# Reducing Chronic Absenteeism under the Every Student Succeeds Act 

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We believe that today's increasingly competitive global economy demands public policy ideas commensurate with the challenges of the 21st Century. The Project's economic strategy reflects a judgment that long-term prosperity is best achieved by fostering economic growth and broad participation in that growth, by enhancing individual economic security, and by embracing a role for effective government in making needed public investments.

Our strategy calls for combining public investment, a secure social safety net, and fiscal discipline. In that framework, the Project puts forward innovative proposals from leading economic thinkers - based on credible evidence and experience, not ideology or doctrine - to introduce new and effective policy options into the national debate.

The Project is named after Alexander Hamilton, the nation's first Treasury Secretary, who laid the foundation for the modern American economy. Hamilton stood for sound fiscal policy, believed that broad-based opportunity for advancement would drive American economic growth, and recognized that "prudent aids and encouragements on the part of government" are necessary to enhance and guide market forces. The guiding principles of the Project remain consistent with these views.

# Reducing Chronic Absenteeism under the Every Student Succeeds Act 

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## Abstract

The Every Student Succeeds Act (ESSA; 2015) requires states to broaden school accountability beyond achievement on standardized tests and high school graduation rates. In this Hamilton Project strategy paper, we articulate a framework for states as they oversee implementation of statewide accountability plans under ESSA and describe how states differ in their approaches. We review the literature and present novel analyses of the factors at the school and student levels that relate to chronic absenteeism. Our analysis shows that health problems and socioeconomic status predict poor attendance, and that chronic absenteeism among students and schools is strongly persistent over time. We describe evidence-based strategies for schools as they work to reduce rates of chronic absence among students.

## Table of Contents

ABSTRACT ..... 1
CHAPTER 1: INTRODUCTION ..... 4
CHAPTER 2: ACCOUNTABILITY AND CHRONIC ABSENTEEISM ..... 6
CHAPTER 3: CHRONIC ABSENTEEISM IN STATEWIDE ACCOUNTABILITY PLANS ..... 10
CHAPTER 4: CHARACTERIZING CHRONIC ABSENTEEISM ..... 13
CHAPTER 5: REDUCING CHRONIC ABSENTEEISM ..... 20
CHAPTER 6: CONCLUSION ..... 23
ACKNOWLEDGMENTS ..... 23
ENDNOTES ..... 24
REFERENCES ..... 24
APPENDIX ..... 29
HAMILTON PROJECT PAPERS ON EDUCATION ..... 31

## Chapter 1: Introduction

Physically being present in school is one of the most basic conditions for a student's success. Although most schools have daily attendance rates of well over 90 percent, according to the newly released U.S. Department of Education Civil Rights Data Collection (CRDC), about 8 million students in the United States missed more than three weeks of school during the 2015-16 school year (U.S. Department of Education 2015-16). This represents an increase over the 6.8 million students who missed more than three weeks of school during the 2013-14 school year (U.S. Department of Education 201314). These students, generally referred to as being chronically absent, go on to have worse educational outcomes than they would if they had better attendance.

In the 2015-16 school year 7.3 million regular school students were chronically absent, an increase of 900,000 students over the 2013-14 school year. About 94 percent of regular schools
enrolled at least one chronically absent student during the 2015-16 school year (figure 1). ${ }^{1}$ In about 58 percent of regular schools more than 10 percent of students crossed this high absence threshold. Schools with a large share of chronically absent students are less likely to meet and improve on key academic metrics.

Federal initiatives to reduce chronic absenteeism began during the Obama Administration. The White House, through the My Brother's Keeper Initiative, led efforts to coordinate federal, state, and local efforts to address chronic absenteeism. The Secretaries of Education, Health and Human Services, and Housing and Urban Development, as well as the Attorney General, sent a joint letter to states calling for cross-sector strategies to combat chronic absenteeism (U.S. Department of Education 2015). Through its convening power, the White House sponsored a national summit on chronic absenteeism.
figure 1.

## National Distribution of School Rates of Chronic Absenteeism, 2015-16



[^0]The 2015 federal education law, the Every Student Succeeds Act (ESSA), changed the national structure of No Child Left Behind (NCLB; 2002) by empowering states to design and implement their own accountability systems. Each state is required to have annual school performance determinations and to use this information to identify its lowest-performing schools. In addition to test-based academic metrics and, for high schools, graduation rates, ESSA requires states to hold schools accountable for at least one measure of "school quality or student success (SQSS)" (ESSA 2015, 1111-31). As states developed their plans in 2016 and 2017, chief state school officers led processes to engage stakeholders and decide how to approach this new indicator.

In a 2016 Hamilton Project strategy paper, Diane Whitmore Schanzenbach, Lauren Bauer, and Megan Mumford presented a framework-grounded in lessons learned from NCLB-for states to use in designing their accountability plans. They recommended that states adopt chronic absenteeism as the SQSS indicator (Schanzenbach, Bauer, and Mumford 2016). With all state plans submitted to the U.S. Department of Education and the majority approved, 36 states, the District of Columbia, and Puerto Rico have chosen chronic absenteeism as either one of or their only SQSS indicator(s).

As states turn from statewide accountability plan development to implementation, there is an opportunity to make real gains in lowering chronic absenteeism and in raising student achievement and graduation rates. In chapter 2, Accountability and Chronic Absenteeism, we describe an evidence-based framework for states as they oversee implementation of statewide accountability plans under ESSA and apply that framework to the case of chronic absenteeism. That framework is as follows:

1. What gets measured gets done. Accountability regimes direct a school to improve on measures to which stakes are attached. To broaden the scope of school improvement efforts, one could expand the domains that are measured-as long as these new domains can be measured with consistency and rigor.
2. The goal must be within reach. Accountability goals are most effective at changing the behavior of schools when they can improve after making reasonable changes to their policies and practices. Goals that are out of reach might not induce desired behavior changes. This can occur at the school level, when a school stops pursuing unreachable goals completely, or at the individual level, when a school does not invest in students unlikely to clear a distinct measurement hurdle.
3. Beware: goalposts can be moved. Indicators that can be changed over time-by moving the passing threshold, altering how the outcomes are measured, or introducing or replacing measures-obscure true gains and losses.
4. When a measure becomes a target, it sometimes ceases to be a good measure. When stakes are attached to a measure, schools can use strategies to raise their performance in ways that do not necessarily align with the broader goal. Teaching narrowly to the test is one example of this phenomenon. The best accountability measures are minimally susceptible to such gaming.
5. Prevent, track, and adapt to minimize gaming. Incentives to game the system are inherent to accountability policies. To stay ahead and make real progress on an accountability metric, regulators should engage in active oversight.
6. Aim for real change in implementation. To institute a novel policy, implementers must make the effort to prevent the policy's incorporation into standing or superficial practice. To direct attention to new policies and practices, implementers should maintain visibility, monitoring, and awareness among all stakeholders.

In chapter 3, Chronic Absenteeism in Statewide Accountability Plans, we apply the six-point framework to key decisions in the states' plans. States use six different definitions of chronic absenteeism and set goals for schools in a variety of ways. In some states, chronic absenteeism is the only SQSS indicator; in most states, it is one of a handful of new SQSS metrics. States also vary in the weight given to chronic absenteeism in a school's summative rating-a composite of all the accountability indicators that allows a state to identify how schools perform singly and relative to one another. How much weight an underlying metric has affects how a state rewards a school for progress.

In chapter 4, Characterizing Chronic Absenteeism, we present novel analyses of some of the school- and student-level factors that both relate to chronic absenteeism and predict persistent chronic absenteeism. Finally, in chapter 5, Reducing Chronic Absenteeism, we describe evidence-based strategies for schools as they work to reduce rates of chronic absence among students.

## Chapter 2: Accountability and Chronic Absenteeism

School accountability policies, in which school performance is evaluated based on specific metrics, have developed over the past few decades as a strategy to assess progress toward providing a quality education for all students. Measuring and publicizing how a school performs-in terms of student achievement, graduation rates, and school qualitygives teachers and school principals additional reasons to improve. Accountability gives policymakers better data with which to act and makes parents better-informed.

NCLB held schools accountable for high school graduation rates as well as for student achievement on standardized tests of reading and math. While the goals and certain student subgroups were determined nationally, states were granted some degree of flexibility-selecting their own standardized tests and proficiency thresholds, for example. Test scores and graduation rates improved, but with these improvements came concerns that the gains were in part superficial due to gaming. Achievement on non-tested subjects and aspects of school quality suffered at the expense of tested subjects.

In late 2015 President Barack Obama signed ESSA, NCLB's replacement. ESSA broadened the scope of accountability and devolved to states much of the authority for deciding what measures to hold schools accountable for improving. ESSA requires statewide accountability systems to measure five metrics annually and to use these assessments to identify each state's lowest-performing schools. The first three indicators are math and reading achievement measured in an annual assessment, graduation rates for secondary schools, and an additional academic indicator for presecondary schools. The fourth indicator is a new requirement for the statewide system, holding schools accountable for improvement in the English language proficiency of English language learners. The fifth indicator is at least one state-chosen metric of school quality.

As states begin overseeing this next wave of reform, we offer a framework for understanding and implementing accountability systems. In this chapter, we organize evidence from more than a decade of research on NCLB into a six-point framework, link these concepts to changes made in ESSA, and apply it to the case of chronic absenteeism.

## 1. WHAT GETS MEASURED GETS DONE.

Accountability policies direct schools to improve on measures to which stakes are attached. These incentives direct resources away from low-stakes subjects. NCLB held schools accountable for raising math and reading proficiency rates as well as high school graduation rates. While accountability led to improvements in these areas-particularly in math achievement-school emphasis on social studies, science, and physical education declined (Dee and Jacob 2011; Dee, Jacob, and Schwartz 2013; Jacob 2005; Murnane and Papay 2010; West 2007).

To broaden the scope of school improvement tasks, one approach would be to expand the domains that are measured-as long as the new domains can be measured with consistency and rigor. Implicitly, the SQSS measure should incentivize schools to address areas critical to school quality. If chronic absenteeism were included in the accountability mix with student achievement and graduation rates, we would expect schools to improve attendance measurement and work to reduce absences. To the extent that this results in more instructional time, evidence suggests that these efforts would increase school performance on related accountability metrics.

Attendance is empirically related to achievement and academic outcomes (Gottfried 2011; Gottfried and Kirksey 2017; Roby 2004). As early as kindergarten, school absences lower subsequent achievement levels (Chang and Romero 2008). The effects are immediate: students who are chronically absent as kindergartners are more likely to be chronically absent in first grade (Romero and Lee 2007), fall behind in English language arts (Ready 2010), and score poorly on tests (Chang and Romero 2008). In California, three-quarters of students who had been chronically absent in kindergarten and first grade did not meet state proficiency standards in math and reading in third grade (Harris 2016). Furthermore, research has found that poor attendance in middle school (Balfanz, Herzog, and MacIver 2007) and high school (MacIver 2011) predicts whether a student drops out before completing high school.

In addition to studies that show the negative consequences of chronic absenteeism, there is evidence that reducing chronic absenteeism benefits students. Even among students with extremely poor attendance, there are increases in academic measures and credit accumulation when attendance improves (Balfanz and Byrnes 2018).

## 2. THE GOAL MUST BE WITHIN REACH.

In designing these policies, it is important that states set ambitious, but attainable, goals. Accountability goals are most effective at changing behavior when schools can improve their ratings on the measure after making reasonable changes to policies and practices and when schools know what the goal is. NCLB's goal of 100 percent proficiency in just over a decade was thought to be-and turned out to be-unattainable (Darling-Hammond 2006; Linn 2003). In the chronic absenteeism case, a perfect record is similarly unlikely. Based on the 2013-14 school year rates, fewer than 10 percent of schools demonstrate a chronic absenteeism rate of zero. In the handful of states that have set an overall goal, which is not required by ESSA, none aim to eliminate chronic absenteeism entirely.

Schools should know how performance on the accountability indicators affects their summative rating. A potential cause for concern is that, based on their consolidated plan submission, many states have not made clear how meeting or not meeting chronic absenteeism goals will be scored or even what the goals are.

The level at which a state sets a goal is crucial because it directs attention to students who are most likely to help a school meet the goal. A single proficiency threshold encourages schools to focus on students performing just below the threshold, rather than on the lowest-performing students or students who would have passed regardless (Neal and Schanzenbach 2010). Proficiency goals can discourage investments in students who are unlikely to ever achieve the goal precisely because they are the most in need of attention.

All states are on the path to setting the student-level goal by defining chronic absenteeism. Thirty-five states and the District of Columbia defined chronic absenteeism at the student level in terms of a single threshold in plans submitted to the U.S. Department of Education for approval.

How does the definition of chronic absenteeism affect the ways in which schools target students to improve their attendance? In general, schools would be expected to concentrate their resources to prevent students from crossing the chronic absenteeism threshold. Because absences are cumulative, attendance pressure will be more widely distributed at the beginning of the school year. Pressure would be the strongest on students who become chronically absent with one to five
additional absences as well as on students who had been chronically absent in a previous year.

With a single threshold in place, schools have no incentive from the SQSS provision to continue to focus on students once they pass the chronic absenteeism threshold. Incentives provided by other pieces of the accountability system might continue to encourage schools to focus on these students' attendance. The metric of average daily attendance has had a role in school funding in many states, which applies pressure to improve all students' attendance. The student achievement components of statewide accountability incentivize schools to increase instructional hours.

Furthermore, as shown in chapter 4, once students are chronically absent, they are more likely to continue to be chronically absent in subsequent years. This means that forward-looking schools might still want to direct resources at students who are already above the absence threshold in the hopes of bringing them back under the threshold in the future.

## 3. BEWARE: GOALPOSTS CAN BE MOVED.

Indicators that can be changed over time-by moving the passing threshold, altering how the outcomes are measured, or introducing new measures-obscure true gains and losses. Under NCLB several states found ways to lower standardsmaking tests easier or shorter, or changing the definitions of adequate progress (Neal 2010; Plank and Dunbar 2004; Ryan 2004). If states permit schools to make progress by changing the rules, the rules are not motivating.

There are permissions built into ESSA that allow states to move goalposts each year and to switch the SQSS indicators entirely. In the next few years, some states plan to pilot new SQSS metrics; this is not in itself a nefarious act, since piloting can lead to better policy. States should aim to keep the SQSS metrics consistent in quantity and measurement. If alterations are needed, states can incorporate additional metrics into their SQSS without dropping established measures.

How might a state change the chronic absenteeism goalpost? Chronic absenteeism counts excused and unexcused absences as the same; if states allow excused absences to not count against a student's total, it would make it easier for schools to have a low chronic absenteeism rate. There is already some evidence of this behavior. For example, if a student in New Jersey is absent for Take-Your-Child-to-Work Day, a college visit, a religious holiday, or another rule issued by the commissioner of Education, that absence does not count against chronic absence (New Jersey Department of Education 2017a). In Connecticut there is current legislation introduced that would take absences due to lack of immunization papers out of the metric (State of Connecticut General Assembly 2018).

As it relates to chronic absenteeism, there is a guardrail against this sort of gaming. States are required by statute to list on their school report cards their rate of chronic absenteeism by the federal definition (U.S. Department of Education 2016). If states were to change their definitions of chronic absenteeism, schools would still be required to report the federally-defined statistic. This requirement will serve as a bulwark against states who might try to move the goalposts on a chronic absenteeism threshold or who take out the metric altogether.

## 4. WHEN A MEASURE BECOMES A TARGET, IT SOMETIMES CEASES TO BE A GOOD MEASURE.

When stakes are attached to a measure, schools can use strategies to raise their performance in ways that do not necessarily align to the broader goal, thereby undermining the accuracy of the measure itself. This phenomenon is known as Goodhart's law. As the late social scientist Donald Campbell said, "The more any quantitative social indicator is used for social decision-making, the more subject it will be to corruption pressures and the more apt it will be to distort and corrupt the social processes it is intended to monitor (Campbell 1976, 34)."

Under high-stakes accountability, when an indicator becomes a target, the metric loses some of its value as a proxy for other characteristics. A divergence between the concept and the measurement of student achievement occurred under NCLB; coaching test-taking strategies or teaching to the test could increase performance on a measure of student achievement without increasing the student's subject knowledge. When researchers studied whether knowledge transferred in the same subject area from a high-stakes to a low-stakes test, they found smaller or no estimated effects of accountability (Figlio and Rouse 2006; Jacob 2005).

The statutory language in ESSA requires that an SQSS metric be valid, reliable, and comparable; it must capture the conceptual value of the item and it must be measurable identically across schools and circumstances. These requirements center accountability expansion on issues of gaming and construct validity (Cook et al. 2002). Measures that cannot reliably differentiate among schools, including many self-reported surveys of school climate, fail to qualify under the law. Once targeted, these surveys will no longer provide reliable information about school climate-just as standardized tests no longer provide a clear signal of achievement.

Chronic absenteeism meets the minimum threshold of validity, reliability, and comparability. In the perfect case, an accurate measurement of daily school attendance would produce a precise picture of progress on reducing rates of chronic absenteeism in any school. When chronic absenteeism is included in the accountability measurement, we would expect schools to monitor chronic absenteeism more closely and work to reduce it.

Chronic absenteeism will cease to be a strong correlate of other educational outcomes if schools do not provide effective instruction to all students. Present research suggests chronic absenteeism is strongly negatively related to educational success, but if schools find ways to improve attendance just to meet a goal and without using that instructional time to raise achievement, the metric will mean less.

## 5. PREVENT, TRACK, AND ADAPT TO MINIMIZE GAMING.

Evidence from NCLB shows that any accountability measure can be gamed or corrupted to some extent by teachers, school leaders, and policymakers. Under NCLB, gaming behaviors occurred at the state and school levels (Davidson et al. 2015). Jacob and Levitt (2003) found evidence of teachers cheating on standardized tests in 4 to 5 percent of Chicago Public Schools. Educators in Atlanta were convicted for racketeering and sentenced to jail (Fausset and Blinder 2015). Graduation rate metrics were also gamed; for example, at Ballou High School in Washington, D.C., the high stakes pressured teachers to pass students to increase graduation rates (McGee 2017).

Not all gaming involves outright cheating. To meet the adequate yearly progress goal under NCLB, schools narrowed the scope of subjects to teach to the standardized test (Figlio and Rouse 2006; Jacob 2005). Some schools at high risk of failing to achieve this goal were found to place students in special education to exempt them from testing requirements or to suspend low-performing students strategically during the test period so that their scores would not count toward the accountability measure (Cullen and Reback 2006; Figlio 2006; Figlio and Getzler 2006). States also used generous or evolving interpretations of certain provisions, such as safe-harbor calculations, to save schools from failing to make adequate yearly progress (Davidson et al. 2015).

ESSA helps to reduce the reward to gaming individual metrics by (1) broadening accountability metrics to new categories, (2) mixing achievement and growth metrics, (3) increasing the quantity of different metrics, and (4) changing the relative value of each metric in the summative rating. That being said, incentives to game the system persist under ESSA. The best accountability measures continue to be the ones that are minimally susceptible to gaming and are complimentary with other objectives; in other words, actions that enhance performance on the accountability measures should contribute to gains in related outcomes. For the new SQSS metric, the extent to which a potential measure is likely to be gamed-and whether the resulting distortion is large enough to offset the gains from introducing the accountability measure in the first place-was a critical selection criterion.

Incentivizing schools to focus on reducing chronic absenteeism outweighs the risks posed by gaming. Attendance
data, measured as average daily attendance, have been a part of accountability since NCLB and some states have used attendance as an input to school funding formulas (Jordan and Miller 2017). In fact, some school responses that appear to be-from one perspective-gaming tactics would actually benefit students: because some states will count out-of-school suspensions toward chronic absenteeism rates, schools could improve their rate by shifting suspensions from out-of-school to in-school suspensions, which many educators argue is preferable for students (Blankenship and Bender 2007). As states pivot from plan formation to implementation, setting policy and devising systems to deal with inevitable gaming behaviors is a top priority.

For chronic absenteeism, preventing and sanctioning gaming starts with data. Producing accurate attendance data has been a challenge since efforts were first made at systemization in the 19th century (Hutt 2018). Each state has laws on the books that provide for the definition and categorization of school attendance as well as lawful and unlawful school absences as part of regulating compulsory school attendance.

Instrumentally, attendance data are an input to many policies, processes, and programs. Attendance data are useful to policymakers, administrators, teachers, and parents-for monitoring, regulation, midstream corrections, research, and evaluation-only if they are accurate. Attendance data are an input into early warning systems and anti-truancy programs; in some cases, these data are used in referrals to legal authorities as evidence in truancy proceedings. These data, which schools are required to collect, could be shared with parents over the course of the school year; evidence reviewed in chapter 5 suggests that communicating with parents about their child's attendance reduces chronic absenteeism.

To the extent possible, a school should produce a single stream of attendance data for all stakeholders. To support this goal, a state should invest in statewide data systems that would track daily attendance and train relevant personnel to monitor gaming. For example, the New Jersey Department of Education will hire a dedicated staff person to support schools as the state
reduces its rates of chronic absenteeism, including developing strategies to monitor chronic absenteeism, reviewing attendance data, and developing early warning systems that schools can use for intervention (New Jersey Department of Education 2017a). More detailed recommendations on proper attendance tracking can be found through the Data Quality Campaign and Attendance Works.

## 6. AIM FOR REAL CHANGE IN IMPLEMENTATION.

The previous maxims for performance-based accountability describe how to prevent artificial or narrow progress based on how the system is designed, monitored, and improved. But, as leading education scholars Jennifer O'Day and Marshall Smith wrote, "Implementation is 90 percent of impact" (2016, 308). When policy goes to school, evidence suggests that implementers are more likely to respond to new policies with practices that are similar to what they already do. ${ }^{2}$

The extent to which schools implement a policy as designed is termed "implementation fidelity." Implementation fidelity could be lacking if the prescribed approach does not work for the particular school. Greater flexibility in implementation allows schools to tailor to their needs and circumstances and might be more productive (Gill et al. 2008). A school could also fail to implement a program because of insufficient material or personnel capacity (Elmore 2005; Newmann et al. 2001). The lesson of NCLB and other school reform proposals is that to implement a novel policy, school leaders must make the effort to prevent the new policy's incorporation into standing or superficial practice (Spillane, Reiser, and Gomez 2006).

To focus attention on policies and practices that reduce rates of chronic absence, implementers should maintain visibility, monitoring, and awareness among all stakeholders. Requiring schools to detail what new policies they will undertake to combat chronic absenteeism, and incorporating evaluation and updating into the process, will contribute to implementation fidelity. In each of the interventions to increase attendance reviewed in chapter 5, making teachers, parents, and students aware of the need to be in school every day is key.

## Chapter 3: Chronic Absenteeism in Statewide Accountability Plans

Since ESSA was passed, states have been required to make a handful of key decisions about how to hold schools accountable for improving rates of chronic absenteeism. In order to proceed with statewide accountability, each state was required to report its plan to the U.S. Department of Education for approval. In this chapter, we review how states have incorporated chronic absenteeism into these plans using the guideposts outlined in chapter 2.

No two states are holding schools accountable for reducing chronic absenteeism in the same way. States define chronic absenteeism at the student level at least 6 different ways. States also set different goals and different kinds of goals for schools. In some states, chronic absenteeism is the only SQSS metric while in other states it is one of many. In some states chronic absenteeism is the only SQSS metric for elementary schools
but is one of several for high schools. Finally, states vary in the degree to which a school's summative rating is based on chronic absenteeism.

## DEFINING CHRONIC ABSENTEEISM

There is no consistent definition of chronic absenteeism, either in the academic literature or across states (Dougherty 2018). The map (figure 2) shows how states using chronic absenteeism in their accountability system have chosen to define it for an individual student. The majority of states define a chronically absent student as one who misses at least 10 percent of the school year, while a small number of states use the functionally equivalent inverse: a student who is present at least 90 percent of the time. Hawaii and Alabama use the threshold set in the first wave of the CRDC: a student who misses 15 days or more during the school year is chronically absent. Indiana takes

FIGURE 2.
Definitions of Chronic Absenteeism in State ESSA Plans


Note: A model attendee is a student attending at least 96 percent of school days or a student who has made a 3 percent gain in
a novel approach by incorporating proficiency and growth into its definition of what it calls a model attendee: either a student attending 96 percent of school days or a student who has made a 3 percent gain on days attended over the previous school year. New Mexico has not yet set a definition of chronic absenteeism but will do so before the 2018-19 school year begins. Puerto Rico defines attendance continuously for each student.

All states will report school rates of chronic absence on their school report cards and report rates of chronic absenteeism to the U.S. Department of Education as part of the CRDC.

## CHRONIC ABSENTEEISM AND SCHOOL SUMMATIVE RATINGS

Setting the definition of chronic absenteeism is the first step for states. States also determine the goals that schools must meet for reducing student rates of chronic absenteeism. How a state sets its goals determines the impact that progress or failure on chronic absenteeism will have on a school's summative rating: a composite metric of all the accountability indicators that allows a state to identify how schools perform singly and relative to one another.

While the academic literature has looked at the incidence of chronic absenteeism among students, there is very little work on defining problematic levels of chronic absenteeism for a school. Not surprisingly, then, states are setting chronic absenteeism goals for schools in distinct ways. Some states have not yet clarified exactly how they will be assessing schools.

The majority of states use either a continuous measure or a multiple threshold measure to set goals for a school and assign points for the summative school rating; notably, no state uses a single threshold model. However, more than 10 states that use chronic absenteeism as an indicator do not provide sufficient information on their consolidated state plans to determine with certainty how they set goals or what the goals are.

A multiple threshold model gives points for hitting particular targets. For example, Nevada gives a school 10 points for a school rate of chronic absenteeism less than or equal to 5.0 percent, 5 points for a school rate of chronic absenteeism between 5.1 and 10.0 percent, and zero points for a rate greater than or equal to 10.1 percent. In some states improvement in rates of chronic absenteeism is more explicitly rewarded. For example, Washington, D.C., combines a threshold model with a growth model, which measures a school's improvement of median student attendance over time.
figure 3.

## Number of SQSS Indicators and Weight of Chronic Absenteeism in Elementary School Summative School Rating



[^1]A continuous model gives schools a score that increases with every percentage point decline in the rate of chronic absenteeism, thus providing schools with an incentive to improve regardless of their current absenteeism rate. For example, in Hawaii the rate of chronic absenteeism is subtracted from 100 to determine a school's score. A school can get more points the next year by reducing its rate of chronic absenteeism. Some states, such as New Jersey and Massachusetts, give at least some points based on the relative performance of a school compared to all other schools in a state.

Under ESSA, a state can choose to hold schools accountable for as many different SQSS indicators as it sees fit. A review of state plans reveals that some states have chosen chronic absenteeism to be the only SQSS indicator while other states have selected multiple SQSS indicators, one of which is chronic absenteeism. The weight given to chronic absenteeism in a school's summative rating varies widely across states and within states.

Of the states that have selected chronic absenteeism, 9 hold schools accountable for chronic absenteeism as their only SQSS metric in every gradespan: Hawaii, Maine, Minnesota, Missouri, Nebraska, New Jersey, Oregon, Tennessee, and Wisconsin. Four states hold elementary and middle schools accountable only for chronic absenteeism but hold high schools accountable for additional SQSS indicators: Alabama, New York, Oklahoma, and Washington. In five states, chronic absenteeism is one of the elementary and middle school SQSS indicators but high schools are not accountable for chronic absenteeism: Arizona, California, Colorado, Indiana, and South Dakota. ${ }^{3}$ In the remaining 19 states, the District of Columbia, and Puerto Rico, chronic absenteeism is one of between 2 and 17 SQSS indicators across all gradespans.

States also must articulate transparently for schools how their performance on chronic absenteeism is incorporated into the summative rating. The law does not permit SQSS indicators to outweigh academic indicators in the summative rating formula and the state cannot use a school's performance on the SQSS indicators to solely determine the lowest-performing schools in a state.

Figure 3 shows that there is no consistent link between the number of SQSS indicators a state has selected and the individually weighted value of chronic absenteeism in the school's summative rating. At the low end is Ohio; chronic absenteeism has a weight of 2.29 percent for grades K through 3, 0.63 percent for grades 4 through 8 , and 0.48 percent for high schools. At the high end is Massachusetts, in which chronic absenteeism counts for up to 36 percent of a school's summative rating.

There are 8 states that do not report the individual weight that chronic absenteeism will have in the summative rating formula: Kentucky, Michigan, Minnesota, Nebraska, New York, Oregon, Pennsylvania, and Virginia. While some states clearly articulate how the weighting of individual components would shift when the fourth indicator, progress on English language learning, is or is not included, others do not. New York has proposed not weighting indicators at all ("New York State does not explicitly weight indicators, but rather uses a series of decision rules to differentiate between schools" [New York State Education Department 2018, 70]). It is unclear based on how they have structured their system if all schools in New York will have an incentive to reduce rates of chronic absenteeism.

## Chapter 4: Characterizing Chronic Absenteeism

Much of the existing academic literature on chronic absenteeism focuses on students. By bringing chronic absenteeism to school accountability, the characteristics of the school itself come to the forefront. The goals of the statewide accountability system under ESSA are to provide annual school summative ratings and to use these ratings to identify the state's lowest-performing schools. This raises important questions, such as: how are schools with high levels of chronic absenteeism different from those with lower levels? Where should schools look within the building to improve attendance rates?

This chapter aims to provide a clearer picture of chronic absenteeism among schools and students. We document the following:

- Most schools have nontrivial chronic absenteeism rates.
- Still, much of chronic absenteeism is clustered in a subset of schools that have long-standing and widespread problems with attendance.
- Chronic absenteeism persists. When controlling for numerous factors, chronic absenteeism in a prior year is a key predictor of whether a student is chronically absent or a school has a substantial share of chronically absent students in a subsequent year.

FIGURE 4.
School Days Missed in New Jersey, by Gradespan


[^2]Note: Data are restricted to public schools in New Jersey.

- Chronic absenteeism is an acute problem for certain students. Chronic absenteeism is most frequent among kindergartners and high school students. Chronic absenteeism is strongly linked to health problems, lowincome status, and the interaction of the two.

These analyses show that rates of chronic absenteeism can vary widely across schools, controlling for key characteristics. The fact that chronic absenteeism in a prior year tends to matter far more than school or individual characteristics suggests scope for school-specific policies to address a chronic absenteeism problem.

## SCHOOL CHRONIC ABSENTEEISM

First, we illustrate that pressure to increase attendance would be widespread among students. Figure 4 employs studentlevel data in New Jersey to describe how attendance patterns are distributed across schools. While New Jersey's chronic absenteeism definition is 10 percent of school days, the 15-day threshold in these data approximates that definition. Looking by gradespan, by the end of the school year about 12 percent of elementary school students, 11 percent of middle school students, and 18 percent of high school students missed more than 3 weeks of school. An additional 47 percent of elementary school students, 44 percent of middle school students, and 46
percent of high school students missed between 1 and 3 weeks of school. All told, about 60 percent of students in New Jersey were at risk of chronic absence last year.

While the majority of New Jersey students will be exposed to accountability pressure, each school has its own attendance profile. Figure 5 looks at how the distribution of absences differed in New Jersey high schools in 2016-17. Schools are placed into quintiles based on their relative chronic absenteeism rates ordered from highest to lowest. Though there are chronically absent students in each quintile, the extent of attendance problems varies dramatically. Schools with a large share of chronically absent students have an attendance profile that is quite distinct from schools with the smallest share.

Looking at a school's overall rate of chronic absenteeism might obscure high rates of chronic absenteeism among student subgroups. To account for this, states that selected chronic absenteeism as an indicator are holding schools accountable for rates of chronic absenteeism overall as well as among designated subgroups of sufficient size.

We employ data from the 2016-17 school year in Connecticut to look at the rates of chronic absenteeism, defined by

FIGURE 5.
School Days Missed in New Jersey High Schools, by Absenteeism Quintile


Source: New Jersey Department of Education 2016-17; National Center for Education Statistics 2011-17.
Note: Data are restricted to public high schools in New Jersey. The average chronic absenteeism rate is 31 percent in the high quintile, 16 percent in the upper-middle quintile, 11 percent in the middle quintile, and 8 and 4 percent for the lower-middle and low quintiles, respectively.


Source: Connecticut State Department of Education 2011-17; National Center for Education Statistics 2011-17.
Note: Data are restricted to public schools in Connecticut in the 2016-17 school year. The state considers schools to be chronically absent if 5 percent of students are above the threshold. High-needs students comprise English language learners, low-income students, and students with disabilities. Racial subgroups include American Indian or Alaska Native; Asian; Black or African American; Hispanic/Latino of any race; Native Hawaiian or Other Pacific Islander; White; and two or more races.

Connecticut as missing more than 10 percent of school days, within schools for high-needs and racial subgroups (figure 6). High-needs students are defined as students who have a disability, who are English language learners, or who are low-income. In the Connecticut accountability plan, a school gets full points if no more than 5 percent of its students are chronically absent, no points for a chronic absenteeism rate of 30 percent or higher, and proportional points for a rate between 5 and 30 percent.

Looking at the 5 percent schoolwide threshold, just 12 percent of schools would receive full points overall as well as for the school's subgroups. In the 2016-17 school year, about 36 percent of schools would receive full points overall, but two thirds of these schools are below the threshold for their highneeds students, racial categories, or both. Among the 64 percent of schools over the 5 percent schoolwide threshold, nearly all schools ( 99.9 percent) failed the threshold for either high-needs students or a racial student subgroup and most schools (92 percent) failed the threshold for both high-needs and racial subgroups (figure 6).

Within a school, there are grade-level patterns to chronic absenteeism. Prior to high school, rates of chronic absenteeism are highest among kindergartners (Balfanz and Byrnes 2012). Previous research has found extremely high rates of chronic absenteeism, especially among low-income and urban kindergartners (Chang and Romero 2008; Romero and Lee 2007) although kindergartners who took the school bus were 2 percentage points less likely to be chronically absent than those who traveled to school by other means (Gottfried and Kirksey 2017).

Figure 7 shows the distribution of chronic absenteeism rates for California public schools by grade level in the 2016-17 school year. We find results that corroborate Balfanz and Byrnes (2012): most elementary schools hovered around a 5 percent rate of chronically absent students for grades 1 through 6; but, for kindergarten, the largest share of schools fell in the 10 to 15 percent range. School rates of chronic absenteeism also tend to be lower (concentrated farther to the left) as we look at older grades. This suggests that within a school a portion of students leave chronic absenteeism behind in kindergarten but for others it is a persistent condition.

FIGURE 7.
Rates of Chronic Absenteeism in Kindergarten-6th Grade, California


Student chronic absenteeism rate (percent)

Source: California Department of Education 2016-17; National Center for Education Statistics 2011-17.
Note: Data are restricted to public schools in California. California considers students to be chronically absent if they are absent for at least 10 percent of the days they are expected to attend.

FIGURE 8A.
Rates of Chronic Absenteeism in 7th-12th Grade, California

FIGURE 8B.
Rates of Chronic Absenteeism in 9th-12th Grade, New Jersey



[^3]Although elementary schools typically demonstrate lower rates of chronic absenteeism as the students get older, this pattern flips as the students enter adolescence. As shown in figure 8a, school chronic absenteeism rates increase (concentrate farther to the right) from middle to high school grade levels in California. Disaggregating the high school grades in New Jersey (8b), we observe higher chronic absenteeism rates with each additional grade level; a majority of New Jersey high schools have chronic absenteeism rates higher than the 10 percent threshold among its seniors.

## PERSISTENCE IN SCHOOL-LEVEL CHRONIC ABSENTEEISM

Moving from a single school year to successive school years, little is known about persistence in school-level chronic absenteeism. This matters because states are asking schools to improve on rates of chronic absenteeism, and schools are starting from different baselines of attendance patterns and characteristics. While there is anecdotal evidence that schools with very high levels of chronic absenteeism can bring rates down dramatically (Attendance Works and Everyone Graduates Center 2017), how difficult it is to reduce schoollevel rates of chronic absenteeism is consequential in highstakes accountability.

From what evidence we have, it seems that schools that have a problem in one year with high rates of chronic absenteeism had the same problem in a previous year. As an example, Maryland has been tracking the rate of students missing more than 20 unexcused days of school for the past 15 years. Figure 9 shows
the distribution of Maryland high schools by the number of years in which more than 10 percent of their students were absent for more than 20 unexcused days. Since the 2002-03 school year nearly half of the public high schools in Maryland had this high level of chronic absenteeism annually. Though we have previously shown that chronic absenteeism rates rise dramatically when students enter high school, evidence from Maryland suggests that high rates of chronic absenteeism manifest selectively and continuously in schools. ${ }^{4}$

Using the 2013-14 and 2015-16 CRDC, we describe how school rates of chronic absenteeism have changed by looking at the same school at two points in time. In the 2015-16 school year the chronic absenteeism rate was lower in 40 percent of schools, but higher in 58 percent of schools as compared to their school rates of chronic absenteeism in the 2013-14 school year. 14 percent of schools had lower rates of chronic absenteeism by over 5 percentage points, whereas 24 percent of schools saw more than a 5 percentage point increase in school rates of chronic absenteeism. The remaining 61 percent of schools had a school rate of chronic absenteeism in the 2015-16 school year within 5 percentage points of their 201314 rate (U.S. Department of Education 2013-14; 2015-16).

We use 2016-17 data from the state of Connecticut to test whether there is a relationship between chronic absenteeism in prior years and later years ( 5 percent threshold), adjusting for relevant school- and district-level characteristics. ${ }^{5}$ Middle and high schools have higher chronic absenteeism rates than elementary schools. Schools with a higher proportion of students eligible for free or reduced-price meals have higher

FIGURE 9.
Years of High Chronic Absenteeism in Maryland, 2002-03 through 2016-17


Source: Maryland State Department of Education 2002-17; National Center for Education Statistics 2011-17.
Note: Data are restricted to public high schools in Maryland with at least 15 years of data. Maryland considers students to be chronically absent if they have more than 20 absences in a school year; a school has a high chronic absenteeism rate if 10 percent of students or more are chronically absent.
rates of absenteeism. ${ }^{6}$ When controlling only for whether the school was an elementary, middle, or high school, Connecticut public schools were 68 percent more likely to exceed the 5 percent chronic absenteeism threshold if they had done so in the previous year. Adding in the full set of controls for school and district characteristics, a school with a chronic absenteeism problem in one year is 53 percent more likely to have the same problem the next year.

Connecticut has also reported school rates of chronic absenteeism for different subgroups of students for the past five years. For the subgroups for which we have sufficient data, we estimate the increased likelihood of a school exceeding the chronic absenteeism threshold in a particular year if the school had done so in the previous year. The likelihood of a school having high rates of chronic absenteeism for highneeds students and Hispanic students increased by 36 percent and 31 percent, respectively, when those groups had a high rate in the previous year. These groups on average are highly likely to have chronic absenteeism rates above 5 percent, so the combination of the constant and lagged chronic absenteeism implies over a 90 percent chance for these groups to be above the 5 percent threshold if they were the year before.

A school's prior history of chronic absenteeism explains more of the variation in chronic absenteeism than time-varying school- and district-level characteristics. In the 2016-17 school year, school- and district-level characteristics alone can explain 36 percent of the variation in chronic absenteeism rates; in contrast, we can explain half the variation in chronic absenteeism by looking only at a prior history of chronic
absenteeism and level of school (our unadjusted model). When we look at prior absenteeism and school- and districtlevel characteristics together, we can explain 56 percent of the variation, suggesting school and district characteristics add relatively little information once lagged absenteeism is considered.

Beyond the single-year time lag, being above the 5 percent chronic absenteeism threshold predicts current year chronic absenteeism distinctly going back up to three years. Our results show not only that chronic absenteeism is a persistent phenomenon, but also that a school's track record is a crucial way to identify schools in need of intervention and support.

## STUDENT CHRONIC ABSENTEEISM

States are holding schools accountable for reducing rates of chronic absenteeism; for a school to make progress, it will have to work with students and their families. Based on their needs and circumstances, students will respond differently to school-level policies and programs to reduce chronic absenteeism. There are many factors that predict whether a student is likely to be chronically absent, including eligibility for free or reduced-price lunches and illness (Kearney 2016). In this section we produce new evidence about the relationship between health, poverty, and chronic absenteeism.

Using nationally representative data from the Centers for Disease Control and Prevention's National Health Interview Survey from 2012-16, we sort all students into a health limitation category: chronic disability, serious diseases, hearing and/or vision problems, developmental disability, asthma

## FIGURE 10.

Student Chronic Absenteeism, by Health Limitation and Family Income


## Health limitation category

[^4]or allergies, poor emotional health, common illness, and no limitations. Figure 10 compares rates of chronic absenteeism by these classifications; the horizontal black bar shows the rate of chronic absenteeism for each health limitation group. Then, the figure shows how chronic absenteeism varies by whether the student with a health limitation is nonpoor (left bar) or poor (right bar).

Overall, about 2 percent of children between the ages of 5 and 18 were chronically absent, defined as missing 15 or more days of school; this rate is substantially lower than in the CRDC data. ${ }^{7}$ On net, those in poverty have chronic absenteeism rates of 3 percent, while those not in poverty are slightly less likely to be chronically absent (1.9 percent).

Student health plays a large role in chronic absenteeism. 38 percent of students had no health limitation and a chronic absenteeism rate of about a half a percent. About 9 percent of students had a common illness, such as a cold or ear infection, and had an absenteeism rate almost identical to the national average. Having a full-time nurse in the school is associated with fewer students leaving school during the day due to illness or injury (Allen 2003; Wyman 2005). Research has shown that public health interventions, such as nurses instructing students about sanitary practices like handwashing, are costeffective ways to reduce absenteeism rates (Houck and Perri 2002; Kimel 1996; White et al. 2001).

The second-largest group of students, the 26 percent of students with asthma or allergies, had an absenteeism rate just higher than the national average. These results are consistent with existing literature on the relationship between asthma and decreased school attendance (Moonie et al. 2006). Overall, about a quarter of the chronically absent children in these data had asthma or allergies.

In nearly all of the health categories, poor students are substantially more likely than nonpoor students to be chronically absent. In addition, students in poverty are more likely to have conditions that contribute to chronic absenteeism. Students in poverty are 45 percent more likely than their nonpoor counterparts to have a chronic disability, 41 percent more likely to have a serious disease, and 85 percent more likely to have a hearing and/or vision problem-the three categories with the highest levels of chronic absenteeism. Thus, the higher overall rate for poor students is a function of both a higher likelihood of absenteeism across most health categories, and a higher likelihood of being in health categories with higher levels of absenteeism. ${ }^{8}$

While it is understandable that students who have serious disabilities like cerebral palsy, heart conditions, or frequent seizures will miss more school days, these data illustrate how students with easily managed conditions still end up with
poor attendance records-especially if they are financially vulnerable.

## PERSISTENCE IN STUDENT-LEVEL CHRONIC ABSENTEEISM

What predicts persistence in student-level chronic absenteeism? Looking at students in two districts in California from the 2008-09 to 2010-11 school year, London, Sanchez, and Castrechini (2016) found that the largest contributor to chronic absenteeism was the student's attendance history. Controlling for other factors, students who were chronically absent in 2008-09 were about 30 percentage points more likely to be chronically absent in a subsequent year.

Identifying the effects of a prior history of chronic absenteeism from the effects of school- or student-level characteristics that are associated with high chronic absenteeism requires repeat observations of a child. Using panel data from the Early Childhood Longitudinal Study, Kindergarten Class of 2010-11, we look at the relationship between prior and later chronic absenteeism from kindergarten through third grade. ${ }^{9}$ Controlling for student, parent, and school characteristics, we still find significant effects for prior years of chronic absenteeism, defined in the data as missing 11 or more school days during a school year.

Without any other controls, from first to third grade a student is between 24 and 28 percent more likely to be absent in the subsequent school year if they were absent in the prior school year; for example, a student is 24 percent more likely to be chronically absent in first grade if they were chronically absent in kindergarten. If a student was chronically absent in the first three years of elementary school-kindergarten, first, as well as second grade-they are 41 percent more likely to be chronically absent in third grade.

Controlling for student, parent, and school characteristics, a student is 12 percent more likely to be chronically absent in first grade if they were chronically absent in kindergarten. A student who was chronically absent in kindergarten, first, and second grade is almost 20 percent more likely to be chronically absent in third grade. Even if a student was not chronically absent for the first and second grades, chronic absenteeism in kindergarten still increases the likelihood of chronic absenteeism in the third grade by about 10 percent. ${ }^{10}$

These results suggest that it would be more effective to focus on preventing chronic absenteeism earlier on, particularly in kindergarten where chronic absenteeism is quite common. But, the evidence also suggests that remediation later on can change trajectories. Additional efforts should be taken to support and assist students who have been chronically absent in the past, even if they are no longer chronically absent.

## Chapter 5: Reducing Chronic Absenteeism

As we showed in chapter 4 , the scope of attendance problems that schools encounter and the depth and diversity of student needs recommend tailoring intervention strategies. Understanding what is likely to make a child chronically absent or a school likely to have high levels of chronic absenteeism is an essential input to school policies and practices. The approach recommended by Attendance Works is the three-tiered Response to Intervention model (Kearney and Graczyk 2014; Kearney 2016; Attendance Works 2018).

Depending upon the scope of a school or a student's needs, leaders can customize strategies and interventions to bolster attendance. Tier 1 strategies can be implemented schoolwide at relatively little cost. Many of the strategies discussed in this paper would be considered Tier 1, including data programs and communicating about the impact of attendance on student performance. Tier 2 strategies are more personalized to an individual student and may be more costly, in dedicated staff or staff time. In this section, the mentoring programs, Success Mentors and Check \& Connect, are Tier 2 strategies. Tier 3 strategies are for the most severe circumstances, for students who have missed more than 20 percent of school days. Strategies for these include working with social workers, service agencies, and the legal system. As part of the tiered approach, a school can incorporate a variety of programs to boost attendance.

In the past several years, teams of researchers across the country have been running experiments to test interventions to increase attendance. This chapter reviews experimental evidence of interventions meant to increase school attendance and reduce chronic absenteeism. While the experimental evidence suggests promising interventions, organizations such as Attendance Works and the U.S. Department of Education's National Student Attendance, Engagement, and Success Center offer schools additional, excellent resources to support attendance growth.

## DEEPER CONNECTIONS AND BETTER COMMUNICATIONS

Researchers have studied the impact of communication with parents regarding attendance, including parent-toparent communications, two-way texting between parents and schools, and informational mailings to parents.

Communicating the value of school attendance to parents was central to the strategy in each study, but different modes and mechanisms were at play.

The Children's Attendance and Social Capital Project (CASCP) was a program that tried to improve student attendance in Head Start through parental engagement. While Head Start has systems in place to promote consistent attendance and to contact families if a child is absent, this program differs by trying to build parent-to-parent relationships to support attendance. During the 2013-14 school year, the program paired parents to generate social capital and provide mutual support in getting their children to school. Though there was not an overall effect of the program, Sommer et al. (2017) found a 5.3 percent increase in Head Start attendance during the winter.

Building on evidence that texting with parents impacts student achievement (e.g. Mayer et al. 2015), Smythe-Leistico and Page (2018) designed an experiment to test the effect of text messaging on attendance. A pilot program in an elementary school in Pittsburgh looked at two-way texting on attendance and school engagement. They designed a program called Connect-Text, which sent reminder messages to parents about school events, notified parents if a student missed school, and invited parents to engage with teachers. Smythe-Leistico and Page (2018) found that the rate of chronic absenteeism among kindergartners in the experimental school ( 13 percent) was much lower than that of the control group (24 percent).

Todd Rogers' Student Social Support R\&D Lab at Harvard has implemented a set of experiments in several different locations that examine what types of mailings to parents are effective when trying to improve student attendance. In each of the mailing studies, the intervention was found to be more effective among students with the poorest attendance patterns, reducing rates of chronic absence as well as improving attendance among untreated siblings. These experiments were tested in three locations across the country-Philadelphia, Chicago, and San Mateo County-and the researchers have spun off a company, In Class Today, to bring the intervention to scale.

In Philadelphia, Rogers and Feller (2016) sent five mailings to three different treatment groups but not to the control group.

Each treatment group received different information from the school. In the researcher-termed "reminder" group, parents were informed about the importance of school attendance and their capacity to improve attendance for their children; in this group, chronic absenteeism was reduced by 8 percent. In the "total absences" group, parents were also given updates on the total number of days their child had missed school; in this group, chronic absenteeism was reduced by 10 percent. In the "relative absences" group, parents were also informed about how many days of school their child's classmates had missed; in this group, chronic absenteeism was reduced by 11 percent.

In California the type of information the Student Social Support R\&D Lab mailed to parents was again varied (Robinson et al. 2017). The control condition received no additional communications. This study included more than 10,000 households in 10 California school districts. In the baseline treatment condition, parents received mail that emphasized the importance of attendance and the total number of days their child had missed school. The second communication treatment group tested a strategy similar to the CASCP program in that it encouraged parents to reach out to their network for support in getting their child to school daily. Pooled together, the mailings caused a 15 percent reduction in chronic absenteeism.

## MENTORS AND TEACHERS

A relatively small amount of staff time was required for the communications-based strategies. In the text message experiment, for example, Smythe-Leistico and Page (2018) estimated that only 30 minutes a week of staff time was spent on maintaining communications with parents. By contrast, dedicated staff are the key component of other attendance interventions: Success Mentors and Check \& Connect.

One of the facets of the New York City (NYC) Interagency Campaign to Reduce Chronic Absenteeism was the NYC Success Mentor Corps (Success Mentors). The Success Mentors worked on attendance, including inventorying underlying causes of absenteeism and working directly with students and their families. Balfanz and Byrnes (2013) found that students with Success Mentors who initially missed 42 days on average gained almost two weeks of schooling after the program. In the schools that benefited the most from the program, chronically absent program participants gained more than a month of school on average.

The Check \& Connect program is similar to Success Mentors: a mentor is charged with monitoring critical indicators including attendance, developing relationships with students and their families, and developing tailored intervention

FIGURE 11.
Topics of Teacher-Parent Engagement in the Early Truancy Prevention Program


Topics of teacher-parent engagement

[^5]plans. Evaluations have found that Check \& Connect causes persistent attendance among students (Maynard, Kjellstrand, and Thompson 2014; Sinclair et al. 1998; Sinclair, Christenson, and Thurlow 2005). A recent randomized controlled trial evaluation of Check \& Connect in Chicago found evidence that the program can reduce the likelihood of crossing a 5 -, 10 -, 15 -, or 20 -day absence threshold by 5 to 13 percentage points in grades 5 through 7; but, there were no detectable effects on students in grades 1 through 4 (Guryan et al. 2017).

The My Brother's Keeper Alliance (MBK), which started in the White House and has continued within the Obama Foundation, works to close opportunity gaps facing boys and young men of color. MBK focuses on reducing chronic absenteeism through its efforts to bring Success Mentors to scale.

While having dedicated mentors to work with students and families on school connection is one strategy for improving attendance, mentors are not the only adults in the building who can be a part of the solution. There is a role for classroom teachers. A team of researchers from Duke University developed the Early Truancy Prevention Project (ETPP) to develop teacher-parent communication and increase attendance (Cook et al. 2017).

ETPP uniquely consisted of a teacher making a home visit and receiving a smartphone to use to communicate with parents. As with other programs, ETPP also provided frequent attendance data reports, recommendations for increasing attendance based on each student's needs, and information about existing attendance resources. ETPP offered teachers a small stipend and an additional payment per home visit completed. The researchers conducted the study in more than 40 elementary schools in North Carolina. They found that the program reduced absenteeism of 10 or more days by 12 percent.

To guide future research, Cook et al. (2017) looked at what topics the teachers worked on with families and how that differed across treatment and control teachers (figure 11). Working with families on attendance when the child was sick was the highest frequency topic across both groups, but teachers in the treatment group were twice as likely to be communicating with parents about health. Teachers in the treatment group were also engaging with parents on other issues critical to attendance, including transportation, at much higher rates than those found in the control group.

## COST

The programs reviewed here vary widely in terms of cost as well as the extent of non-attendance-related benefits one might expect.

Several of the studies use a cost-benefit framework and describe how much the intervention costs by the days of school attendance gained as a result. The Philadelphia mailing intervention cost $\$ 6.60$ per incremental day (Rogers and Feller 2016) and the California mailing intervention cost $\$ 10.69$ per incremental day (Robinson et al. 2017). The program costs for Success Mentors amounted to about $\$ 120$ in personnel opportunity cost per incremental day generated (Rogers and Feller 2016). The Chicago Check \& Connect program reduced absenteeism at a cost of $\$ 500$ per incremental day generated for middle school (Guryan et al. 2017). Both of these programs, by including another trusted adult in a child's life, might have substantial benefits beyond attendance only.

Two programs describe the cost of the program per student rather than in the cost-benefit framework. The text-message intervention costs about $\$ 200$ per student (Smythe-Leistico and Page 2018) and ETPP costs a little less than $\$ 150$ per student (Cook et al. 2017).

## Chapter 6: Conclusion

TThe Hamilton Project offers this strategy paper to support states as they oversee the next wave of accountabilitydriven education reform. Building on Schanzenbach, Bauer, and Mumford (2016), which recommended that states adopt "chronic absenteeism" as the SQSS indicator, this paper focuses on implementation for the 36 states, the District of Columbia, and Puerto Rico that have done so.

We set ideas about how evidence from NCLB-era reform forewarns broadening school accountability under ESSA and apply these lessons to the case of chronic absenteeism. Using this framework, we consider how states offer incentives to schools to reduce rates of chronic absenteeism. ESSA presents
states with the opportunity to lead and innovate through its implementation of statewide accountability. It is clear from reviewing all 52 plans that states have devised accountability plans that offer marked contrasts with-and the prospect to learn from-each other in the coming years.

While states have a responsibility to oversee the accountability system, each school will act based on its circumstances and the unique needs of its students. High stakes accountability pressure paired with a school-level tiered approach represent an evidence-based strategy for increasing attendance and improving student outcomes.

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## Endnotes

1. Estimates of chronic absenteeism rates using the 2013-14 CRDC are likely to be understated due to measurement error-it is possible that school districts reported no students chronically absent when in fact there were simply missing data (Attendance Works and Everyone Graduates Center 2017).
2. The extent to which this policy is new varies across states. ESSA is the next iteration of NCLB and the waivers that states received in exchange for NCLB relief (Hemelt and Jacob 2017). While some states-such as Connecticutused the waiver process to broaden school accountability to include chronic absenteeism, the scope and consequence of the SQSS indicators in highstakes accountability is more novel than not. Similarly, while every school collects attendance data, states and schools vary in their familiarity with chronic absenteeism, in their experience using data and early warning systems to make the problem visible and actionable, and in implementing programs and systems to work toward its reduction.
3. According to consolidated state plan submitted to the U.S. Department of Education, California listed chronic absenteeism as the second academic indicator for elementary and middle schools, rather than as the SQSS indicator. California is the only state to have done this. Because high schools are not required to have this indicator, this could explain why California is not holding its high schools accountable for chronic absenteeism.

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4. See Appendix figures 1-3 for the same exercise using data from Connecticut, Utah, and Rhode Island.
5. See online appendix tables for more details.
6. We also control for parental diplomas and race and ethnic characteristics of districts, but their effects are not consistently statistically significantly different from zero across specifications. See online appendix table 1 for details.
7. Student absences are based on parental reporting, a method that some find underestimates total absences. Nevertheless, these data show that rates of chronic absence vary across health limitation and within limitation categories by family poverty status.
8. It is unclear as to why poorer students with a serious disease (defined as diabetes, anemia, noncongenital heart disease, or sickle cell anemia) have lower rates of absenteeism. Data limitations prevent us from determining any clear cause of this discrepancy.
9. See online appendix tables for more details.
10. Across the many specifications, qualifying for free/reduced-price meals tends to increase the likelihood of chronic absenteeism and having attended preschool tends to lower chronic absenteeism.

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## Appendix

APPENDIX FIGURE 1.
Years of High Chronic Absenteeism in Connecticut, 2011-12 through 2016-17


APPENDIX FIGURE 2.
Years of High Chronic Absenteeism in Utah, 2011-12 through 2016-17


Source: Utah Department of Education 2011-17; National Center for Education Statistics 2011-17.
Note: Data are restricted to public high schools in Utah with at least 6 years of data. Utah considers students to be chronically absent if they miss 10 percent of school days or more in a school year; in this figure a school has a high chronic absenteeism rate if 10 percent of students or more are chronically absent.

APPENDIX FIGURE 3.
Years of High Chronic Absenteeism in Rhode Island High Schools, 2010-11 through 2015-16


[^6]
## Selected Hamilton Project Papers on Education

## POLICY PROPOSALS

- "Returning to Education: The Hamilton Project on Human Capital and Wages"
Jay Shambaugh, Lauren Bauer, and Audrey Breitwieser discuss the relationship between human capital and wages from early childhood through workforce development. Human capital is central to raising wages. This framing paper describes trends in human capital investment and educational attainment, and reviews the evidence of wage returns to educational attainment and to early childhood education, K-12 education, postseconday education, and workforce development. It also synthesizes a decade of Hamilton Project policy proposals on education, focusing on increasing access while maintaining quality.
- "Improving College and Career Outcomes of LowPerforming High School Students"
Louis Jacobson shows that many students who perform at or below average in high school are not prepared for college and do not attain postsecondary degrees or highvalue certificates. The author proposes a set of policies and practices, informed by his multimethod evaluation of the Florida College and Career Initiative (FCCRI), that would improve college and career outcomes at relatively low cost. This includes holding high schools accountable for students' longer-term successes.
- "Lessons for Broadening School Accountability under the Every Student Succeeds Act"
Diane Whitmore Schanzenbach, Lauren Bauer, and Megan Mumford highlight rates of chronic absenteeism in elementary, middle and high schools throughout the United States and recommends the selection of chronic absenteeism when states choose a new measure of school accountability as mandated under the recently enacted federal education law.


## ECONOMIC FACTS

- "Seven Facts on Noncognitive Skills from Education to the Labor Market"
Diane Whitmore Schanzenbach, Ryan Nunn, Lauren Bauer, Megan Mumford, and Audrey Breitwieser
In the past 30 years, the U.S. labor market has shifted dramatically toward increasing demand and reward for noncognitive skills. These noncognitive skillselsewhere called soft skills or social, emotional, and behavioral skills-include qualities like perseverance,
conscientiousness, self-control, social skills, and leadership ability. To facilitate success in the modern labor market, education policies should address how schools and teachers develop noncognitive skills. In this set of economic facts, The Hamilton Project explores the development of noncognitive skills in education and the returns to noncognitive skills in the labor market.


## - "Eight Economic Facts on Higher Education"

Diane Whitmore Schanzenbach, Lauren Bauer, and Audrey Breitwieser
In this set of eight facts, the Hamilton Project offers evidence of the economic value of a postsecondary education. These facts document who is enrolling in and completing-or dropping out of-postsecondary programs and how this has changed over time. While there continues to be a sizeable earnings premium for postsecondary degree holders, these facts also describe the distribution of debt and default among student borrowers.

- "Fourteen Economic Facts on Education and Economic Opportunity"
Diane Whitmore Schanzenbach, David Boddy, Megan Mumford, and Greg Nantz
There are many factors at work in determining educational outcomes; some of these are more easily addressed by policy reforms than others, and not all can be addressed directly within the K-12 education system. The Hamilton Project illustrates the payoffs from increasing educational attainment and the promise of targeted childhood interventions.
- "A Dozen Economic Facts About K-12 Education"

Michael Greenstone, Max Harris, Karen Li, Adam Looney, and Jeremy Patashnik
Education is a powerful force for promoting opportunity and growth. It is not surprising that an individual's educational attainment is highly correlated with her income. What might be less obvious is that education is also a significant determinant of many other very important outcomes, including whether individuals marry, whether their children grow up in households with two parents, and even how long they will live. This paper explores both the condition of education in the United States and the economic evidence on several promising K-12 interventions that could improve the lives of Americans.

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## Abstract

The Every Student Succeeds Act (ESSA; 2015) requires states to broaden school accountability beyond achievement on standardized tests and high school graduation rates. In this Hamilton Project strategy paper, we articulate a framework for states as they oversee implementation of statewide accountability plans under ESSA and describe how states differ in their approaches. We review the literature and present novel analyses of the factors at the school and student levels that relate to chronic absenteeism. Our analysis shows that health problems and socioeconomic status predict poor attendance, and that chronic absenteeism among students and schools is strongly persistent over time. We describe evidence-based strategies for schools as they work to reduce rates of chronic absence among students.

Years of High Chronic Absenteeism in Maryland, 2002-03 through 2016-17


Source: Maryland State Department of Education 2002-17; National Center for Education Statistics 2011-17.
Note: Data are restricted to public high schools in Maryland with at least 15 years of data. Maryland considers students to be chronically absent if they have more than 20 absences in a school year; a school has a high chronic absenteeism rate if 10 percent of students or more are chronically absent.


[^0]:    Source: U.S. Department of Education 2015-16; National Center for Education Statistics 2011-17.
    Note: The CRDC defines chronic absenteeism as missing 15 or more days of school in a school year. Percentages are rounded up.

[^1]:    Source: Authors' analysis of state ESSA plans.
    Note: SQSS refers to "school quality or student success."

[^2]:    Source: New Jersey Department of Education 2016-17; National Center for Education Statistics 2011-17.

[^3]:    Source: California Department of Education 2016-17; New Jersey Department of Education 2016-17; National Center for Education Statistics 2011-17. Note: Data are restricted to public schools. Both states consider students to be chronically absent if they are absent for at least 10 percent of the days they are expected to attend.

[^4]:    Source: Centers for Disease Control and Prevention 2012-16.
    Note: The limitation categories are mutually exclusive. Students with multiple limitations were categorized by their most severe limitation. The "No limitations" category does not include emotional health due to missing data issues.

[^5]:    Source: Cook et al. 2017.
    Note: Data are aggregated to the classroom level and result from surveys administered to teachers participating in the ETPP. Asterisks indicate

[^6]:    Source: Rhode Island Department of Education 2010-16; National Center for Education Statistics 2011-17.
    Note: Data are restricted to public high schools in Rhode Island with at least 6 years of data. Rhode Island considers students to be chronically absent if they miss 18 school days or more in a school year; in this figure a school has a high chronic absenteeism rate if 10 percent of students or more are chronically absent.

