



Addressing Illness-Related Chronic Absences

Cherry Arimas-Macalino, DNP, RN

Penny C. Weismuller, DrPH, RN

Rachel McClanahan, DNP, RN, NCSN 

School attendance is a predictor of academic achievement. Chronic absenteeism, defined as missing 10% or more school days affects 14% of all students nationwide. District attendance processes, policies, and data were analyzed in a demographically diverse southern California high school. A review of the attendance history of 117 ninth and tenth graders, who missed at least 10% of days in school, showed that 66% of the absences were due to illness. Prior to the project, these students were not referred for nursing intervention. Results of this quality improvement project supported the adoption of a specific code for absences due to illness. A district procedure for illness chronic absence was adopted to allow early nursing intervention for students with chronic absences prior to the development of illness-related academic underperformance. This project demonstrates nursing roles in the quality improvement and care coordination aspects of the NASN's Framework for 21st Century School Nursing Practice™.

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Absenteeism

Nationwide, 14% of all students miss 15 or more school days during the school year, and 19% of high school students are chronically absent (U.S. Department of Education, Office of Civil Rights, 2016). Chronic absenteeism, defined as missing 10% or more school days, regardless of reason, leads to adverse long-term effects, including employment problems, lower health literacy, higher rates of illness, and earlier death (California Attorney General, 2016). Chronic absenteeism is also a warning sign for high-risk behaviors, such as tobacco use, drug abuse, high-risk sexual behaviors, and violence (Vaughn, Maynard, Salas-Wright, Perron, & Abdon, 2013).

Chronic Absence due to Illness

Evidence highlights the impact school nurses can have in the reduction of absenteeism rates in students with chronic health conditions (Rodriguez et al., 2014). Chronic health conditions, defined as conditions with symptoms

lasting 3 months or more, and requiring medical care, have increased in prevalence and currently affect 15% to 20% of students in the United States. The existence of a chronic health condition poses increased risk for poor educational attainment and unsuccessful high school completion (Champaloux & Young, 2015). Raun et al. (2017) reported that 50% of children with a chronic health condition miss a significant amount of school due to physical and/or social consequences associated with their condition. For students with chronic health conditions, absences may be attributed to symptom flare-ups, medical appointments, side effects of the treatment regimen, or perceptions of feeling different (Raun et al., 2017). Emerson et al. (2016) reported that the parents of children with chronic health conditions might extend absences due to an increased perception of vulnerability in their child. The school nurse is not always informed of those who have frequent or extended periods of absence, which might be an indicator of chronic or episodic health conditions. Since "illness" is a common reason given for absences, whether the absence is truly

illness related or not, monitoring the attendance of students who have reached the 10% threshold for chronic absence due to illness, and referring them to the school nurse for assessment, is critical. The Care Coordination and QI components of NASN's Framework for 21st Century School Nursing Practice™ (2016) guided the iterative process in this project for the development of recommendations for mitigation of chronic absenteeism due to illness.

Record Keeping Practices

Illness is a common excuse provided by parents when reporting an absence, yet many school attendance tracking systems do not specifically identify the reason for an absence, or whether the absence is illness related (Jacobsen, Meeder, & Voskuil, 2016). In some schools, missed days are coded simply as “excused” or “unexcused” without specific coding for different reasons. The lack of a detailed coding system poses a challenge in tracking and can cause illness-related chronic absences (IRCA) to go unnoticed until a student is at risk of academic failure. Without information about which students are missing school due to illness, the school nurse cannot provide necessary interventions and accommodations.

Additionally, even in districts where illness absences are recorded as such, processes for alerting the school nurse about those students are often not formalized or nonexistent. The lack of a formalized process to elicit a school nurse referral results in missed early-intervention opportunities that may ensure that illness-related absences do not impede learning.

Quality Improvement Project

The goal of this quality improvement (QI) project was to review attendance data and, if warranted, recommend an improved attendance tracking system that identified students with illness-related chronic absenteeism and to initiate a referral process for school nurse intervention with those students. The overarching goal was to promote student health and maximize educational outcomes by minimizing illness absences. Evidence suggests that

attendance and school performance in the ninth grade are highly predictive of high school dropout (Allensworth, Gwynne, Moore, & de la Torre, 2014). Because positively influencing attendance rates in students in the lower grades of high school is critical, the records of students in 9th and 10th grades were examined. The project was carried out at a single high school in southern California during the fall of 2017 and spring of 2018. The project was approved by the participating school district and was exempt from institutional review board review.

At the project school, attendance personnel record illness absences with a “code 1—excused” and chart that the absence is due to illness in the notes section of the database. A “code 1—excused” is also used to indicate absences for other reasons, such as appointments or funerals. Without a feature in the school's system to aggregate student absences by the notes, each record must be reviewed individually to identify the specific reason for an absence. This process is cumbersome and prevents ready identification of students with illness absences.

Quality Improvement Model

The QI process used was the FADE model (Sublett, 2008). Its four steps include *Focus*, *Analyze*, *Develop*, and *Evaluate*. The *Focus* of this project was determining the level of illness-related absences among 9th and 10th graders. The *Analyze* step reviewed illness-related absences to portray the extent of “excused” absences that were due to illness and to describe educational impacts, such as course failure and academic progress, found in case studies of students with chronic absenteeism due to illness. The *Develop* step included creating both a recommendation for implementing a specific illness code for absences and a nursing referral process for students with these chronic absences. Finally, the *Evaluate* step examined whether the project resulted in a policy change for identifying and referring illness absences.

Method

For this project, an illness absence was defined as missing a full school day due to a reported illness or health-related appointment. The school district in which this project was conducted defines attendance-level measures as satisfactory (missing less than 5% of total school days), at risk (missing 5% to 9.99%), moderate chronic absence (missing 10% to 19.99%), and severe chronic absence (missing 20% or more). These categories are a modification of the State of California Department of Education's Dashboard (2019).

Among students identified with chronic absenteeism, due to any reason, we defined IRCA when 51% or more of absences were health related. These absences were then reviewed to determine if they occurred in clusters. A clustered illness-related chronic absence (CIRCA) was defined as four or more consecutive missed school days due to an illness-related reason (see Table 1).

The project team anticipated that students meeting the CIRCA criteria might have a chronic or more significant episodic health condition that could be influenced by nursing intervention, so these students were selected for individual case review, analysis, and care planning. Case review and analysis of students with CIRCA included examination of records for detail and trends related to the student's attendance (Table 2). For each CIRCA student case reviewed, a nursing diagnosis and proposed interventions and outcomes were developed.

Findings

The attendance records of all 9th- and 10th-grade students who were absent from August 2017 to March 2018 were reviewed to determine if the absences were illness related. If the student met the IRCA criteria, their absences were further examined to determine if they met the CIRCA criteria. If a student's absences met both IRCA and CIRCA definitions, their individual attendance and school records were reviewed by the

Table 1. Attendance Definitions

Abbreviation	Name	Definition
IRCA	Illness-related chronic absences	Chronic absences are attributed to illness
CIRCA	Clustered illness-related chronic absences	Chronic absences with four or more <i>consecutive</i> days attributed to illness

Table 2. CIRCA Case Review and Analysis Checklist

Document	Details of document examination
Attendance	<input type="checkbox"/> Current year, previous years, existing trends
Health History	<input type="checkbox"/> Has one been completed in the past two years, if so what are the results? If not, complete new health history.
Grades	<input type="checkbox"/> Current year, previous years, cross-check with attendance in current and previous years to find trends in alignment with absences
Health Office Visits	<input type="checkbox"/> Number and type of visits current year, previous years, check for trends in alignment with absences, what do the visit notes say?
Contact with Parents/Guardians	<input type="checkbox"/> Number and types of contact with parents by nursing (health office staff), reason for contact, check for trends in alignment with absences
Enrollment Date	<input type="checkbox"/> Date the student enrolled in the school to determine the percentage of days absent since enrollment
Special Programs (IEP/504)	<input type="checkbox"/> Does student have an IEP or 504 Plan, what are the details of the plan related to health and attendance?
Student Support Meetings	<input type="checkbox"/> Has a student support meeting, such as a Student Study Team (SST), Response to Intervention (RTI), Student Assistance Team (SAT), Coordinated Services Team (CST), and so on, been held, what were the results, action items, follow-up items of the meeting(s)? What are the details of the meetings related to health and attendance?
Student Attendance Review Board (SARB)	<input type="checkbox"/> Has student had a previous SARB meeting, what are the details and outcomes of that meeting?

Note: CIRCA = clustered illness-related chronic absence; IEP, individualized education plan.

project lead to determine the underlying reason for the absences, and to develop a nursing plan to mitigate future absences.

Among 9th graders with moderate chronic absences, 71% of absences were illness related, and for 10th graders, illness-related absences were 73%. Of those who met the severe chronic absence category, 46% of 9th graders and 38% of 10th graders missed school due to reported illness. Of the 117 students in the 9th and 10th grade with moderate to severe chronic absences, 66% reported

illness as the primary reason for the absences. A comparison of the moderate and severe chronic illness categories showed that students with severe IRCA had a higher proportion of clustered absences. Of the 117 students with moderate to severe chronic absences, 77 missed school due to a reported illness (Table 3).

Case Study Analysis Findings

Twenty-six students from the pool of 77 met the CIRCA criteria of having missed four or more consecutive school

days due to illness and so an in-depth examination of those records was completed.

Health Conditions

Of students with CIRCA, 11 had a diagnosed chronic health condition, including asthma, a heart condition, Down's syndrome with hydronephrosis and hypothyroidism, kidney transplant, and seizure disorder. Six students had asthma, only three had a prescribed inhaler available at school, and none had utilized their inhaler during the current

Table 3. Students With Moderate to Severe Illness-Related Chronic Absences (IRCA)^a

Grade	Moderate IRCA, N (%)	Severe IRCA, N (%)	Moderate and severe IRCA, N (%)
9	30 (83)	6 (17)	36 (100)
10	36 (88)	5 (12)	41 (100)
Total	66 (86)	11 (14)	77 (100)

^aModerate chronic absence (missing 10% to 19.99% days). Severe chronic absence (missing 20% or more days).

school year. Of these students with chronic health conditions, only two had been referred to the school nurse for case management. This lack of referral may have been due to a deficiency in understanding of the school nurse role in addressing chronic health conditions and absenteeism.

A majority of the student cases analyzed had no record of a diagnosed health condition. Several students had documentation of having visited the health office, usually for somatic complaints of stomachache, headache, or orthopedic injury. Other students had a notation in their record of having a parent-reported health condition, such as depression, anxiety, reflux, eczema, flu, or chronic pain, without documentation of a diagnosis from a healthcare provider. Seven students had no documentation of any health-related concern at all.

Academic Outcomes

Of 30 ninth graders with moderate IRCA, 10% failed one or more courses and teachers documented that excessive absences affected academic progress in 17% of these students. In comparison, 17% of students with severe IRCA failed one or more courses due to excessive absences. Of the 77 ninth- and tenth-grade students with moderate to severe IRCA, 14% failed one or more courses in the first semester. Students with CIRCA had even poorer academic outcomes with 40% of 9th graders and 44% of 10th graders failing at least one class in the first semester. Failed courses create credit deficiency and increase the risk of not meeting high school graduation requirements.

Discussion

This QI program demonstrated that a procedure was needed to efficiently identify and refer students at risk for IRCA, prior to the negative consequences of academic performance. A review of project school and district practices, attendance data from the district, information gleaned from other district practices, and the case analysis results promoted the development of a specific attendance code for illness as well as a model chronic absence procedure algorithm.

Illness Absence Attendance Code

In order to effectively record, aggregate, and intervene with students who are chronically absent, schools or school districts should create a dedicated code to indicate those absences that are illness related. In addition to dedicated illness code, specifics about the absence should be noted in the narrative section. Key information to enter would include whether the absence was due to hospitalization, illness or injury, who reported the absence, and whether a healthcare provider verified the absence. Based on the findings of this project, the district is instituting a specific illness absence code in order to trigger referral to the school nurse for those students with chronic absence due to illness.

Chronic Absence Procedure Algorithm

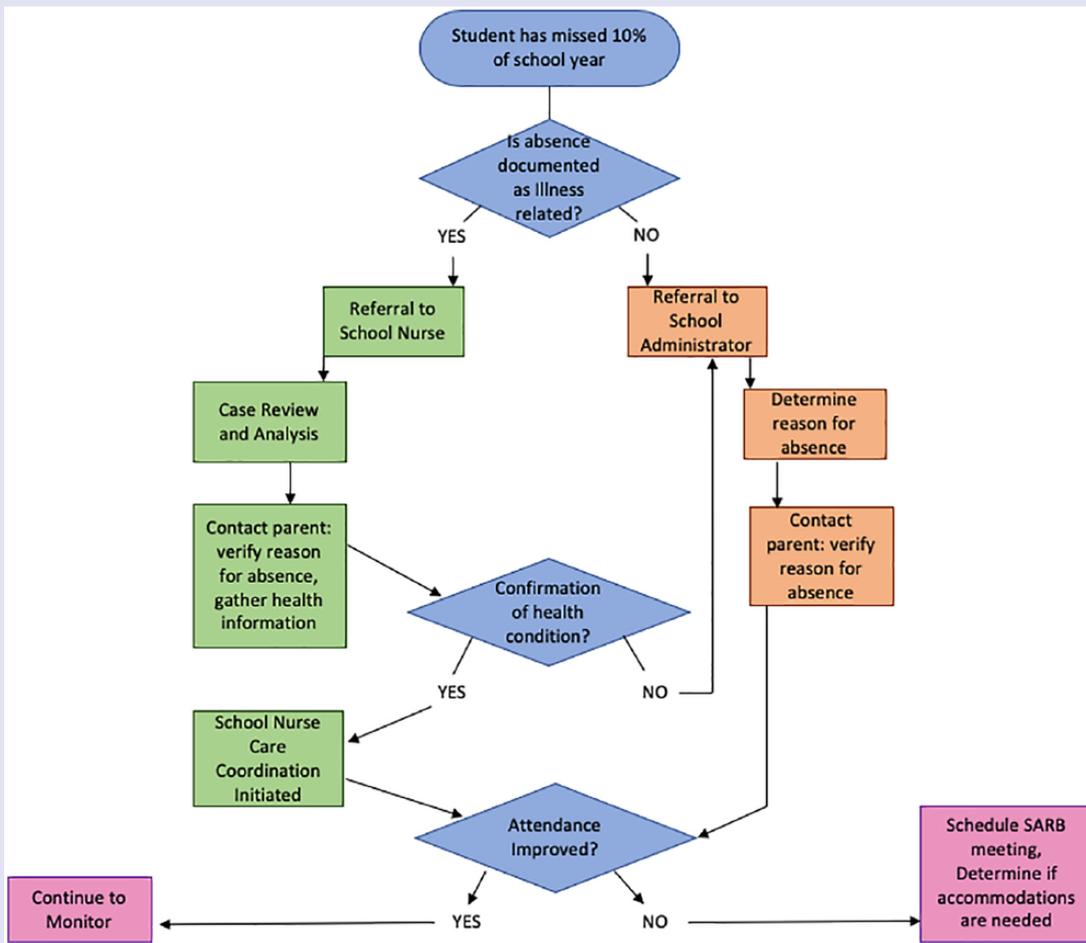
In addition to the illness absence code, the district adopted the chronic absence algorithm, and school nurse referral process (Figure 1).

The algorithm shows a clear referral pathway to the school nurse for IRCA or to the administrator for non-IRCA. The school nurse reviews the student's health and attendance history (for the current and previous school years) and contacts the parent to verify the reason for the illness absences. If a medical condition is verified, care coordination, which may include a full health history assessment, contact with healthcare providers, and the development of an individualized health plan, is initiated. The referral of a student with illness absences as soon as the 10% absence threshold is reached is critical for the school nurse to provide early intervention and case management, which may improve the health and educational attainment of the student.

Early identification of chronically absent students who are at risk of academic failure is feasible when a consistent process is in place. Defining roles and standardized attendance monitoring practices are key to ensuring that students who have a history of missing 10% or more school days, or who have a risk factor (i.e., chronic illness), receive individualized support to mitigate the effects of chronic absenteeism. The early referral to the school nurse can enhance the effectiveness of care coordination for these at-risk students.

The thrust of this project was to analyze existing data, to develop and recommend a specific absence code for illness, and to implement an algorithm for school nurse referral. Data gathered supported these recommendations, which the district has now implemented. A new QI cycle will now analyze their impact on illness absences and nursing

Figure 1. Chronic Illness Absence Procedure Algorithm



referral, to include number of illness chronic absences, referrals for nursing intervention, and any resultant educational outcomes achieved.

Limitations

The data collected for this QI project were limited to 9th- and 10th-grade students in a single, large high school in a suburban southern California community. Thus, findings might not be applicable to other grade levels. Additionally, almost half of the student population was Hispanic or Latino, and about 37% were eligible for free/reduced lunch. Thus, findings may not be applicable to other ethnic or socioeconomic student groups. Project findings were limited to students with CIRCA, leaving potential health-related

issues for students with IRCA undetermined.

Implications for School Nursing Practice

This project is in line with a growing national movement to address underlying causes of chronic absenteeism. In 2016, the American Academy of Pediatrics (AAP) Council on School Health released a revised policy statement highlighting the critical role school nurses have in promoting academic achievement, improved attendance, and better graduation rates. Access to a school nurse is a key element in students attending school regularly and without health-related barriers. Individualized nursing interventions are instrumental in efforts to curtail chronic absenteeism through the

application of care coordination processes, a key principle of the Framework for 21st Century School Nursing Practice (NASN, 2016). Care coordination includes assessment of the student's health status, collaborative communication with the student's caretaker(s) and healthcare provider, and development and implementation of a plan of care (McClanahan & Weismuller, 2015). School nurses have the opportunity intervene in these circumstances by educating families about the importance of regular school attendance, and by coordinating care specific to the student's health needs (NASN, 2015).

The Every Student Succeeds Act of 2015 requires states to report chronic absenteeism rates as a measure of student success. In the NASN Position Statement

(2018) on chronic absenteeism, tracking chronic absence due to illness and referring students to the school nurse, thus prompting a nursing assessment and intervention, is one method of curtailing chronic absenteeism and promoting academic success.

When working with chronically absent students, data collection is vital in determining which nursing interventions were effective in improving health and educational outcomes. Data collection and analysis may aid in helping students attend school regularly. Data can also help substantiate the role of school nurses in supporting health and education. Most school nurses serve multiple sites that pose a challenge in prioritizing their workload. Therefore, it is important to develop reliable procedures that inform nurses of specific student needs in order to utilize the limited school nurse resources available in a school or district most effectively. With a specific illness absence code and a policy for referral to the school nurse in place, it will be easier to document the impact of nursing interventions on the attendance of those students chronically absent due to illness. ■

ORCID iD

Rachel McClanahan  <https://orcid.org/0000-0003-0124-8369>

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**Cherry Arimas-Macalino, DNP, RN
Credentialed School Nurse
Corona-Norco Unified School District,
Norco, CA**

Cherry is a board member of California School Nurses Organization, Southern Section, and serves on her district's Student Attendance Review Board.

**Penny C. Weismuller, DrPH, RN
Professor, School of Nursing, California
State University Fullerton
Fullerton, CA**

Penny is a member of the Consortium of School Nurse Educators and serves on the JOSN Editorial Consultant Board.

**Rachel McClanahan, DNP, RN, NCSN
Assistant Professor, School of Nursing
California State University Fullerton
Fullerton, CA**

Rachel is the Coordinator of School Nurse Credential Program at the School of Nursing and is a member of the Consortium of School Nurse Educators.