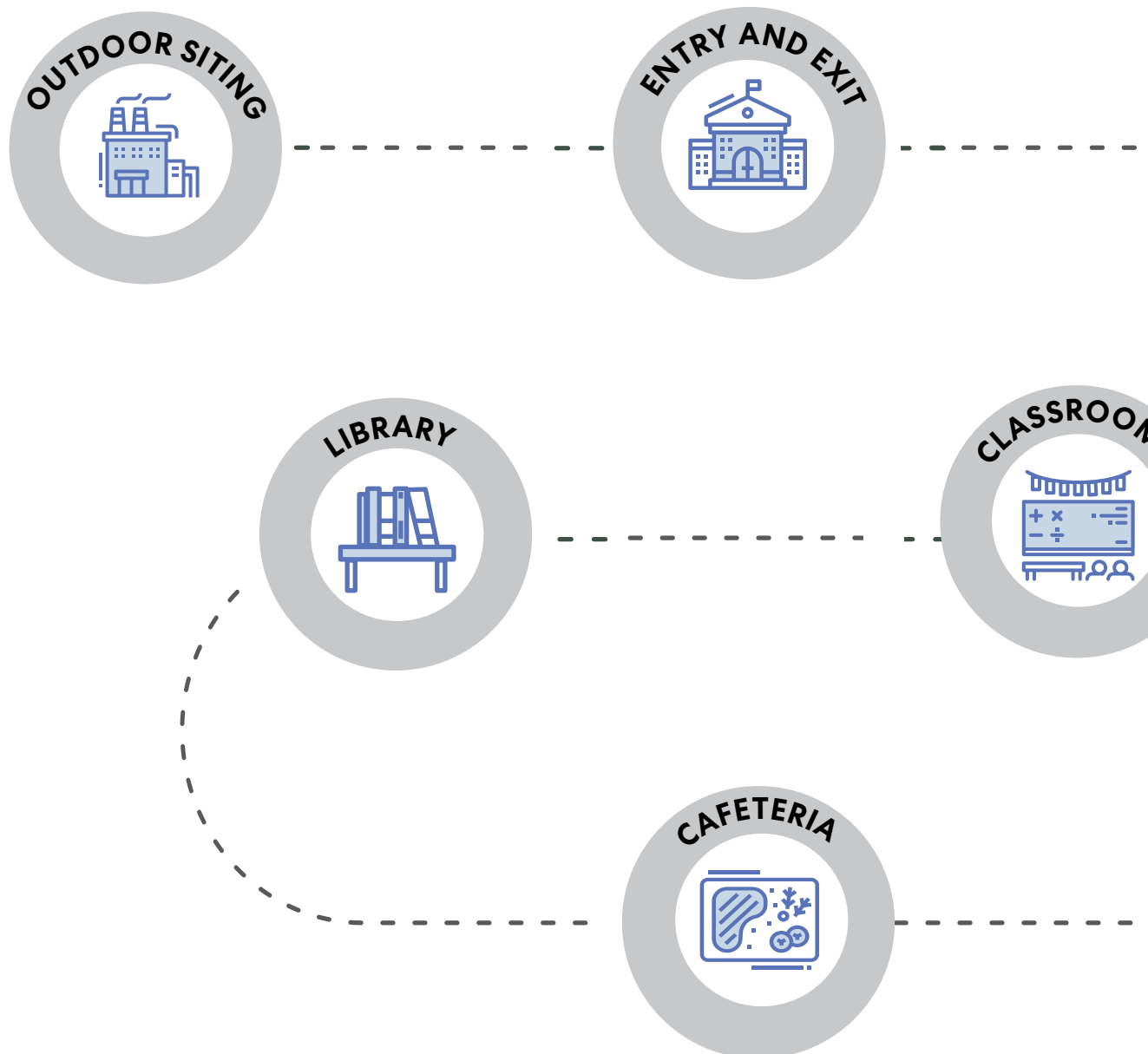
Nurse's Office

Healthy Schools by Design

2022

Perkins&Will





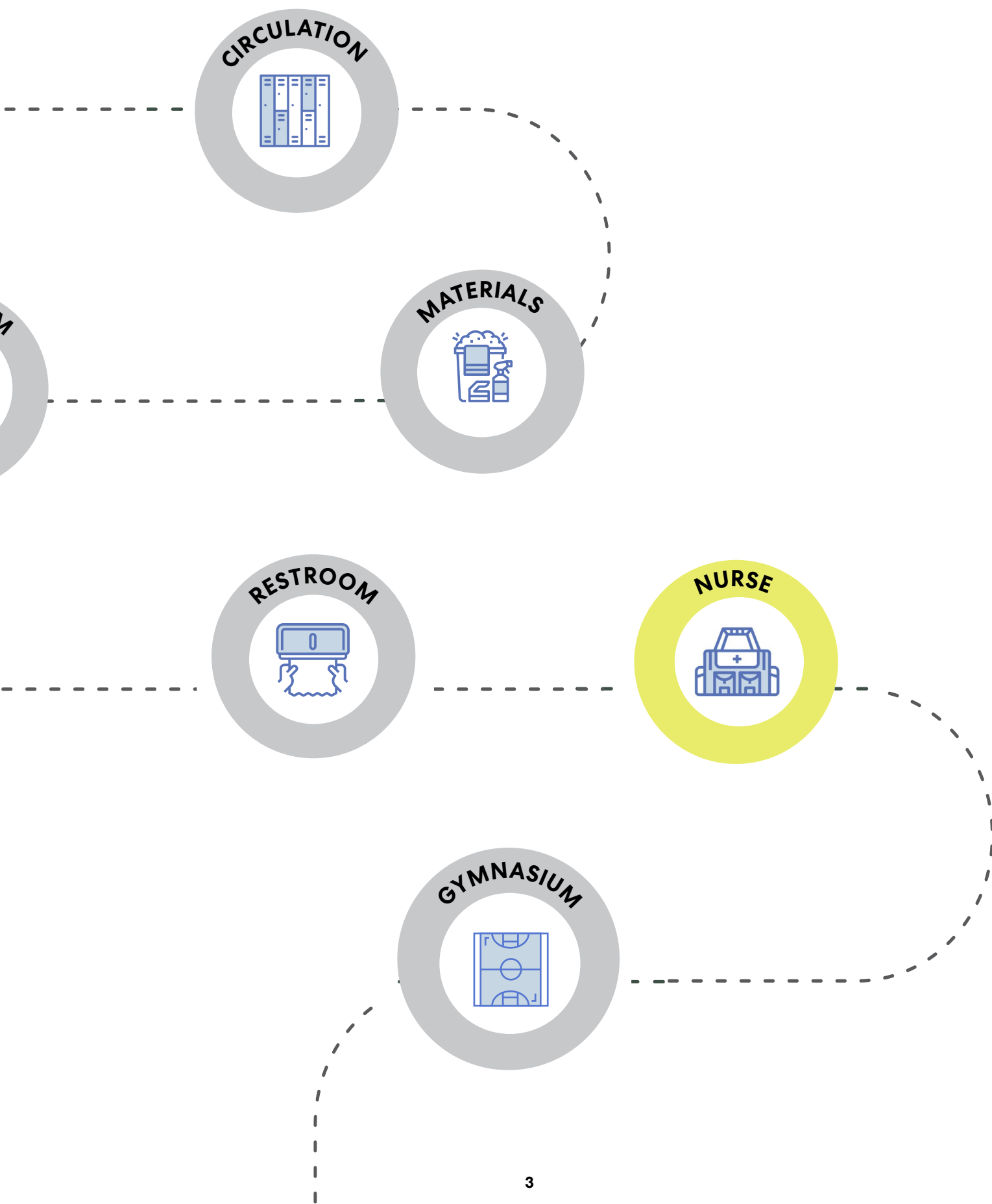
A DAY IN THE LIFE

Meet Riley

In the pages that follow, we invite you to imagine how these design interventions will impact Riley, an imaginary—but very real—student. We owe it to students like Riley to make school buildings as inviting, safe, and healthy as they can be.



Follow Riley's journey through school at
healthyk12.perkinswill.com/



Why you should read this!

- School nurses are often the single point of contact between school-age children and the health care system.
- Studies show that for every \$1 spent on **school nursing**, communities save \$2.20. Preventive screening, like school nurse visits, helps decrease emergency room visits and reduce the number of hours parents lose when taking care of their children.
- Research also shows that health is closely related to academic achievement. Improving a child's physical health may be a valuable factor in improving academic performance.



Our Goal



This series is focused on translating research into practical design solutions that promote child and staff health in our K-12 Schools. These documents will continue to be updated to reflect novel findings and community input. This primer is not a comprehensive list, and some strategies may not be achievable in existing buildings. Our goal is to identify opportunities where design and operations decisions can improve human experience.

The guidance provided is based on the available information as of the date of publication and does not replace federal, state, or local public health recommendations. It aggregates best practices and innovative solutions at the intersection of buildings and school health. We encourage schools to reach out and seek expert advice on their unique circumstances.



Project: Lucile Packard Children's Hospital



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— Nurse`s Office

After two years on the front lines battling the COVID-19 pandemic, the value of the nursing profession has never been clearer. While the crushing weight of the pandemic has left many nurses exhausted, the level of pride for the accomplishments achieved by nursing is unparalleled—“Nurses make a difference.” We highlight the pivotal role of a nurse within our school system and how their physical environment can help them efficiently and effectively support students.

Nurses have a unique role in the school and in the community:

School nursing is a specialized practice of nursing. Nurses protect and promote student health, facilitates optimal development, and advances academic success. School nurses, grounded in ethical and evidence-based practice, are the leaders who bridge healthcare and education, provide care coordination, advocate for quality student-centered care, and collaborate to design systems that allow individuals and communities to develop their full potential.

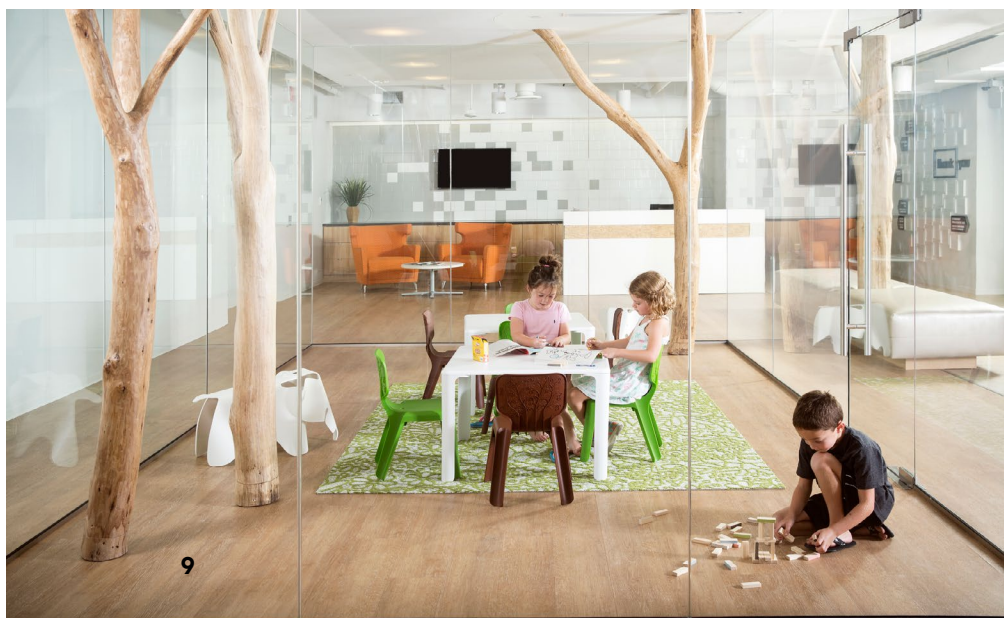
Why are school nurse areas part of the healthy school's movement?

The role of school nurses has been expanding throughout our history, constantly adapting and responding to world events.

Driven by the pandemic and exacerbated by systemic inequity, the need for holistic solutions to support student health has never been greater. As we respond to the current crisis and future challenges, school nurses will continue to play a critical role as we design facilities that are resilient and take a comprehensive approach to student health. By using an evidence-based approach to planning, we can provide a student-centered health experience.

In the United States, more than **40% of school age** children have one or more lifelong health condition. Nurses are vital to how these children and their families deal with chronic conditions. Often, the school nurse is the first to identify illness among students and their presence in schools gives many children the ability to get an education regardless of their health.

During the pandemic, this role was indispensable. Nurses became policy leaders and interpreters of local, state, and federal guidelines. Nurses stand at the intersection of **health and education**, serving as important figures that parents rely on to help understand everything from government health regulations to common childhood ailments.



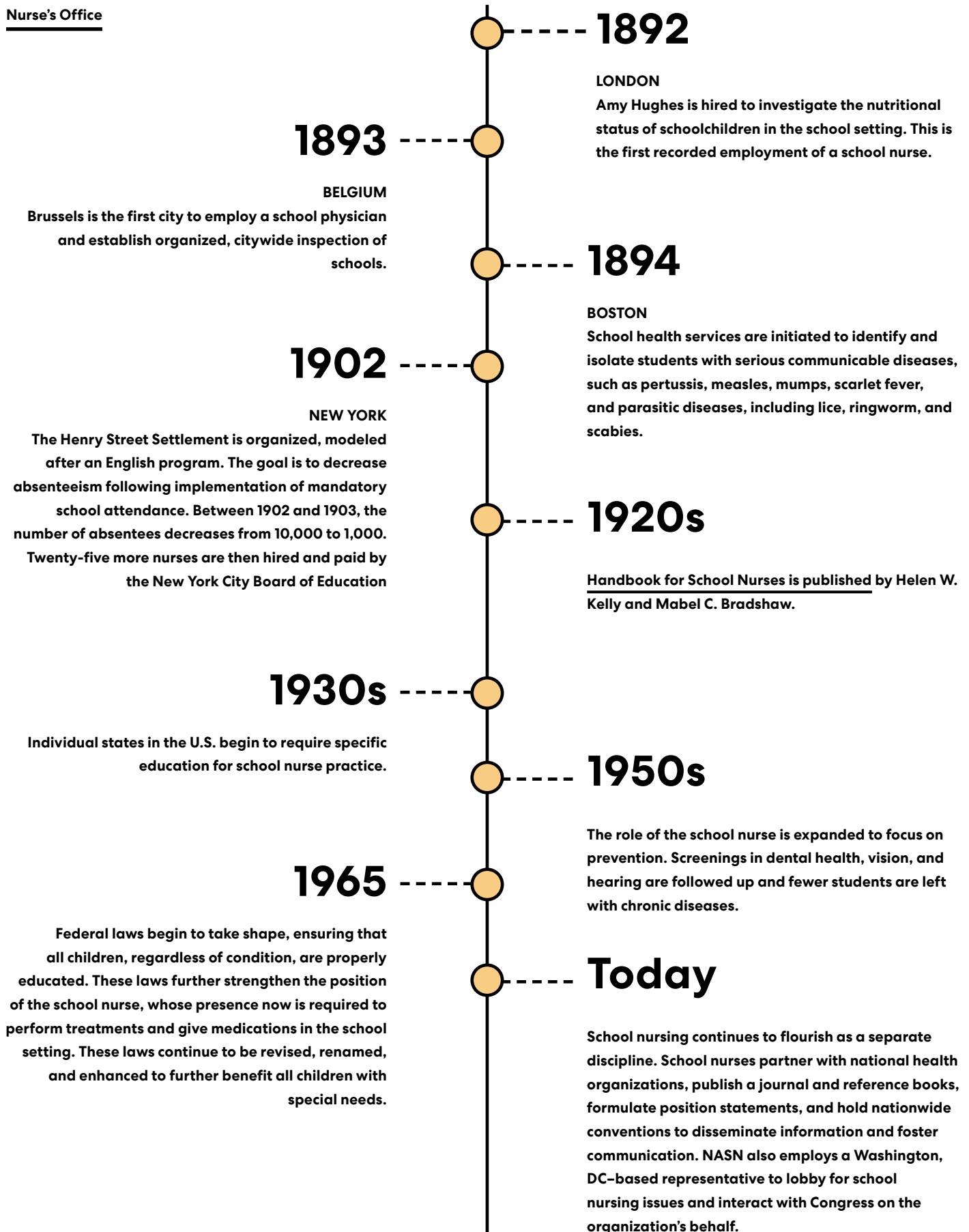


Did you know?

Only about 84,000 RNs are employed as school nurses - enough to staff just 64% of schools with a full-time nurse. Many nurses are responsible for covering multiple schools or they work part-time. As a result, only 40% of schools have a full-time registered nurse on staff. 35% have a part-time RN, and the remaining 25% do not employ one at all.



Check it Out: *School Nursing: Early Beginnings
and the Unfolding of a New Nursing Specialty*
—Janice Loschiavo



Student Health Needs

ADOLESCENT MENTAL HEALTH

The teen mental health crisis is rising nationwide. As such, the school nurse's role in screening anxiety, depression, and other mental illnesses cannot be overstated. In addition to school counselors, nurses play a critical role in triaging student needs and communicating with parents, caregivers, and counselors.

In 2005 a survey of school nurses on **mental health services** in U.S. public schools indicated that school nurses spend approximately 32% of their time providing mental health services. For adolescents, substance abuse, eating disorders, and thoughts of suicide can be complications of both anxiety and depression. Nationally, children are often waiting six months to a year for professional services.

STUDENTS WITH HOUSING INSECURITY

This issue is more pronounced among children without homes who are at **increased risk of abuse, exposure to violence, and psychological trauma.** Research shows that they are more likely to suffer from chronic diseases, hunger, and malnutrition than children with homes.

Child health and housing security are closely intertwined. Children and families in unstable housing often receive fragmented health care and rely on the emergency department as a primary source of care. They experience difficulty obtaining **affordable, accessible, and coordinated** health care services. In addition to such physical issues, students who are homeless have three times the rate of



emotional and behavioral problems, such as anxiety, depression, sleep problems, withdrawals, and aggression. Homeless students are significantly at-risk for experiencing a range of negative life outcomes such as school dropout, the **development of mental health problems**, use of illicit substances, suicidality, and even early mortality.

For students in unstable living conditions, school is often a refuge and the only secure setting in their day. These students experience a higher incidence of illness, often more serious. In Virginia, there were over 18,000 homeless children identified in 2012-13. More than 15% of them are estimated to have one or more chronic conditions, including 12% with asthma and 11% with ADD/ADHD. Students may have difficulty recovering from illnesses due to a lack of transportation to the doctor, privacy to recuperate, necessary resources to prepare a special diet, the ability to afford prescriptions, and consistent immunizations to prevent illnesses.

While school nurses cannot cure all these problems, knowing what illnesses and health-related problems are common may help the school develop a repertoire of responses to students' health needs.

Did You Know?

- During 2015-2016 school year, **52% of public schools had a full-time nurse.** When considering part time nurses, 82% had at least one full-time or part-time nurse.
- Research shows that health is closely related to academic achievement; therefore, improving a child's physical health has the potential to be a valuable protective factor in the improvement of academic performance.

PHYSICAL HEALTH

Asthma rates are particularly high among children and youth experiencing homelessness as stress and allergens (e.g., dust, mold, moisture, rodent, and insect dropping, and tobacco smoke) aggravate the condition. Asthma rates for children living in a shelter are **two to three times the national prevalence.** Severe cases of **asthma have been linked with higher levels of behavior problems,** especially if symptoms are poorly managed or associated with poor overall physical health.

According to 2019-2020 **Every Student Counts** data from National Association of School Nurses.

- 78.5 in 1000 students have Asthma,
- 8.2 in 1000 have Seizure Disorder
- 35.5 in 1000 have life threatening Allergy
- 3.2 in 1000 have Diabetes type 1
- 0.4 in 1000 have Diabetes type 2

Types of Student Health Needs

1. Routine Care (no known illness)

- immunization assessments
- vision, dental & hearing screenings
- referral to healthcare providers

2. Urgent Care (fractures, wounds)

- first aid to stabilize/resolve urgent health concerns
- evaluation after providing first-aid
- referral for further medical evaluation, if needed

3. Chronic Health (asthma, diabetes)

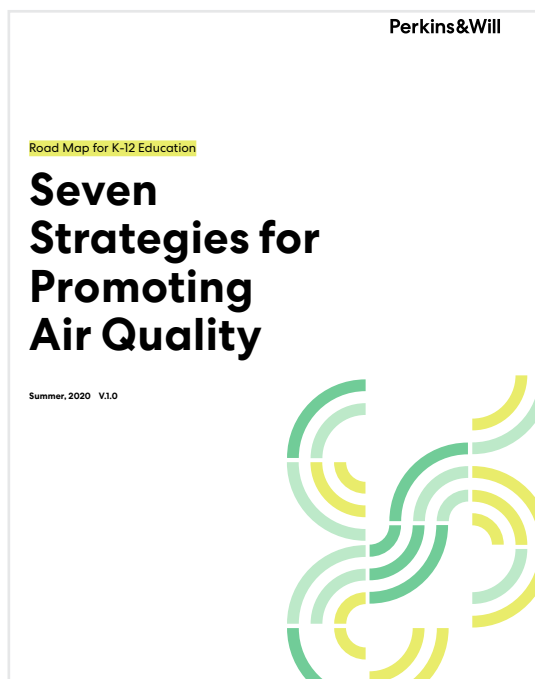
- coordination of chronic condition management
- train school staff on health plans and procedures
- monitor school staff on health activities

4. Behavioral Health (anxiety, depression)

- crisis intervention and referral
- provide ongoing health counseling
- care coordination with parents and providers

5. Medically Fragile (requires ongoing care)

- monitor and train school staff in nursing procedures
- collaborate with providers in case management
- care coordination with parents and providers



Air Quality

In 2020, we proposed seven strategies for promoting air quality and improving ventilation school buildings.

Check out the link here.

The Den at Jean Childs Young Middle School

The Den at Jean Childs Young Middle School

With initiatives like The Den, the Atlanta Public School system aims to strengthen the needs of their students by putting their health at the center of education and school-building design.

The school recently celebrated the completion of its on-site wraparound services. In collaboration with Perkins&Will, the school completed its transformation of an entire wing dedicated to a new on-site wraparound support initiative named “The Den.” As one of the first middle schools in Georgia to offer wraparound services, The Den provides on-site comprehensive, holistic support to over 800 students

in four focus areas: social-emotional well-being, academic success, basic needs support, and access and exposure to the world.

By partnering with Young Middle School administrators, faculty, students, and community stakeholders, Perkins&Will was able to design a space that met students’ mental and physical health needs. Dedicated spaces for hairstyling, laundry, mentoring, tutoring, career exploration, and basic needs are the foundation of self-care in The Den’s aspirational mantra: **“I Am. I Can. I Will.”**

Did you know?

Wraparound services differ from many service delivery strategies. It provides a comprehensive, holistic, youth and family-driven way of responding when children or youth experience serious mental health or behavioral challenges. Wraparound services put the child or youth and family at the center.

The Den at Jean Childs Young Middle School

“What the Den is saying is ‘Come here—we got you,” says Principal Ron Garlington. “when you create a space like that—when you’re actually meeting the needs of individuals—now they have a voice. They’re more empowered to be a stronger member of the community at large.”

—Ron Garlington, Principal



Strategies

STRATEGY	CATEGORY	NEW/EXISTING	IN YOUR SCHOOL?
N.1 Identify existing spaces or create isolation areas near nurse areas for students and staff who appear symptomatic.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.2 Increase square footage or provide adjacencies that allow for increased waiting areas during seasonal flu outbreaks. In addition, handwashing/sanitation areas should be provided at entry.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.3 Incorporate spaces for easy access to daily medication (e.g. inhalers) in the nurse's area for non-communicable or well students.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.4 Have nursing resources or space for each educational building .	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.5 For nurse's office, create a single point of entry and exit for students to facilitate one-way student flow to limit spread.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.6 Use touchless entry technology at the entrance/exit of the nurse office to reduce fomite transmission.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.7 Provide triage areas at the front of the nurses office to help sort well and unwell students.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.8 Include measures for adequate ventilation or supplement with portable air cleaners to reduce airborne transmission.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.9 Ensure nursing areas are flexible and multifunctional through the use of technology, partitions, and furniture to support the continuity of school operations, optimize privacy, and adjust to demand.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.10 Provide mother's rooms , outside the nurse's area to avoid contact with sick individuals.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable

Our aim is to support holistically healthy buildings, but we understand that each learning community is unique and has their own health priorities. Use these strategies as a starting point!

Nurse's Office

STRATEGY	CATEGORY	NEW/EXISTING	IN YOUR SCHOOL?
N.11 Provide direct views to cot area to monitor sick patients.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.12 When possible, locate nurse's office near entrance to facilitate caregiver pick-up and reduce infection transmission.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.13 Provide a welcoming atmosphere where students feel comfortable speaking to the nurse about mental or physical issues with sound isolation and privacy .	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.14 Provide sound privacy or a white noise machine in the nurse area to protect student privacy when other students or staff are in the area.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.15 Include the school nurse in the design visioning and programming phase to provide input on the program.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.16 Remove barriers to mobility to allow for inclusive design .	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.17 Include elements of biophilic design to reduce stress and promote healing.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.18 Provide an educational space to train school staff on chronic condition management for students.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable
N.19 Reduce background noise and sensory cues that may overload injured (e.g. concussion) individuals.	Risk Mitigation Health Promotion Educational Adaptation	New Construction Existing Building	☐ Yes ☐ No ☐ Not Applicable

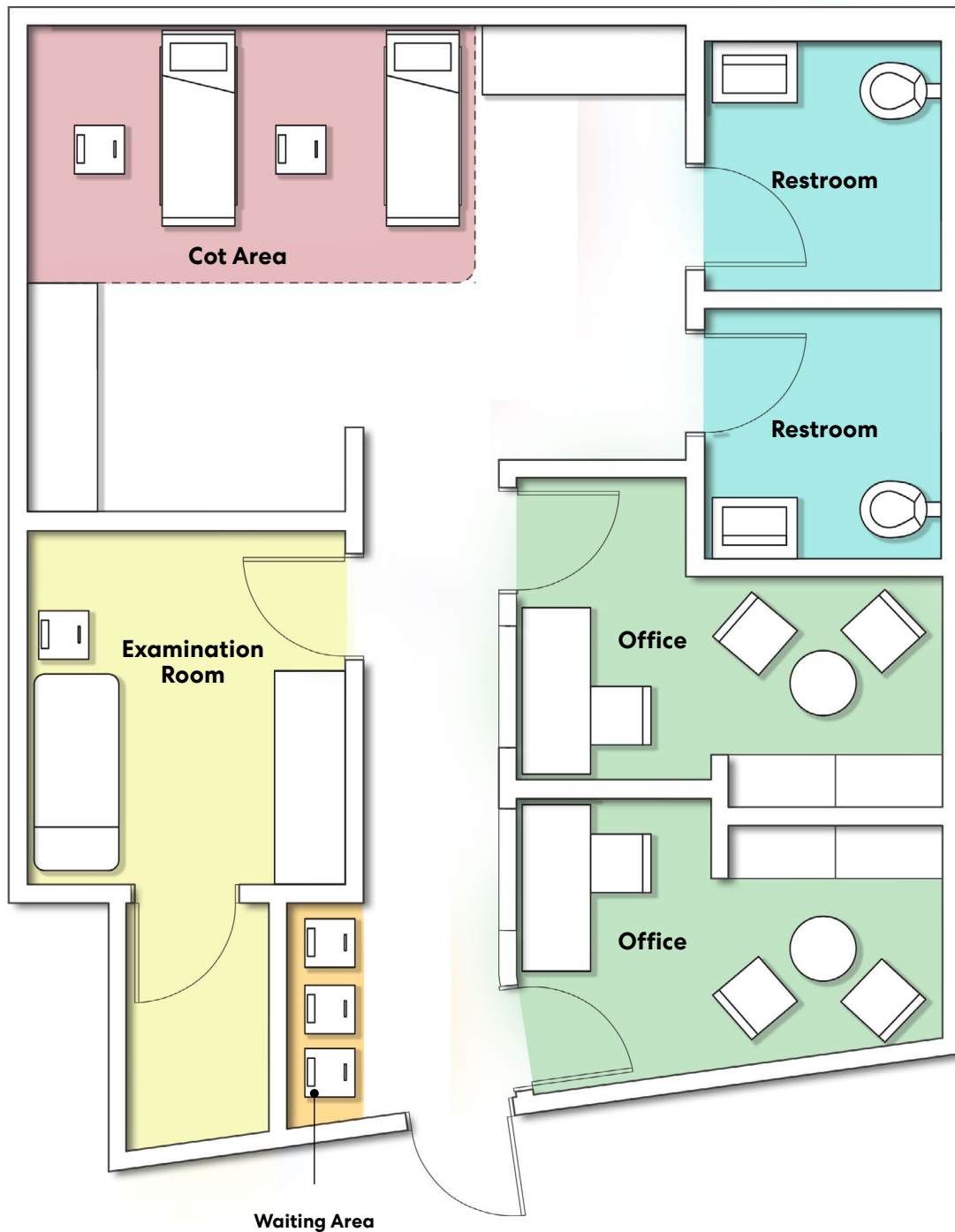


Check it out!

From the cells in your body to a sense of belonging, building materials can impact your health and well-being. Take a look at our **Materials Report** which calls attention to the materials found within our schools, including harmful chemical additives that migrate out into the air and dust we breathe.

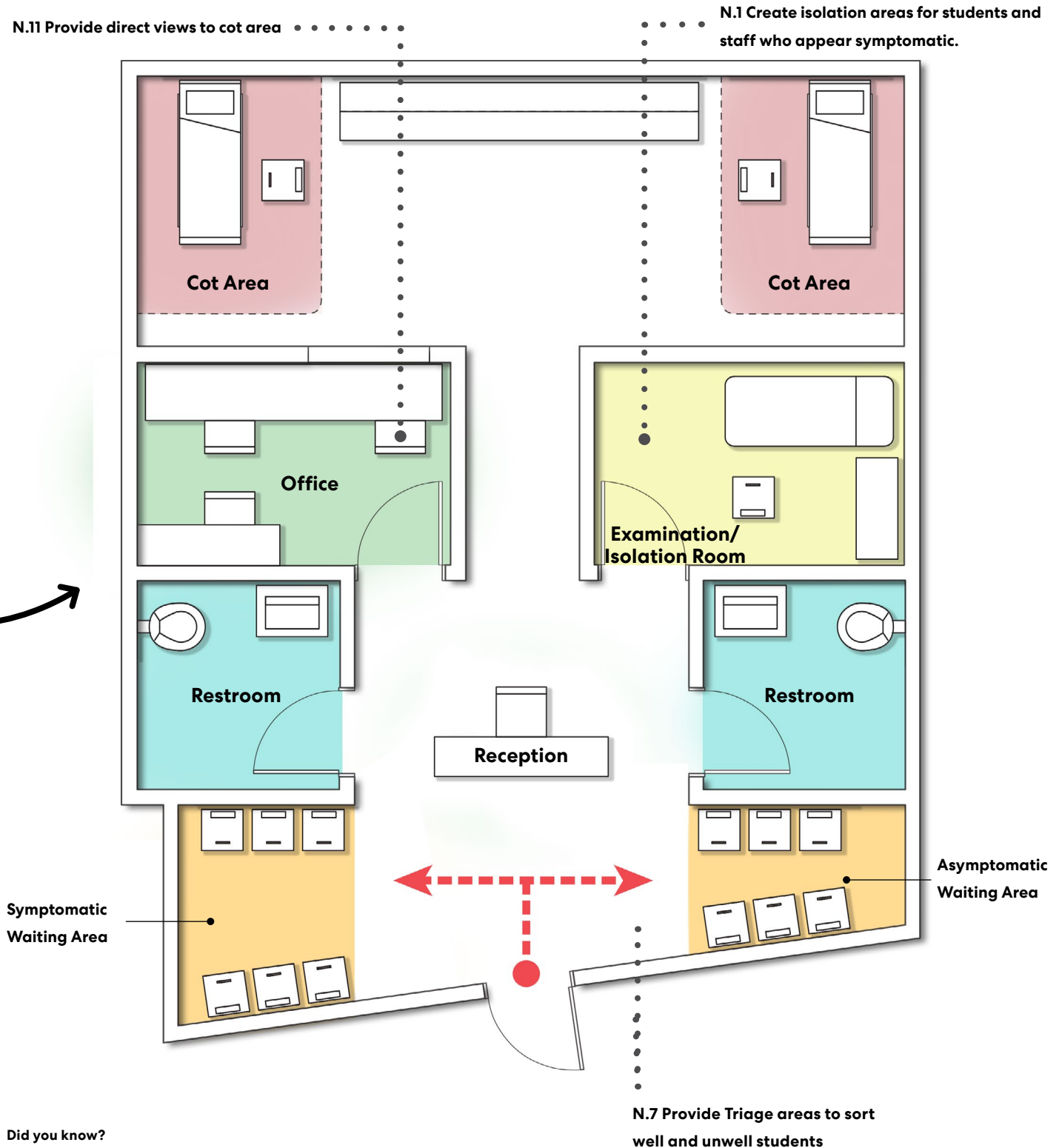
Design Hypothesis: Nurse's Suite

Pre-COVID Layout



It is crucial to **include a nurse** during the visioning and program phase of both renovation and new construction projects to properly understand their workflow and needs.

Post-COVID: Lessons Learned



Lessons from Our Health Practice

From our work with healthcare clients, we understand that that people feel more secure when they can see the nurse in a hospital's observation area and that biophilia can bring a sense of comfort. We can apply the same way of thinking to the school nurse's office. Like hospitals, schools can integrate materials, design strategies, and cleaning procedures that mitigate opportunities for pathogen growth, such as:

- Increasing the number and visibility of hand washing stations
- Reducing the number of unnecessary surfaces where dust and germs collect
- Designing surfaces to be easily cleaned
- Thought should be given to surface details, materials, seams, etc.
- Minimizing surface clutter to make cleaning easier
- Increasing focus on indoor air quality and investing in mechanical air filtration systems
- Including Ultraviolet C (UVC) light to kill microorganisms
- Including High Efficiency Particulate Air (HEPA) filtration to remove airborne particles
- Developing multifaceted cleaning protocols
- Including products that have a low impact on human health and the planet
- Using cleaners that are effective on bacterial, viral, and fungal infections
- Maintaining and reviewing instructions for cleaning staff
- Considering how cleaners impact finishes and textiles

Check it Out!

Back to School: What K-12 Architects Can Learn from Hospitals in the Wake of COVID-19

Recent events have made it clear that schools play a central role in the overall health of the community. The ideas in this article offer not only short-term solutions but can also help schools create a long-term vision that will build overall resilience. So much is still unknown, but whichever solution is necessary, it is apparent now more than ever that the actions we take today will help us prepare us for the future.



→
*Medical University of South Carolina,
Shawn Jenkins Children's Hospital*

Nurse's Office



*Medical University
of South Carolina,
Shawn Jenkins
Children's Hospital*

We understand that visiting hospitals and healthcare facilities can make even adults feel anxious. Because of this, design is a valuable tool that we can use to minimize these feelings. When designing the physical space, it is important that we create a welcoming atmosphere where students feel safe and comfortable both physically and mentally.

The ideas outlined in this document offer not only short-term solutions but can also help schools create a long-term vision that will build overall resilience. So much is still unknown, but whichever solution is necessary, it is apparent now more than ever that the actions we take today will help us prepare us for the future.

Check it Out!

A Message from our Health Practice: Innovative Solutions for Healing Environments

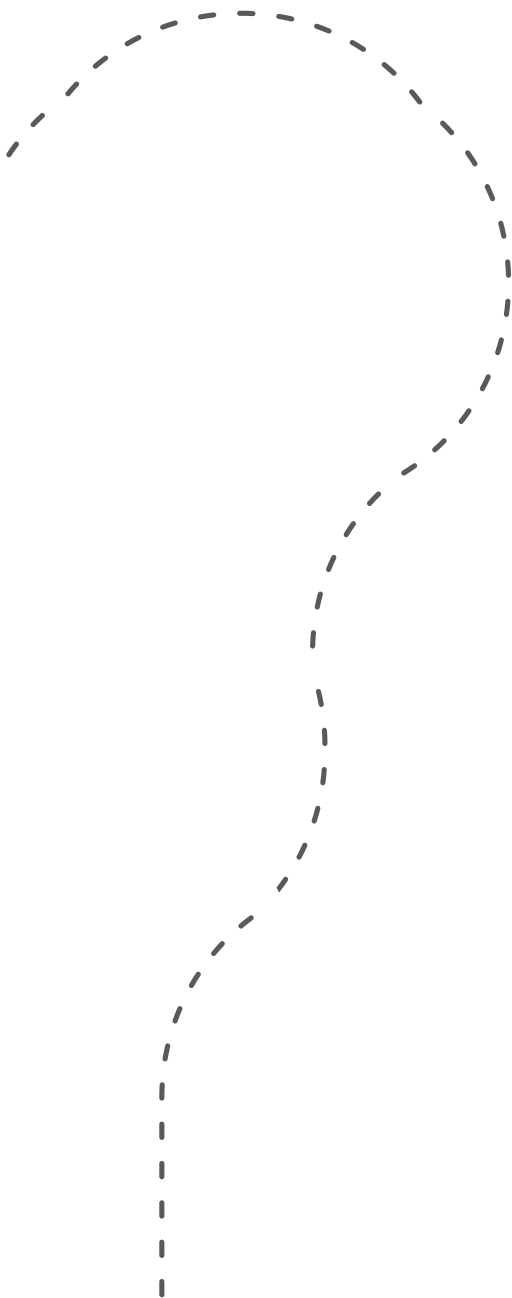
A top priority for healthcare environments is to be nimble, flexible, and able to adapt quickly to evolving needs. Recently, we brought together multiple perspectives—from architects and interior designers to planners and registered nurses—to discuss this topic. Read More: [**Innovative Solutions for Healing Environment.**](#)

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For more information, contact:

K12Education@perkinswill.com

Continue Riley's journey at:

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