School Attendance, Chronic Health Conditions and Leveraging Data for Improvement: Recommendations for State Education and Health Departments to Address Student Absenteeism
Acknowledgements

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Introduction and Purpose

The impact of school attendance and absenteeism on student academic success and educational attainment is well documented, as is the effect of education on health and other outcomes. Absences are associated with lower test scores including reading skills and higher dropout rates that can negatively affect high school graduation and college readiness.\(^1\)\(^,\)\(^2\)\(^,\)\(^3\)\(^,\)\(^4\) Higher education levels tie to better health outcomes including less chronic illness and improved social and economic outcomes.\(^5\)\(^,\)\(^6\) Reducing absenteeism is a compelling indicator for education and an important ingredient for improving population health and health equity and positioning students for lifelong success.\(^a\)

The many causes of school absence can be interdependent and complex. Chronic health conditions are described as physical, developmental, behavioral or emotional conditions that last for a prolonged time period, require more than routine health services, and can affect usual childhood activities,\(^7\)\(^,\)\(^8\)\(^,\)\(^9\) and they may contribute to absence.\(^10\) Asthma, for instance, is one of the most common chronic health conditions among children and a leading cause of school absenteeism.\(^11\) Children living in poverty are disproportionately affected by absenteeism and chronic health conditions.\(^1\)\(^,\)\(^10\)

Millions of students diagnosed with or at risk for chronic health conditions attend school. An estimated 15.9% and 17.5% of children ages 6-11 and 12-17 years old, respectively, have at least one of 18 chronic health conditions measured in the National Survey of Children’s Health (e.g., asthma, diabetes, epilepsy or seizure disorder, etc.).\(^12\) Childhood chronic health conditions lower educational attainment, and school absences increase this association.\(^13\) Students with chronic health conditions are at risk of missing school because of their disease or its progression. If their conditions are not managed appropriately, adverse symptoms or a need for medical treatment during the school day may keep them from attending school. Those having physical conditions may also experience increased stress and co-occurring psychological illness that can negatively affect coping, treatment adherence, and consequently school attendance.\(^9\)\(^,\)\(^14\) Students with chronic health conditions can have accommodations addressing attendance through written plans such as Individualized Education Programs (IEP), Section 504 plans, and Individualized Healthcare Plans (IHP), but it is still important for schools to do what they can to support and keep them in school to a most optimal level possible.\(^b\)

Confronting absenteeism calls for cross-sector engagement to gather data examining absence and possible related causes, and to prioritize and implement coordinated interventions that keep students attending school. In partnership with schools, state education and health departments can play a pivotal leadership role to shape policies and practices in reducing absenteeism through a comprehensive approach that is inclusive of addressing chronic health conditions. This document is for state education and health departments through the lens of school health services and focuses on the ways state school nurse consultants and additional state school health personnel can provide support to schools. It emphasizes school nursing and the role of school nurses in data collection and use. Nursing leadership is integral to managing the care of students with chronic health conditions. School nurses are associated with improved attendance and their interventions, including case management, contribute to positive educational and health effects.\(^15\)\(^,\)\(^16\)\(^,\)\(^17\) In addition, school nurses coordinate care to improve linkages between the medical home, family and school and collaborate with others to reduce health-related barriers to learning and better position students for success.\(^c\)\(^,\)\(^18\)

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a Health equity is ‘attainment of the highest level of health for all people. Achieving health equity requires valuing everyone equally with focused and ongoing societal efforts to address avoidable health disparities, and the elimination of health and health care disparities,’ according to Healthy People 2020. http://www.healthypeople.gov/2020/about/foundation-health-measures/Disparities


c The medical home concept is “…a cultivated partnership between the patient, family, and primary provider in cooperation with specialists and support from the community.” One of the criteria is to determine if a child has a physician (e.g., primary care provider) or nurse who knows the child well and is a usual source for health care. http://www.hrsa.gov/healthit/toolbox/Childrenstoolbox/BuildingMedicalHome/whyimportant.html
The purpose of this document is to 1) raise awareness on the connections between school attendance and chronic health conditions, 2) promote the notion that more can and must be done to integrate school health services, specifically nursing, into efforts aimed at improving school attendance, and 3) give recommendations for actions to take in this area. An additional aim is to exemplify strategies and best practices for addressing absenteeism that already exist and identify how states and schools advance their implementation. Importantly, approaching health in schools within a framework that aligns with educational goals (e.g., improving academic achievement, reducing achievement gap, etc.) is critical. Actions to collect and use attendance data in relation to students with chronic health conditions should be in concert with goals that matter most to schools.

The recommendations are based on a review of relevant national and state resources and key informant interviews with stakeholders at the national, state, and local levels. The document additionally features:

- Discussion of attendance as a measure, including context and definitions,
- National efforts aimed at improving school attendance,
- Challenges and opportunities for attendance and chronic health condition data collection and use, and
- Examples and success spotlights of strengthened absenteeism initiatives by states, local school districts, and partners that connect attendance and chronic health conditions as part of their approach.

For students burdened by poverty, the implications of being absent from school amplify an existing equity issue. A total of 21.1% of U.S. children under 18 live in poverty, and an estimated 14% of children reside in high-poverty areas. The highest rates of absenteeism are among low-income students, and these students benefit the most from being in school on a daily basis. Low-income children are more likely to experience risks that negatively influence school attendance and are more likely to fall behind their peers as they spend less time in school. Students of color, those with disabilities, and other groups confronted with significant challenges, including poverty, experience disproportionate rates of absenteeism and adverse educational outcomes. One particularly vulnerable and highly mobile group is the approximately 2.5 million U.S. children who experience homelessness each year.

Students affected by poverty and absenteeism can be the same students adversely impacted by chronic health conditions. For example, low-income children are disproportionately affected by asthma and have poorer asthma control. Similarly, those having low socioeconomic status have increased rates of overweight and obesity. Childhood obesity is a known risk factor for weight-related conditions like type 2 diabetes, which can be difficult to treat in children, especially adolescents. Research shows that social determinants of health contribute to the rise of chronic health conditions and are challenges to effectively managing disease.

According to the World Health Organization, “The social determinants of health are the conditions in which people are born, grow, live, work and age.” They contribute to health inequities. http://www.who.int/social_determinants/sdh_definition/en/
“In partnership with schools, state education and health departments can play a pivotal leadership role to shape policies and practices in reducing absenteeism through a comprehensive approach that is inclusive of addressing chronic health conditions.”

Attendance as a Measure: Context and Definitions

This document is prepared within the context of reducing absences for students with chronic health conditions and an examination of the total number of school days missed. It does not focus on data points for health office dispositions, which assess rates of students returning to class for academic instruction, being sent home due to illness, or requiring emergency services or 911 following visits to registered nurse during the school day. These indicators relate to attendance and are additional measures to collect, track, and act upon in efforts aimed at addressing absenteeism. Step Up & Be Counted! National School Nurse Standardized Data Set is a joint initiative by the National Association of School Nurses (NASN) and the National Association of State School Nurse Consultants (NASSNC), and the data set includes health office visit disposition data points. School nurses may be more involved in the collection of these data than they have with total school days missed for students whose chronic health condition is being managed in school.

Chronic Absence, Average Daily Attendance, and Truancy

The concept of chronic absence is important to highlight, and it is experiencing increased national recognition along with measurement attention. Chronic absence is a measure of how much a student is absent from school for any reason, including both excused and unexcused absences. It predicts poor educational outcomes, has an impact across a child’s schooling, and can position students for reduced success academically starting at an early age in kindergarten. The Office for Civil Rights (OCR) at the U.S. Department of Education (ED) defines a chronically absent student as one “…who is absent 15 or more school days during the school year” (p. 45). There is no standard definition of chronic absence across all states, but a common definition is missing 10% or more of school in an academic year.

This document incorporates the concept of chronic absence and conveys that data should be examined throughout the school year on a regular basis for attendance trends related to chronic health conditions. Schools can use chronic absence as a metric for early warning to detect absenteeism at a particular time interval. This involves applying the definition (e.g., missing 10% or more of school) to compare the number of days absent to days enrolled for a time period. Schools may then identify students missing school and implement interventions before and as students begin to have the “chronicity” of missing too much school over time.

Most states do not calculate chronic absenteeism data at a state level and measurements vary, which create challenges to determining a national chronic absence rate or comparing rates between localities. Without having fully understood the scope of chronic absence within communities due to lack of measurement, it limits the systems and interventions to address absenteeism including approaches that reach students early in their education when chronic absence often emerges. According to the Data Quality

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1. Attendance Works, a national and state initiative that promotes better policy and practice around school attendance, uses the criteria of missing 10 percent of more of school days for any reason. http://www.attendanceworks.org

A review of data among the six states that measured chronic absenteeism in 2012 conservatively estimated that 10-15% of students, or up to 7.5 million students, are chronically absent each year. National chronic absenteeism data for the 2013-2014 school year released by ED through the Civil Rights Data Collection (CRDC) in 2016 show that 13% of students, or more than 6.5 million students, are chronically absent. Chronic absence rates are much higher in high school (18%) than elementary school (11%), and among students of color and those with disabilities.

The attendance measure that most states continue to use in school report cards and for accountability is average daily attendance (ADA), which reflects the percentage of students who attend school on a typical day. The same definition is used nationwide. However, schools vary in when they count absences during the school day and by how many periods constitute a full day of absence, which can affect attendance rates. ADA does not provide student-level data, and the measure can mask chronic absence. Students who have an excessive number of absences can be missed, even in schools reporting high ADA rates at 90 or 95 percent.

Truancy, whose definition varies state-by-state, focuses on unexcused absences from school and can underestimate total absences. States and school districts that suspend or expel students for truancy as a result of punitive codes for truancy can contribute to the chronic absence problem, lowering a chance at success for very vulnerable students. Some school districts are making changes to discipline policies and support systems to reduce suspension and expulsion that remove students from school. Replacing out-of-school discipline policies with restorative justice programs has led to reduced chronic absenteeism in schools.

Recent national initiatives highlight the importance of improving school attendance for all children. They bring synergy to absenteeism as a universal issue for schools and cross-sector partners to rally behind and communicate that absenteeism is especially problematic among groups of students. It is an ideal time for states and localities to strengthen their actions, bringing increased attention to children living with chronic health conditions who experience absenteeism or are at risk of school absence.

The National Collaborative on Education and Health, a national initiative co-convened by Healthy Schools Campaign and Trust for America’s Health launched in 2014, established a Chronic Absenteeism Working Group that brought together multiple sectors representing federal, national, state, and local organizations including government agencies and school districts. This Working Group examined leading health conditions impacting student attendance and developed principles and recommendations as well as a framework for state action. Their work inspired the development of Mapping the Early Attendance Gap: Charting a Course for Student Success, a publication written by Attendance Works and Healthy Schools Campaign that conveys health as part of the challenge and solution to improving attendance and provides information and guidance to further state policy and practice in this area. It also provided a foundation for Addressing the Health-Related Causes of Chronic Absenteeism: A Toolkit for Action prepared by Healthy Schools Campaign.

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g Civil Rights Data Collection, http://www2.ed.gov/about/offices/list/ocr/data.html
h Restorative justice programs are an alternative to zero tolerance discipline policies and have a “… goal of improving relationships between students, parents, teachers, and administrators, reducing out-of-school suspensions and expulsions, and creating a positive school climate.” http://www.gradnation.org/sites/default/files/18006_CE_BGN_Full_vFNL_0.pdf (p. 43).
The U.S. Department of Education participated in the National Steering Committee and all Working Groups of the National Collaborative on Education and Health. In partnership with three federal agencies and the President's My Brother's Keeper initiative, ED launched Every Student, Every Day: A National Initiative to Address and Eliminate Chronic Absenteeism (Every Student, Every Day initiative) in 2015 to support coordinated community action that addresses the underlying causes of local chronic absenteeism. In addition, ED released first-ever national chronic absenteeism data having added chronic absenteeism to its biennial CRDC. The Every Student Succeeds Act (ESSA) (2015), a reauthorization of the 1965 Elementary and Secondary Education Act, includes chronic absence as a measure of attendance. States will be required to report chronic absenteeism rates for schools, and school districts will be allowed to spend federal dollars on training to reduce absenteeism.1 The federal and national leadership around chronic absenteeism may motivate states to strengthen data collection and rethink approaches to address absenteeism.

Simultaneously, there is convergence and intersection around the significant connection between educational attainment and health with use of school attendance as a mediator. Healthy People 2020 includes social determinants of health as a goal for this decade. Education is one of the five key areas of social determinants of health, and components include high school graduation, enrollment in higher education, language and literacy, and early childhood education and development.2-3 Attendance is strongly associated with high school graduation, and chronic absence relates to all of these components.4 Inclusion of the social determinants of health may be a catalyst to improved collaboration across sectors and intentional efforts directed at the many issues affecting population health. In addition, the GradNation Campaign, launched by America's Promise Alliance in partnership with many organizations promoting the lives of children, aims to have a 90% national high school graduation rate by 2020, along with increases in postsecondary enrollment and graduation.21 In achieving this goal, the effort has an emphasis on increasing school attendance and incorporates health as an important underpinning through alignment with Five Promises, one of which is a healthy start.5

**School Attendance and Chronic Health Conditions Data Collection and Use: Challenges and Opportunities**

Addressing absenteeism has its challenges, but with challenges there are opportunities. Absenteeism is a workable problem, and effective actions that states, school districts, and partners take can have a positive impact on school attendance. Moreover, reducing absenteeism is too important to let challenges impede an attempt to better understand and act on absenteeism related to chronic health conditions at a state or local level. Research suggests there are linkages between education and health and their impact on life-long outcomes,6 chronic health conditions contribute to absence,7-10 and school nurses can improve attendance,11,12 all of which provide supportive evidence to the value of school health services as part of a comprehensive approach.

Importantly, data collection and use practices in schools can become more meaningful to address absenteeism in improving student outcomes. That is at the heart of moving states and local school districts to measure, track, and disaggregate chronic absence

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2 Healthy People 2020, developed by the US Department of Health and Human Services in partnership with extensive stakeholders, sets the nation’s 10-year goals and objectives for health promotion and disease prevention. The five key areas of social determinants of health are economic stability, education, social and community context, health and health care, and neighborhood and built environment. http://www.healthypeople.gov
3 America's Promise Alliance is comprised of more than 360 national organizations dedicated to improving the lives of young people. Collaborative work is aimed at reaching Five Promises: caring adults, safe places, a healthy start, an effective education, and opportunities to help others and GradNation goals. http://www.americaspromise.org
Examining chronically absent students as individuals or populations gets closer to revealing why these absences occur. Identifying the reasons why students miss school helps determine and implement the appropriate interventions needed for students to attend school.

Many speak about the difficulty in collecting high-quality attendance data and barriers that complicate the ability to directly connect attendance data and chronic health conditions data. Primary challenges to improving the quality of data collection are funding and the availability and capacity of staffing and technology to capture and record attendance data. If a school collects health-related reasons for absence through attendance codes, the information is only as accurate as the parental report and physician’s medical excuse. Although it may be ideal to ask parents follow-up questions in order to provide more detail on why a child is absent, this process in practice is a challenge. Inconsistency among users responsible for data entry and questionable fidelity of how data is inputted into student data systems is an additional barrier, as it can be subject to user judgment. There can be significant variance in the kind of data being collected and when absences are counted during the school day between school districts and schools within states, because decisions are made locally. These challenges lead to concerns about data quality as well as reliability and validity of absence reason if used as a data point.

Some challenges regarding staffing and technology extend to the tracking of attendance data. The data may not be stored in longitudinal databases that adequately capture trends over time. While school districts can use student-level data, there are concerns regarding data sharing and interpretation of Family Educational Rights and Privacy Act (FERPA) (1974). However, FERPA clearly permits the disclosure of data to organizations conducting studies for or on behalf of schools and educational agencies. The law allows for data sharing with school personnel and state education and health departments.

States experience many of the same attendance data challenges faced by local school districts and schools. Most state departments of education and health lack appropriate infrastructure and coordination between agencies to collect high-quality attendance data. Specific reasons for absence, if captured locally, are not reported into state-level data systems. Inconsistency regarding state funding formulas related to attendance and infrastructure also has an impact on data prioritization and analysis. Some states have data governance committees that are supportive. In addition, states have different definitions of attendance measures, and it is challenging to change definitions for improvement and could affect the tracking of trend data.

There is inconsistent data collection for students with chronic health conditions as well, although a number of states collect this data at a state level and through data initiatives, e.g., Step Up & Be Counted! National School Nurse Standardized Data Set. The school nurse is primarily responsible for data collection and use regarding students’ chronic health conditions, but not necessarily for their attendance. School nursing responsibility for students with chronic health conditions and other health needs can be highly demanding. If schools do not make attendance data reports readily available for nurses to examine absenteeism in relation to their students with chronic health conditions, the added logistics and time to process this information becomes burdensome and can affect the extent to which nurses intervene. Furthermore, many states have school districts and schools with inadequate levels of school nurse staffing that affects overall capacity.

Even when there are structures and systems in place for collecting data on attendance and chronic health conditions at a local or state level, there are challenges to housing the data together or making separate systems interoperable. Some school districts are able to streamline data by using the same data system to store all education and health data. In Kentucky, for example, all school districts use the same system statewide for both attendance and chronic health conditions, which facilitates standardized reporting to the state. Other school districts create add-ons to include tabs or text boxes to look at...
students with chronic health conditions (e.g., asthma) in the attendance data system and add a sustainable database query. They record a chronic health condition by name or by numerical code. School nurses can then look at the data system to pull up the students affected by a chronic health condition directly.

Direct impact on attendance may not be determined from an identified health or nursing-specific intervention per se. However, attendance as a measure has strong ties to educational goals, and it is a behavioral, health-related indicator. An examination of attendance in school health services is a step forward and encourages the exploration of the following questions: (1) Why is this student absent? (2) What is contributing to absence? and (3) How can school health services along with others in the school community be mutually supportive through a coordinated, comprehensive approach? The measurement and use of disaggregated chronic absence data is important to this exploration, because it treats absence regardless of cause as time away from school that can reduce a student’s opportunity to learn. Chronic absence aligns with evidence that shows the negative impact of missing school relates to the number of days a student is absent, rather than why a student is absent, and it can be a more standardized attendance measure in an area subject to variability. Chronic absence data can drill down to identify those students who have poor school attendance and the risks associated with absenteeism.

Efforts connecting attendance and chronic health conditions generally involve one or more of the following:

- **Comparing attendance rates before and after intervention(s) for an individual student or a group of students.** Some use a comparison group that has not received the intervention to help evaluate the impact. For instance, two evidence-based asthma programs in Hartford Public Schools, Connecticut and Denver Public Schools, Colorado use absenteeism data as a primary outcome. Data analysis is ongoing, but the Hartford study found that the absenteeism rate decreased for students enrolled in the program (n = 67) over 2012-13 and 2013-14 school years in contrast to both a control group of those not in the intervention and a comparison group matched by asthma severity that experienced increased rates.

- **Monitoring attendance data for all students and intervening with those at risk for absenteeism or having high absenteeism rates.** These processes can identify underlying health issues or needs for them to better control chronic disease in which the school nurse can be engaged as part of a system-wide team.

- **Monitoring and tracking absenteeism for students identified with chronic health condition(s),** incorporating and building upon what can be influenced regarding health, and engaging other resources in the school and community as needed for those students at risk or experiencing higher absenteeism.

The recommendations and examples of states, local school districts, and additional partners highlighted within this document in the sections that follow expand on these approaches and opportunities.
Collecting Causes of School Absence, Including Chronic Health Conditions

A convening of 12 Central Texas school superintendents in 2011 identified attendance as a top priority for the community. As a result, a regional Missing School Matters (MSM) Campaign led by the E3 Alliance developed a goal to increase attendance to improve student achievement and return revenue to schools that are funded based on attendance. In addition to raising awareness about absences in the region with MSM, E3 Alliance conducted an Absence Reasons Study in 2013 to identify root causes that underlie absenteeism to provide specific ways to address it.38

Researchers reviewed two selected school districts’ attendance codes and created a list of 24 detailed reason codes to use in an eight-week study, many of which had not been used by either district prior to the study. Nine codes involved medical or dental reasons, and three of the codes were asthma, diabetes, and chronic (physical) illness other than diabetes or asthma. They established protocols to ask about and document the absence reason(s), including medical/dental treatment follow-up questions to learn if the student was being treated and to uncover reasons for not getting treatment. Scripts and example questions to use when seeking information from parents were provided. E3 Alliance developed a formal Data Sharing Agreement with the districts that allowed the schools to share student-level data for the analysis.

The study’s findings helped determine absence patterns generalizable to the region and identify actions to improve student attendance and community health. Researchers identified acute illness as the largest reported cause (48%) especially influenza. E3 Alliance through MSM worked with the state to change the administrative code for allowing administration of flu vaccines on school campuses. In partnership with community agencies, they implemented an in-school flu immunization campaign, reaching 26,000 students in 136 schools across nine school districts in 2015.

The campaign will more than double the number of schools in 2016. E3 Alliance identified chronic illness, including asthma, as one of the most impactful reasons to concentrate community services and has started working with regional stakeholders in education and health to address absences due to asthma. Since 2011, Central Texas has experienced increased attendance and has had a return of $24 million to schools.

Researchers at the University of Chapel Hill at North Carolina conducted a 2014 study that explored adding real-time, cause-specific school health absenteeism data including absences related to chronic disease (e.g., asthma, diabetes) into population-based disease surveillance. As a possible data collection method, the study considered integration of an electronic direct feed of the school data into the North Carolina Disease Event Tracking and Epidemiologic Collection Tool (NC Detect), a syndromic surveillance system managed by the North Carolina Division of Public Health that contains data from multiple clinical sources and is designed to be robust with expanding functionality. The researchers found that state public health officials, school administrators, school nurses, and others surveyed support further feasibility studies regarding development and implementation of a surveillance system to capture real-time, cause-specific absenteeism data that can help detect and manage disease outbreaks and monitor acute and chronic health conditions. Stakeholders provided feedback on specific acute and chronic health conditions they felt were important to track. Examples of chronic health conditions included diabetes, asthma, seizures, and ulcerative colitis.39, 40

Notably, these examples illustrate that work to address absenteeism can require cross-sector engagement to leverage resources such as funding, staffing, and use of existing data systems. In Central Texas, to collect and track causes of school absence and use the data to inform decisions, the support came from an education data-driven collaborative funded by health foundations with an understanding that they needed to provide schools with additional staffing assistance. A number of community and regional partners have implemented interventions focused on improving attendance in collaboration with schools.
The recommended actions that follow reflect the experiences of those who helped inform the development of this document, along with the information gleaned from a review of national and state resources. The tips are directed to state education and health departments through the lens of school health services, an area that may operate apart from or minimally with those who focus on school attendance. They are aligned with services that state education and health departments can offer schools at state and local levels, including ways to support school nursing through funded programs and continuous quality improvement projects or professional development and technical assistance. These actions can be useful to initiate or strengthen efforts to address absenteeism and are readily integrated into how state education and health departments approach and conduct their work. The recommendations may serve as a tool for state education and health departments to gauge need and identify their own actions for improvement.

**Improve Data Collection and Analysis**

1. **Learn about and promote improvements to processes and systems that support state-level attendance data collection and use.**

Examples of processes and systems:

- Attendance measures and their definitions, and the indicators to which schools are held accountable.
- Policies and procedures, including school district data reporting requirements.
- Data reporting systems and how they intersect with data systems used internally among school districts and the ease of transferring or exporting data to the state.
- Staffing infrastructure and support focused on attendance data collection and use.

- Attendance data monitoring and data trends.
- Accessibility of data.
- Plans for collecting and tracking chronic absence data, if not already in place.
- Use of early warning indicators for educators.
- Programs and practices aimed at reducing absenteeism, including those at the state level like a chronic absence interagency team.
- Primary reasons for truancy and programs and practices aimed at truancy diversion, as truancy is an underlying issue of absenteeism and to see if and how causes and intervention intersect with health services.

2. **Advocate for improved data quality that makes the data more meaningful and actionable.**

Examples of improved data quality for attendance and chronic health conditions:

- Chronic absence of students. The data will allow educators to better understand who is at risk for becoming chronically absent and where to target specific interventions that might help fix the problem. Data can be reported at the school district and school level and be disaggregated to show chronic absence among racial, economic, and other groups.
- Chronic health conditions of students, including disaggregated data to show chronic health condition diagnoses among racial, economic, and other groups. Step Up & Be Counted! National School Nurse Standardized Data Set, a joint NASN and NASSNC initiative, provides data points schools can use.
- Consistent and comparable definitions for attendance measures (e.g., a standard definition for chronic absence). At a minimum, the state should have standard attendance definition(s) to compare school districts and schools.
- Ways to collect cause-specific school absenteeism data, including chronic health condition-related causes, even if initially through a small pilot project that can be brought to scale at a regional or state level. This information can strengthen targeted interventions.
- Disaggregated absenteeism and chronic health conditions data to identify high rates and determine how these data sets align. Look at the data in the right way, to determine where resources and services should be allocated, including “hotspots” where these students are located.
Explore inclusion and/or review of additional health-related sources of data to inform absenteeism.

Examples of additional data sources:

- School-level data including school nurse sensitive indicators (e.g., health office visits, early school dismissal, seat time, percent of students with an asthma diagnosis having an asthma action plan, etc.) mapped out across the school year and determine if and how to translate statewide. These data can supplement and provide a context for attendance and chronic health conditions data.

- Community health assessment data prepared by local health departments and hospitals. Public health departments seeking accreditation through the Public Health Accreditation Board (PHAB) complete community health assessments and improvement plans. All non-profit hospitals must complete a community health needs assessment (CHNA) and implementation strategy every three years in order to be treated as tax-exempt under the Patient Protection and Affordable Care Act (Affordable Care Act) (2010). Hospitals also assess hospitalization and emergency department utilization data in establishing priorities. There may be overlay between these efforts with special attention to improving children’s health and working with schools on shared goals as a means to improving population health.

- Public health surveillance that compiles data from multiple sources. Some systems may capture data for various chronic health conditions. Others focused on the detection of acute illness such as influenza have incorporated school attendance. Determine if there are ways to apply these data analyses or leverage processes and resources to examine school attendance patterns for chronic health conditions.

- Consider supplementary state-added attendance questions in the state Youth Risk Behavior Surveillance System, Principal Questionnaire for School Health Profiles, or other

Approach Health Within a Framework that Aligns with Educational Goals

Below are several key points highlighted in Absences Add Up: How School Attendance Influences Student Success, a publication by Attendance Works:

- “Poor attendance in the first month of school can predict chronic absence for the entire year.”
- “Absenteeism in preschool and kindergarten can influence whether a child will be held back in third grade.”
- “Absenteeism in middle and high school can predict dropout rates.”
- “Absenteeism influences not just chances for graduating but also for completing college.”
- “Improving attendance is an essential strategy for reducing achievement gaps.” (p. 5).
- “When students reduce absences, they can make academic gains.”
- “Research points to effective strategies for improving attendance.” (p. 6).

To approach health in schools within a framework that aligns with educational goals, ask: How does addressing the management of chronic health conditions intersect with these points? Do state education and health departments and schools examine absenteeism for students with chronic health conditions in the first month of school or in early grades? Since schools nurses support students being healthy and ready to learn, to what extent is looking at improving attendance in reducing the achievement gap a part of their role? How are school health services incorporating evidence-based research and clinical guidelines for chronic health conditions into their practice to improve management in schools and reduce health-related causes of school absence?
Leveraging Health Data Management Systems and Processes to Address Absenteeism

Additional health-related sources of data to address absenteeism may be explored. Two examples are community needs assessments and public health surveillance systems described in more detail below. Existing health data management systems and processes such as these may help inform absenteeism as related to chronic health conditions, including possible cause-specific data and provide guidance for intervention. Advances in informational technology and shared use of electronic health records to enhance communication and coordination between schools and their partners may offer new possibilities into the future.

Community assessment analyses and reports that synthesize state- and local-level data are a source of information for schools to access. Local public health departments conduct community health assessments at least once every five years as part of the PHAB accreditation process, and non-profit hospitals are required under the Affordable Care Act to conduct a CHNA every three years and adopt a CHNA report and implementation strategy. Public health, health care, and other stakeholders (e.g., government officials, non-profit organizations including schools, etc.) are increasingly collaborating in the development and implementation of assessments and plans to improve population health. The community needs and priorities identified can tie to social determinants of health, including components within the area of education, involve children’s health, and intersect with schools.

Disease surveillance systems that cull data from various secondary sources may help provide timely, early warning indicator information regarding health problems. Even those with a sole emphasis on communicable illness monitoring (e.g., influenza) can be a gateway or inform processes to connect attendance data and chronic health conditions. The Electronic Surveillance System for the Early Notification of Community-based Epidemics (ESSENCE) administered by the Maryland Department of Health and Mental Hygiene (DHMH) incorporates school absenteeism data from all public schools statewide for use with other surveillance sources to monitor illness in communities. Through ESSENCE, school systems signed a memorandum of understanding addressing FERPA compliance with DHMH regarding the transfer of school data. Public Health – Seattle & King County (PHSKC) in Washington developed an automated school absenteeism surveillance system to monitor absenteeism trends for 18 public school districts and assessed system utility. School nurses received weekly absenteeism reports from PHSKC, and the system led to benefits in responding to outbreaks, monitoring absenteeism in the context of school interventions, and guiding administrative and program decisions.
health-related survey instrument(s), to examine students who report health and absences.

Be aware of and able to respond to challenges to improving data quality and strategies for navigating FERPA and the Health Insurance Portability and Accountability Act (HIPAA) (1996). There are data challenges, but it is important to know and anticipate them and communicate the opportunities. Development of clear guidelines at the state level for collecting, using, and sharing data while protecting student information can help address questions schools may have and lessen barriers. Addressing compliance with FERPA and HIPAA is pivotal to establishing partnerships that involve data sharing.

Leverage Policy and Environmental Change

Identify policy levers and how state-level health policies involving schools can help support education and improved attendance. In the development, implementation, and revision of relevant state-level health policies and procedures with key policy makers and other stakeholders, explore how to align systems and policies around education goals, including the achievement gap, and how attendance data collection and use can be incorporated. Policies can be reviewed to make sure they do not conflict with goals to improve school attendance. For example, state regulations for schools can better mirror and incorporate criteria recommended by the American Academy of Pediatrics (AAP) that define conditions or symptoms that necessitate school exclusion. Although these AAP guidelines address contagious illness, they may be useful as a resource to determine if and when students with chronic health conditions should not attend school and may help prevent exacerbated absences in populations at risk for absenteeism. It is important to increase understanding of the drivers for reducing attendance and what messages resonate with potential school partners, such as having an attendance-based funding model, the linkages between absenteeism and academic achievement (e.g., lowered test scores), and integration of the whole child. Communicating that a primary role of the school nurse is keeping children healthy and in school is critical, and it could be more impactful in states with school districts looking to increase revenue based on attendance.

Capitalize on the national efforts aimed at improving school attendance and the information and resources they provide. Many of these initiatives tie to the concept of chronic absence. The Every Student, Every Day initiative and ESSA should enhance reporting of chronic absenteeism data and build momentum in reducing absenteeism through a coordinated, comprehensive approach that intersects with health. There is a unifying opportunity for states, schools and additional partners to improve policy and practice aligned with national goals.

Consider the climate around integrating public health and health care and explore how to leverage the social determinants of health, which includes education as a key area and components that tie to attendance. Healthy People 2020’s goals around social determinants of health can be a lever to engage policy development and partnership.

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s Health Insurance Portability and Accountability Act (HIPAA) (Public Law 104-191), http://www.hhs.gov/hipaa/
Strengthen Partnerships and Community Linkages

1. **Build relationships with key state education and health department personnel and explore opportunities to collaborate that engage cross-systems support to address absenteeism.** Supportive partners can include government officials, national non-governmental organizations (NGOs) such as Attendance Works, NGO state affiliates and chapters, state organizations and advocacy groups, hospitals, local health departments, community-based organizations, and more, as appropriate. Collaboration with national and state school nurse organizations may help increase the use of evidence-based clinical guidelines for chronic health conditions in school nurse practice (e.g., national guidelines for asthma, or EPR-3 guidelines), potentially improving attendance. Be strategic with aligning school health services and partnerships. Schools cannot do this alone and partners having a unified strategy can help in achieving goals. Examples of efforts that engage cross-systems support:

- Collect and review attendance data at state or local level.
- Identify and disseminate interventions and best practices to reduce absenteeism.
- Develop and communicate key messages to school districts.
- Plan and implement a coordinated, comprehensive approach. Become part of an interagency attendance team if feasible.

2. **Leverage partnerships to provide funding and logistical support (e.g., assistance to lessen a school nurse’s clerical workload) that supplement school health services.** Additional support can help school nurses better analyze attendance within the context of chronic health conditions in order to strengthen and implement evidence-based nursing interventions that reduce absenteeism. School nursing staffing generally falls short of optimal levels to meet the needs of students.

There may be opportunities to fund a position that works across school nursing and other school staff, between students and families, and perhaps to directly fund additional school nurses. The school district may be able to leverage other relevant existing positions, such as a designated liaison for homeless students, to assist with absenteeism.

3. **Consider partnering in qualitative and quantitative research opportunities with universities and other public and private organizations around examining absenteeism and chronic health conditions.** These studies can extend the capability of state education and health departments and involve more robust data analysis and comparative research. They may better identify effective programs and services that improve attendance for students with chronic health conditions for different groups and age levels based on disaggregated data (e.g., low-income status).

Engage Schools in Planning and Assessment

1. **Learn from statewide school district and school examples having increased attention to and progress in a) addressing absenteeism and b) connecting attendance and chronic health conditions data.** Identify examples, and ask about structures and processes for attendance data collection and use, and whether school health services data intersects for those students with chronic health conditions. Inquire about their needs, interests and areas for state-level support as well as best practices and evidence-based interventions used locally to reduce absenteeism. This is especially impactful in schools with high absenteeism rates or that have high numbers of students with chronic health conditions. Additionally, it is helpful to seek insight from schools that have better rates of attendance despite having known risks associated with absenteeism (e.g., poverty).

2. **Ask schools about how they socially and emotionally support students who have chronic health conditions.** There are multifactorial reasons for absence that extend...
beyond meeting physical health needs. This can also help investigate the reasons for truancy for these students and meet a comprehensive set of needs. Moreover, it may help identify strategies that build care coordination and how schools nurses can better work with other student support staff professionals and resources directed to students’ social and emotional needs.

3 Establish a small advisory group to inform plans and priorities regarding attendance data collection and use as related to chronic health conditions or solicit guidance from an existing group involved in other related activities or projects.

The group can be comprised of state- and local-level partners including representation of school nurses and “champions” who are connecting attendance and health.

Build Capacity through Funded Programs and Continuous Quality Improvement Projects

1 Develop or strengthen state-funded programs and continuous quality improvement (CQI) projects to improve health outcomes with inclusion of objectives and interventions that relate to absenteeism and having attendance as a data point.

Examples for measurement regarding attendance:

- Attendance-related data points and goals that include chronic absence. Set annual, achievable target goals for reducing chronic absence in schools on an annual or more frequent time interval. Use the OCR definition of 15 days or more during the school year or the common definition of 10% or more in a school year as a basis. Emphasize the need to monitor for absenteeism regularly and redirect interventions if there is no improvement.

- Parameters for attendance status in examining chronic absence risk. For instance, a study involving a school district and partners examining data in New Britain, Connecticut used four levels to assess chronic absenteeism, defined as less than 90% attendance: 1) good: 96% - 100%, 2) approaching chronic absenteeism: 91% - 95%, 3) chronic absenteeism: 81% - 90%, and 4) severely chronic absenteeism: 80% or lower.\(^45\) Tiers of intervention move from universal strategies to intensive supports reflecting the level of anticipated need,\(^46\) and the three tiers to reduce chronic absence can be applied to parameters like these.\(^v\)

2 Intervene with attendance early and throughout a child’s schooling.

Direct programs and services to early intervention beginning in pre-K and kindergarten as that is when absenteeism arises and continue to monitor and intervene in all grades through elementary, middle, and high school. Transition grades such as kindergarten and grades 1, 6 and 9 have increased absences and may be critical points for intervention.\(^1\),\(^34\) Chronic absence rates increase into middle and high school as truancy worsens.\(^34\) Intervening early and throughout a child’s schooling over time can support school engagement and continuous motivation for learning and educational progress.\(^w\)

3 Start small and keep asks of schools simple, consistent, and sustainable.

Examples:

- To tie in attendance data, it may involve extra work on behalf of the nurse. Look at what is appropriate for school nursing structure and pilot with a short list of schools.

- For work focused on chronic health conditions, start with major issues impacting health such as asthma. Asthma is better managed with increased control and associated with absenteeism. Efforts involving asthma can be a model for addressing other chronic health conditions.

- Begin with students in one or only a few select grades.

- Determine the “low-hanging fruits” through use of

\(^v\) The three tiers of intervention to reduce chronic absence are used in many school districts and states. Attendance Works provides suggestions for each of these tiers for schools and schools can adapt these ideas and/or identify their own strategies. http://www.attendanceworks.org/tools/schools/3-tiers-of-intervention/

\(^w\) “Engagement is associated with positive academic outcomes, including achievement and persistence in school; and it is higher in classrooms with supportive teachers and peers, challenging and authentic tasks, opportunities for choice, and sufficient structure.” http://smhp.psych.ucla.edu/pdfdocs/schooleng.pdf (p. 2).
disaggregated data and the partners and resources that are available. Identify the areas that make the most impact on health equity and population health.

**Enhance Professional Development and Technical Assistance**

1. Share and promote national and state recommendations and best practices with schools and offer schools opportunities to network and learn from each other.

   **Examples:**

   - Importance of examining chronic absence to move schools away from ADA, which can mask chronic absence. Emphasize the need to look at specific data sets. Use and promote school resources and tools from the Every Student, Every Day initiative, Attendance Works, Everyone Graduates Center, and Healthy Schools Campaign. Many states have developed their own guidance around addressing absenteeism. Adapt the information to school districts in the state as feasible, incorporating the policy levers, drivers and messages that resonate with partners.

   - Collected best practices and success stories for school districts connecting attendance and chronic health conditions within their districts and schools. These successes may examine chronic health conditions such as asthma and absenteeism.

   - Nursing interventions and evidence-based clinical practice guidelines for chronic health conditions to support improving the management of chronic health conditions in schools. Their implementation may better address the health-related causes of absenteeism.

   - Opportunities that foster peer-to-peer networking and learning, exemplifying how the state can provide support. Schools can benefit from sharing strategies directly with each other.

2. Educate various audiences, particularly school nurses and health care providers, and frame messages to demonstrate the value to schools in making connections between attendance and chronic health conditions.

   School nurses can be a valuable member of the school district or school attendance team in improving attendance and academic achievement. It is important to build their buy-in and involvement regarding actions that could extend their workload such as collecting data to learn if absence is due to a health reason and to convey that carrying out interventions to reduce absenteeism is within nursing scope of practice. School nurses can identify and implement strengthened nursing interventions, including but not limited to the development of management plans such as IEPs, 504 Plans, IHPs, and Emergency Care Plans that document required medications, activity modifications, and other key actions to address daily management of the student’s condition and emergency response needs; referrals to community-based medical providers, insurance programs and other resources; and education for students and families. They can strive to minimize tardiness or missing class due to chronic health reasons, since time spent in the health room is time lost from classroom instruction. Similarly, primary care physicians and other providers caring for students with chronic health conditions can be educated about the importance of attendance and to be thoughtful in providing medical notes for health-related absence and scheduling appointments to help students avoid any unnecessary school absences.

3. Deliver professional development and technical assistance to schools, including school nurses, to improve attendance data collection and use.

   Encourage schools to consider conducting any or all of the following activities:

   - Collect and review 1) attendance data and 2) chronic health conditions data for students with attention to quality of data entry for individual students and use of longitudinal student databases to store and track data. Involve data programmers if needed to generate reports that identify chronically absent students.

   - Provide school nurses and other designated staff access to attendance data about each student that can show student-level trends over time. If reasons for absence are collected, school nurses should receive these reports to track absences due to health concerns.

   - Monitor and review real-time student attendance data as a team, at consistent intervals (e.g., data reports every 10 days or 20 days) to identify specific
issues or affected student populations. Include the school nurse as part of the team. School-wide attendance teams provide triage for individual students and foster systems solutions. Case management nursing positions or positions like family liaison workers can help schools reach those requiring additional support.

- Build a school culture that values and promotes attendance for all students through district staff working with a shared understanding on the roles they play.
- Identify and communicate with partners and instill a community-embraced approach that supports the expectation of attendance and reduced absenteeism.
- Determine thresholds for absenteeism to address and implement tiered interventions. Parents and guardians should be alerted as early as possible to a student’s increasing absences.
- Improve parent and family awareness and engagement in promoting good attendance, including how school nurses and health care providers can communicate and work with parents and how to provide personalized outreach and support to students and families that meet their needs and goals. School nurses and others can educate about signs and symptoms for when a child is too ill to go to school. Even if reasons for absenteeism are not formally tracked, these relationships can help identify challenges to attending school and make referrals to medical and community resources. Home visiting programs and support for parenting skills can assist.
- Identify ways to ease school transitions to provide early and proactive response to absenteeism if it has been an issue. For students who have school transitions between school years or during the school year, identify the possibility for schools to learn about an incoming student’s attendance history and any prior school interventions through longitudinal databases or contact with previous school nurses who may be able to provide a nurse-to-nurse report, for example.
The examples within this section are organized by state and highlight actions of state education and health departments, schools, and other partners to address absenteeism through comprehensive approaches that can be mutually beneficial to education and health. They integrate school health services and the role of the school nurse in data collection and use in efforts aimed at improving school attendance. Some strategies show the recommendations and opportunities for school attendance, chronic health conditions, and leveraging of data for improvement identified above in action.

Connecticut

The Connecticut State Department of Education (CSDE) has demonstrated significant state leadership around reducing chronic absenteeism. Several state-level highlights in recent years are listed below:

- CSDE measures and publicly reports chronic absenteeism data for the state, and a three-year trend analysis indicates improvement. Data for each school district are disaggregated by grade range, race/ethnicity, meal eligibility status and other measures.
- The Children’s Committee of the Connecticut General Assembly has identified chronic absence as one of its “headline indicators” for ensuring that Connecticut children are growing up in a stable environment. It is tracked through a results-based accountability CT Kids Report Card. In 2014, this committee formed the Strategic Action Group (SAG) on Chronic Absenteeism to coordinate and centralize efforts to reduce chronic absence. CSDE co-chairs SAG with the Consolidated School District of New Britain (New Britain SD). In addition, the SAG is partnering with the Connecticut Data Collaborative and schools to initiate an attendance data geo-mapping pilot project.
- Public Act 15-225, An Act Concerning Chronic Absenteeism went into effect in 2015 to strengthen efforts to improve chronic absence and requires development of a chronic absenteeism prevention and intervention plan. All school districts having a district chronic absenteeism rate of 10% or higher, or a school having a school chronic absenteeism rate of 15% or higher, must establish school attendance review teams that meet at least monthly to identify and implement school interventions and community referrals to reduce their absenteeism. The law clarifies ‘disciplinary absence’ and supports to identify and resolve the cause of a child’s truancy using non-punitive procedures.
- Chronic absenteeism became included as an indicator in the CSDE enhanced accountability system.
- The Connecticut State Board of Education released guidelines that highlight nationally recognized best practices aimed at improving student attendance, including the leveraging of school nurses to improve overall attendance and compliance to attendance.

y Connecticut Data Collaborative, http://ctdata.org
policies and recommendations on the three tiers of intervention.\textsuperscript{49} CSDE created an inventory of best practices in the state collected through interviews with Alliance Districts and has shared these practices with various organizations throughout the state and through communications to schools.\textsuperscript{2, aa}

CSDE provides technical assistance to districts and schools and reinforces the importance of chronic absence data collection and delivery of interventions aligned with the disaggregated data. Attention to chronic absence is CSDE-wide, so incorporating health and nursing services is an integral part. CSDE partners with champions for reducing absenteeism across the state including the Governor’s Prevention Partnership and Attendance Works.

New Britain SD is an example of a strong district-level effort. The district had a high chronic absenteeism rate of 19.1\% that exceeded the state rate of 10.7\% during the 2013 - 2014 school year. Since 2012, New Britain SD has reduced absenteeism for kindergarten students by approximately 39.7\% and for K - grade 3 students by 44.86\%. Below are key features regarding the New Britain SD approach:

- New Britain SD emphasizes building a school-wide culture of attendance and its importance with staff awareness on the role they each play in helping students succeed. New Britain SD has increasingly integrated addressing health issues in efforts aimed at reducing absenteeism. The attendance director provides professional development opportunities at the start of the school year and meets weekly with school-based intervention teams including school nurses throughout the school district to review and discuss an attendance report that spans 10 days of data and identifies and tracks chronically absent students. The meetings identify and set plans in motion to meet individual student needs across a continuum and monitor school trends and absence commonalities to determine system solutions for groups of students. New Britain SD student attendance intervention and monitoring procedures use Attendance Works’ recommendations for the three tiers of intervention and designate responsible staff to implement and document interventions.

- In partnership with the Coalition for New Britain’s Youth and the support of the Community Foundation of Greater New Britain, New Britain SD hired family intervention liaisons to assist in case management and work with families of kindergarten students. They work with school nurses and others to determine when to make home visits that can determine the reasons for a student’s absenteeism and needs for the student or family that must be met, which will help the student attend school.

- Students identified as not having well-controlled asthma in any grade level can receive case management services involving the school nurse and others from the New Britain HD to assist with issues like home-based environmental remediation.

A supportive data project conducted by New Britain HD in collaboration with New Britain SD and the Center for Public Health and Health Policy at the University of Connecticut examined the relationship between obesity, asthma, and attendance. It helped assess the need for health-related interventions and provided statistically sound baseline information to use in designing and evaluating intervention programs. Researchers examined demographic data and weight and asthma status for all students (n = 4,509) in Pre-K, kindergarten, and 2nd, 3rd, 6th, and 9th grades with the attendance information available for most of these students (n = 3,973) in the 2014 – 2015 school year. They reviewed data from prior years for longitudinal analyses of weight status with select grades. A total of 29\% of students in New Britain SD have physician-diagnosed asthma and by 6th grade the prevalence increases to a high of 39\%.\textsuperscript{ab} The study found that additional demographics in the study sample: 59\% of students of Hispanic/Latino ethnicity; 75\% of students eligible for free/reduced cost lunch; chronic absentee rate of 21\% but as high as 46\% among 9th graders; and 37\% of students are overweight or obese.
asthma control should be addressed to increase attendance and test performance.\textsuperscript{45}

\section*{Kentucky}

Kentucky uses an attendance-based funding model where school districts receive funding based on their attendance rates. School superintendents must annually submit reports of student attendance to the Commissioner of Education. This model can be a driver for districts to collect and track attendance data and identify interventions to reduce absenteeism. These efforts have helped connect attendance with health in Kentucky. All schools are required to report attendance data and health data including chronic health conditions data to the Kentucky Department of Education (KDE) through a data collection system used statewide.\textsuperscript{ac}

KDE and the Kentucky Department for Public Health target six school districts for the management of chronic health conditions in their implementation of State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health (DP13-1305), funded by the Centers for Disease Control and Prevention.\textsuperscript{ad} All students diagnosed with asthma within these schools are linked to a medical home, insurance, and needed supports. School nurses receive professional development and technical assistance from KDE, and they become engaged in monitoring attendance data, identifying asthma-related causes, and implementing nursing interventions as appropriate.

Schools review monthly student attendance data and identify students with asthma who have six or more absences. They prepare written policies and protocols to reduce absences, with involvement of school nurses in the school-level attendance interventions. School nurse documentation involves increasing the number of IHPs and ECPs for students with asthma and strengthening their implementation. Initial data indicate improved attendance with a decline in the average number of absences for students with asthma by 1\% over the two years of implementation, although the number of students with asthma and number of absences increased. A rural district reduced the number of absences by three days, or the equivalent of more than 2000 hours of instructional time for the students. The success is being attributed to a number of factors including enhanced communication with physicians, parents, and the community regarding asthma management, coordination between school attendance teams and school nurses, and medication adherence and administration. School nurses see students before they are being sent home “sick,” which has also improved tracking of health office visits and disposition data.

\section*{Massachusetts}

Massachusetts Department of Elementary and Secondary Education in partnership with the American Institutes for Research developed an Early Warning Indicator System (EWIS) focusing on grades 1-12 to help identify students at risk for achieving academic goals, like high school graduation.\textsuperscript{ae} The EWIS model includes attendance rate in addition to other indicators. Many efforts in the state use EWIS and local data to identify, diagnose, support and monitor students beginning at earlier grade levels, and EWIS has helped spur health-related projects to build on the use of attendance as a behavioral indicator.

The Essential School Health Services (ESHS) program through the Massachusetts Department of Public Health (MDPH) strengthens school nursing and comprehensive school health services. A total of 120 different school districts have received funding since the program’s inception, and 69 districts are a part of the FY2016 program. An Attendance Continuous Quality Improvement (CQI) project implemented in all funded ESHS school districts measures improvement

\textsuperscript{ac} The Kentucky Department of Education publishes data via Open House, a public one-stop-shop for education data including supplemental data for school health. http://openhouse.education.ky.gov

\textsuperscript{ad} State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health (DP13-1305), http://www.cdc.gov/chronicdisease/about/state-public-health-actions.htm

\textsuperscript{ae} Massachusetts Early Warning Indicator System, http://www.doe.mass.edu/edwin/analytics/ewis.html
in attendance rates for students with poor attendance records by implementing nursing interventions, specifically manage health issue, referral, and parent education. In FY2015, the CQI project involved second grade students, and expanded in FY2016 to continue tracking of those students into grade 3, in addition to cohorts in grades 1, 7, and 9. School nurses identify students who miss three or more school days in the past 30 consecutive school days, implement and document nursing interventions as appropriate, and then track school attendance for intervals of 30 consecutive days following intervention, determining the number of students with an improved attendance rate. The CQI project is showing improved attendance for the students involved in school nursing services.

Moving Forward

Cumulative absences equate to lost opportunities for learning. Absenteeism is associated with student education and health outcomes, and improving attendance rates has potential to yield many positive benefits for children. These linkages become even more compelling for low-income students and others groups who face difficult hurdles in life that can affect their ability to attend school. State education and health departments, through their work in the area of school health services, share in the responsibility to address absenteeism and can provide tremendous leadership and support to schools. They can contribute to a coordinated, comprehensive approach inclusive of attendance data related to students with chronic health conditions. Some states and schools already examine attendance and chronic health conditions together, but they may still find recommendations and examples provided here useful to strengthen their work.

In moving forward, the hope is that efforts to improve school attendance and the management of chronic health conditions in schools can become more inherently connected. Ideally, in initiatives to monitor and improve school attendance, a question would always be asked regarding the possible cause of an absence and if it is indicative of an underlying health condition or a disease exacerbation that needs to be managed more effectively. To improve the management of chronic health conditions in schools, attendance for students with chronic health conditions would be examined to identify and implement interventions that help students maintain disease control and attend school. Improvement through the collection and use of meaningful data is pivotal to these actions in addressing absenteeism for every student to succeed.
Additional Resources

Attendance Works, www.attendanceworks.org


Everyone Graduates Center, http://every1graduates.org

Healthy Schools Campaign, Chronic Absenteeism, healthyschoolscampaign.org/chronic-absenteeism


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