THE RALES CENTER: INTRODUCTION TO THE 5-YEAR EVALUATION

RUTH AND NORMAN RALES
Rales Center for the Integration of Health and Education

JOHNS HOPKINS CHILDREN'S CENTER

OCTOBER 2020

What is the Rales Center?

The Rales Center for the Integration of Health and Education was established in 2014 as a program of the Johns Hopkins Children's Center with a gift from the Norman and Ruth Rales Foundation. The Rales Center envisioned a new approach to school health, one that partners health professionals with educators to provide comprehensive health care, wellness, prevention, and social supports in school, with the goal of improving not just health outcomes, but educational outcomes. This report focuses on the Rales Center's signature project, launched in the summer of 2015—the implementation and evaluation of a comprehensive, integrated school health program at KIPP Baltimore. This program provides a laboratory in which to test new strategies to transform school health in a real-world setting and to develop, evaluate, and refine innovative programs tailored to the needs of urban schools.

Rales Center Vision

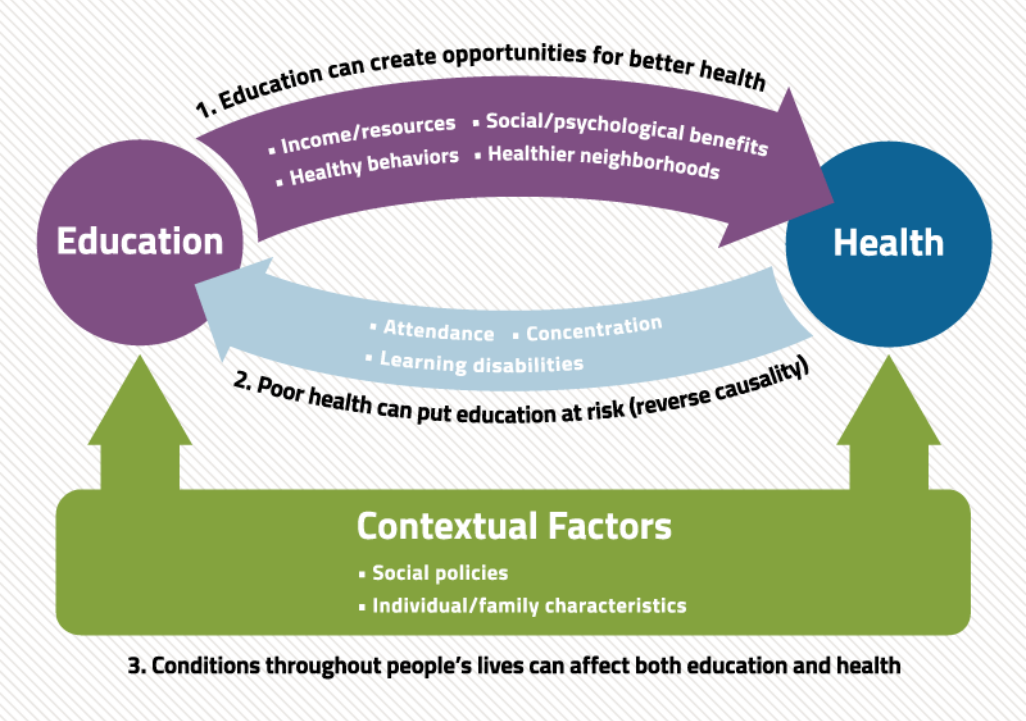
The Ruth and Norman Rales Center's vision is to be a national leader in developing, evaluating, and disseminating new models that integrate health, education, and developmental services for young people and their families, in order to measurably impact the health and future productivity of children and adolescents, their families and their communities.

Rationale

Children's health and achievement are powerful predictors of health and prosperity across the life course, and socioeconomic and racial inequities in these outcomes are widening [1, 2]. Children who grow up in poverty, particularly children from historically marginalized racial and ethnic groups, are less healthy than their more advantaged peers and, as a group, they have poorer academic achievement [3]. These well-documented disparities are driven by social factors such as structural racism, inadequate access to care, and educational funding as well as greater exposure to known risks to child well-being such as community violence, trauma, caregiver mental health conditions, and inadequate or inconsistent access to healthy food. Moreover, health and educational outcomes are interdependent.

Good health can support better cognition, attention, school connectedness and engagement, school attendance, and health behavior [4]. In turn, greater educational attainment is causally related to better adult health [5]. According to the World Health Organization, the single most effective way to improve child health and reduce disparities is to invest in helping young people reach their full academic potential [6]. Given the well-established interdependent relationship between health and educational outcomes, innovative strategies are needed to support and protect child well-being. These strategies are particularly critical for children from historically marginalized and underserved communities in order to reduce health and educational inequality.

Schools provide a natural place to address children's health and psychosocial needs because they are the setting in which students spend the majority of their time [7]. However, school health resources are often constrained or inadequate [7]. For example, the US Department of Health and Human Services recommends at least one nurse for every 750 students, but only 45% of public schools have a full-time nurse [8]. In recent years, there has been more cutting of school health services despite demonstration of cost effectiveness [9, 10]. Children from low-income communities are among the most disadvantaged by this lack of resources. School-Based Health Centers (SBHCs) are designed as part of the safety net to provide preventive care. SBHCs can address gaps in care for students who do not have access or do not regularly access primary care.



Source: https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html

While the resources afforded to support comprehensive student wellness in schools vary widely, many SBHCs are designed to be "co-located" rather than integrated into schools. SBHCs provide health services to a subset of students who are enrolled and may be removed from the day-to-day educational activities of the school. To better meet the health and educational needs of children from historically underserved communities, greater integration and partnership between health and educational stakeholders is needed. Weaving health into the fabric of the school day offers the opportunity to coordinate and align the efforts of child health staff and educators. The Whole School, Whole Community, Whole Child (WSCC) model developed by the Centers for Disease Control and Prevention and the Association for Supervision and Curriculum Development combines traditional coordinated school health program components (e.g., adequate school health services delivery) with the tenets of the whole child model of education in order to align and integrate health and education [11].

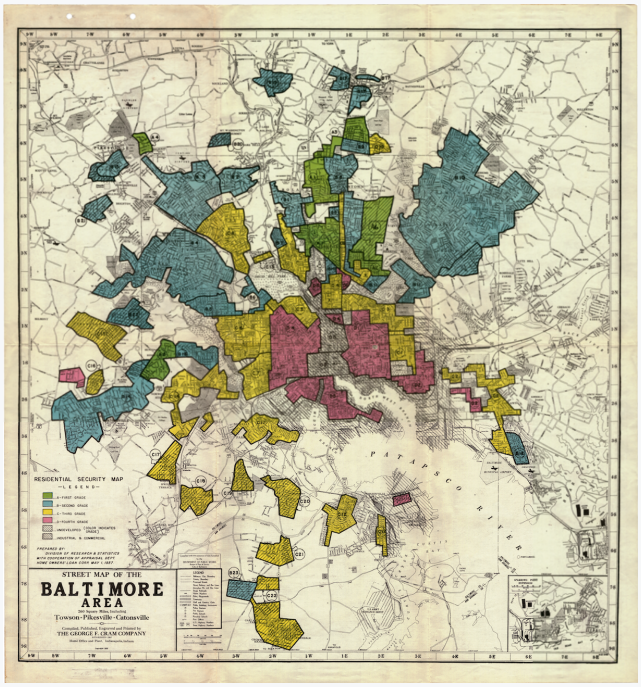
Despite its promise, to date, implementation of the WSCC framework has been limited, particularly in urban schools, and these efforts have not been rigorously evaluated [12]. The Rales Model reimagines school health using a multidisciplinary team of professionals who are woven into the fabric of the school; this approach allows for proactive identification and monitoring of students whose health concerns might otherwise go unnoticed and seeks to partner with children, parents and caregivers, and teachers to support the foundations of child health and achievement.

WSCC model Source: http://www.ascd.org/programs/learning-and-health/wscc-model.aspx

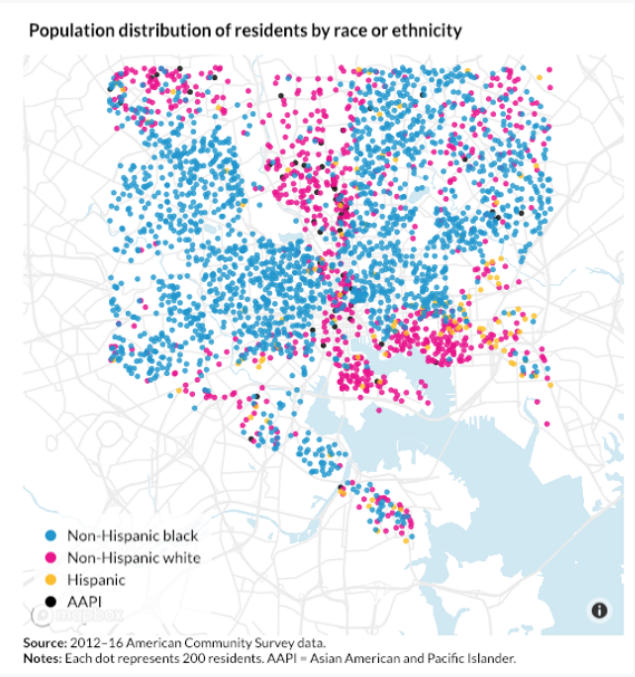
The Needs of Children in Baltimore

Compared to children in surrounding areas, children in Baltimore City have less opportunity to fulfill their potential. Seventy-two percent of City residents are members of a historically marginalized racial or ethnic group [13] and 26% of children live in poverty [14], more than twice the rate of Maryland overall. Stark inequalities driven by racial and economic marginalization provide the backdrop for the health, wellbeing, and achievement of many of Baltimore's children. For example, Baltimore City has one of the highest pediatric asthma hospitalization rates in the nation [15] and 1 in 3 school-aged children is overweight or obese [16]. The teen birth rate is more than double the national rate [16]. Baltimore City Public Schools lack adequate funding to meet the complex needs of their students. An analysis by the Maryland Department of Legislative Services concluded that the district is underfunded by $290 million per year [17]. Only 17% of Baltimore City school buildings are considered to be in good or superior condition, the lowest proportion in the state [18]. Only 39% of kindergarteners enter school fully ready to learn [19], and 13% of 4th graders demonstrate proficiency on reading assessments [20]. Though the City has seen strong progress in 4-year graduation rates in the last decade, only 72% of students graduate on-time and 15% drop out [21].

Persistent inequalities in health and opportunity in Baltimore are the bitter fruit of more than a century of discriminatory policies. Redlining and resulting neighborhood segregation have resulted in economic and educational marginalization of many of Baltimore's citizens, chronic underfunding of schools, and tenuous funding for other critical social services. Concentrated poverty, lower life expectancy, and under- and unemployment are concentrated in the "black butterfly" (so-called because the shape of neighborhood concentrated disadvantage resembles a butterfly on a map where the population is predominately Black or African American). Strikingly, the shape of the black butterfly reiterates boundaries established with the implementation of Jim Crow racial segregation policies in 1910. Now, 110 years later, individuals in the wealthiest neighborhood in Baltimore City live 20 years longer than those in the poorest neighborhood, a gap that illustrates the urgency of new strategies to support children and families. While structural and economic solutions are essential, additional strategies to reduce barriers to health and wellbeing among school children in Baltimore are urgently needed.



Residential security map of Baltimore, 1937, illustrating racial segregation policies.
(source:https://jscholarship.library.jhu.edu/handle/1774.2/32621)

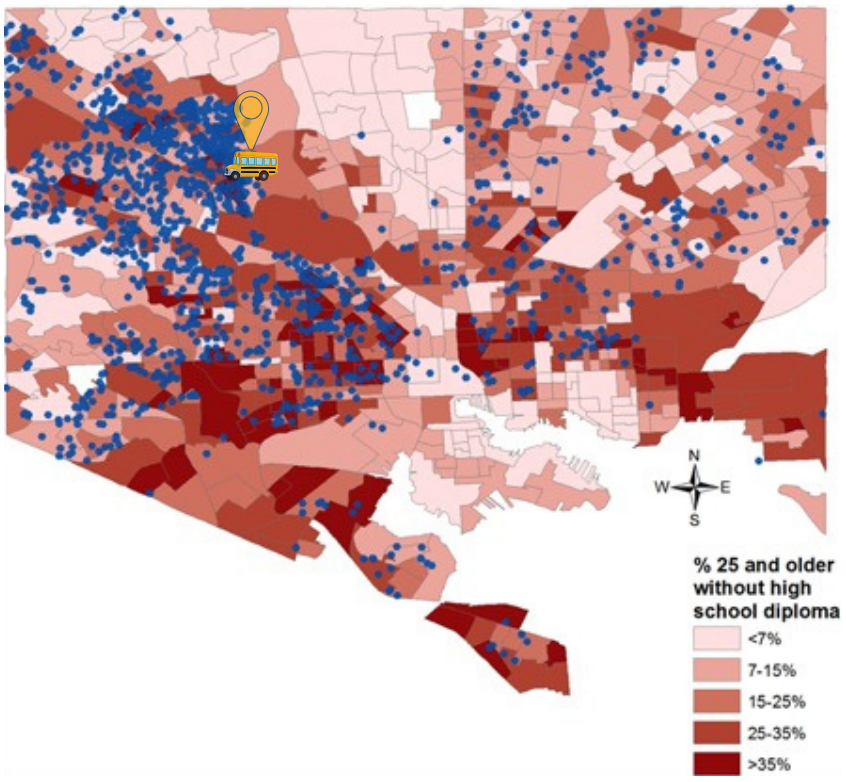


"Black butterfly" created by redlining policies and resulting disenfranchisement in Baltimore
(source: https://www.bloomberg.com/news/articles/2019-02-14/the-black-butterfly-new-deal-for-equity-in-baltimore)

The Demonstration Site: KIPP Baltimore

The Rales Model is being tested at KIPP Baltimore. The Knowledge is Power Program (KIPP) is a national network of public charter schools focused on college preparation. KIPP Baltimore is comprised of KIPP Harmony Academy (elementary) and KIPP Ujima Village Academy (middle), two public charter schools that are co-located in the same building. Together, the schools serve more than 1,500 students in grades K-8 enrolled from around the City by lottery. More than 80% of KIPP Baltimore students live in areas of concentrated poverty, and more than 99% of students are Black or African American. KIPP Baltimore operates under Baltimore City Public Schools' local education agency (LEA); therefore, while it has autonomy to tailor its approach to the needs of its students, some aspects of operations (e.g., accountability, admission to all, collective bargaining) are dictated by Baltimore City Schools. The school was located in the Park Heights neighborhood of northwest Baltimore until the 2019-2020 school year when it moved to the Walbrook neighborhood, approximately 2.5 miles away.

Before the initiation of the Rales Center partnership, KIPP Baltimore had a full-time school nurse and operated a SBHC one day per week staffed by a part-time medical assistant and nurse practitioner. In addition to a psychologist and a social worker in each school, KIPP also contracted to provide 3.5 full-time equivalent mental health providers.



Map of KIPP Baltimore students' neighborhoods (2017) in relation to Census-based measures of educational attainment. Note the reiteration of the "butterfly" shape. KIPP's Park Heights location is illustrated with a school bus (Source: Rales Center).

The Case for an Integrated Model

Schools provide a natural setting in which to address children's health and psychosocial needs. Black, Latinx, low-income, and immigrant children are least likely to receive primary care [22]. Lack of well checkups result in missed opportunities to identify and manage health conditions and to provide health education and immunizations. Despite high rates of health insurance, reasons for low rates of utilization include lack of transportation, scheduling challenges because of inflexible parent work schedules, and lack of priority for well visits in light of other family stresses.

A new, comprehensive approach to school health is needed. This approach must: 1) provide accessible, comprehensive pediatric care using a population health framework; 2) provide health and social-emotional skills education, bolstering students' ability to initiate and maintain behaviors that are essential to their current and future health; 3) promote a school climate that supports well-being, physical and emotional safety, and academic success; and 4) reduce barriers to health and healthy behaviors at home and at school.

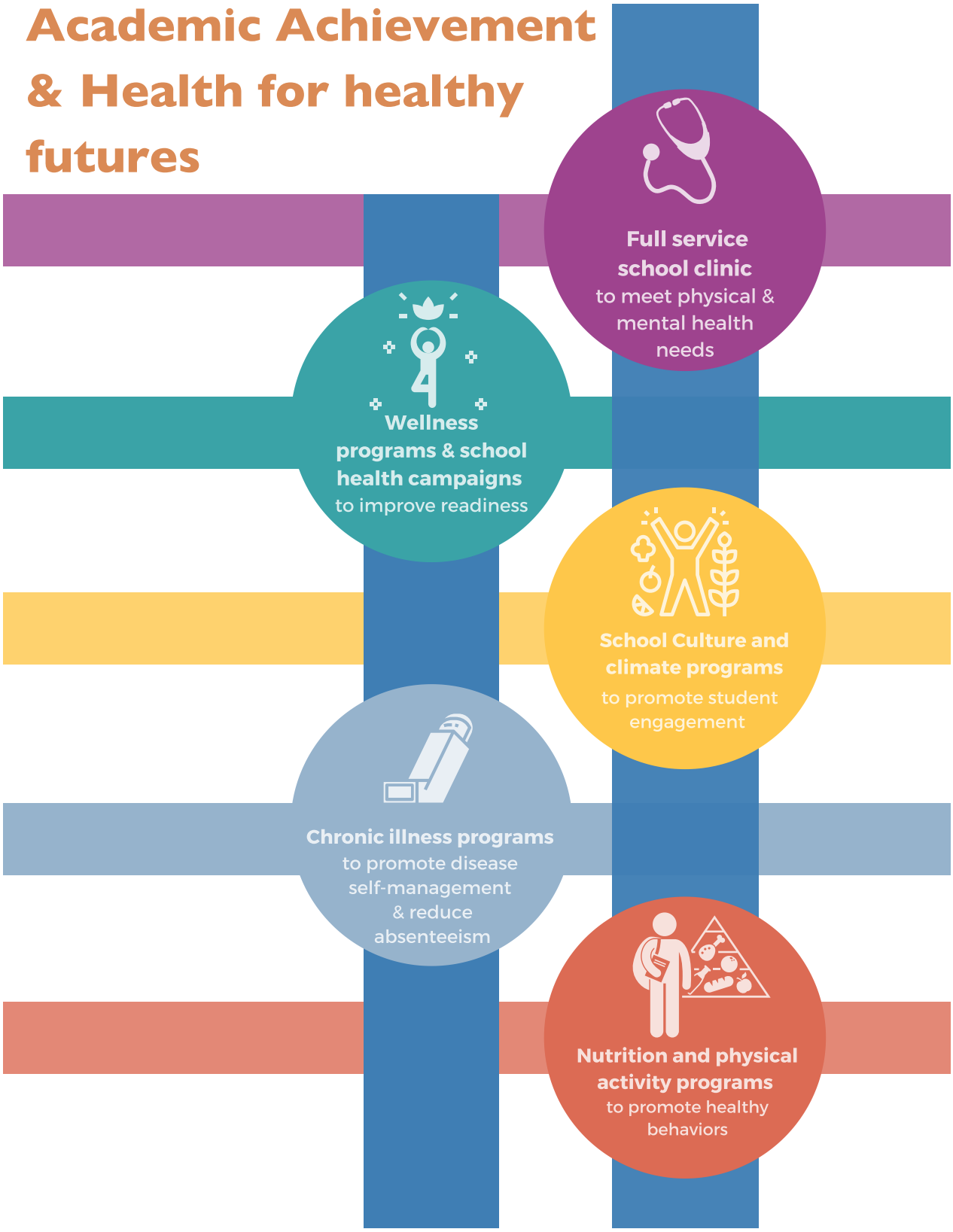
Program Overview

The Rales Model was implemented beginning in Fall 2015. The breadth and intensity of activities offered as part of the Rales Model are reflective of the complex health and psychosocial needs of students in this setting.

Rales Health Center

The mission of the Rales Health Center (RHC) is to create and implement a new model of holistic school-based healthcare focused on supporting all members of the school community in leading their healthiest and most successful lives. RHC provides comprehensive preventive and acute care, chronic disease management, and family advocacy. The RHC also provides a safe, affirming, and supportive environment and serves as a pathway to health care and school engagement. Services are provided by a multidisciplinary team of health professionals (a pediatrician/medical director, nurse practitioner, medical assistant, and two school nurses) who aim to make population health a seamless part of the educational experience. Preventive school nursing provides proactive outreach and health screening activities focused on population health in addition to routine school nursing services. The school-based health center (SBHC) offers comprehensive pediatric preventive care services including routine assessments of developmental and educational progress, immunizations, and diagnosis and management of chronic health problems. A family advocate connects families to resources such as housing referrals, obtaining or re-enrolling in health insurance, scheduling visits to medical specialists, and tutoring.

Figure 1. Rales Center Program Overview



Mental and Behavioral Health Services

Two Master's level mental health clinicians from Johns Hopkins Bayview's Expanded School-Based Mental Health Program supplement school-district provided mental health personnel, a cost that is borne by KIPP Baltimore. A child psychiatrist visits the health center monthly and RHC's clinicians collaborate with mental health clinicians in managing students on psychiatric medications.

Wellness Programs

In addition to health services, the Rales Model focuses on student and staff wellness. A wellness director is based at the school and works in concert with school leadership and staff, supported by a Rales Center faculty lead. Multilevel wellness program components include a focus on social and emotional learning, restorative and trauma-informed approaches to school discipline and school climate, physical activity programs, health education, and staff wellness activities.

Parent Engagement

Parent engagement efforts strive to connect families in need to community resources and to create programs that build positive relationships between parents, the school, and the RHC. A Rales Center faculty lead promotes parent engagement in partnership with school staff. The Rales Center convenes a parent advisory group, educational activities and leadership development sessions, and family fun activities.

Evaluation Overview

The evaluation of the Rales Model at KIPP Baltimore had three goals: 1) to characterize the process of implementing fully integrated school health, including lessons learned; 2) to characterize baseline health status at KIPP; and 3) to quantify the impact of our program in both short and long-term health and wellness and educational outcomes. This report examines implementation during years 1-4 (school years 2015-16 to 2018-19). Year 5 outcomes were omitted due to 1) the school's move across West Baltimore which resulted in a change in 20% of the school population, and 2) the COVID-19 pandemic, which shifted the school to virtual learning beginning in March 2020. The Rales Center's efforts during the COVID-19 pandemic are detailed elsewhere.

Organization of this Report

Each major program or area of focus is reflected in a separate brief report focused on key activities, results, impact, and lessons learned. Conclusions and implications focus on lessons learned, highlight the most feasible and impactful program elements, and outline considerations for scaling. Supplemental materials are provided on technical details of the evaluation, and academic and scholarly publications provide additional methodological details.

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THANK YOU FOR YOUR SUPPORT

To Our Loyal Supporters

We are grateful to all those who have joined us in our mission to create models of school health that help every child to achieve their full health and academic potential. Special thanks to the Norman and Ruth Rales Foundation and our partners at KIPP Baltimore; without them this work would not be possible.

To learn more, please visit hopkinschildrens.ralescenter.edu.

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