

School-based health care support toolkit: National examples of school-based health models and their outcomes

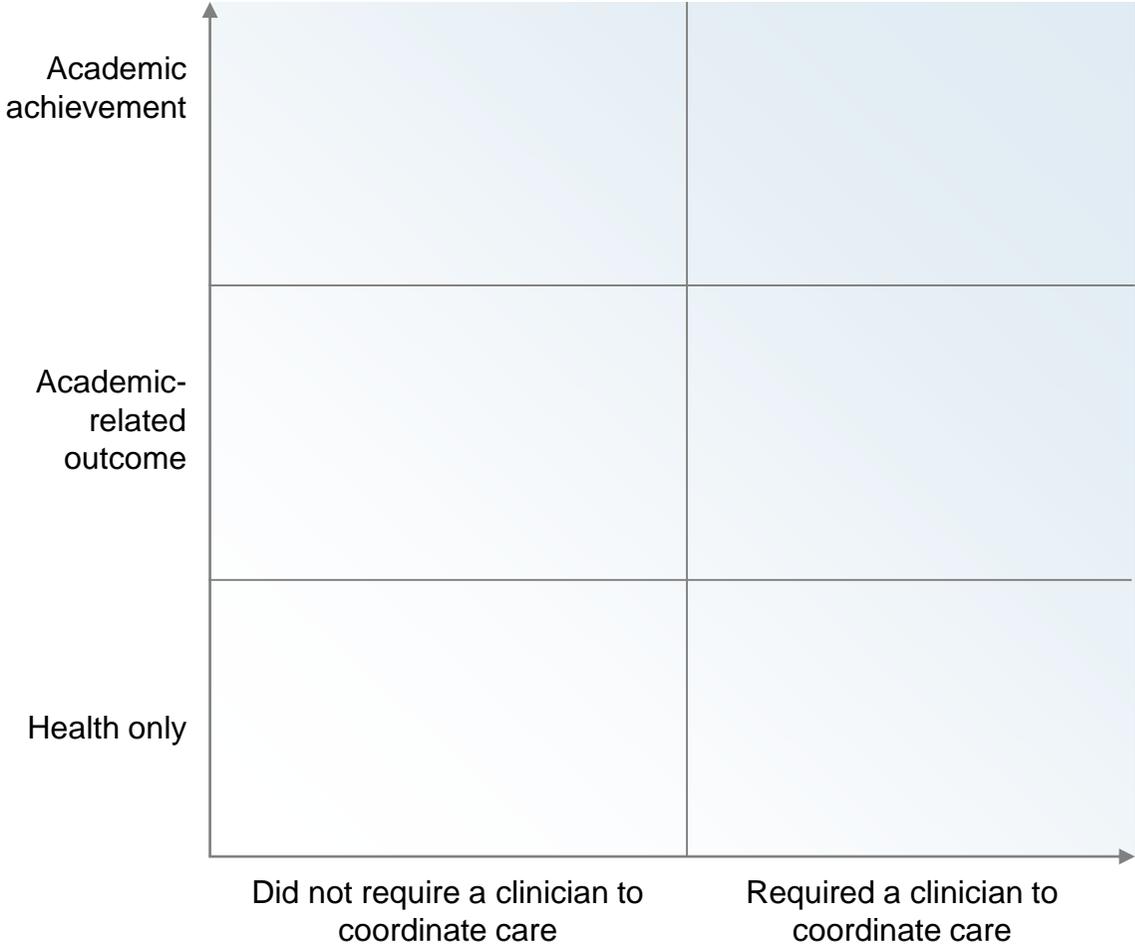


The following maps ~50 school-based health interventions against the type of outcomes they achieved and how they were delivered

Illustrates outcome of intervention:

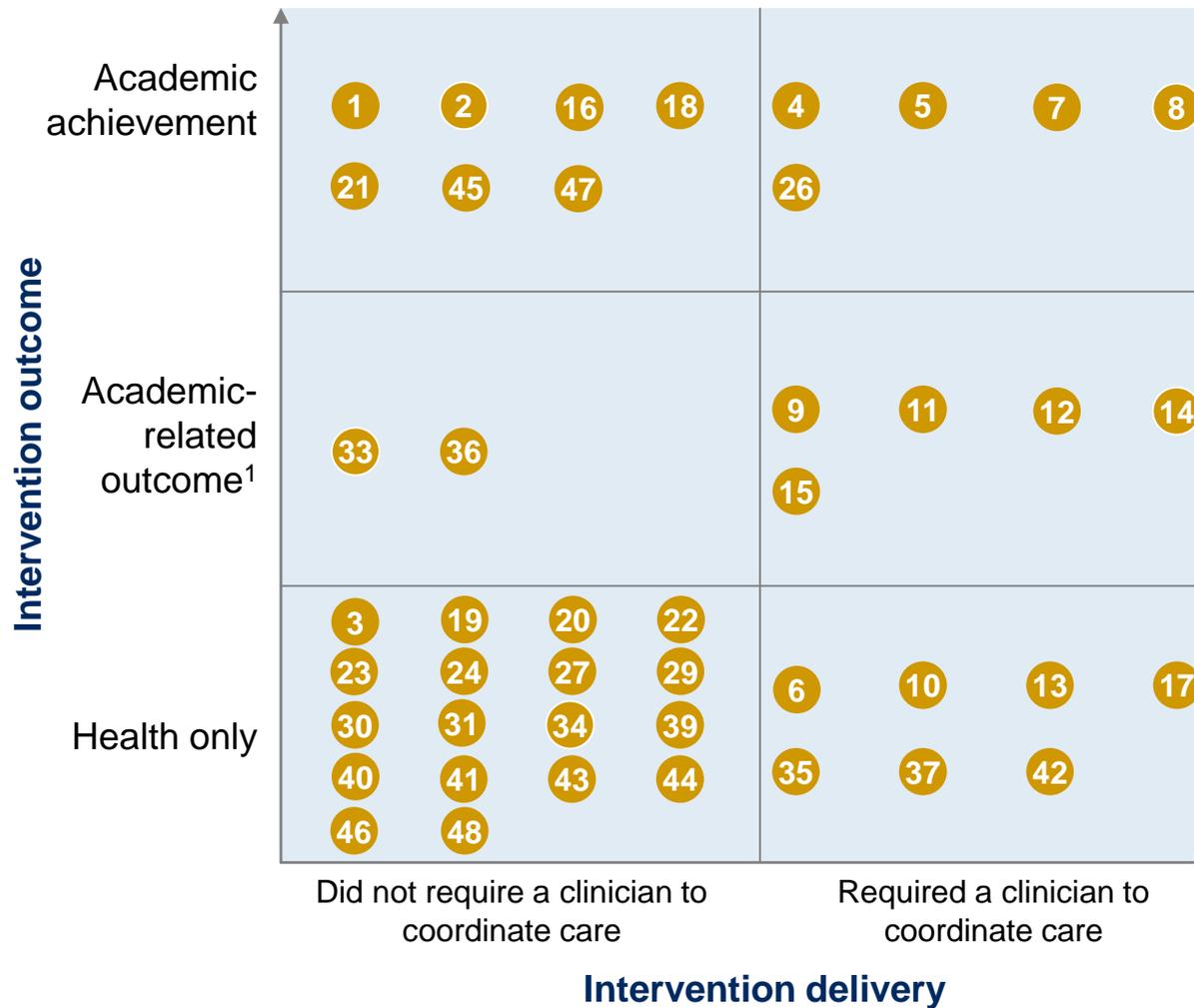
- **Academic achievement** (e.g., test score)
- **Academic-related outcome** (e.g., attendance)
- **Health only** (e.g., dental cleaning)

Intervention outcome



Intervention delivery

School-based health care interventions and impacts



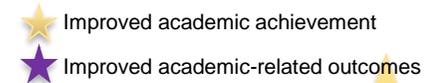
List of interventions²

COORDINATED SERVICES	VISION
1 Citi Connects	25 Smart Vision
2 SAFE Children	26 FL Vision
3 CSHP	HEARING
4 CASBHC	27 Dangerous Decibels
5 Seattle SBHC	28 Hearing Screen
BASIC MEDICAL CARE	DENTAL
6 Elev8	29 Caring for Kids
7 Dallas Youth/Family Services	30 Tooth Brushing
8 AEP	31 Fluoride Rinsing
9 LES	32 SBHA Oral Health
IMMUNIZATIONS	SEXUAL
10 Kentucky HPV	33 Aban Aya
11 Wisconsin Flu	34 Children's Aid
12 LA FluMist	35 Postponing Sex
13 Ontario HPV	36 RIPPLE
ASTHMA	37 LARC
14 ASMA	38 SBHA HIV/STD
15 APSAP	39 Reducing the Risk
16 Chronic Mgmt	40 Be Proud!
17 HLAI	MENTAL / BEHAVIORAL
PHYS ACTIVITY/OBESITY	41 SASS
18 SPARK	42 Caring for Kids
19 Reduce TV	43 Signs of Suicide
NUTRITION	44 Suicide Prevention
20 M-SPAN	45 FAST
21 Breakfast Clubs	46 Peacebuilders
22 Food Trust	47 PATHS curriculum
23 Cardio + Nutrition	48 Coping Power program
24 Columbus City Wellness Initiative	49 SBIRT

1 Includes improved attendance rates, reduced academic stress, etc.

2 Matrix does not include interventions 25, 28, 32, 38 and 49 because outcome evidence does not exist

Case examples: Coordinated Services



1

City Connects

- **Place/Context:** Now in over 20 k-8 schools in Boston, City Connects, a partnership with Boston Public Schools, Boston College and community agencies, places site coordinators in schools to develop and maintain partnerships to bring services to children in school.
- **Intervention implemented:** Site coordinators can refer students for interventions including
 - Small social skills groups on a time-limited basis addressing focused topics such as making friends, bullying, and healthy eating;
 - Crisis intervention for individual or small groups of children
 - Family outreach and support addressing specific family needs that are affecting the child's performance in school
- **Impact:** Students enrolled in a City Connects elementary school have significantly higher performance in both academic and non-cognitive skills during the enrollment and in secondary school. The benefits are often greatest for the most at-risk students, particularly English Language Learners. Now over 20,000 students are served and resources connected. Students are 50% less likely to drop out. 100% school principals believe it improves school climate.

2

SAFE Children Program

- **Place/Context:** Works with urban families in inner-city Chicago to improve academic performance
- **Intervention implemented:**
 - Multiple family sessions focusing on aspects of parenting, family relationship characteristics, parental involvement in school and child development
 - Individual phonics based tutoring helps the child's academic development
- **Impact:** Shown to decrease child aggression, improve reading scores and academic functioning, maintain parental involvement in children's schooling and improve children's concentration and prosocial behavior.

Case examples: Coordinated Services

3 Coordinated School Health Program (CSHP)

- **Place/Context:**, CSHPs have been integrated in most states in the US, including 23 state education agencies currently funded by CDC; was incorporated into Whole School, Whole Community, Whole Child (WSCC) initiative
- **Intervention implemented:** A CSHP integrates efforts of the eight components of the school community that can strongly influence student health: (1) health education; (2) physical education; (3) health services; (4) nutrition services; (5) counseling, psychological, and social services; (6) healthy school environment; (7) health promotion for staff; and (8) family and community involvement
- **Impact:** Completion of the program has led to positive changes in the school health environment: for example, schools have hired a physical education teacher for the first time, added healthier food choices, and organized aerobics classes for teachers. One study found increase in (1) awareness of health and wellness, (2) integration of wellness activities within and across schools and districts, and (3) leveraged resources.

Case examples: Basic medical care

4

Connecticut Association of School Based Health Centers (CASBHC)



- **Place/Context:** CASBHC is a statewide network of 83 school-based health centers, serving a total of 20,000 students each year.
- **Intervention implemented:** The SBHCs provide comprehensive primary health services including routine check-ups, treatment of acute illnesses, immunizations, physical exams, and counseling
- **Impact:** In a 2012 CASBHC student survey, over 70% of students confirmed that they learned new health habits and changed behaviors as a result of visits to the SBHC. One-third of the surveyed students saw an improvement in their grades and school attendance.

5

Seattle School Based Health Center



- **Place/Context:** Seattle School District has offered a variety of services through school based health centers for more than 20 years
- **Intervention implemented:**
 - Health centers provide mental health, family planning, immunization, counselling, physical health services
 - Operated by community health agencies and are staffed with coordinators, nurse practitioners and mental health counselors
 - Staff serve diverse ethnic background of students and interpretation and translation services are provided as needed including language support for non-English speaking families
- **Impact:** Led to improved academic outcomes in high schools and 75% of students who use the centers say they are receiving services they otherwise would not get

Case examples: Basic medical care

6

Elev8 Initiative in Chicago

- **Place/Context:** The Elev8 Initiative focused on middle school students, their families, and communities, offering comprehensive preventative and primary health-care services (as one of the four pillars of activity).
- **Intervention implemented:** Elev8 sites opened federally-qualified health centers at the target schools. Health center services included access to preventative care, pregnancy prevention, physicals, immunizations and mental health services.
- **Impact:** In the third year of the program, the clinics averaged 50-150 unique visitors each month, which extended to nonstudent community members. In addition, 95% of students in participating schools were in compliance with the district's physical and immunization requirements, which was much higher than previous years and comparable schools.

7

Dallas Youth and Family Centers



- **Place/Context:** School-based initiative in Dallas through a partnership between the Dallas Independent School District (ISD) and the Parkland Health and Hospital System
- **Intervention implemented:** Provides school-based health care, behavioral health care, and support services to children as well as their families in nine centers. Physical health care is provided by the Parkland System and includes acute health care, nutrition counseling, physical, and immunizations among other services. The ISD provides the behavioral health services, which include therapy, support groups and psychiatric evaluations.
- **Impact:** A total of 16,162 students and families were served in 2004-05. Those served were largely minorities and qualified for free lunch.
 - The Youth and Family Centers found a 31% decrease in course failure among students that had received services in one of the nine available school clinics

Case examples: Basic medical care

8 Alternative Education Program (AEP) SBHC



- **Place/Context:** An alternative public high school in Greensboro, NC serving a high-risk population of students in grades 6-12, opened an SBHC. These students were at high-risk of not graduating or being promoted to the next grade - nearly 74% of these students were retained in their grade in the 1990-91 school year. They also had high health risks ranging from diet, smoking, stress, and exercise, and cited transportation and distance as barriers to accessing health care.
- **Intervention implemented:** The school developed a SBHC and offered services including mental health care, contraceptives, and preventative care
- **Impact:** Registered students and students who used the clinic were twice as likely to graduate or be promoted; the relationship became stronger with more visits to the clinic and was particularly strong among black males at the school. Students who used the clinic were also absent a lower percent of the time (36% vs 51% for students who did not use the clinic).

9 Northeastern City Learning Environment Study (LES)



- **Place/Context:** In 2007, the Dept of Education conducted a Learning Environment Survey of schools with and without SBHCs in a large northeastern city
- **Intervention implemented:** LES was conducted across 416 schools, with a mix of SBHC and non-SBHC schools
- **Impact:** Both students and parents in SBHC schools rated “academic expectations” and “school engagement” significantly higher than those in non-SBHC schools. Overall, SBHC schools were better perceived by parents and students

Case examples: Immunizations

10

Rural Kentucky HPV Vaccination Program

- **Place/Context:** The Lake Cumberland District Health Department (LCDHD), which covers ten rural south-central Kentucky counties, partnered with the University of Kentucky to implement and test a school-based HPV vaccination program
- **Intervention implemented:** Program activities included education, reminders, and in-school vaccinations at two rural Kentucky high schools during the 2012-2013 school year. Nurses facilitated immunization clinics during the school day, with the vaccine available at no cost for all students
- **Impact:** Despite being a limited study, findings suggest that school-based HPV vaccination programs are successful in bringing students through the three-dose series during an academic year.

11

Elementary School Flu Vaccination in Wisconsin



- **Place/Context:** In 2010, a local public health agency in Wisconsin administered school-based influenza vaccination in two rural Wisconsin elementary schools
- **Intervention implemented:** The Wood County Health Department distributed information and consent forms to parents. Two vaccination clinics were then held at the schools and absenteeism was monitored for 12 weeks.
- **Impact:** Absenteeism due to fever or cough illnesses were significantly lower at the vaccination clinic schools

Case examples: Immunizations

12

LA FluMist Vaccination Program

- **Place/Context:** Los Angeles County Dept of Public Health launched an influenza vaccination program in 49 elementary, middle, and high schools
- **Intervention implemented:** The LACIP tested different administration methods and campaign promotion methods while administering a total 3,650 doses of FluMist
- **Impact:** School nurses administering the vaccine correlated with the highest number of administered vaccines. In addition, participating school had a significantly lower average absentee percent at 1.7% versus the 4.6% for non-participating schools

13

Ontario school-based HPV vaccination program

- **Place/Context:** A school-based HPV vaccination program was evaluated for a cohort of eligible eighth grade girls in Ontario, Canada
- **Intervention implemented:** Ontario's grade 8 HPV vaccination program begin in 2007, using government funding to provide three doses of the vaccine free of charge to all eighth grade girls in province through school based immunization clinics
- **Impact:** Almost 90% of girls who initiated the HPV vaccination series went on to complete all three doses, which represents on the of the highest levels of series completion



Case examples: Asthma

14 Asthma Self Management for Adolescents (ASMA)

- **Place/Context:** Three hundred forty-five primarily Latino/a (46%) and African American (31%) high school students reporting an asthma diagnosis, symptoms of moderate to severe persistent asthma, and asthma medication use in the last 12 months were randomized to test the efficacy of Asthma Self-Management for Adolescents (ASMA)
- **Intervention implemented:** ASMA consists of two complementary components: (1) an 8-week intensive program for the students, and (2) academic detailing for the adolescents' medical providers. The student intervention consists of three 45- to 60-minute group sessions, and individual tailored coaching sessions held at least once per week for 5 weeks. Sessions are delivered by trained health educators during the school day.
- **Impact:** ASMA students took significantly more steps to prevent asthma from starting than control students. In the treatment group, confidence (self-efficacy) improved by 10% from baseline to follow-up at 6 and 12 months

15 Albuquerque Public Schools Asthma Program (APSAP)

- **Place/Context:** In 2003, the New Mexico Departments of Health and Education launched APSAP. The number of schools participating in the APS Asthma Program grew from 20 in year one to 85 by year four
- **Intervention implemented:**
 - Program school nurses provide asthma education to school staff and students in grades 3–5
 - The APS Nursing Administration updates asthma education and management procedures to reflect best practices
 - Students and families unable to access state-funded or private health insurance are referred to the New Mexico Department of Health's Children's Medical Services
 - All APS health rooms are equipped with asthma-control devices.
- **Impact:** Individual health plans, orders for medication, and asthma action plans increased, indicating better management of student asthma. Overall absences due to asthma decreased from 39% to 26%

Case examples: Asthma

16 Training for Management of Chronic Diseases

- **Place/Context:** Launched in New York and Washington (through Nurse Corps) this aimed to help students with asthma improve their self-management of the condition by controlling their symptoms and protecting themselves from environmental triggers
- **Intervention implemented:**
 - Provide intensive training on how to manage asthma and supportive systems for students with asthma
 - Training for staff and peers to help protect students with asthma
 - Links to a health care provider and developing an asthma control plan
- **Impact:** Students enrolled in Training for Management of Chronic Diseases in New York had decreased asthma episodes (attacks) and improved grades in math, science and verbal expression

17 Healthy Learners Asthma Initiative (HLAI)

- **Place/Context:** The goals of the program are to strengthen asthma management for 916 students with asthma in sixteen Minneapolis public schools
- **Intervention implemented:** First, the Health Related Services Director oversees the program and quarterly trainings on various asthma topics. Second, asthma resource nurses visit schools once or twice a month in order to provide coaching to licensed school nurses, licensed practical nurses, and health service assistants. Last, training is provided to clinic staff on understanding and applying NIH guidelines for asthma care children, such as absences from school and hospitalizations
- **Impact:** The intervention had significant impacts on asthma care activities: parents in intervention schools were contacted more frequently regarding episodic visits; intervention schools obtained peakflow measurements on more students; they had more students getting asthma instruction and action plans and they had better access to asthma medications

Case examples: Physical Activity/Obesity

18 Project SPARK (Sport, Play and Active Recreation for Kids)

- **Place/Context:** Launched in 11 schools and designed to promote high levels of physical activity among students in PE classes and outside school and consists of a PE component and self management component
- **Intervention implemented:**
 - 3 PE classes per week in 30 minute sessions (15 for health fitness such as aerobics, 15 for skills fitness such as Frisbee and basketball)
 - A classroom-based program promoted behavioral change skills to increase the amount of regular physical activity and was taught in weekly 30 minute sessions, guided by scripted curricula
- **Impact:** Students enrolled in Project SPARK performed better or same than students in control group despite having less classroom instruction time. Also led to improved standardized reading scores

19 Reducing Children's Television Viewing to Prevent Obesity

- **Place/Context:** 192 students from 2 public elementary schools in San Jose were enrolled in a reduction of television viewing time program to tackle child and adolescent adiposity
- **Intervention implemented:** 18 lessons of 30 to 50 minutes were taught by the regular third- and fourth-grade classroom teachers. Early lessons included self-monitoring and self-reporting of television, videotape, and video game use to motivate children to reduce the time they spent in these activities. Lessons were followed by a television turnoff challenge for 10 days. The entire curriculum consisted of approximately 18 hours of classroom time. To help with television-time budgeting, each household also received an electronic television time manager
- **Impact:** Children had significantly relative decreases in body mass index, triceps skinfold thickness, waist circumference and waist-to-hip ratio, television viewing time and meals eaten in front of the television which are all promising steps to reduce childhood obesity



Case examples: Nutrition

20 Middle School Physical Activity and Nutrition (M-SPAN)

- **Place/Context:** Twenty-four public middle schools in San Diego County, California participated, with a mean enrollment across schools of 1109 students
- **Intervention implemented:**
 - Physical activity is promoted before and after school and after lunch by teachers and through programs, flyers, school bulletins, newsletters, and PTA meetings. Equipment is made available for students to use for physical activity. Physical education teachers give class credit for physical activity conducted outside of physical education class
 - Child nutrition service staff is given 11 hours of training with the goal of reducing the fat content in foods through changing the purchasing, preparation, and serving procedures. Vendors select low-fat items and donate foods for sampling and feedback. Parents are encouraged to supply their children with low-fat foods to bring from home for lunch, as well. Newsletters, signs, meetings, and contests keep the students and teachers aware of the nutrition changes in the school
- **Impact:** The intervention was found to significantly reduce BMI among boys in the experimental group when compared to the control group, but no differences were found for girls

21 School Breakfast Clubs

- **Place/Context:** School Breakfast Program in Massachusetts reaches 98,815 students in 1046 schools to get a healthy and smart start to their day. Similar programs implemented in Baltimore, Washington, and Philadelphia, among other cities
- **Intervention implemented:** Students offered free breakfast every day
- **Impact:** After 4 months of participation, students showed increase in math grades and decrease in absences or tardiness and teacher ratings of psychosocial (depression, anxiety, hyperactivity) decreased in students with increased breakfast participation



Case examples: Nutrition

22 School Nutrition Policy Initiative – The Food Trust

- **Place/Context:** Multi-component program designed to prevent obesity amongst schoolchildren in Philadelphia through school self-assessment, nutrition education, nutrition policy, school marketing and parent outreach
- **Intervention implemented:**
 - 50 hours of food and nutrition education is delivered to students per academic school year by linking food choices to individual health and integrating nutrition education into classroom activities
 - School staff receive 10 hours of training and receive curricula
 - School nutrition policies modified to meet nutritional standards such as serving 100% juice and low fat milk
 - Family outreach conducted through home and school association meetings, parent education meetings and weekly nutrition workshops
- **Impact:** Incidence of obesity was cut in half for 4th – 6th grade students enrolled in randomly assigned intervention schools versus control schools

23 School-Based Cardiovascular Exercise and Nutrition Program with Parent Participation

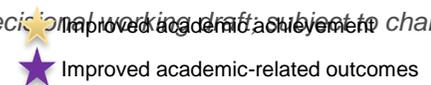
- **Place/Context:** Parents and their children attending two second grade classrooms and two fourth grade classrooms at an elementary school in a middle class, rural area in the US
- **Intervention implemented:** The intervention has physical fitness, nutrition, and family exercise and nutrition education components.
 - The physical fitness education part consists of four, 30-minute sessions delivered over the course of ten weeks.
 - The nutrition education component of the intervention consists of two, 30-minute knowledge-based curriculum sessions per week delivered over the course of ten weeks.
 - The family exercise and nutrition aspect of the program requires students to take nutrition and physical education curriculum materials home to their families so that they can engage in at-home lessons with their parents. There is an incentive system that rewards children each time the families completed one of the program activities.. Additionally, parents are contacted by phone once a week to go over program progress
- **Impact:** Children in the intervention group scored significantly higher on measures of fitness and nutrition, increases in fruit and vegetable intake. Intervention and control children did not differ on changes in height, weight, skinfold thickness, one-mile run times, or cholesterol, saturated fat, and grain/cereal intake

Case examples: Nutrition

24

Columbus City Schools (CCS) Wellness Initiative (WI)

- **Place/Context:** Columbus City Schools founded the Wellness Initiative in 2005 to develop a wellness policy based on the Coordinated School Health model
- **Intervention implemented:** The initiative focuses on enhancing nutritional options for students (e.g., water-only and healthier snack vending), providing BMI measurements and increasing student physical activity during the day
- **Impact:** Since inception, the initiative has produce a measurable decrease in average student body mass.



Case examples: Vision

25 Smart Vision Labs

- **Place/Context:** Verizon launched its **See Better = Learn Better Mobile Vision Program** between Smart Vision Labs, [OneSight](#) and [SUNY Optometry](#) to provide free vision care for school children across Omaha. The program will roll out to several more districts across the next two years.
- **Intervention implemented:** Provide quality vision care (a comprehensive eye exam and glasses if needed) to students with failed vision screenings during OneSight Vision Clinics held at schools
- **Impact:** This round of screening provided more than care and prescriptions to students. This week students were also given free glasses to take home courtesy of OneSight.

26 Providing Vision Screening and Free Eyeglasses in Elementary Schools in FL

- **Place/Context:** Vision Screening and Free eyeglasses were provided to 80 elementary schools in Florida reaching 18,190 students
- **Intervention implemented:**
 - FLVQ offered screening to all 4th and 5th grade students with a state-of-the-art screening tool, which may be more accurate than the standard screening methodology
 - At full treatment intervention schools, students who failed the screening was offered a free comprehensive vision exam at a mobile vision clinic at the student's school
 - If the optometrist at the mobile vision clinic prescribed eyeglasses, the student would receive two pairs of eyeglasses delivered to the school at no charge
- **Impact:** Providing vision screening and free eyeglasses significantly increased achievement in two of the three districts studied, while screening without the provision of free eyeglasses had no effect. The full-treatment intervention increased the probability of passing the standardized reading test by 2.5 percentage points and the standardized math test by 3.4 percentage points





Case examples: Hearing

27

Dangerous Decibels

- **Place/Context:** The program was administered to 507 4th and 7th graders in Oregon and Washington schools to prevent Noise-Induced Hearing Loss in Adolescents and Young Adults
- **Intervention implemented:** Dangerous Decibels is an interactive classroom program which discusses the physics of sound, mechanisms of hearing, how loud sounds damage hearing, consequences of hearing loss, and ways to prevent hearing loss
- **Impact:** 4th grade participants showed significant long-term improvement in knowledge and attitudes related to hearing and improvements in knowledge about hearing and hearing loss prevention, and attitudes returned to baseline levels

28

High-frequency school-based hearing screen

- **Place/Context:** In the Autumn of 2011 the high-frequency screen was delivered alongside the Pennsylvania school screen for students in the 11th grade to compare the sensitivity and specificity of current school hearing screening with hearing screening including high frequencies, designed to detect adolescent hearing loss
- **Intervention implemented:** The PA screen and the high-frequency screen were conducted over 4 days. Students were provided with passes at 10 minute intervals to come to a school conference room for testing.
- **Impact:** Modifying school-based protocols may be warranted to best screen adolescents, and make optimal use of school nurse time and effort. Impacts on academic / academic-related outcomes are unclear.

Case examples: Dental Health

29

Caring for Kids: Expanding Dental Services through School-Based Health Centers

- **Place/Context:** Caring for Kids invested \$3.36M to expand dental and mental health services through school-based health centers. Under this program seven projects in six states provided dental services in 17 schools
- **Intervention implemented:** Dental interventions that were either free or required a small co-payment:
 - Sealant programs
 - Comprehensive school-based dental programs: screening, cleaning, restorative care and classroom education
 - School-community partnerships for dental disease prevention and treatment management.
- **Impact:** Students at the participating schools had 1,952 dental visits (18 percent of all health center visits); Students received 5,322 dental services and procedures during these visits

30

Supervised Tooth Brushing

- **Place/Context:** A school-based caries preventive program was assessed by comparing dental caries status of two groups, a study group (436 children) and a control group (420 children)
- **Intervention implemented:** The study group received a preventive program which consisted of intensive oral hygiene instructions sessions, and supervised daily tooth brushing using fluoridated tooth paste in schools, whereas the control group received only oral hygiene instructions sessions) over a period of 4 years
- **Impact:** Annual dental examination to record dental caries status, using Decayed Missed Filled Teeth Index (DMFT) and deft, was conducted for both groups over a period of 4 years. The results of this test showed statistically significant difference in the caries status between the study and the control groups for both ages

Case examples: Dental Health

31

Fluoride Rinsing

- **Place/Context:** A random sample of 1333 children surveyed by the National Dental Inspection Program with average age 11.4 years was included in this study to evaluate an existing school-based fluoride mouthrinsing program
- **Intervention implemented:** A program of supervised fortnightly rinsing in selected state run Primary Schools with a 0.2% NaF solution was started in the Lothian region of Scotland in 1967 for children from 6 to 11 years of age, and is now run in 180 schools from a total of 225 in Lothian NHS Board area. Each child in the program rinses once every 2 weeks for 2 min, during the school terms, equivalent to approximately 20 rinses per year
- **Impact:** After adjusting for age, sex and deprivation, the odds of a tooth being decayed missing or filled for a child who rinsed are 0.79 (0.64, 0.98) compared with those of a child who did not

32

Innovation in School-Based Oral Health Services

- **Place/Context:** Tooth decay is the most prevalent and preventable chronic disease of children in the United States, and lower-income and minority children experience higher-than-average rates. Through an online learning collaborative and in-person meetings, the School-Based Health Alliance engaged twelve of the largest U.S. school districts in the development and advancement of promising practices and innovative strategies in school oral health services.
- **Intervention implemented:** The School-Based Health Alliance partnered with national oral health experts to: (1) define the core components of school oral health, (2) identify standardized measures of outcomes, and (3) identify and distribute successful policy, finance, and sustainability strategies for school oral health programs. In addition, the Alliance built an online resource library. The library is organized around the key components of school oral health and allows visitors to link directly to the sources of content.
- **Impact:** TBD

Case examples: Sexual Health

33

Aban Aya Youth Project

- **Place/Context:** The youth project served 12 schools in the metropolitan Chicago area between 1994 and 1998 working with 1153 African American students
- **Intervention implemented:** ABAN AYA, a classroom-based youth development curriculum, aimed at African American youth in grades 5-8, emphasizes African cultural values, heritage, and literature. The curriculum teaches cognitive-behavioral skills to build self-esteem and empathy, manage stress and anxiety, develop healthy interpersonal relationships, resist peer pressure, and develop skills in making decisions, solving problems, resolving conflicts, and setting goals
- **Impact:** At study conclusion, there were no significant intervention effects for girls. For boys, however, ABAN AYA significantly reduced the rate of increase in violent behavior (by 35% compared with controls), provoking behavior (41%) school delinquency (31%) drug use (32%), and recent sexual intercourse (44%). ABAN AYA also improved the rate of increase in condom use (95%) as compared to the health education control condition

34

Children's Aid Society Pregnancy Prevention Program

- **Place/Context:** Children's Aid Society implemented a sexuality education and pregnancy prevention program for highrisk adolescents in Harlem
- **Intervention implemented:** The five major program activities are complemented by health care & mental health programs:
 - Work-related intervention with stipends, help with bank accounts, graduated employment experiences and career awareness
 - Academic component (featuring individual assessment, tutoring and homework help, PSAT and SAT preparation, and assistance with the college admissions process)
 - Comprehensive family life and sexuality education (weekly sessions emphasizing sexual knowledge given at age-appropriate and developmentally appropriate levels by an educator–reproductive health counselor)
 - Arts component (designed to help young people discover and develop talent and confidence through weekly music, dance, writing or drama workshops led by theater and arts professionals)
 - Individual sports (as opposed to team sports) component that emphasizes activities requiring impulse control that can be practiced at all ages, such as squash, golf, snowboarding and swimming.
- **Impact:** Females in the program were significantly more likely than those in the control group to say they had chosen not to have sex when pressured (75% vs. 36%). Program women were significantly less likely than controls to have ever had intercourse

Case examples: Sexual Health

35 Postponing Sexual Involvement

- **Place/Context:** 812 7th grade students from six DC public schools were eligible for participation in this study in Postponing Sexual Involvement (PSI).
- **Intervention implemented:** Treatment schools were assigned a full-time health professional who led 7th graders in three classroom sessions on reproductive health. After receiving this instruction, students took part in a youth-led version of the PSI curriculum. The next year, as 8th graders, students were again led in three classroom sessions on reproductive health and were encouraged to take part in “booster” activities. Booster activities included voluntary small group discussions on matters of pertinence to adolescent health, an assembly on sexually transmitted diseases, and a student contest. .
- **Impact:** Females who received the PSI curriculum were significantly less likely to become sexually active and were significantly more likely to use contraception if sexually active than were females who did not receive the curriculum. The program did not have these impacts on males

36 Peer-Led Sex Education (RIPPLE Study)

- **Place/Context:** 13 to 14 year old students at 29 schools in central and southern England participated in Peer-led sex education where older high school students lead class sessions on sex education for younger high school students
- **Intervention implemented:** Peer-led sex education involves training twelfth-grade students to act as peer educators. The training takes place over two days and provides the peer educators with information about condoms, contraception, STDs, and relationships. Sessions are approximately one hour in length, use participatory learning methods, and focus on improving students’ sexual communication, condom skills, and knowledge of pregnancy, STDs, contraception, and local services related to sexual health. Topics for the three sessions are relationships, STDs, and condoms and contraception, respectively
- **Impact:** Girls who received peer-led sex education were less likely to have had sex by age 16 (at the 18-month follow-up), had greater knowledge of STDs at the 6-month follow-up but not at the 18-month follow-up, were more confident about using condoms at the 18-month follow-up, and had marginally fewer unintended pregnancies than did girls in the control group. However, girls who received peer-led sex education were also less confident about refusing to do something sexual they did not want to do, and there was no impact on the rate of unprotected first-time sex. Boys who received peer-led sex education had greater knowledge of STDs at the 18-month follow-up, but not at the 6-month follow-up.



Case examples: Sexual Health

37

Washington State LARC administration

- **Place/Context:** In Washington, a state program called Take Charge helps low-income women access contraceptives, with one SBHC operator administering long acting reversible contraception (LARCs) at schools
- **Intervention implemented:** Neighborcare SBHCs were equipped to enroll teens in the Take Charge program to obtain LARCs at no cost. Clinicians were trained to educate students and insert LARCs
- **Impact:** Since the program began in 2010, more than 500 LARCs have been administered across 6 participating schools in Seattle. Interviewed students and faculty also comment on a shift in a more open environment to discuss contraceptives and sexual health.

38

SBHA HIV/STD Prevention Among Adolescents

- **Place/Context:** In September 2016, the School-Based Health Alliance was awarded a two-year cooperative agreement from the Centers for Disease Control and Prevention (CDC), Division of Adolescent and School Health to increase education of key stakeholders on CDC-developed school-based approaches for creating healthier adolescents (10-19 years old) by reducing HIV and sexually transmitted disease (STD) infection.
- **Intervention implemented:** School-Based Health Alliance from 13 states are eligible to apply for grant for HIV/STD prevention programs. Conferences, webinars and workshops are held at participating schools to explore topics including sexual health education, roles of multiple agencies in HIV/STD prevention, LGBTQ inclusivity.
- **Impact:** TBD

Case examples: Sexual Health

39

Reducing the Risk

- **Place/Context:** The sexual health education curriculum was implemented at 13 California high schools in 1991
- **Intervention implemented:** The curriculum is based on social learning theory, social inoculation theory and cognitive-behavioral theory. It focuses on promoting delayed intercourse or using protection during intercourse. It consists of 16 sessions, each lasting 45 minutes and expandable to 90 minutes if desired. Experiential activities are included to build skills in refusal, negotiation, and communication.
- **Impact:** Among participants in the quasi-experimental evaluation, the program significantly increased participants knowledge and parent-child communication about abstinence and contraception. Among students who had not initiated intercourse, the curriculum reduced the likelihood they would engage in intercourse the next 18 months. The curriculum appears to have significantly reduced unprotected intercourse (through delayed start or increased use of contraceptives); effects were particularly strong among lower risk youths and females.

40

Be Proud! Be Responsible! A Safer Sex Curriculum

- **Place/Context:** Urban male teens ages 13-19 in Philadelphia were recruited from multiple venues to participate in the program; they were given a monetary incentive for participating.
- **Intervention implemented:** The five-hour, six-part intervention aims to prevent HIV and other STIs among adolescents ages 13 to 18 by improving their HIV related knowledge, attitudes and behaviors. It addresses pregnancy prevention, including using condoms and being monogamous. Videos, role-playing, games and exercises reinforce learning of the risks of injected drug use and unsafe sexual behaviors.
- **Impact:** Intervention participants had a greater knowledge of HIV and AIDS immediately after the intervention and at 3 month follow up; participants reported weaker intentions to engage in unsafe sexual behavior. Participants were also less likely to report instances of sex and reported fewer sexual partners, riskier partners, and increased condom use.



Case examples: Mental Health

41

Skills for Academic and Social Success-Cognitive Behavioral Therapy (SASS)

- **Place/Context:** Thirty-five socially anxious adolescents in grades 9 through 11 from two parochial high schools in New York,
- **Intervention implemented:** Skills for Academic and Social Success (SASS) is a cognitive-behavioral school-based program designed to reduce children's anxiety. SASS consists of 12, 40-minute weekly group sessions, two booster sessions, two 15-minute individual meetings, four weekend social events with prosocial peers, two 45-minute parent group meetings, and two 45-minute teacher meetings. In total, the program lasts for three months
- **Impact:** At post-test, treatment group students had significantly lower observer-rated anxiety disorders (very large effect size of 2.4), social phobic disorder (very large effect size of 2), social anxiety (large effect size of 0.77), and total functioning (very large effect size of 2.3) when compared with control group students. Treatment group students also had significantly lower self-reported social avoidance and distress (large effect size of 0.79) when compared with control group students. Treatment group students had significantly lower parent-reported social avoidance and distress (large effect size of 0.82) when compared with control group students

42

Caring for Kids: Expanding Mental Health Services through School-Based Health Centers

- **Place/Context:** Caring for Kids invested \$3.36M to expand dental and mental health services through school-based health centers. Under this program eight projects in seven states expanded mental health services in 17 schools
- **Intervention implemented:** Mental Health interventions that were free or paid-for by a medical payor:
 - Programs to prevent the emotional and behavioral problems of school-age children and youth
 - Expanded mental health treatment programs within a school-based health center
 - Added or expanded psychiatric consultation to existing mental health services; adding clinical social workers or psychologists to increase treatment capacity; increasing supervision and consultation by a senior licensed clinical social worker; or by combining these strategies
 - Integrated models of mental health service delivery that link mental health services provided by school-based health centers to other school and community mental health services
- **Impact:** Students at the participating schools had 5,321 mental health visits (32 percent of all health center visits)

Case examples: Mental Health

43

Signs of Suicide Prevention Program

- **Place/Context:** 2100 students from 5 high schools in Hartford, Connecticut and Columbus, Georgia participated in the program to combat increasing rates of suicide among high-school youth.
- **Intervention implemented:** The SOS program is designed to teach youth the signs of suicide as well as what to do if they recognize these signs in others. The program is centered around a video program which is followed by group discussions about suicide
 - The students are taught the ACT plan as a response to recognition of suicidal behavior. The ACT plan involves Acknowledgement of suicidal behavior, demonstration of Care for suicidal students, and Telling responsible adults about recognized suicidal behavior. As a second step to the program, students are asked to complete the Columbia Depression Scale (CDS) as a screening for depression, a suicide risk factor
- **Impact:** Students in the treatment condition were found to report fewer suicide attempts (3.6%) and were also found to have greater knowledge about depression and suicide when compared with the control group (5.4%). Help seeking behavior on the other hand, did not vary significantly between treatment and control conditions

44

Untitled School Based Suicide-Prevention Program

- **Place/Context:** 105 (suicide-risk) students in grades 9-12 at 5 urban high schools participated in this school-based suicide prevention program
- **Intervention implemented:** The dropout and suicide prevention intervention program is a set of 2 Personal Growth Classes (PGC I and II) offered at the high school level. Each course is 1 semester long and is offered for credit. Both PGC I and PGC II include the following components: Small group work characterized by social support which facilitated peer to peer and group leader to student exchanges.
- **Impact:** Researchers found that suicide risk behaviors and thoughts were reduced for all 3 groups (including the control) and the greatest effects were seen in the control group and the single semester PGC group of whom 85 percent showed decreased suicide -risk behaviors of 25 percent or more (65 percent of the 2-semester group showed similar results). Scales of depression, hopelessness and stress showed similar patterns of decline among all three groups. The major treatment effect was seen in students' perceived personal control. Experimental groups showed significant improvements on measures of personal control (44 percent of participants showed improvement) whereas only 20 percent of the control group showed similar improvements

Case examples: Mental Health

45 Families and Schools Together (FAST) program

- **Place/Context:** Eight urban schools in a Midwestern university community were invited to participate in a family-centered, multi-family support group program to engage low-income, stressed and socially isolated families of school-aged children. The FAST program has been implemented in more than 800 schools as early prevention and intervention program for high-risk youth.
- **Intervention implemented:** A trained collaborative team for minimum 4 members (e.g., school social worker, member of local community-based agencies) that reflect the culture of the families participating (i.e., if family is Spanish-speaking Mexican Americans than the team is composed of Spanish-speaking Mexican Americans) guide child's parents to participating in school-based activities. FAST sessions last approximately 2.5 hours and can include a meal at the family table, singing, parent-led family activities, attendance to multi-family group meetings, etc
- **Impact:** Positive effects on parent involvement, child behavior, teacher perceptions of child performance and reductions in child aggression. FAST studies have reached hundreds of sites involving thousands of families; teachers reported that FAST improves children's academic performance, attendance and attitude toward school.

46 PeaceBuilders

- **Place/Context:** PeaceBuilders is a large-scale, universal violence prevention program for male and female youth identified as low, medium or high risk for future violence. The intervention was implemented in 8 urban schools.
- **Intervention implemented:** The program attempts to change antecedents that trigger aggressive behavior, reward prosocial behavior and provide strategies to avoid reinforcing negative behavior. The intervention structure uses several behavior techniques to promote change: symbolic and live models, role=plays and rehearsals and group and individual rewards.
- **Impact:** High-risk children reported more decreases in aggression and more increases in social competence in comparison to medium and low level risk children.

Case examples: Mental Health

47

PATHS curriculum

- **Place/Context:** PATHS curriculum has been implemented in numerous school settings and has undergone multiple rigorous clinical studies over the past several years.
- **Intervention implemented:** PATHS curriculum is a comprehensive program for promoting emotional and social competencies and reducing aggression and behavior problems in elementary school-aged children (grades K-6). The curriculum includes separate lessons across five conceptual domains: self-control, emotional understanding, positive self-esteem, relationships and intra-personal problem solving skills. It is designed to be taught 2-3 times per week and to be used by educators in a multi-year, universal prevention model.
- **Impact:** Across multiple studies, PATHS relative to a control group showed: lower rates of aggression, better understanding of cues to recognize feelings in others, reduction in ADHD symptoms, higher test score proficiency in reading, writing and math. The significant program effects were improvements in social problem solving, emotional understanding, and self-control, as well as higher scores on peer sociability and social school functioning.

48

Coping Power Program

- **Place/Context:** The program was implemented with at-risk preadolescent boys at the time of transition from elementary school to middle school.
- **Intervention implemented:** The program has targets the child and the parent. The child component consists of 24 structured cognitive-behavioral group sessions and periodic individual sessions design to positively affect the child ability to set goals, and skills related to organization, anger management, social interactions and problem-solving ability. The parent component consists of 16 group sessions and periodic individual contacts to develop and reinforce the use of praise, clear rule setting, appropriate discipline actions, stress management and communication.
- **Impact:** Participants in the program produced lower rates of covert delinquent behavior and teacher-rated behavioral improvements in school during the follow-up year.



Case examples: Mental Health

49

SBIRT Substance Use Prevention in SBHC

- **Place/Context:** In 2015, the School-Based Health Alliance received funding from the Conrad N. Hilton Foundation to conduct a two-year pilot project (SBIRT Phase I) to train a group of school-based health providers in screening, brief intervention, and referral to treatment (SBIRT) methods and test the feasibility of this approach in a school-based setting, at 9 sites across the country. SBIRT Phase II was initiated in 2017 to include 9 sites in 3 states.
- **Intervention implemented:** a learning collaborative to engage additional SBHC sites in the use of SBIRT; increased use of evidence-base interventions, such as Teen Intervene, to provide treatment in school settings; expert support for EHR integration to support ease of SBHC work flow; youth development to enhance buy-in and efficacy for adolescents; and new educational partners to develop alternatives to discipline policies. Through these strategies, we hope to see an increase in referrals to the SBHC site for further assessment and treatment, to get at the multifaceted issues that could be at the root of the substance use. An online learning compendium of SBIRT-in-SBHCs training resources will be released to the entire field at the end of Phase II.
- **Impact:** TBD