

**Innovative School Care Coordination Project
for High Risk Populations
Worcester Public Schools 2018-2019**

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The Worcester Public School Nursing Department is grateful to be one of the recipients of the Massachusetts Department of Public Health's Innovative School Care Coordination Project for High Risk Populations (ICCP).

The overall goals of the ICCP within the Worcester Public Schools (WPSs) is to provide quality nursing care of students with behavioral/emotional chronic conditions in the school setting, to improve their school attendance, enhance school connectedness, and support readiness to learn.

According to the National Institute of Mental Health, anxiety disorders are the most common mental illness in the United States. The Anxiety and Depression Disorders Association of America reports that 1 in 8 children suffer from anxiety disorders. Depression is diagnosed in almost half of individuals diagnosed with anxiety. Research shows that children and adolescents diagnosed with anxiety and depression are at risk for avoiding or doing poorly in school, missing out on significant social experiences, and engaging in substance abuse. Anxiety has become an epidemic in the United States (<https://adaa.org/about-adaa/press-room/facts-statistics>) (<https://www.nimh.nih.gov/health/statistics/any-anxiety-disorder.shtml>).

Currently, there are 25,878 students enrolled in 51 schools in the WPS District. To date this year, there have been 787 behavioral health assessments performed by WPS nurses. There have been 2,232 coping enhancement/reassurance/self-calming interventions performed. WPS nurses report 306 stress/anxiety reduction/de-escalation interventions for this school year. Data from 2017-2019 reveals that of district-wide 911 calls, 1/3 were behavioral health related.

Worcester Public Schools participated in the ICCP for the past four years. Initially, Ellen Capstick, MSN, RN, NCSN selected students with asthma, diabetes, and social/emotional concerns exhibiting chronic absenteeism as the subjects of the ICCP grant. She met with these students and educated WPS nurses about implementing individual health care plans for them and tracked their absences in SNAP, professional software for nurses. Ellen also introduced iPad applications to nurses in WPS, including Inner Balance, which is a biofeedback tool to use with students with anxiety disorders. She constructed a Diabetic Resource Binder which assists WPS nurses in treating their diabetic students effectively based on evidence-based practice. Ellen provided WPS nurses with continuing professional development relevant to students with chronic health conditions. She worked collaboratively with school nurses and school adjustment counselors to assist these students and improve their overall absenteeism rates with success.

Deborah O'Brien-Thibodeau RN, BSN acquired the ICCP in 2016. The first objective was to select students to participate in this grant project with diagnoses of depression and/or anxiety, those exhibiting signs of increased stress, or having behavioral issues. Elementary students who had frequent somatic complaints and visits to the health office were identified and referred from two school nurses. Other referrals came from teachers, school administrators, and adjustment counselors. Seventeen students were selected in total with the majority of the students coming from one school as their adjustment counselor was on leave for much of the school year.

Parent/guardian consent was obtained for participation for all of the students. Eight hours were devoted per week to the care coordination of these students. Twenty seven elementary and middle school students were similarly identified and referred from five schools in 2017. During the 2017-2018 and 2018-2019 school years, the care coordination hours increased to twelve hours per week. Twenty four students were referred for the ICCP in the 2018-2019 school year from three elementary schools and one middle school. Four students were referred during March and April of this year, whose data will not be included in this report.

Many of the students involved with the ICCP over the last three years come from traumatic backgrounds. Their histories include physical/emotional abuse, having a deceased parent, parent(s) incarcerated, parent(s) with drug addictions, and Massachusetts Department of Children and Families (DCF) involvement. Other students have exhibited trichotillomania, violent outbursts, ADD/ADHD, and are on the Autism Spectrum.

Research has shown that relaxation techniques are useful in managing many chronic health conditions including anxiety and depression. According to the National Center for Complementary and Integrative Health, "relaxation techniques are skills, and like other skills, they need practice. People who use relaxation techniques frequently are more likely to benefit from them. Regular, frequent practice is particularly important if you're using relaxation techniques to help manage a chronic health problem. Continuing use of relaxation techniques is more effective than short-term use." Individuals may also benefit from cognitive behavioral therapy for additional support depending upon their needs and severity of their symptoms (https://nccih.nih.gov/sites/nccam.nih.gov/files/Relaxation_Techniques_05-31-2016.pdf).

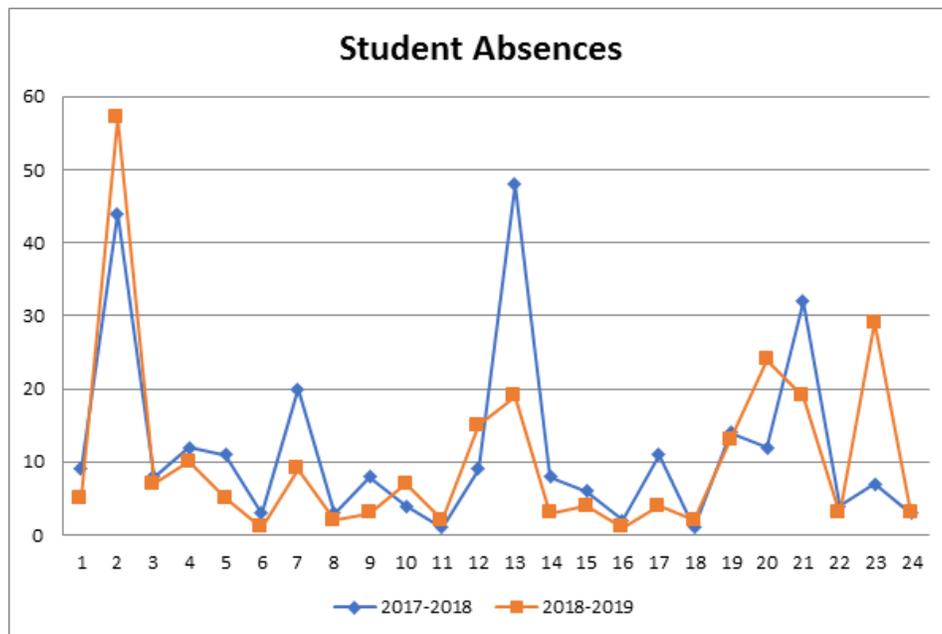
The second project objective was to empower these students with the ability and skills to improve managing their emotional regulation. Students met with the nurse liaison one-on-one or in small groups for approximately twenty to thirty minutes weekly. Students were encouraged to recognize and verbalize their feelings while the nurse liaison engaged in active listening. The students were taught various relaxation techniques and coping skills during these sessions, including breathing techniques, "tapping", or emotional freedom technique, progressive muscle relaxation, exercise, yoga poses, meditation, meditative coloring, guided imagery, iPad applications, calming music, and use of stress balls to add to their "toolbox" of self-help options. The students understood that not all of these calming techniques may work for them, and that it is acceptable to have their own preferences. They were persuaded to frequently practice these strategies throughout the project.

Nursing and other school personnel were provided with the knowledge, skills, and abilities to support individual student outcomes through email and verbal communication regarding students' progress. Information was shared regarding the students' ability to focus in the classroom and attend to the work at hand. Parent or guardian communication was also encouraged regarding students' emotional and behavioral regulation, as well as any concerns. The nurse liaison also attended the students' team meetings when available. As a direct

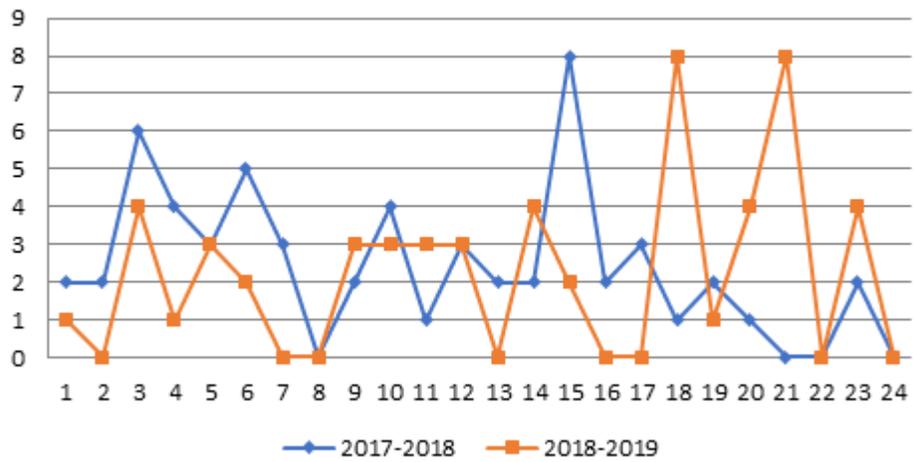
response to this project, some teachers report using relaxation techniques in their classrooms to improve their students' focus and keep them in the classroom.

Quantitative data for student absenteeism, included absences, dismissals, and early releases for the ICCP was obtained from SNAP nursing electronic health record, Sage school database, and Student Attendance Grading and Enrollment information from the Department of Elementary and Secondary Education (DESE). Data was available to compare absenteeism from the previous year for fifteen of the seventeen participants in the 2016-2017 school year. Overall, total student absences, total early dismissals, and total late entries improved, with the exception of one student. Twenty, out of the twenty four students tracked in the 2017-2018 school year, exhibited improved total attendance from the previous year.

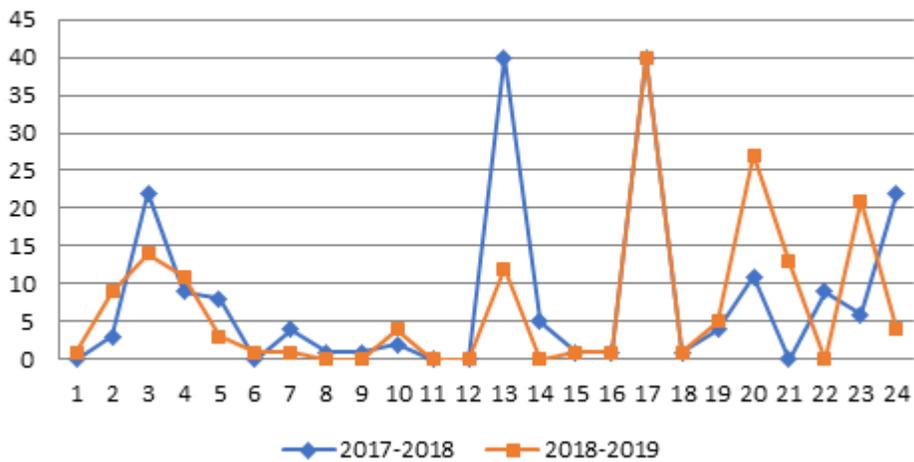
This school year, nine of the twenty four students tracked, had improvement with late entrances into school. Twelve students had improvement with early dismissals from school. There was improvement in total absences in sixteen of the participants, or sixty-seven percent of the cohort involved with the ICCP.



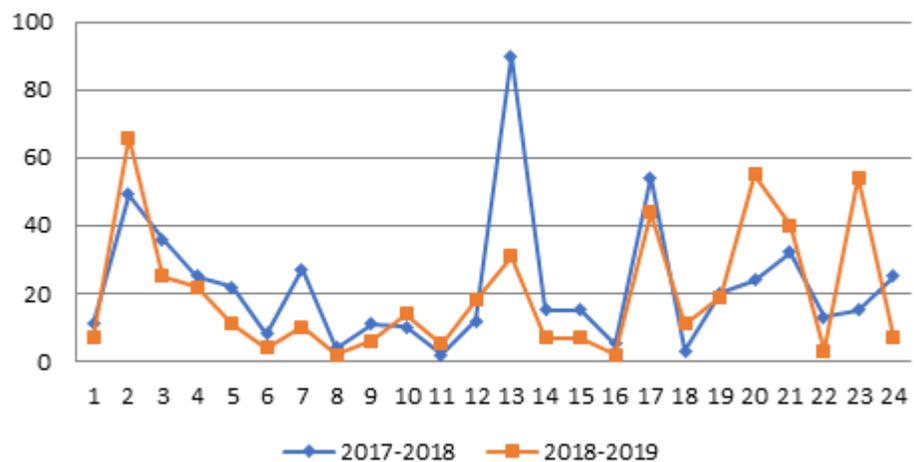
Student Dismissals



Student Late Entries



Student Total Attendance



It is worthwhile to mention that in children, behavioral/emotional chronic conditions may present themselves with a variety of symptomatology. In this project, in particular, some students did, in fact, have frequent absences from school or go to the health office far more times for somatic complaints than their peers. There were some students who were easily frustrated with schoolwork that they found challenging, which increased their less than desirable behaviors. Some students were so wrapped up with their own anxiety that they were unable to focus. They were in school physically, but were unable to learn in that moment. Prompt recognition and intervention is vital in assisting these students in breaking the cycle of missing time-on learning for whatever reason, getting further and further behind academically and socially, and the subsequent anxiety and/or negative behaviors that this may yield.

Subjective data on these students was also obtained by an informal survey with school nurses and teachers regarding their students' abilities to self-manage emotional regulation using new coping strategies, increased time-on learning, improved focus, and being more engaged with classmates and school connectedness. Survey results were positive, but limited, as data was only provided for nine students.

Interviews with teachers, parents, and school nurses were also undertaken. Some notable quotes regarding increased time-on learning and decreased time in the health office are:

"She is staying in the classroom for almost all of the day". (teacher)

"She now enters school with a much more positive attitude and does not seem as stressed. She takes the breathing star out and uses this strategy". (teacher)

" ___ used to ask to go to the nurse often and now practically never does" (teacher)

" ___ uses deep breathing during difficult assignments" (teacher)

"...much calmer and more able to just dive into tasks as it used to take her a long time to get started" (teacher)

"These (three) students have spent significantly less time in the office for anxiety issues". (nurse)

"Thank you for working with ___, he seems to be doing much better with his anxiety". (parent)

Worcester Public School nurses were provided with ongoing professional development since the inception of the ICCP. Speakers include Charles Appelstein, MSW who presented "There's No Such Thing as a Bad Kid" and "Use the Force, Luke!" Managing Number One, First . . . and Staying Motivated to Do the Job!" Last school year, Jon Mattleman, MS from the Minding Your Mind organization, presented "Just Talk About It", highlighting teen depression, anxiety, and suicide and how the school nurse can support students with such conditions. Mr. Mattleman is scheduled to present to parents, caregivers, nurses, and other school staff in May, "The Secret Lives of Teens and Tweens". This presentation will focus on what children in these age groups are really thinking, what they fear, why they do not share more, and how adults can effectively

support these children. The speaker will cover areas such as depression and anxiety, social media and technology, suicide, 'acting out' behaviors, drug and alcohol use, and more.

Worcester Public School Nurses were invited to join an online Facebook Group, Worcester Public Schools Wellness and Support Community, to gain information for their students and themselves regarding wellness practices and positive health support. There are thirty-five iPads loaded with relaxation applications being used by students in WPS health offices. More applications are being added as interest in different coping strategies grows. Each health office has their own relaxation bags consisting of Play Doh, coloring pages, stress balls, and information on how to practice these self-calming strategies. Quick meditations and other relaxation scripts are on-hand for student use. This information and associated links are also available for anyone's use on the Worcester Public Schools website.

Worcester Public School nurses report that their knowledge base, skills, and abilities to support students with depression, anxiety, or signs of increased stress has increased since the start of the ICCP. One school nurse shares: "I have learned techniques to recognize and help children who may be suffering from anxiety but come in with somatic complaints. Often now, children will come in and ask to use the iPad instead of complaining of asthma or difficulty breathing, for example. I would recommend this program in other schools, and have seen a decrease in visits from children in the program." "It (the ICCP) gave me some more insight into each student's issues and also reduced the number of times I saw one of them!" reports another school nurse.

Both subjective and objective data gathered over the last 4 years support that the majority of students who participated in the ICCP in the WPSs with behavioral/emotional chronic conditions had improvements in their school attendance, increased their time-on learning, had enhanced school connectedness, and improved readiness to learn. Nursing care of the ICCP participants improved and nurses report a greater understanding of managing students with behavioral/ emotional chronic health conditions.