Building healthy futures in Baltimore: Integrating health & education at KIPP Baltimore

Kate Connor, MD, MSPH; Beth Marshall DrPH; Sara Johnson, PhD, MPH; Vanya Jones, PhD; Gabriela Calderon Velazquez, MSEd; Ryan Connor, MA.
1. Education can create opportunities for better health
   - Income/resources
   - Social/psychological benefits
   - Healthy behaviors
   - Healthier neighborhoods

2. Poor health can put education at risk (reverse causality)
   - Attendance
   - Concentration
   - Learning disabilities

3. Conditions throughout people’s lives can affect both education and health

VCU Center on Society & Health: https://societyhealth.vcu.edu/work/the-projects/why-education-matters-to-health-exploring-the-causes.html
Adapted from: Iton, A. California Endowment
The Rales Center’s vision is to be a national leader in developing, evaluating, and disseminating new school-based models that integrate health, educational, and developmental services for young people and their families.
KIPP: BALTIMORE
ACADEMIC EXCELLENCE. COLLEGE PREPARATION.

KIPP: HARMONY ACADEMY
KIPP: UJIMA VILLAGE ACADEMY

K-4th
848 students

5th-8th
789 students
Student Demographics

• 99% African American
• 80% economically disadvantaged
• High prevalence of chronic conditions
  • 30% have asthma
  • 53% failed vision screening
  • 42% overweight or obese

Neighborhood poverty levels, KIPP Baltimore students.
Our enhanced school health staffing model allows us to take a population health approach to comprehensive school health and wellness.
Wellness

- Full time on-site Wellness Director
- Student, staff, and family-focused wellness programs
- Standards based health education
- Physical activity: brain breaks, recess
- School culture and climate, SEL

https://www.cdc.gov/healthyyouth/wscc/
In order to support social-emotional learning the Rales team supports KIPP’s effort to create a unique SEL programs based on four core principals
- Restorative practices
- Trauma informed schooling
- Social justice
- Joy

The wellness team has led professional development sessions, coached school leaders and teachers, evaluated SEL curricula, and created communities of practice focused on these areas.
Parent Engagement

- Parent Advisory Group
- Communication and engagement
- Parent University, Parent Leadership Institute
- Title I Survey
The Rales Health Center
School Health Services + School Based Health Center

• Robust, expanded school health services
• Full service school based health center
  – Acute, preventive, chronic disease management
  – Onsite lab, prescription delivery
• Case management and resource linkage
Innovative Treatment of Chronic Conditions

Medications prescribed and managed by the school health center

Medications delivered right to school

Students take their daily medications in the RHC
So, how are we doing?

Pediatric care

Wellness curriculum

Teacher wellness
The Rales Health Center has among the highest School Based Health Center enrollment rates in Maryland.
In the first three years of the program, there were:

54k visits to our school nurses.

3,955 visits to our pediatrician and nurse practitioner.

109 families connected with our family advocate.
School Based Asthma Controller Directly Observed Therapy (DOT)

Unscheduled Rescue Medication (Albuterol)/Student

- **Med admin at designated time**
- **Med admin moved**

- **Flu Season**

- **Average**
93% of KIPP students participated in at least one school-wide screening program for asthma, dental hygiene, fitness/obesity, or vision. That’s 8,505 screenings!
547 students participated in vision screening at school, last year. Students who failed received in-school optometric exams.

319 pairs of eyeglasses were provided in-school.
Brain Breaks!

In one year, more than 458K student minutes of physical activity were brought into classroom activities to get kids moving.
Having a health center at KIPP prevented 212 emergency room visits in the first three years of the program.
Between years 1 & 3 ...

Chronic absenteeism dropped by **49%** among students with **asthma**

Chronic absenteeism dropped by **50%** among students with **ADHD**
Despite higher staffing costs, every $1.00 invested in the Rales Health Center returns more than $4.20 of social benefit
53% of students failed vision screening, a rate higher than the national average.
More than one third of students are overweight or obese

- Normal weight: 55%
- Underweight: 3%
- Overweight: 21%
- Obese: 21%

42%
Asthma and ADHD prevalence among KIPP's 1517 students

- 8% of students with ADHD
- 25% of students with asthma
Evaluation Goals

1. Characterize baseline health needs and resources
2. Track the process of implementation
Modification to enrollment process:
Please check ONE box (YES or NO) below regarding your family’s participation in the School Based Health Center:

[ ] NO, I have read the attached information and DO NOT want to register my child with the SBHC.

Contact Activities
1. Mailing packets of forms to students’ homes
2. Outreach at school orientation
3. Outreach at back-to-school night and other school events
4. Incentivizing teacher participation (classroom competition)
5. Personal contact/outreach by parent liaison
1513 students

1117 (73%) consents returned

Mailing 6%
  Personal contact 24%

Orientation 19%

Outreach at school events 21%

Classroom competition 26%

Unknown 5%
Evaluation Goals

1. Characterize baseline health needs and resources
2. Track the process of implementation
3. Evaluate impact and cost effectiveness
Physical Environment

Advocacy through data:

• Measuring room temperatures everyday
• 71.9 °F ± 7.4 °F (48.0 °F to 100.6 °F)
• Temperatures at or above 78 °F are associated with seeking asthma related care