



RESEARCH REPORT

Absenteeism in DC Public Schools Early Education Program

An Update for School Year 2013-14

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Prepared for the DC Public Schools' Early Childhood Education Division

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Contents

| | |
|--|-----------|
| Acknowledgments | iv |
| Executive Summary | v |
| Section I. Background | 1 |
| Section II. Attendance Patterns in DCPS Head Start Programs | 4 |
| Section III. School Interventions on Attendance Issues | 13 |
| Section IV. Conclusions | 16 |
| Tables 1-7 | 19 |
| Appendixes A-H | 23 |
| Notes | 31 |
| References | 32 |
| About the Authors | 33 |

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Executive Summary

Enrollment in early childhood education programs can be an important stepping stone to higher educational achievement, particularly for low-income children. However, children cannot succeed in these programs unless they are present. This report examines the extent of absenteeism in the District of Columbia Public Schools' (DCPS) early education program in Title I schools in the 2013–14 school year (SY). This program is a Head Start School-Wide Model (HSSWM), which combines local funding for pre-kindergarten with Head Start dollars. Key findings include the following:

- DCPS Head Start students were absent for 8 percent of school days, on average, which implies an in-seat attendance rate of 92 percent.
- Forty-four percent of DCPS Head Start students had satisfactory attendance (missing 5 percent or less of enrolled days), 29 percent were at risk for absence problems (missing more than 5 percent and less than 10 percent of enrolled days), 20 percent were chronically absent (missing 10 percent or more but less than 20 percent of enrolled days), and 7 percent were severely chronically absent (missing 20 percent or more of enrolled days).
- Absence rates and the share of students with satisfactory attendance improved between SY 2012–13 and SY 2013–14. Rates of absences declined from 9 percent to 8 percent, and the share of students with satisfactory attendance increased from 36 percent to 44 percent between the two years.
- Attendance patterns varied by students' characteristics. Black children, children who speak English at home, children with disabilities, homeless children, children enrolled in Temporary Assistance for Needy Families, and children attending schools in Wards 1, 5, and 7 had worse attendance across each of the different measures.
- Among students enrolled for the whole year, attendance was lowest on Mondays and Fridays, with 8 and 9 percent of children being absent on average, respectively. Among these students, absence rates increased month by month until January, when 10 percent of students were absent, then dropped in February to 7 percent, rising again to 10 percent by June. Absence rates were also high before and after vacations and snow days and on half-days of school.
- Students who were chronically absent in the previous school year or who were chronically absent in the first month were very likely to be chronically absent for the whole year. However,

a majority of students who ended the year as chronically absent began the year with satisfactory or at-risk attendance.

- Only 30 percent of students were identified as having absence problems and had actions taken to improve attendance despite the fact that 56 percent of students were at risk for or had chronic absence problems. Six percent of students were referred to case management for absence-related issues.
- The share of students who were identified as having attendance issues, who had attendance actions taken, or whose attendance problem was escalated to case management increased each year between SY 2011-12 and SY 2013-14.

Section I. Background

The Early Childhood Education Division (ECED) in the District of Columbia Public Schools (DCPS) has identified school attendance patterns and absenteeism as areas needing improvement in order to meet school readiness goals. This focus is consistent with the overall goal, outlined in the DCPS Capital Commitment Strategic Plan for 2017, of increasing investments that will improve in-seat attendance and reduce tardiness and truancy throughout the school system. Children are not required to enroll in either preschool or prekindergarten in DC, and admission to seats is available through a lottery or through direct application after lottery is complete. Unlike school attendance for children ages 5 through 17, attendance for children ages 3 and 4 is not required by law, making attendance issues more challenging for early education programs. In the past two years, ECED has devoted increased attention to absenteeism and has changed policies regarding absenteeism in DCPS's early education programs. This report focuses prekindergarten programs in Title I schools which operate as a Head Start School-Wide Model (HSSWM).

Most studies of early absenteeism focus on kindergarten through third grade. This literature consistently shows that students who are chronically absent in one year are at greater risk for being chronically absent in the next and subsequent years (Chang and Romero 2008). A recent study in Baltimore suggests that attendance patterns that appear in the first month of school generally predict yearlong attendance patterns, offering an early window to identify and help students and families before absenteeism becomes chronic (Olson 2014). Moreover, research from Santa Clara and San Mateo Counties in California found that absenteeism is negatively associated with children's school success and that by the third grade chronic absenteeism can substantially reduce academic advantages children bring to kindergarten. Furthermore, chronic absenteeism creates challenges for all children in classrooms as teachers devote more resources to helping meet the learning needs of those children who missed school (Applied Survey Research 2011; Gottfried 2011).

BOX 1

An Overview of the Early Childhood Program in District of Columbia Public Schools

In 2008, the District of Columbia passed the Pre-K Act, mandating universal prekindergarten for 3- and 4-year-olds. The implementation of the act allowed District of Columbia Public Schools to become both the largest single provider of services for 3- and 4-year-old children and of Head Start–eligible children in the District of Columbia. The school district accomplishes this mission through the Head Start School-Wide Model (HSSWM), which combines local funding through the Uniform per Student Funding Formula with Head Start dollars to serve nearly 5,000 children each day in their neighborhood schools. Every child in HSSWM receives the full range of services that meet Head Start standards, including screening and diagnostic assessment, high-quality early childhood classroom settings for the full school day and school year, and access to family support services.

Recent studies have examined absenteeism in preschool and prekindergarten settings in a few large cities. In general, children in pre-kindergarten programs show higher rates of chronic absenteeism than children in kindergarten and elementary school. Chronic absenteeism rates were 26.5 percent in Baltimore in school year (SY) 2010–11, 45 percent for 3-year-olds and 36 percent for 4-year-olds in Chicago in SY 2011–12; 33 percent for children enrolled in DCPS Head Start programs in SY 2011–12, and close to 50 percent in New York City in SY 2012–13 (Balfanz and Byrnes 2013; Connolly and Olson 2012; Dubay et al. 2013; Ehrlich et al. 2014).¹ Research conducted in the Chicago Public Schools indicates that the deleterious effects of absenteeism on achievement found in later grades also occur in prekindergarten. The Chicago study found that the more days a 4-year-old child misses in prekindergarten, the lower his or her scores are on the math, letter recognition, and socioemotional portions of the Chicago Public School’s kindergarten readiness tool, controlling for scores at the beginning of the year. Moreover, in Chicago, students with the lowest incoming skills miss the most days of school, and students with low incoming skills are those for whom attendance matters the most for achievement gains (Ehrlich et al. 2014).

The causes of absenteeism and attendance problems are complex and such include factors as characteristics of individual children and their families, the policies and practices of the schools and programs in which they are enrolled, and the broader community. Research commonly points to the following issues as potentially leading any child to miss school: poor health of the child or a parent, special needs of the child, language barriers, cultural norms and parental perspectives on the “costs” of

missing school for younger children, unstable housing, family instability, transportation challenges, inadequate food and clothing, the culture and quality of schools, and the lack of safe neighborhoods and pathways to get to school (Chang and Romero 2008; Applied Survey Research 2011).

Some of these factors, such as health status, are likely to play a consistent role over the course of a child's life. The significance of other factors will often depend on the child's age: family context may play a larger role in attendance for younger children, but the child's own characteristics and perspectives might take on a more important role as the child moves into later grades. In addition, the fact that attendance in early childhood education programs is voluntary likely affects attendance rates. Parental views and choices are shaped by program policies, practices, and communicated expectations. For example, if parents view the program principally as child care rather than early education for their children, they may not follow a routine of sending their children to school every day. Evidence of these contributors to school attendance problems come from many school districts, and these issues were also identified as critical factors affecting attendance in the DCPS Head Start program from qualitative interviews conducted with ECED family services staff (Katz, Adams, and Johnson 2015).

In recognition of the importance of attendance to school success at every stage, ECED included improvements in attendance as one of its key school readiness goals. DCPS contracted with the Urban Institute to examine DCPS STARS and ChildPlus data to identify patterns of absenteeism across DCPS's Title I school-based Head Start programs. This information will be used to inform DCPS's efforts to reduce absenteeism in early childhood programs and to achieve its school readiness goals. This report documents the prevalence and patterns of absenteeism in the DCPS early childhood education programs and identifies how these patterns vary across students, families, and schools. This report focuses on patterns of attendance and absenteeism for SY 2013–14 and contrasts this year with the two previous school years to ascertain whether attendance has improved.

Section II. Attendance Patterns in DCPS Head Start Programs

Various measures are available to gauge the extent of attendance problems for individual students and school systems. This report focuses on two main measures of absenteeism: the share of school days that students are absent for any reason and the share of students who have satisfactory attendance, have at-risk attendance, are chronically absent, and are severely chronically absent.

The share of school days absent is constructed by dividing the number of school days absent for any reason by the number of school days each child is enrolled. The share of school days absent is a broad measure of attendance that takes into consideration that even excused absences such as those due to illness or medical appointments take a toll on learning and achievement. It is a more encompassing measure than the share of enrolled days with unexcused absences, also referred to as truancy, because it measures the lack of in-seat attendance. The extent to which absences are unexcused rather than excused and authorized is also presented. Although the share of school days absent is a widely used measure, it can mask the extent to which students are at risk for attendance problems by presenting an average rather than the distribution of the share of school days absent across students (Chang and Romero 2008). For this reason, a second measure is examined that categorizes students as having satisfactory attendance if they miss 5 percent or less of enrolled days, at risk for absence problems if they miss more than 5 but less than 10 percent of enrolled days, chronically absent if they miss 10 percent or more but less than 20 percent of enrolled days, and severely chronically absent if they miss 20 percent or more of enrolled days.

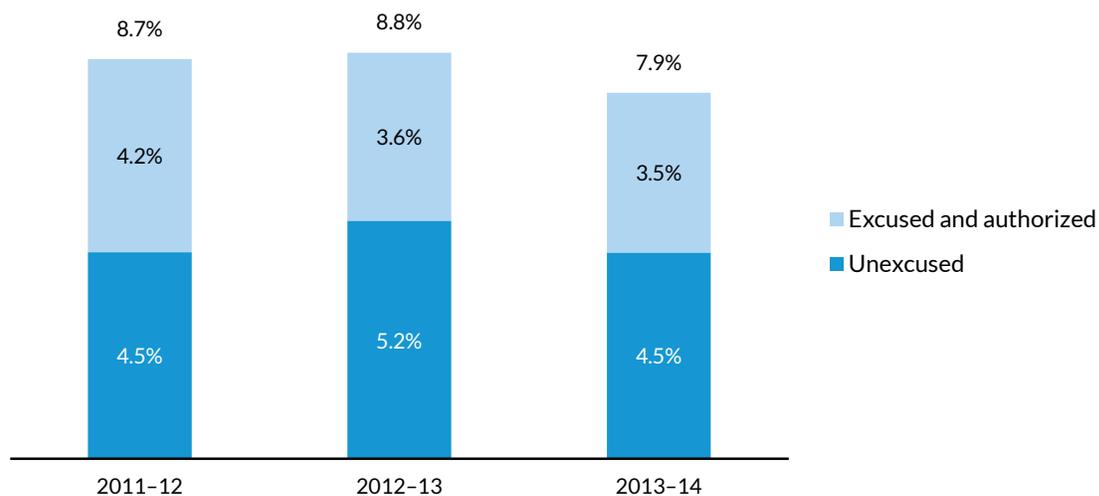
Both descriptive and multivariate analyses were conducted. Multivariate controls included race of the child, whether the child has disabilities, reason for eligibility for Head Start, whether the child lives with his or her parents, whether the child attends an out-of-boundary school, and the ward in which the school is located.² Appendix A contains more detailed information on the data sources and methods used in the report.

Key Attendance Measures

Students were absent for 8 percent of school days during SY 2013–14 (figure 1). Both the descriptive and multivariate results indicate this rate of absence was an improvement from the two previous school

years, when students were absent for 9 percent of all school days (table 1). Unexcused absences accounted for about half of all absences at 4.5 percent of school days during SY 2013–14. This rate is an improvement from the previous year’s rate of unexcused absences of 5.2 percent, but it is not statistically different from the rate for SY 2011–12.

FIGURE 1
Percent of School Days Absent, SY 2011–12 to SY 2013–14

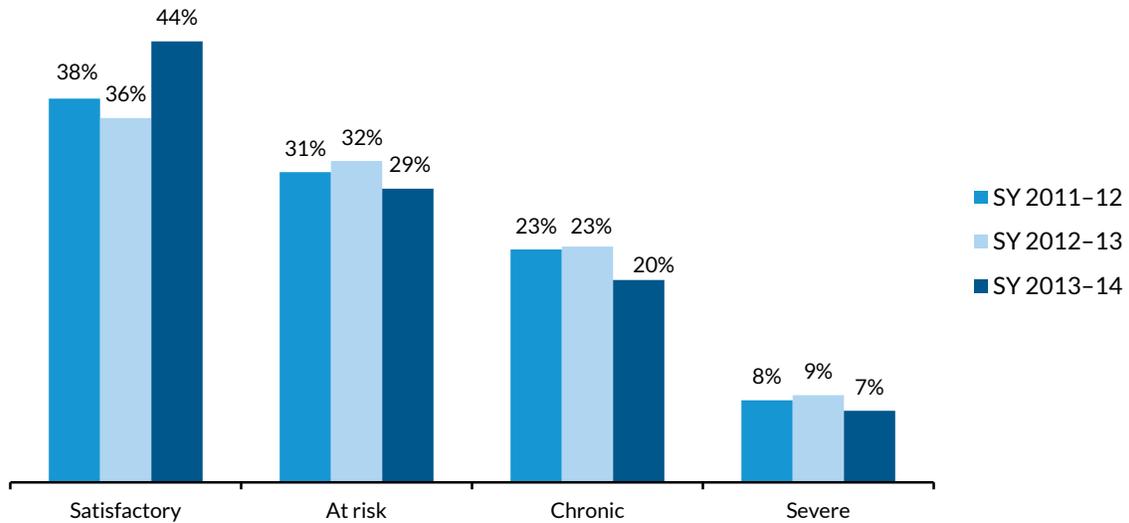


Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

During SY 2013–14, 44 percent of the students had satisfactory attendance, 29 percent were at risk for attendance problems, 20 percent had chronic attendance problems, and 7 percent had severe chronic attendance problems (figure 2). There were significant improvements from the previous years, with an increase in the share of students with satisfactory attendance of 8 percentage points, reductions of 3 percentage points in the share of students at risk or with chronic absences, and a reduction of 2 percentage points in the share of students with severe chronic absences since SY 2012–13 (table 2).

FIGURE 2

Percent of Students by Attendance Category, SY 2011–12 to SY 2013–14



Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Patterns of Attendance

Understanding patterns of absenteeism provides an opportunity to develop targeted awareness efforts, messages, or interventions. Attendance patterns were examined by characteristics of students and schools, seasonal patterns, and predictive patterns (attendance in the previous year and in the first month of school).

Patterns by Characteristics of Students and Schools

Each of the three measures of attendance varied systematically across characteristics of the student and the school's ward (tables 3 and 4). In general, black students missed more days of school and were less likely to have satisfactory attendance than white students. Children who did not speak English at home missed a smaller share of days enrolled and were more likely to have satisfactory attendance compared to their English-speaking peers. Children with either autism or a developmental delay had significantly higher total rates of absence and were less likely to have satisfactory attendance than children without any special needs. However, their rates of unexcused absences were not different than

the rates for nondisabled students. This inconsistency may be due to excused medical absences largely contributing to the disabled children's absentee rate.

Attendance also varied based on children's eligibility for Head Start.³ Homeless children had the highest share of missed days of school and were the least likely to have satisfactory attendance, followed closely by children enrolled in Temporary Assistance for Needy Families (TANF). Children eligible due to their enrollment in Head Start last year had the highest levels of attendance. Descriptively, children who attended out-of-boundary schools missed a greater share of enrolled days and were less likely to have satisfactory attendance; however, these differences disappeared with multivariate controls.

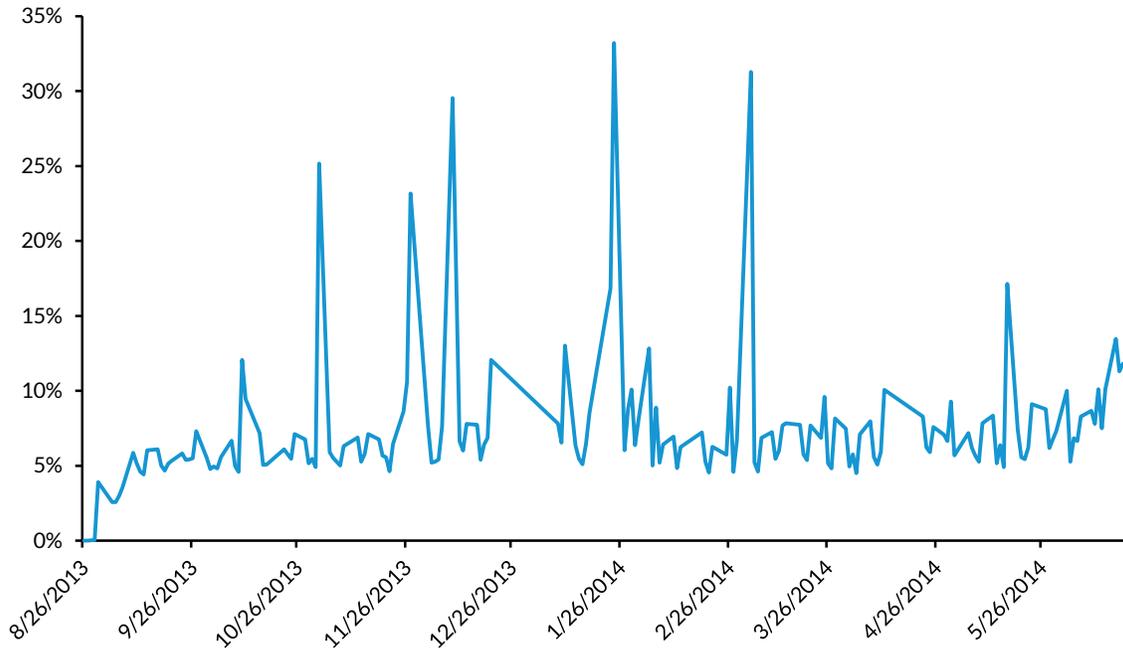
The severity of absenteeism problems also varied by ward: children attending schools in Wards 1, 5, and 7 all had significantly higher rates of absence than children in Ward 4, with the greatest difference being for students in Ward 7 schools. These same wards were also less likely to have satisfactory attendance. These differences across wards remained large but were diminished when multivariate controls were employed. This finding suggests that the characteristics of children enrolled in schools vary substantially across wards, as can be seen clearly in appendix A.

Seasonal Patterns of Attendance

The share of children absent on a given day was examined over the course of the school year, by day of the week, and by month of the year for children who were enrolled for the entire school year. Overall the share of enrolled children absent varied considerably over the school year (figure 3). Very high rates of absence occurred on the day after Halloween, which was also a half-day of school; the Tuesday and Wednesday before Thanksgiving; before and after snow days; the day before long weekends and holiday breaks; toward the end of the school year; and for reasons that are not obvious based on the school calendar.

FIGURE 3

Percent of Students Absent Each Day, Students Enrolled for Full SY 2013–14

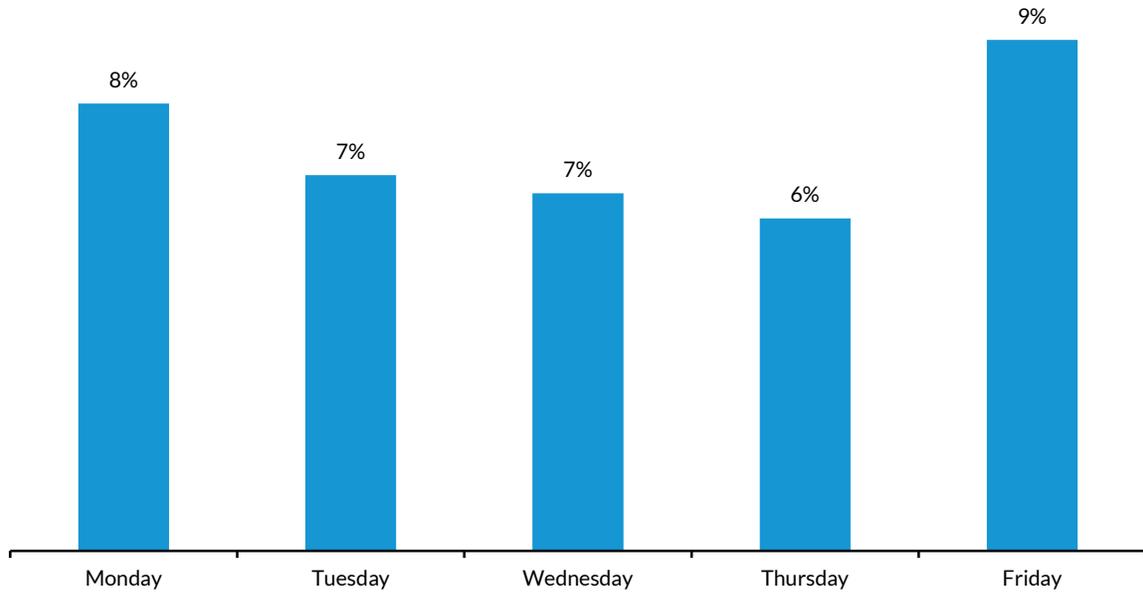


Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Although the overall pattern seems somewhat random over the course of the year, systematic patterns were observed across days and months. Between 6 and 7 percent of students were absent on Tuesdays, Wednesdays, and Thursdays; 8 percent were absent on Mondays; and 9 percent were absent on Fridays (figure 4 and appendix C). The share of students absent increased each month from September (5 percent) to January (10 percent), dropped to between 7 and 8 percent in February through May, and then increased again to 10 percent in June (figure 5 and appendix E). These patterns are very similar to those found in the Chicago Public Schools; the higher rates of absence in the middle of the year may be related to the emergence of cold weather (Ehrlich et al. 2014). The latter finding suggests that consistent messages about attendance are likely important over the first half of the year and not only in the first month. Similarly, messages regarding the importance of the last days of school are probably warranted.

FIGURE 4

Percent of Students Absent by Day of the Week, Students Enrolled for Full SY 2013–14



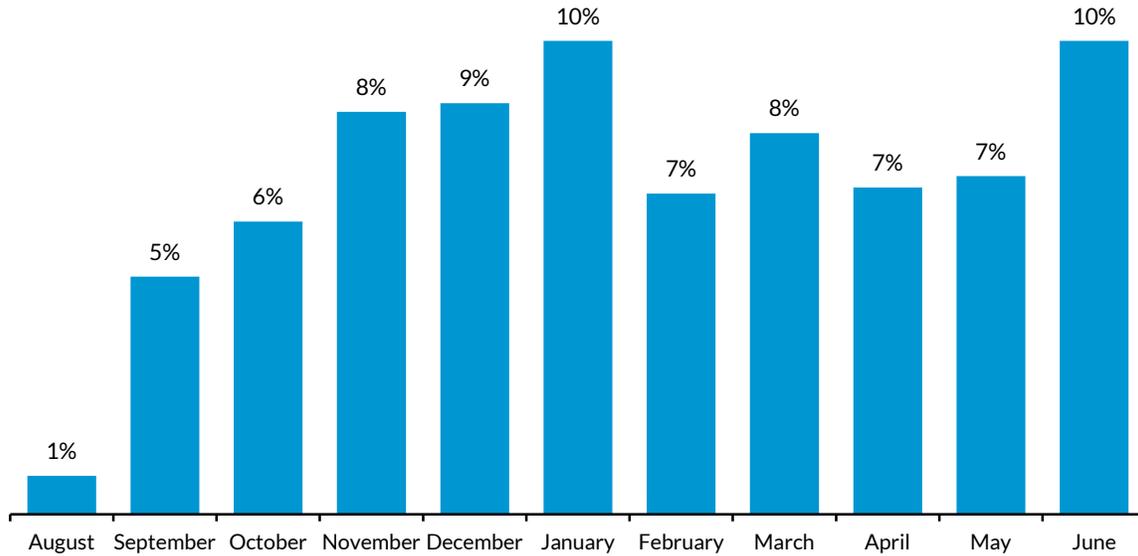
Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Predictive Patterns of Attendance

An extensive body of research indicates that attendance patterns in one year are predictive of those in subsequent years. Other research suggests that patterns of attendance in the first month of school are predictive of yearlong attendance patterns. Understanding how these patterns play out in the DCPS Head Start program offers the possibility of targeting interventions to returning students who had attendance problems in the previous year and to students who have attendance problems in the first month of school. We conducted two analyses to better understand what these patterns look like in the DCPS Head Start programs.

FIGURE 5

Percent of Students Absent Each Month, Students Enrolled for Full SY 2013–14

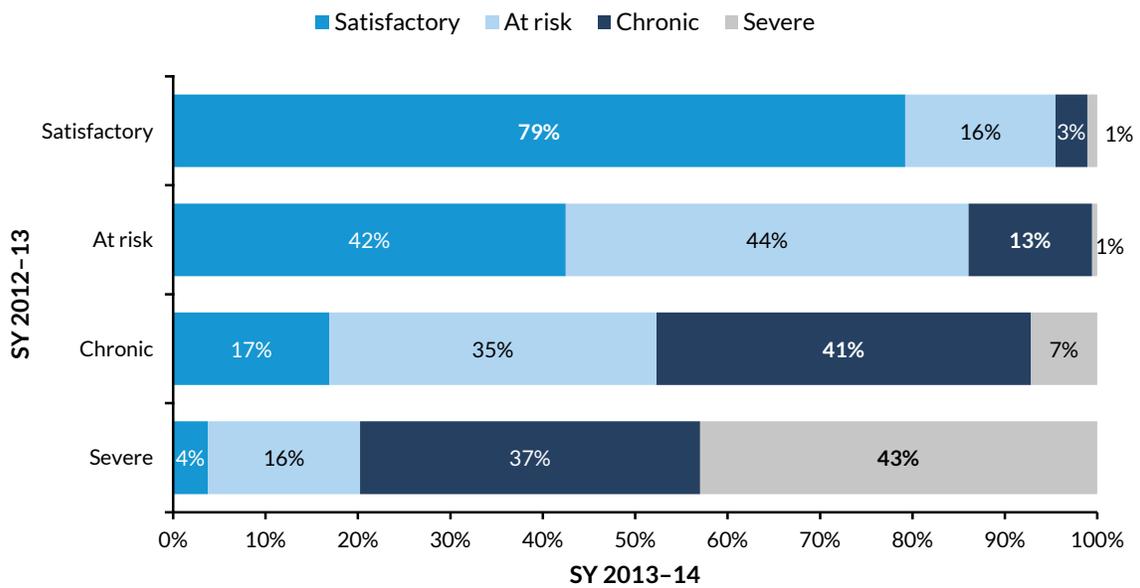


Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

First, attendance patterns for children who were enrolled in DCPS Head Start programs at the same school in both SY 2012–13 and SY 2013–14 were examined to assess whether the earlier year patterns were predictive of the later year patterns (figure 6 and table 5). These children were in classrooms for 3-year-olds in the first year and for 4-year-olds in the second year. Almost 80 percent of students who had satisfactory attendance in SY 2012–13 had satisfactory attendance in SY 2013–14, with 16 percent becoming at risk for attendance problems, and 4 percent becoming chronically or severely absent. There were important improvements over time for some students who did not have satisfactory attendance in the first year. Forty-two percent of students who were at risk for attendance problems in SY 2012–13 had satisfactory attendance in SY 2013–14, 44 percent remained at risk, and 14 percent became chronically or severely chronically absent. Forty-one percent of students who were chronically absent in SY 2012–13 remained so in SY 2013–14, and 7 percent became severely chronically absent. There were improvements for this group of students as well, with 17 percent having satisfactory and 35 percent having at-risk attendance. Although there were some improvements in attendance for students who were severely chronically absent in SY 2012–13, the majority remained either chronically absent (37 percent) or severely chronically absent (43 percent). These data suggest that overall attendance improves as students and families have more experience with school but that

students with attendance problems in prior years will continue to have problems in subsequent years. A better understanding of the reasons why these students are chronically absent is needed in order to develop appropriate interventions. However, these children could be easily identified by examining prior year attendance records if necessary data systems are in place.

FIGURE 6
Percent of Students by Attendance Category Students Enrolled in Both SY 2012–13 and SY 2013–14:
SY 2012–13 versus SY 2013–14



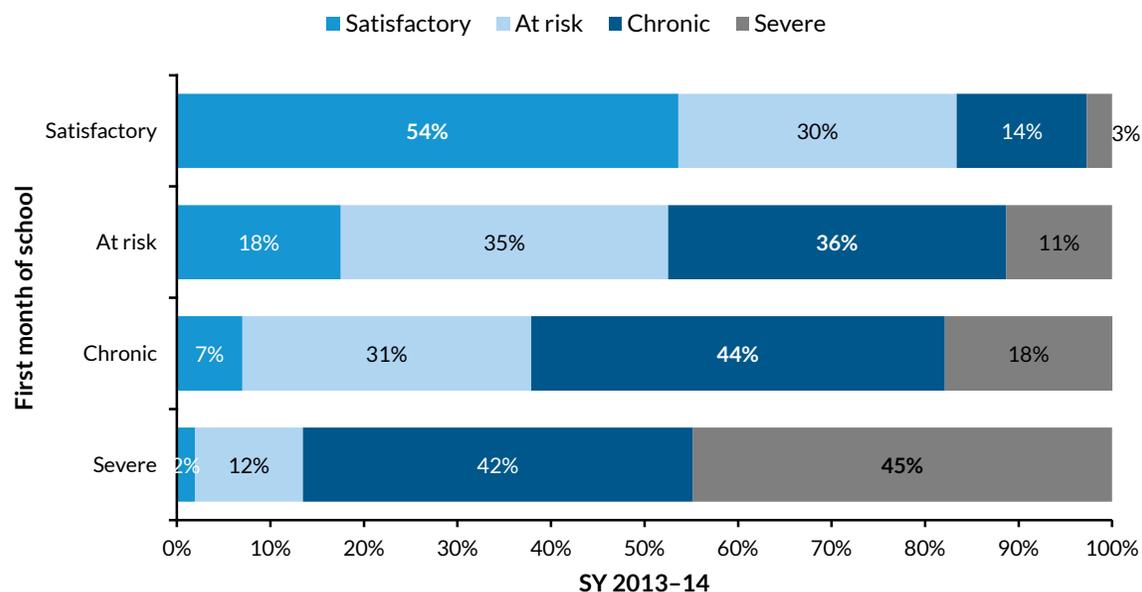
Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

For the second analysis, attendance patterns in the first month of school were compared to school year attendance rates for students who were enrolled for the first 21 school days of SY 2013–14. Among those who had satisfactory attendance in the first month of school, 54 percent had satisfactory attendance for the full year, 30 percent became at risk for attendance problems over the course of the year, 14 percent had chronic attendance problems, and 3 percent were severely chronically absent (figure 7 and table 6). Students who were at risk for having attendance problems in the first month were at much greater risk for becoming chronically (36 percent) or severely chronically (11 percent) absent than those students who had satisfactory attendance in the first month. The majority of students who were chronically absent in the first month of school remained chronically absent (44 percent) or became severely chronically absent (18 percent). However, some of these students improved their attendance

over the course of the school year; almost a third moved to the at-risk category for the full year. Among students who were severely chronically absent in the first month, few moved to the satisfactory or at-risk category (14 percent); a large share (42 percent) were chronically absent for the full year; and 45 percent remained severely chronically absent.

FIGURE 7

Percent of Students by Attendance Category, First Month of School versus Full SY 2013–14



Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

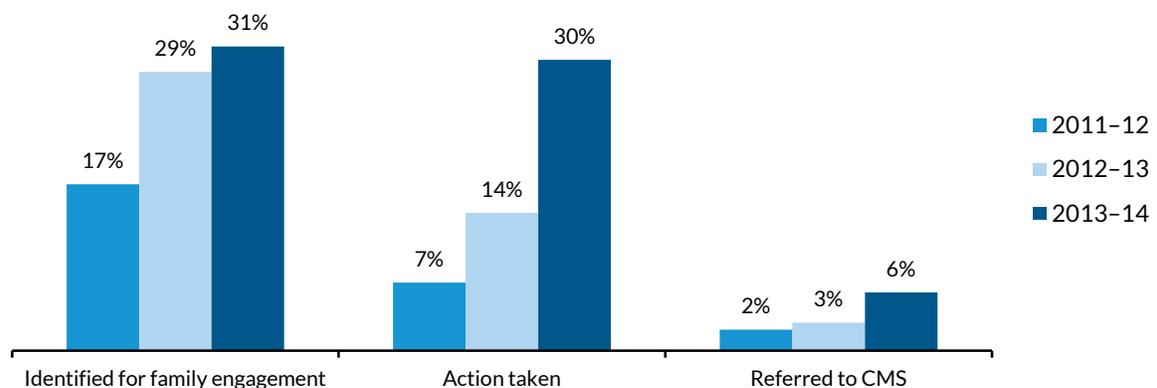
These findings suggest that children who exhibit chronic or severely chronic absence rates in the first month of school should be targeted for interventions. At the same time, less than 10 percent of children who were enrolled for the first month of school start the school year with chronic or severely chronic absence rates, and yet 25 percent of these students are in these categories by the end of the year. Fifty-two percent of the children who ended the school year as chronically or severely chronically absent began the school year with satisfactory attendance, and 21 percent started off at risk for problems (appendix E). Understanding what happens over the course of the school year for these children and what interventions are effective at improving their attendance will be critical for crafting policies to reduce overall chronic and severely chronic attendance rates.

Section III. School Interventions on Attendance Issues

DCPS tracks attendance over time and has set protocols designed to identify and remedy attendance problems early on by engaging family services staff from ECED. After three absences during the course of the year, school staff are required to refer the family to the ECED family services team for additional engagement on attendance. Family engagement by the family services team is then tracked in the ChildPlus system. ChildPlus family service data contain information on which students were identified for family engagement after missing three days of school; what actions (such as phone calls to a parent or guardian, home visits, or meetings with the teacher or principal) were taken by members of the family services team to address attendance problems; and which students were referred to a case management specialist (CMS) due to attendance issues.

Figure 8 shows the share of students for whom an attendance issue was raised, who had an action taken regarding their attendance, or who were referred to a CMS for attendance issues. Thirty-one percent of students were flagged for family engagement after having missed three days of school over the school year. Thirty percent of all students had an action taken regarding attendance, meaning that almost all students initially identified were contacted. Attendance issues were escalated to a case manager for only 6 percent of the total student population.

FIGURE 8
Percent of Students with Attendance Interventions, SY 2011–12 to SY 2013–14

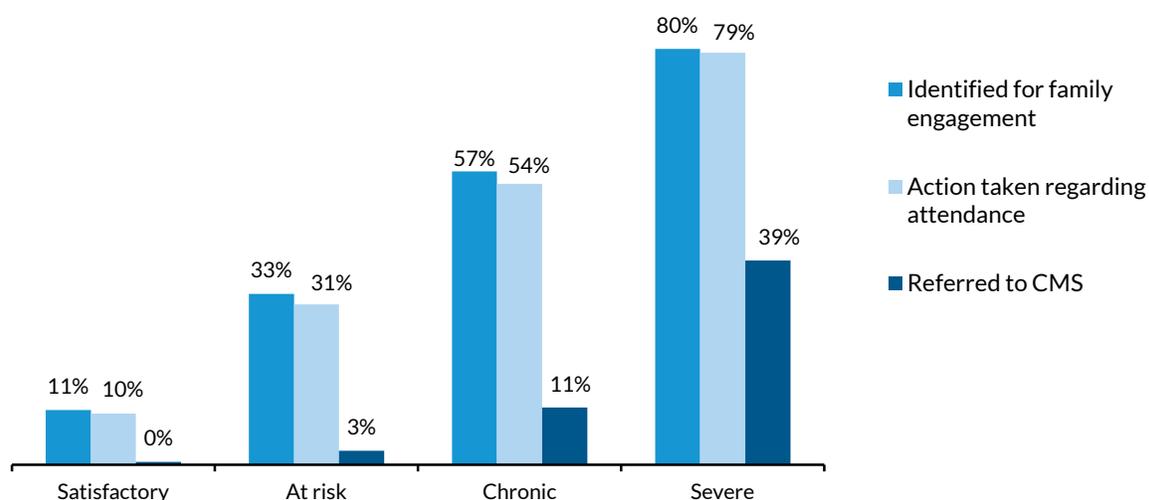


Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

These patterns varied by students' attendance characteristics. Eleven percent of students with satisfactory attendance had an attendance issue raised compared to 33 percent for students with at-risk attendance, 57 percent for students with chronic attendance problems, and 80 percent of students with severely chronic attendance problems (figure 9). Similar patterns were exhibited for having an action taken regarding their attendance or being referred to a CMS for attendance problems.

FIGURE 9

Percent of Students with Interventions by Attendance Category, SY 2013-14



Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Over the past two school years, the Head Start program has identified more students with attendance problems; students identified for family engagement increased from 17 percent in SY 2011-12 to 31 percent in SY 2013-14 (appendix F). In addition, more students had actions taken regarding attendance and were referred to case management services. This increase in identification of students having attendance problems is likely due to a change in policy. In SY 2011-12, students were identified for family engagement only if they missed three consecutive days of school. Beginning in SY 2012-13, students were identified after they missed any three days of school over the course of the year. Despite the improvement in identification for engagement, many students with absence problems were not reached. Although 31 percent of students were identified as having an attendance problem, 80 percent missed three days or more of school and 54 percent of students had attendance that was not

considered satisfactory, which suggests that a large share of students with attendance problems are being missed.

The patterns of family engagement and interventions varied across wards within DCPS (table 7). Students in Wards 2 and 6 were significantly less likely to have attendance issues raised compared to students in Ward 4, a difference of 16 and 10 percentage points, respectively. In addition, students in Ward 2 were 16 percentage points less likely to have an additional action taken regarding attendance, and students in Ward 6 were 9 percentage points less likely to have an action taken. Finally, students in Ward 2 were 4 percentage points less likely to have their case escalated to a case manager.

Section IV. Conclusions

Absence rates in DCPS's Head Start program remained high in SY 2013–14. Students missed an average of 8 percent of school days, only 44 percent of students had what is considered to be satisfactory attendance (missing 5 percent or less of the days they were enrolled), and 27 percent of students were chronically or severely chronically absent during the school year (missing 10 percent or more of the days they were enrolled). The good news is that over the past two years there have been improvements in attendance. The share of school days that students were absent fell from 9 percent in SY 2011–12 and SY 2012–13 to 8 percent in SY 2013–14, and the share of students with satisfactory attendance increased from 38 to 44 percent.

There was also an increase in family engagement around attendance issues by family services teams in the past two years. This increase was principally due to the policy change that flagged children as having an attendance problem when they missed any three days of school rather than after three consecutive days of missing school. This additional investment in family engagement has likely contributed to the increase in attendance. Identifying the unique role that this policy change has had on attendance is challenging, however, because other attendance initiatives across schools and within specific schools were occurring simultaneously. In addition, some schools were closed over the course of the three years examined in this report. What seems clear is that attendance in DCPS Head Start programs is improving over time, and overall efforts by ECED are likely driving this change.

Despite the overall improvement in attendance, systematic patterns appeared to persist. Black students, students whose parents speak English at home, students who were enrolled in TANF, and students who were homeless had much worse attendance than other students. In addition, the extent of attendance problems varied across wards. This variation is due in part to the varied composition of the students across wards, but large disparities remain even after accounting for compositional differences.

This report identifies additional patterns of absenteeism that had not been examined previously in DCPS Head Start programs. In particular, students were more likely to miss school on Mondays and Fridays, on days before holidays, on half-days of school, before and after snow days, and in January and June. Consistent with other research, returning students who were chronically or severely absent in the past year were likely to continue the same patterns in their second year. Targeting these students for intervention early in the school year may ameliorate barriers to attendance. The ability of the Head Start program to accomplish such targeted interventions will depend on access to attendance data from previous years, which qualitative research suggests is challenging (Katz, Adams, and Johnson 2015).

Patterns of attendance in the first month of school were less predictive of full-year attendance. Almost three-quarters of the students who were chronically or severely absent over the course of the year began the year with satisfactory or at-risk attendance in the first month. An understanding of what changed for these students over time is needed to craft appropriate policies to improve their attendance.

A critical disconnect remains between the level of absence problems seen across the city and the identification of problems for intervention. During SY 2013–14, 31 percent of students were identified for family engagement due to an absence problem. However, 56 percent of students had attendance that was not considered satisfactory and 80 percent missed three or more days of school, suggesting that more students should have been flagged for engagement. At the same time, the qualitative evidence collected as part of this project indicated that the change in policy produced a huge jump in caseload for family service teams that they had challenges managing (Katz, Adams, and Johnson 2015). Given these two competing demands, it would be useful to assess which interventions are most effective at improving attendance and whether interventions have similar effects for students at risk for problems as for students who are chronically and severely chronically absent.

As ECED considers how to further address its attendance problems it must recognize that the causes of chronic absence are complex and that solutions will require a multidisciplinary and multi-sectorial approach. The qualitative case studies conducted as a companion piece to this report indicate that family service team members have a clear understanding that multiple factors affect attendance at the child and family level, the school and school district level, and the community level. Due to the complex etiology of school absenteeism, efforts to reduce it will require a combination of prevention and intervention strategies that will require family and community engagement activities and partnerships between families, schools, and community and government organizations (Sheldon and Epstein 2004).

A menu of options to further improve attendance was outlined in the qualitative companion to this report. These options include helping parents understand the importance of prekindergarten and early education, attendance, and keeping track of attendance; attendance-related activities focused on parents and children; working to address common causes of absenteeism; addressing barriers that can cause absenteeism for families facing larger challenges; and creating effective internal processes for support structures, including data analytic capacities.⁴ To effectively choose between these options, a greater understanding of the reasons driving attendance problems for individual students and for specific groups of students in DCPS's Head Start programs will be necessary. Given that little research

on what works to improve attendance for prekindergarten programs exists, efforts to evaluate any strategies that are chosen are warranted and would prove useful to other school districts.

Tables 1–7

TABLE 1

Percent of School Days Absent, SY 2011–12 through SY 2013–14

| Rates of absence | SY 2011–12 | SY 2012–13 | SY 2013–14 |
|--|------------|------------|------------|
| Total (unexcused and excused) absences (%) | 8.7 | 8.8 | 7.9 |
| Difference from SY 2013–14, unadjusted (percentage points) | -0.7*** | -0.9*** | |
| Difference from SY 2013–14, adjusted (percentage points) | -0.6*** | -0.8*** | |
| Unexcused absences (%) | 4.5 | 5.2 | 4.5 |
| Difference from SY 2013–14, unadjusted (percentage points) | 0.0 | -0.7*** | |
| Difference from SY 2013–14, adjusted (percentage points) | 0.1 | -0.7*** | |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Note: Adjusted differences are based on a regression that included race, language spoken at home, disability, whether the child lived with his or her parents, and out-of-boundary status. Eligibility and school were not controlled for within this regression. difference significant at the .01 level. No differences were significant at the .10 (*) and .05 (**) levels.

TABLE 2

Percent of Students by Attendance Category, SY 2011–12 through SY 2013–14

| Attendance category | SY 2011–12 | SY 2012–13 | SY 2013–14 |
|--|------------|------------|------------|
| Satisfactory | | | |
| Percent of students | 38.0% | 36.1% | 43.7% |
| Difference from SY 2013–2014, unadjusted (percentage points) | 5.7*** | 7.6*** | |
| Difference from SY 2013–2014, adjusted (percentage points) | 5.1*** | 7.4*** | |
| At risk | | | |
| Percentage of students | 30.7% | 31.9% | 29.1% |
| Difference from SY 2013–2014, unadjusted (percentage points) | -1.6* | -2.7*** | |
| Difference from SY 2013–2014, adjusted (percentage points) | -1.6* | -2.6*** | |
| Chronic | | | |
| Percent of students | 23.1% | 23.4% | 20.1% |
| Difference from SY 2013–2014, unadjusted (percentage points) | -3.0*** | -3.3*** | |
| Difference from SY 2013–2014, adjusted (percentage points) | -2.7*** | -3.3*** | |
| Severe | | | |
| Percent of students | 8.1% | 8.7% | 7.1% |
| Difference from SY 2013–2014, unadjusted (percentage points) | -1.0** | -1.6*** | |
| Difference from SY 2013–2014, adjusted (percentage points) | -0.7 | -1.5*** | |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Note: Adjusted differences are based on a regression that included race, language spoken at home, disability, whether the child lived with his or her parents, and out-of-boundary status. Eligibility and school were not controlled for within this regression.

* difference significant at the .10 level; ** at the .05 level; *** at the .01 level.

TABLE 3

Percentage of School Days Absent by Demographics, SY 2013–14

| | Rate of absences (%) | Difference from Base Group (% points) | | Rate of unexcused absences (%) | Difference from Base Group (% points) | |
|--------------------------------|----------------------|---------------------------------------|----------|--------------------------------|---------------------------------------|----------|
| | | Unadjusted | Adjusted | | Unadjusted | Adjusted |
| Total | 7.9 | | | 4.5 | | |
| Race | | | | | | |
| Black | 8.8 | | | 5.1 | | |
| White | 3.8 | -5.0*** | -3.3*** | 1.8 | -3.3*** | -2.0*** |
| Hispanic | 6.4 | -2.4*** | -0.4 | 3.2 | -1.9*** | -0.4 |
| Other | 6.6 | -2.2*** | -0.4 | 3.0 | -2.1*** | -0.6* |
| Language spoken at home | | | | | | |
| English | 8.4 | | | 4.8 | | |
| Language other than English | 6.1 | -2.3*** | -0.9** | 2.9 | -1.9*** | -0.8*** |
| Missing | 2.9 | -5.5*** | -3.5*** | 1.5 | -3.4*** | -1.8*** |
| Disability | | | | | | |
| Not disabled | 7.8 | | | 4.5 | | |
| Autism | 10.0 | 2.2** | 2.3** | 5.1 | 0.6 | 0.8 |
| Developmental delay | 8.9 | 1.1*** | 0.8** | 4.9 | 0.4 | 0.4 |
| Speech or language impairment | 6.9 | -0.9* | -1.3*** | 3.5 | -0.9*** | -1.2*** |
| Other | 12.6 | 4.8*** | 4.9*** | 5.4 | 1.0 | 1.3 |
| Eligibility | | | | | | |
| Not eligible | 6.9 | | | 3.7 | | |
| Homeless | 12.3 | 5.4*** | 4.6*** | 7.4 | 3.7*** | 3.1*** |
| Head Start last year | 5.9 | -1.1*** | -1.2*** | 3.1 | -0.6*** | -0.6*** |
| TANF | 9.5 | 2.6*** | 2.1*** | 5.6 | 1.9*** | 1.3*** |
| Living with status | | | | | | |
| With parents | 8.0 | | | 4.5 | | |
| Not with parents | 9.0 | 1.0 | 0.7 | 5.1 | 0.6 | 0.3 |
| Missing | 7.4 | -0.5* | -0.4 | 4.1 | -0.4* | -0.2 |
| Out-of-boundary status | | | | | | |
| In bound | 7.4 | | | 4.1 | | |
| Out of bound | 8.0 | 0.6*** | 0.2 | 4.5 | 0.4** | 0.2 |
| Missing | 13.8 | 6.4*** | 6.5*** | 9.4 | 5.3*** | 5.3*** |
| Ward | | | | | | |
| 1 | 7.1 | 0.8** | 0.9*** | 4.0 | 0.6** | 0.7*** |
| 2 | 6.8 | 0.4 | 0.5 | 2.6 | -0.8*** | -0.8*** |
| 4 | 6.3 | | | 3.4 | | |
| 5 | 9.3 | 2.9*** | 1.5*** | 5.0 | 1.6*** | 0.5 |
| 6 | 7.1 | 0.8** | 0.1 | 3.7 | 0.2 | -0.4* |
| 7 | 9.9 | 3.6*** | 1.8*** | 5.9 | 2.4*** | 1.1*** |
| 8 | 8.0 | 1.7*** | -0.4 | 5.1 | 1.6*** | 0.1 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Note: Adjusted differences are based on a regression that included race, language spoken at home, disability, eligibility, whether the child lived with his or her parents, and out-of-boundary status.

* difference significant at the .10 level; ** at the .05 level; *** at the .01 level.

TABLE 4

Percentage of Students with Satisfactory, At-Risk, Chronic, and Severe Rates of Absenteeism, SY 2013–14

| | SATISFACTORY | | | AT RISK | | | CHRONIC | | | SEVERE | | |
|--------------------------------|-------------------|------------------------------------|----------|-------------------|------------------------------------|----------|-------------------|------------------------------------|----------|-------------------|------------------------------------|----------|
| | Share of students | Difference from Base Group (% pts) | | Share of students | Difference from Base Group (% pts) | | Share of students | Difference from Base Group (% pts) | | Share of students | Difference from Base Group (% pts) | |
| | | Unadjusted | Adjusted |
| Total | 43.7% | | | 29.1% | | | 20.1% | | | 7.1% | | |
| Race | | | | | | | | | | | | |
| Black | 38.3% | | | 29.9% | | | 23.2% | | | 8.6% | | |
| White | 73.3% | 35.1*** | 24.9*** | 20.5% | -9.5*** | -7.6*** | 5.1% | -18.1*** | -7.6*** | 1.1% | -7.5*** | -7.6*** |
| Hispanic | 53.2% | 14.9*** | 3.4 | 29.8% | -0.1 | -0.5 | 13.1% | -10.1*** | -0.5 | 3.9% | -4.6*** | -0.5 |
| Other | 53.2% | 15.0*** | 5.1 | 25.4% | -4.6 | -4.5 | 17.1% | -6.1** | -4.5 | 4.3% | -4.3*** | -4.5 |
| Language spoken at home | | | | | | | | | | | | |
| English | 40.9% | | | 29.1% | | | 22.0% | | | 8.0% | | |
| Language other than English | 55.1% | 14.2*** | 7.2** | 29.3% | 0.2 | -0.1 | 12.2% | -9.8*** | -0.1 | 3.4% | -4.6*** | -0.1 |
| Missing | 90.7% | 49.8*** | 39.3*** | 9.3% | -19.9** | -18.8** | 0.0% | -22.0*** | -18.8** | 0.0% | -8.0*** | -18.8** |
| Disability | | | | | | | | | | | | |
| Not disabled | 44.9% | | | 28.8% | | | 19.4% | | | 7.0% | | |
| Autism | 29.5% | -15.4*** | -14.3*** | 38.3% | 9.5* | 8.2 | 22.1% | 2.7 | 8.2 | 10.2% | 3.2 | 8.2 |
| Developmental delay | 35.7% | -9.2*** | -7.1*** | 30.1% | 1.3 | 0.3 | 26.6% | 7.2*** | 0.3 | 7.6% | 0.6 | 0.3 |
| Speech or language impairment | 46.3% | 1.5 | 1.5 | 32.2% | 3.4 | 3.9 | 15.4% | -4.0 | 3.9 | 6.1% | -0.8 | 3.9 |
| Other | 18.7% | -26.1*** | -26.3*** | 23.7% | -5.1 | -6.1 | 45.4% | 26.0*** | -6.1 | 12.2% | 5.2 | -6.1 |
| Eligibility | | | | | | | | | | | | |
| Not eligible | 49.4% | | | 28.9% | | | 16.3% | | | 5.5% | | |
| Homeless | 24.6% | -24.8*** | -19.4*** | 29.8% | 0.9 | -0.1 | 26.3% | 10.0*** | -0.1 | 19.3% | 13.8*** | -0.1 |
| Head Start last year | 56.1% | 6.7*** | 7.7*** | 26.7% | -2.2 | -2.5 | 14.2% | -2.1 | -2.5 | 3.0% | -2.5*** | -2.5 |
| TANF | 32.9% | -16.5*** | -12.3*** | 30.7% | 1.8 | 1.1 | 27.4% | 11.2*** | 1.1 | 8.9% | 3.5*** | 1.1 |
| Living with status | | | | | | | | | | | | |
| With parents | 43.1% | | | 29.4% | | | 20.3% | | | 7.1% | | |
| Not with parents | 25.9% | -17.2 | -14.4 | 61.4% | 32.0* | 30.8* | 0.0% | -20.3*** | 30.8* | 12.7% | 5.5 | 30.8* |
| Missing | 48.4% | 5.3** | 4.5** | 26.4% | -3.1 | -2.4 | 18.2% | -2.1 | -2.4 | 7.0% | -0.1 | -2.4 |
| Out-of-boundary status | | | | | | | | | | | | |
| In bound | 46.0% | | | 28.4% | | | 19.6% | | | 6.0% | | |
| Out of bound | 42.0% | -4.0*** | -1.7 | 30.8% | 2.4* | 2.2 | 20.5% | 0.9 | 2.2 | 6.7% | 0.7 | 2.2 |
| Missing | 38.4% | -7.6*** | -7.8*** | 16.3% | -12.1*** | -12.0*** | 19.6% | 0.0 | -12.0*** | 25.7% | 19.7*** | -12.0*** |
| Ward | | | | | | | | | | | | |
| 1 | 47.7% | -5.2* | -6.9** | 30.5% | 1.0 | 1.6 | 16.2% | 2.0 | 1.6 | 5.7% | 2.2** | 1.6 |
| 2 | 51.7% | -1.2 | -2.7 | 27.1% | -2.4 | -0.9 | 16.2% | 2.0 | -0.9 | 5.1% | 1.6 | -0.9 |
| 4 | 52.9% | | | 29.5% | | | 14.2% | | | 3.5% | | |
| 5 | 36.1% | -16.8*** | -7.9** | 30.8% | 1.3 | 0.8 | 24.6% | 10.5*** | 0.8 | 8.4% | 5.0*** | 0.8 |
| 6 | 49.2% | -3.7 | -0.2 | 26.0% | -3.5 | -2.6 | 18.5% | 4.4** | -2.6 | 6.2% | 2.8*** | -2.6 |
| 7 | 31.0% | -21.9*** | -10.3*** | 31.7% | 2.2 | 0.9 | 25.8% | 11.7*** | 0.9 | 11.5% | 8.0*** | 0.9 |
| 8 | 43.5% | -9.4*** | 3.3 | 27.9% | -1.6 | -2.8 | 21.6% | 7.4*** | -2.8 | 7.1% | 3.6*** | -2.8 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

* difference significant at the .10 level; ** at the .05 level; *** at the .01 level.

TABLE 5

Percentage of Students by Attendance Category for Students Enrolled in Both Years, SY 2012–13 versus SY 2013–14

| Category in SY 2012–13 | Category in SY 2013–14 | | | |
|------------------------|------------------------|---------|---------|--------|
| | Satisfactory | At risk | Chronic | Severe |
| Satisfactory | 79.2 | 16.2 | 3.5 | 1.1 |
| At risk | 42.5 | 43.6 | 13.4 | 0.6 |
| Chronic | 16.9 | 35.4 | 40.5 | 7.2 |
| Severe | 3.8 | 16.5 | 36.8 | 43.0 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Note: Numbers may not total 100 because of rounding.

TABLE 6

Percentage of Students by Attendance Category, First Month of School versus Full SY 2013–14

| Category in first month, SY 2013–14 | Category in SY 2013–14 | | | |
|-------------------------------------|------------------------|---------|---------|--------|
| | Satisfactory | At risk | Chronic | Severe |
| Satisfactory | 53.6 | 29.8 | 13.9 | 2.7 |
| At risk | 17.5 | 35.0 | 36.2 | 11.3 |
| Chronic | 7.0 | 30.9 | 44.2 | 17.9 |
| Severe | 1.9 | 11.6 | 41.7 | 44.8 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

TABLE 7

Percentage of Students with Attendance Interventions by Ward, SY 2013–14

| Ward | Identified for Community Parent Outreach Coordinator Family Engagement | | Action Taken Regarding Attendance | | Escalated to CMS | |
|------|--|--------------------------------|-----------------------------------|--------------------------------|-------------------|--------------------------------|
| | Share of students | Difference from Ward 4 (% pts) | Share of students | Difference from Ward 4 (% pts) | Share of students | Difference from Ward 4 (% pts) |
| | Total | 31.2% | | 29.8% | | 6.0% |
| 1 | 29.8% | -3.5 | 29.5% | -3.1 | 7.8% | 1.6 |
| 2 | 17.8% | -15.5*** | 16.5% | -16.0*** | 2.0% | -4.2*** |
| 4 | 33.3% | | 32.5% | | 6.2% | |
| 5 | 30.9% | -2.5 | 30.9% | -1.7 | 5.5% | -0.7 |
| 6 | 23.6% | -9.7*** | 23.6% | -8.9*** | 6.4% | 0.1 |
| 7 | 35.8% | 2.5 | 34.9% | 2.4 | 6.4% | 0.2 |
| 8 | 36.3% | 3.0 | 31.5% | -1.0 | 5.2% | -1.0 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

*** difference significant at the .01 level. No differences were significant at the .10 (*) and .05 (**) levels.

Appendixes A–H

APPENDIX A. DATA SOURCES AND LIMITATIONS

The analysis presented here draws on data from two systems maintained by DCPS: STARS and ChildPlus. Child-level data on absences and demographics are from the STARS data reporting system and were obtained for each student enrolled in a DCPS Head Start program at any point during the year. STARS data contain information for each child’s race and ethnicity; the language spoken at home; whether the child has special needs, and if so, what those needs are (including autism, developmental delay, hearing impairments, intellectual disabilities, multiple disabilities, other health impairments, specific learning disabilities, speech or language disabilities, and visual impairments); whether the child is living with his or her parents; the school and classroom in which the child is enrolled; and the admission and withdrawal dates for each school and classroom in which the child was enrolled.

Critical to this study, the STARS data contain information on attendance for each day of school and, if the child was absent, whether the absence was excused, authorized, or unexcused. Excused absences include those related to illness, medical appointments, deaths in the family, court dates, religious holidays, and unknown excused absences. Authorized absences are treated as excused by DCPS and include being in an acute care setting, on a school activity, being suspended, and receiving visual instruction. Unexcused absences include absences reported as unexcused or truant.

The ChildPlus system’s program eligibility data contain monthly information on the basis of each child’s eligibility for Head Start, including eligibility due to participation in TANF, homelessness, having been enrolled in Head Start in the previous year, and non-categorical eligibility. Monthly eligibility data over the course of the year were aggregated to a single variable that indicated whether the child (1) was ever homeless but not involved with the Child and Family Services Agency (CFSA); (2) was enrolled in TANF but was not involved with CFSA or homeless during the year; (3) was eligible for Head Start in the previous year but was not involved with CFSA, homeless, or enrolled in TANF; or (4) was not otherwise categorically eligible.

The ChildPlus data system also provided information on children who were flagged for attendance issues and any interventions that were taken either by a community parent outreach coordinator or a CMS. The SY 2011–12 policy was to flag a student in the ChildPlus system who missed three consecutive days of school. At this point, an “initial engagement” would occur through a community parent outreach coordinator. In some instances, a student’s case would be elevated from the coordinator level to that of a CMS.

The base file for the analysis merged the STARS absence data with information from ChildPlus on eligibility and absence interventions for each student. Children in this file can have multiple observations; specifically, there is one observation for each child, school, and classroom combination. For each observation in the file, the number of days enrolled in school was calculated using the admission and withdrawal dates from STARS. For each student the number of excused absences, authorized absences, and unexcused absences was also calculated. For analysis purposes, and because few absences were authorized, excused and authorized absences were combined. From these two pieces of information, the share of days enrolled that the child was absent, both overall and by type of absence, was calculated.

Two data challenges warrant mention. First, the methodology used to extract data on TANF enrollment changed in SY 2013–14 to be more precise. As a result of this and other changes, between SY 2012–13 and SY 2013–14 the share of students eligible for TANF went from 59 percent to 30 percent; the share eligible due to being enrolled in Head Start the previous year went from less than 1 percent to 19 percent; and the share not categorically eligible went from 33 percent to 43 percent (appendix F). Other characteristics of students changed very little over this time. Lacking the same measure of eligibility for the first two school years, we could not include eligibility as a control in analyses that considered multiple school years. However, we controlled for eligibility in multivariate models that analyzed only SY 2013–14 data.

Second, a new system was implemented in SY 2013–14 to gather ChildPlus data on family service interventions. Data from the new system contained numerous errors in which STARSIDs, student names or school names were missing (appendix H). These types of data were not missing in previous years. Their absence could be due either to the new system or the large jump in interventions that needed to be recorded. We attempted to match all records of intervention by using student’s names but were not always successful. As a result, we believe that interventions may be somewhat understated.

APPENDIX B

Characteristics of Students Participating in DCPS School-Based Head Start Programs by Ward

| Characteristic | Ward 1 | | Ward 2 | | Ward 4 | | Ward 5 | | Ward 6 | | Ward 7 | | Ward 8 | |
|--------------------------------|--------|----|--------|----|--------|----|--------|----|--------|----|--------|----|--------|-----|
| | N | % | N | % | N | % | N | % | N | % | N | % | N | % |
| Race | | | | | | | | | | | | | | |
| Black | 238 | 33 | 135 | 40 | 324 | 41 | 468 | 92 | 642 | 71 | 1,073 | 97 | 1,109 | 97 |
| White | 70 | 10 | 46 | 13 | 33 | 4 | 6 | 1 | 176 | 19 | 3 | 0 | 11 | 1 |
| Hispanic | 335 | 46 | 93 | 27 | 398 | 50 | 27 | 5 | 49 | 5 | 24 | 2 | 13 | 1 |
| Other | 82 | 11 | 68 | 20 | 38 | 5 | 11 | 2 | 43 | 5 | 7 | 1 | 7 | 1 |
| Language spoken at home | | | | | | | | | | | | | | |
| English | 320 | 44 | 191 | 56 | 367 | 46 | 487 | 95 | 878 | 97 | 1,090 | 98 | 1,136 | 100 |
| Language other than English | 399 | 55 | 145 | 43 | 425 | 54 | 24 | 5 | 30 | 3 | 17 | 2 | 4 | 0 |
| Missing | 6 | 1 | 4 | 1 | 1 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 |
| Disability | | | | | | | | | | | | | | |
| Not disabled | 626 | 86 | 271 | 79 | 673 | 85 | 422 | 83 | 784 | 86 | 937 | 85 | 1,029 | 90 |
| Autism | 10 | 1 | 12 | 4 | 7 | 1 | 13 | 3 | 21 | 2 | 22 | 2 | 11 | 1 |
| Developmental delay | 48 | 7 | 38 | 11 | 52 | 7 | 41 | 8 | 54 | 6 | 94 | 8 | 58 | 5 |
| Speech or language impairment | 39 | 5 | 12 | 3 | 57 | 7 | 24 | 5 | 37 | 4 | 39 | 4 | 35 | 3 |
| Other | 3 | 0 | 9 | 3 | 5 | 1 | 11 | 2 | 13 | 1 | 15 | 1 | 7 | 1 |
| Eligibility | | | | | | | | | | | | | | |
| Not categorically eligible | 413 | 57 | 209 | 61 | 451 | 57 | 202 | 40 | 402 | 44 | 368 | 33 | 319 | 28 |
| Homeless | 45 | 6 | 15 | 4 | 20 | 2 | 46 | 9 | 89 | 10 | 107 | 10 | 103 | 9 |
| Head Start last year | 167 | 23 | 82 | 24 | 170 | 22 | 121 | 24 | 200 | 22 | 182 | 16 | 129 | 11 |
| TANF | 101 | 14 | 36 | 11 | 152 | 19 | 142 | 28 | 218 | 24 | 450 | 41 | 589 | 52 |
| Living with status | | | | | | | | | | | | | | |
| With parents | 692 | 96 | 284 | 83 | 735 | 93 | 465 | 91 | 726 | 80 | 964 | 87 | 1,009 | 89 |
| Not with parents | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 1 | 0 | 4 | 0 | 3 | 0 |
| Missing | 33 | 5 | 57 | 17 | 57 | 7 | 46 | 9 | 182 | 20 | 140 | 13 | 127 | 11 |
| Out-of-boundary status | | | | | | | | | | | | | | |
| In bound | 318 | 44 | 108 | 32 | 452 | 57 | 273 | 53 | 388 | 43 | 504 | 45 | 531 | 47 |
| Out of bound | 384 | 53 | 219 | 64 | 314 | 40 | 215 | 42 | 490 | 54 | 569 | 51 | 558 | 49 |
| Missing | 22 | 3 | 14 | 4 | 27 | 3 | 22 | 4 | 32 | 3 | 34 | 3 | 51 | 4 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

APPENDIX C

Percent of Students Absent by Weekday among Students Enrolled for Full SY 2013–14

| Day | Students absent (%) | Difference from base group (% pts) |
|-----------------------|---------------------|------------------------------------|
| Monday | 8.1 | 2.1* |
| Tuesday | 6.8 | 0.8 |
| Wednesday | 6.5 | 0.5 |
| Thursday ^a | 6.1 | |
| Friday | 9.3 | 3.3*** |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

^aThursday served as the base group for comparison.

* difference significant at the .10 level; *** at the .01 level. No differences were significant at the 0.5 (**) level.

APPENDIX D

Percent of Students Absent by Month among Students Enrolled for Full SY 2013–14

| Month | Students absent (%) | Difference from base group (% pts) |
|------------------------|---------------------|------------------------------------|
| August | 0.8 | -4.2** |
| September ^a | 5.0 | |
| October | 6.1 | 1.2 |
| November | 8.4 | 3.4** |
| December | 8.6 | 3.6** |
| January | 9.9 | 4.9*** |
| February | 6.7 | 1.7 |
| March | 7.9 | 3** |
| April | 6.8 | 1.9 |
| May | 7.1 | 2.1 |
| June | 9.9 | 4.9*** |

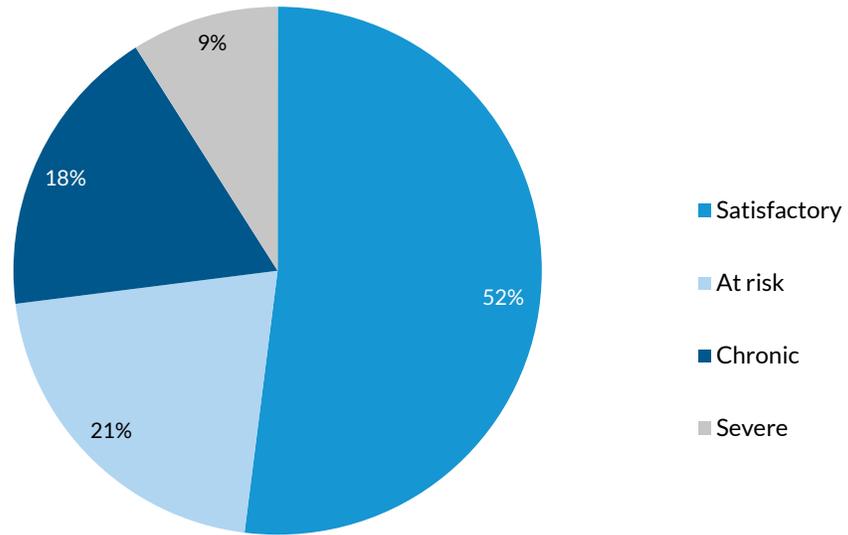
Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

^aSeptember served as the base group for comparison.

** difference significant at the .05 level; *** at the .01 level. No differences were significant at the .10 (*) level.

APPENDIX E

Percent of Students Chronically or Severely Absent for Full Year by Attendance Category in First Month of School, SY 2013–14



Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014)

APPENDIX F

Percent of Students with Attendance Interventions, SY 2011–12 through SY 2013–14

| Attendance intervention | SY 2011–12 | SY 2012–13 | SY 2013–14 |
|--|------------|------------|------------|
| Identified for family engagement | | | |
| Percent of students | 17.0% | 28.5% | 31.2% |
| Difference from SY 2013–2014 (percentage points) | 14.1*** | 2.6*** | |
| Action taken | | | |
| Percent of students | 7.0% | 14.1% | 29.8% |
| Difference from SY 2013–2014 (percentage points) | 22.8*** | 15.7*** | |
| Referred to CMS | | | |
| Percent of students | 2.2% | 2.9% | 6.0% |
| Difference from SY 2013–2014 (percentage points) | 3.8*** | 3.1*** | |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

*** difference significant at the .01 level. No differences were significant at the .10 (*) and .05 (**) levels.

APPENDIX G

Characteristics of Students in DCPS School-Based Head Start Programs

| | SY 2011-12 | | SY 2012-13 | | SY 2013-14 | |
|--------------------------------|------------|------|------------|------|------------|------|
| | <i>N</i> | % | <i>N</i> | % | <i>N</i> | % |
| Race | | | | | | |
| Black | 3,935 | 73.0 | 3,961 | 71.5 | 3,974 | 71.9 |
| White | 283 | 5.3 | 315 | 5.7 | 346 | 6.3 |
| Hispanic | 886 | 16.4 | 980 | 17.7 | 949 | 17.2 |
| Other | 288 | 5.3 | 285 | 5.2 | 257 | 4.7 |
| Language spoken at home | | | | | | |
| English | 4,457 | 82.7 | 4,434 | 80.0 | 4,456 | 80.6 |
| Language other than English | 920 | 17.1 | 1,093 | 19.7 | 1,058 | 19.1 |
| Missing | 14 | 0.3 | 15 | 0.3 | 13 | 0.2 |
| Disability | | | | | | |
| Not disabled | 4,625 | 85.8 | 4,727 | 85.3 | 4,741 | 85.8 |
| Autism | 88 | 1.6 | 105 | 1.9 | 95 | 1.7 |
| Developmental delay | 374 | 6.9 | 416 | 7.5 | 383 | 6.9 |
| Speech or language impairments | 265 | 4.9 | 250 | 4.5 | 244 | 4.4 |
| Other | 39 | 0.7 | 44 | 0.8 | 62 | 1.1 |
| Eligibility | | | | | | |
| Not eligible | 1,532 | 28.4 | 1,841 | 32.7 | 2,368 | 42.9 |
| CFSA | 39 | 0.7 | 29 | 0.5 | 0 | 0.0 |
| Homeless | 339 | 6.3 | 404 | 7.2 | 423 | 7.7 |
| Head Start last year | 2 | 0.0 | 7 | 0.1 | 1,051 | 19.0 |
| TANF | 3,480 | 64.5 | 3,343 | 59.4 | 1,683 | 30.5 |
| Living with status | | | | | | |
| With parents | 4,807 | 89.2 | 5,089 | 91.8 | 4,875 | 88.2 |
| Not with parents | 8 | 0.2 | 3 | 0.1 | 9 | 0.2 |
| Missing | 577 | 10.7 | 451 | 8.1 | 642 | 11.6 |
| Out-of-boundary status | | | | | | |
| In bound | 2,307 | 42.8 | 2,527 | 45.6 | 2,573 | 46.6 |
| Out of bound | 2,838 | 52.6 | 2,782 | 50.2 | 2,750 | 49.8 |
| Missing | 247 | 4.6 | 234 | 4.2 | 203 | 3.7 |
| Ward | | | | | | |
| 1 | 732 | 13.6 | 737 | 13.3 | 736 | 13.3 |
| 2 | 299 | 5.5 | 324 | 5.8 | 343 | 6.2 |
| 4 | 754 | 14.0 | 780 | 14.1 | 807 | 14.6 |
| 5 | 529 | 9.8 | 507 | 9.2 | 488 | 8.8 |
| 6 | 864 | 16.0 | 930 | 16.8 | 912 | 16.5 |
| 7 | 1,103 | 20.5 | 1,122 | 20.2 | 1,109 | 20.1 |
| 8 | 1,111 | 20.6 | 1,143 | 20.6 | 1,131 | 20.5 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

APPENDIX H

Missing Observations in SY 2013–14 DCPS ChildPlus Reports 1–3 by Type

| Type | Report #1 | Report #2 | Report #3 |
|-----------------------------------|-----------|-----------|-----------|
| Only student ID# | 0 | 123 | 0 |
| Only school name | 80 | 688 | 224 |
| Only student name | 0 | 0 | 0 |
| Only student ID# and school name | 0 | 13 | 52 |
| Only student ID# and student name | 3 | 0 | 0 |
| Only school name and student name | 0 | 0 | 0 |
| All three categories | 1 | 64 | 0 |
| At least one category | 84 | 888 | 276 |

Source: Urban Institute analysis of DCPS STARS and ChildPlus data (2014).

Notes

1. Chronic absenteeism is calculated somewhat differently across these studies, but it is generally defined as missing at least 10 percent of enrolled days.
2. Multivariate models that examined changes over time did not include controls for eligibility because these variables were defined differently over the three school years examined.
3. Data on family income of students is not available.
4. For a more complete discussion of these strategies, see Katz, Adams, and Johnson (2015).

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