

## PROGRAM EVALUATION PROTOCOL

### 2016/2017 HealthCorps *Living Labs*: Building Capacity for School Wellness Programming

#### Evaluation Team:

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#### I. Background

Obesity has quadrupled in US adolescents in the past 30 years, presenting a major public health problem for the foreseeable future.<sup>1-3</sup> Schools are promising settings for engaging youth in obesity prevention education and programming, with high-quality programs that integrate physical activity and education being shown to have positive influence on academic achievement and health outcomes among adolescents.<sup>4-8</sup> HealthCorps, a nationwide nonprofit agency [501(c)(3); incorporated in New York in 2007], has partnered with high schools in diverse communities in more than a dozen states and the District of Columbia to help high schools:

- Foster skill-based learning about healthy lifestyles through exercise and nutrition via classroom and schoolwide wellness activities, and
- Facilitate implementation of wellness policies, including the creation of building-level School Wellness Councils.

These aims are grounded in nationally recognized evidence-based guidelines that seek to reduce adolescent obesity ([2015-2020 Dietary Guidelines for Americans](#), [US Department of Health and Human Services](#), [CDC Bridging the Gap](#)), with a recent evaluation of HealthCorps in a sample of New York City high schools showing support for significantly increasing students' knowledge about nutrition, mental health, and physical activity. Specifically, HealthCorps' programming impacted a variety of health-related behaviors, with boys increasing fruits/vegetables intake ( $p = .03$ ) and girls increasing acceptance of new fruits/vegetables ( $p = .03$ ) and breakfast consumption ( $p = .04$ ), and decreasing sugary beverage/energy-dense food intake ( $p = .03$ ).<sup>9</sup>

HealthCorps' main vehicle for achieving these aims is its core curriculum, which is comprised of an introduction to the program and its methodology followed by twelve lessons broken into four units that are delivered over the course of the school year. The units focus on skills for developing a healthy mind, healthy eating, health body, and on self-care. Also included is a supplemental library of approximately sixteen lessons on healthy living for use at the facilitator's discretion. All programming is facilitated by a full-time coordinator, a recent college graduate trained by HealthCorps to promote planning and implementation of the HealthCorps program. In general, Coordinators serve as liaisons between teachers, students and administrators at their assigned school to promote wellness programming, and as mentors for students. Coordinators lead lessons both in and out of the classroom, as well as after school through clubs (e.g., cooking, fitness and youth empowerment) and other activities.

On the school level, HealthCorps' programming is intended to promote positive changes to the environment and to policy – and to ultimately be absorbed into the culture of the community. School level activities promote collaborative capacity among local wellness champions in the school, to support activities that facilitate working together to support and grow activities that help everyone in the school community learn and make healthier choices. Additionally, awareness of federally recommended school wellness policies and development of specific goals to help implement and sustain them are a key focus.

On the student level, the curriculum and its associated activities are intended to build resilience and leadership skills as well as raise awareness of healthy behaviors and foster positive change. HealthCorps' student-level programming supports consciousness-raising and skill building that includes strategies that promote peer-to-peer support among students. These strategies include personal dietary and exercise habits, as well as skills to build mental resiliency to deal with conflict and cope with stressful circumstances. To foster healthy behavior change, HealthCorps has adopted the **SMART Goal** model. **SMART Goals** are goals that students set to achieve a particular behavior change that are **Specific** (a selected skill-building activity aim or objective), **Measurable** (a goal students can track, to see process), **Attainable** (a goal that the student is likely to be able to achieve), **Realistic** (a goal that is reasonable in scope and that can be independently conducted), and **Timely** (completed within a specified timeframe).

## II. HealthCorps *Living Labs*

HealthCorps *Living Labs* is an on-going initiative intended to actively engage multiple school-based stakeholders from diverse HealthCorps high schools in wellness program planning and evaluation. Participating high schools will work collaboratively with HealthCorps and its evaluation partners to assess the effectiveness of wellness programming on students and on the school climate, as a whole. In this way *Living Labs* high schools contribute valuable information annually to strengthen the HealthCorps' core curriculum while enhancing overall school wellness.

At all *Living Labs* schools, the HealthCorps Coordinators will lead activities with students and school staff that will support robust evaluation of all HealthCorps school and student wellness programming. Evaluation activities include observational exercises and self-reported information from by key stakeholders (described in detail below). The results will be summarized and reported back to the Coordinators and their school-based stakeholders and used to enhance the HealthCorps program. A detailed description of procedures and instruments is provided below.

## III. Process Evaluation Questions

Our evaluation protocol will address questions regarding the reach and impact of HealthCorps' school wellness activities on students, school environment, and school policy. Two overarching questions frame our evaluation:

1. How do classroom activities in the HealthCorps core curriculum foster students' adoption of healthy behaviors, over the course of the academic year in *Living Labs* schools?
2. How do HealthCorps school-wide wellness activities serve to develop an environment supportive of student leadership, peer mentoring, and implementation of wellness policies and practices, over the course of the academic year in *Living Labs* schools?

## IV. Process Evaluation Team

In 2013 the **Albert Einstein College of Medicine** (Bronx, NY) was awarded funding to conduct a multi-year research project in partnership with **HealthCorps** (New York, NY) and **FamilyCook Productions** (New York, NY), to develop and test educational materials designed to support wellness education and behavioral change in high school students, consistent with the US Dietary Recommendations for adolescents. The evaluation team's work is supported by funding awarded by the National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK; R01 DK097096).

**Albert Einstein College of Medicine.** The evaluation team at Einstein includes Principal Investigator **Dr. Judith Wylie-Rosett (EdD, RD)**, Co-Investigators **Dr. David Lounsbury (PhD)**, **Dr. Moonseong Heo (PhD)**, and Research Coordinators **Sarah Martin (MPH)** and **Camille Gonzalez (MPH)**. All members of the Einstein research team are

faculty and staff in the Department of Epidemiology and Population Health. As Principal Investigator, Dr. Wylie-Rosett oversees all project activities for the NIDDK grant. Her research focuses on preventing obesity and reducing associated cardiometabolic risks. She has been an investigator in multi-center trials including the Diabetes Control and Complications Trial, the Women's Health Initiative, and the Diabetes Prevention Program. Her current investigator-initiated research includes a family-based weight control trial, a diabetes prevention trial for Chinese immigrants, and a school-based wellness program to facilitate achieving the Dietary Guidelines. Dr. Lounsbury supports on-going implementation of the NIDDK grant, focusing on promotion of school-level change by developing and accessing the quality of collaboration among school-based wellness champions and by disseminating system dynamics modeling as a methodology to explore and assess complex, multi-level, problems in primary care and public health. Dr. Heo is senior biostatistician who provides data analytic expertise to the NIDDK grant. He works closely Ms. Martin and Gonzalez, who share responsibility for design and deployment of an electronic data capture system, created in RedCap to survey students about health behaviors in participating schools. They have also developed and piloted other student-level program evaluation tools (i.e., SMART goal xxx and SMART goal xxx). Ms. Marin facilitates weekly evaluation team meetings via teleconference and periodic face-to-face meetings, to ensure that evaluation procedures are on track.

**FamilyCook Productions. Lynn Fredricks, BA** is founder of FamilyCook Productions and an award-winning pioneer in obesity prevention and nutrition. She is the author of *Cooking Time Is Family Time* (Morrow 1999) and *Get Your Family Eating Right!* (Fair Winds Press 2013). Since 1995, the nutrition education efforts under her lead have reached over 300,000 parents and children. Ms. Fredricks works closely with Einstein team members to design and pilot classroom and schoolwide wellness activities for the NIDDK grant. Fredericks also assists with innovates the embedding of impact measures within curricular activities to serve both participants and researchers. As Co-Investigator for a NIH-funded research project in NYC high schools with Einstein College of Medicine, she designs dissemination strategies that build on the success of her Teen Battle Chef program leadership development, emphasizing skill building and peer-sharing. Fredericks has served within the leadership of numerous professional societies.

**HealthCorps.** Trains and supports HealthCorps Coordinators, via webinars and in-person training sessions held at the start of the school year, to implement the HealthCorps program and all evaluation activities in participating Living Labs schools. **Michelle Bouchard**, the President, oversees the national non-profit wellness educational program which has impacted almost two million high school students since 2007 across 19 states and Washington, D.C. She has received citations for her work at HealthCorps from the California State Senate, the Clinton Global Initiative, the New York City Family Caregiver Coalition, the Mayor of Oklahoma City and the New York City Council. **Kelly Nimmer** (MPH), is the Programs Director overseeing national implementation of the Living Labs program, including evaluation efforts. **Megan Ling** is the Regional Supervisor, East Coast directly overseeing Coordinators' program implementation in schools on the East Coast. **Jean Lim** is the Research Scientist responsible for conducting evaluation trainings with the Coordinators, gathering feedback from them to improve processes, and facilitating the partnership among HealthCorps, Einstein College of Medicine, and FamilyCook Productions.

## **V. Evaluation Instruments/Sources of Information**

A collection of instruments to help evaluate both reach and impact of HealthCorps' core curriculum and promotion of wellness policies in terms of reach and impact on students and the school environment. Student level instruments include: (1) the Healthy-Me Snapshot, (2) SMART Goal Worksheet, (3) SMART Goal Lesson Assessment, and (4) Healthy Me Reflection Exercise. School level instruments include: (1) School Community Assessment Surveys and (2) HealthCorps Monthly Impact Reports.

### **Student Level Program Evaluation Instruments**

**Healthy-Me Snapshot:** This instrument will be used as part of a classroom activity to provide students with feedback messages that will help students set SMART Goals and initiate behavior change related to the 6 dietary guidelines and mental resilience. For our purposes, the dietary guidelines have been distilled into six general behavioral goals, namely: 1) decreasing sugary beverage intake; 2) increasing frequency of breakfast; 3) increasing vegetable and fruit

intake to 2½ cups per day; 4) decreasing frequency of fast food meals; 5) becoming physically active (goal of 1 hour per day); and 6) reducing sedentary behavior time (<2 hour day).

*Data collection and sample size.* Within each school, HealthCorps Coordinators will administer the Healthy-Me Snapshot to all students, male and female, aged 13-21 who are exposed to the HealthCorps core curriculum. They have been selected because enrolled in classes for which the HealthCorps Coordinator partners with teachers to deliver the HealthCorps curriculum. Dependent upon school size, 100 to 200 students per school are expected to complete the Snapshot. For example, HealthCorps Coordinators deliver approximately 6 classes of students per school lessons. Therefore approximately n=30 students per class, approx. n=180 (6 x 30) students per school.

The Snapshot will be administered electronically via a REDCap (Research Electronic Data Capture) portal maintained by the Albert Einstein College of Medicine (Bronx, New York). REDCap is a secure web application for building and managing online surveys and databases. All survey data is collected using unique identifiers to ensure confidentiality of student participants. The Coordinator will not maintain the survey data but they will maintain the list of unique identifiers which may be used to link other student curricular activities with their Healthy-Me Snapshot. This database will not include student contact information. HealthCorps will not be collecting contact information on file for use after the data has been collected. Only data from those students whose parents provide a signed consent form will be included in the evaluation.

*Data processing and feedback reporting.* All Snapshot data will be collected electronically collected data via the RedCap portal. Data received via the portal will be reviewed and checked by Einstein staff. Students will take this quick survey and will, subsequently, will receive personalized feedback (i.e., **Healthy-Me Snapshot Report**). The report gives each student an assessment of their self-reported daily habits, in relation to each of the Dietary Guidelines in fun, pithy, relatable language. This includes a rating, complete with emoticons, that reveals the area(s) or guidelines they are most in need of improving. Snapshot reports will be used in a following classroom activity to help students form a SMART Goal that aligns with the dietary guideline they have prioritized.

The Snapshot will be sent back to the participating student via e-mail. In addition, an electronic copy of all student reports, identified by their unique identifier, will be send to the designated HealthCorps Coordinator.

From there, participating students will spend time in an upcoming class that introduces them to the Dietary Guidelines that are most critical to their age group. With this understanding, students will be asked to define a personal SMART Goal that aligns with the Dietary Guideline they have prioritized. Some students may receive a report with two or more areas that suggest a need for personal improvement. In such cases, it will be up to the student, then, to select a Guideline they are the most interested in changing.

The Healthy-Me Snapshot can also be used to provide each school with an aggregated report, summarizing results from a specific classroom and/or for all participating classrooms. Such information may be useful in planning school-wide wellness programming/priorities. Aggregate reports will only be based upon data from parents of students who have actively consented to participation in the program evaluation.

Data collected from the Healthy-Me Snapshot will provide a profile of which of the dietary guidelines students are performing well on, and which need attention, per student self-report. Results will be associated with gender and age, and potentially with other school community characteristics of interest.

**SMART Goal Worksheet:** This instrument will be completed by each student as part of a classroom learning activity conducted by the HealthCorps Coordinator. Students will print their name at the top of the form, which, subsequently, will allow Coordinators link completed worksheets to Healthy-Me Snapshot data. The form is organized by the SMART goal components, namely **Specific** (a selected skill-building activity aim or objective), **Measurable** (a goal students can track, to see process), **Attainable** (a goal that the student is likely to be able to achieve), **Realistic** (a goal that is reasonable in scope and that can be independently conducted), and **Timely** (completed with a specified timeframe). Student responses are semi-structured. To assist students in completing the worksheet, a “SMART Goal Activity Bank” of sample responses organized by each of the dietary guidelines is provided.

*Data collection and sample size.* Within each school, HealthCorps Coordinators will distribute the SMART Goal Worksheet to students in each of their classes. Worksheets will be completed manually by students. Participation in this exercise is open to all students, male and female, aged 13-21 who are exposed to the HealthCorps core curriculum. They have been selected because enrolled in classes for which the HealthCorps Coordinator partners with teachers to deliver the HealthCorps curriculum. Dependent upon school size, 100 to 200 students per school are expected to complete the Worksheet, the same sample that completed the Snapshot. Only data from those students whose parents provide a signed consent form will be included in the evaluation.

*Data processing, analysis and feedback reporting.* Data from each Worksheet will be entered into a secure DropBox file with the assistance of HealthCorps, FamilyCook and/or Einstein evaluation staff. Data will be entered using unique identifiers only. Student names will be not be recorded in the secure file.

Data collected from the SMART Goal Worksheets will be linked to Snapshot data. Associations with students' self-reported health behaviors will be assessed. Descriptive evaluation of the content and completeness of the students Worksheets will also be conducted. In addition, Worksheet content will be associated with gender and age, and potentially with other school community characteristics of interest. Reports will only be based upon data from parents of students who have actively consented to participation in the program evaluation.

**SMART Goal Lesson Assessment:** This instrument serves to review the quality of classroom activities associated with student SMART Goal development. It is intended to be a process evaluation of HealthCorps' SMART Goal lessons. The SMART Goal Worksheet will be the data source for the SMART Goal Lesson Assessment. Scores will be based upon five indicators, one for each component of the SMART Goal. Each indicator will be evaluated as either sufficient (1 point) or insufficient (0 points). Total score will be based on a 5 point scale:

- **SPECIFIC:** Does SMART Goal identify a specific DG or MR to work on? Includes increase consumption of breakfast, increase consumption of fruits and vegetables, increase physical activity, decrease sedentary behavior, decrease junk food, decrease sugary beverages, or improve Mental Resiliency. (Yes = 1 point).
- **ACTION-ORIENTED:** Did student choose an ACTIONABLE activity that will help achieve their goal? Student must identify a specific action that relates to the specific DG or MR goal. (Yes = 1 point).
- **MEASURABLE:** Did student identify a method to measure their goal? Times per week? Quantity consumed (or cut out)? (Yes = 1 point).
- **REALISTIC:** Is it reasonable that student may accomplish this goal? Only deduct this point if the goal is not in the parameters of logic, for example they will eat breakfast 8 times a week or they will consume vegetables with 10 meals each day. (Yes = 1 point).
- **TIME-BOUND:** Did student define a period of time they will work toward goal? (Yes = 1 point).

*Data collection and sample size.* Scores will be computed from a random sample of students' SMART Goal Worksheets not to exceed a sample of more 50% of completed Worksheets from a given school. Only data from those students whose parents provide a signed consent form will be included in the evaluation.

*Data processing, analysis and feedback reporting.* Each SMART Goal Worksheet will be coded with the assigned unique identified assigned to each participating student by the Coordinator. Results will be submitted electronically to Einstein via secure DropBox. Two Einstein evaluators will review each SMART Goal and assign a score. Score disagreements will go to a third evaluator. All data will be stored in RedCap.

Knowledge uptake will be assessed based on the lesson's culminating exercise where students are asked to create a personal SMART Goal related to the 6 dietary guidelines. After completing a worksheet that assists the student in identifying each of the S-M-A-R-T components of the goal, students write the complete goal in a free-text box of the worksheet. Reports will only be based upon data from parents of students who have actively consented to participation in the program evaluation.

**Healthy Me Reflection Exercise:** This instrument will be completed by each student as part of a classroom learning activity conducted by the HealthCorps Coordinator. Students will print their name at the top of the form, which, subsequently, will allow Coordinators link completed worksheets to Healthy-Me Snapshot data and SMART Goal



Worksheet data. The form is organized into three parts. The first part captures students' self-reported SMART Goal foci, time expended in pursuing their SMART Goal(s), as well as self-reported assessment of SMART Goal level of achievement. All response are structured. Students can document up to three SMART Goals. The second part is semi-structured. It asks respondents to reflect on how their SMART Goal experience changed the way they think, feel, or look, or how then interact with peers, family member and other in their community. The third part asks student s to record a new SMART Goal, one that builds upon the prior experience and their current health behavior priorities.

*Data collection and sample size.* Within each school, HealthCorps Coordinators will distribute the Healthy Me Reflection form to students in each of their classes. Reflection forms will be completed manually by students. Participation in this exercise is open to all students, male and female, aged 13-21 who are exposed to the HealthCorps core curriculum. Dependent upon school size, 100 to 200 students per school are expected to complete the Reflection form, ideally the same sample that completed the Snapshot. Only data from those students whose parents provide a signed consent form will be included in the evaluation.

*Data processing, analysis and feedback reporting.* Data from each student Reflection form will be entered into a secure DropBox file with the assistance of HealthCorps, FamilyCook and/or Einstein evaluation staff. Data will be entered using unique identifiers only. Student names will be not be recorded in the secure file.

Data collected from the Healthy Me Reflection Exercise will be linked to Snapshot data, SMART Goal Worksheet data. Associations with students' self-reported health behaviors will be assessed. Descriptive evaluation of the content and completeness of the students Reflection Exercise forms will also be conducted. In addition, Reflection Exercise data will be associated with gender and age, and potentially with other school community characteristics of interest. Reports will only be based upon data from parents of students who have actively consented to participation in the program evaluation.

### **School Level Program Evaluation Instruments**

**School Community Assessment Survey:** This tool is designed to help the HealthCorps Coordinator and wellness champions build a well-rounded description of their school and its surrounding community. Having an improved, personal understanding of the geographic, demographic, economic and social make-up of their school community will help participating schools more clearly understand the challenges and opportunities that their community faces so that they can be a more effective resource for them.

*Data collection and sample size.* One School Community Assessment Survey will be completed for each participating Living Labs school. The Survey cannot be completed in a single sitting. To collect reliable, useful information, it is recommended that Coordinators allow for multiple cycles of data gathering, recording and reflection. Ideally, Coordinators will conduct the survey with the input and deliberation of key stakeholders in their school community. Their tacit knowledge about your school and its community will serve to improve the quality and utility of this exercise.

*Data processing, analysis and feedback reporting.* Completion of the survey typically involves multiple methods including obtaining primary data through interviews and direct observations and secondary data through reputable sources. Coordinators will work to complete the survey within the first 8 weeks of the school year. Data for each survey will be entered electronically by the Coordinator into a secure DropBox database file. Data will be reviewed and tabulated by HealthCorps and Einstein evaluation staff. A summary report for each participating school will be generated and shared with the Coordinator and her wellness champions.

**HealthCorps Monthly Impact Reports:** HealthCorps Coordinators complete weekly reports, which are summarized into monthly impact reports, on all program components to better understand the reach of the program, and to document the process and outcomes of the program at each of the Living Labs schools. Information about the development of a network of school wellness champions, awareness of and engagement in the implementation of recommended school wellness polices, including the development of School Wellness Councils, will be documented in these reports.

*Data collection and sample size.* Data from the impact reports will create a robust, longitudinal data set of largely qualitative data about the implementation of wellness programming at a given Living Labs school.

*Data processing, analysis and feedback reporting.* Trends over time, expressed qualitatively in terms of facilitator sand barriers to implementation of classroom and schoolwide wellness activities will be generated.

**Café-O-Yea Student-Led Demonstration Evaluation Instrument:** HealthCorps Coordinators train student leaders to conduct skill-building demonstrations that support the dietary guidelines and guidelines for mental resilience. Demonstration activities that qualify must impart a skill that participating students can quickly learn to do themselves as well as share with friends and family members. Demonstration activities are organized around HealthCorps' three pillars (i.e., Nutrition, Fitness, and Mental Resilience), mapped to a corresponding US Dietary Guideline or mental resilience guideline.

In general, the criteria defining an effective demonstration activity are as follows:

1. Shares a demonstrable skill towards achieving the relevant guideline;
2. Can be easily understood through visuals alone (e.g., cafeterias are loud, can be difficult to hear), by using signage and participatory engagement to make the 'what and how' implicit;
3. Can be easily recalled and recreated by youth (supported by distribution of recipe/instruction handouts);
4. Skill must be easily shared with others (e.g., play the game with friends, recreate the breakfast or snack strategy with food at home);
5. Supports the SMART goal model, as defined above (e.g., student demo participants could use the skill to work toward achieving one or more personal SMART goals).

Approximately 6 options for each guideline have been developed (more than 36 different activities mapped to each HC pillar/Guideline).

*Data collection and sample size.* To evaluate the delivery of Café-O-Yea activity, Coordinators will be asked to complete an on-line Planning and Evaluation Report, available via secure RedCap portal, for each Café-O-Yea they will carry out at their school. The Planning and Evaluation Report is submitted at the discretion of the Coordinator, after all sections are complete. Coordinators can return to a given report record time and again, until it is completed and deemed ready for submission. It includes items that document targeted guideline, school setting, number of student leaders (who conduct the demonstration), facilitators and barriers to implementation, as well as estimated number of student audience participants (i.e. 'reach'). For overall evaluation purposes, Café-O-Yea activity data will be de-identified and used to assess and compare overall metrics and trends.

A new Planning and Evaluation Report form is to completed for each independent Café-O-Yea. Data from the Café-O-Yea reports will create a structured archive and timeline of these school-level events. For evaluation purposes, coordinators are requested to organize and conduct no less than three demonstration activities associated with a single, prioritized guideline (e.g., Eating Breakfast), to be completed over a two to three month period (i.e., spring semester: March, April, May). By choosing a single, prioritized guideline (e.g., Increasing consumption of breakfast), wellness champions can grow school capacity to engage more students over time.

*Data processing, analysis and feedback reporting.* A summary of Café-O-Yea activity for a given school over a given time horizon can be generated as needed. Trends over time, expressed qualitatively in terms of facilitator sand barriers to implementation of classroom and schoolwide wellness activities will be generated.

**Café-O-Yea Student-Led Demonstration Student Feedback Survey.** To obtain the participating students' perspective, the effect on the audience of students at the Café-O-Yea, a one-page paper survey will be used. All members of the student audience will be asked to take a moment to complete the feedback form. Using a structured format, the form asks 7 questions:

1. What was the purpose of today's Café-O-Yea? (List of options)
2. How much did you like today's Café-O-Yea? (0 to 10)

3. Do you think you will try out what was shown today at least once in the next 7 days? (0 to 10)
4. Do you think you will share what was shown today with friends and/or family at least once in the next 7 days? (0 to 10)
5. In addition to today's Café-O-Yea, how many other Café-O-Yeas have you seen at your school this year?
6. What's your grade? Check one response.
7. What's your gender? Check one response.

*Data collection and sample size.* To facilitate data collection, a set-up collection box, surveys and pencils will be made available at the Café-o-Yea venue. The aim will be to collect as many feedback forms as possible. It is expected that each event will reach no fewer than 15 students, hence N=45 feedback surveys for each set of three demos. Surveys will be processed by Einstein staff once received from Coordinators.

*Data processing, analysis and feedback reporting.* A summary of aggregated Café-O-Yea student feedback by event will be generated. Quasi-experimental comparison by demonstration purpose, venue, and student impact will be made. Differences across schools by frequency, type and 'reach' of these events over time will also be reported.

**Wellness Champion Survey.** The purpose of this instrument is: (1) To teach to the construct of collaborative capacity in participating HealthCorps schools, using a systems thinking approach as presented in our current causal loop diagram of school-level and student-level dynamics; (2) To assess levels of each dimension of collaborative capacity [(A) Member capacity, (B) Relational capacity, (C) Organizational capacity, and (D) Programmatic capacity] over the course of the school year (ideally at three time points: baseline, mid-year, and at the end-of-year); and (3) Using these data and other available evaluation data sources, to design and calibrate of one or more system dynamics models that simulate behavior change among students in the school.

Evaluation questions to be addressed with these survey data include: How do levels of collaborative capacity vary across BWFL Dissemination Schools? How do levels of collaborative capacity change over time, and what drives these changes (facilitators and barriers)? How does improvement in collaborative capacity extend reach to students and drive wellness outcomes (e.g., student leadership, support for wellness, policy awareness)?

*Data collection and sample size.* HealthCorps Coordinators at each participating high school will be asked to nominate all supporter/champions of wellness programming at their school. Nominations will be collected via short electronic survey2 (via RedCap) at baseline. Nominated supporters/champions would receive an invitation to participate in the survey, via an electronic message and link to the survey site. A special informed consent will be presented electronically (although it may be completed by hand under the supervision of the Coordinator). Once consent (or parental assent) is obtained, a short survey link will be generated. It is anticipated that approximately 6 to 12 supporters/champions will be nominated to participate in the survey, and that nearly 100% will agree to do so.

*Data processing, analysis and feedback reporting.* In return, the research team would provide a school feedback report after each survey milestone (baseline, mid-year, end of year). Results of the survey would be used to inform a general model of the dynamics of collaborative capacity for wellness programming at school level. Data analysis of the full sample of participating schools would be conducted so that no participating school would be identifiable. Research team members would be available to assist with any technical or logistical matters that may arise.

To further explore the relationships in our causal loop diagram of school-level and student-level dynamics, the research team will identify key informants (i.e., wellness champions) in n=3 to 4 dissemination HC schools who voluntarily agree to participate in a reflective, qualitative interview to elicit additional context and insights about school-level wellness activities and about their efforts to build and sustain wellness outcomes. Interviews would be recorded via a videoconference session, then coded and analyzed for themes that support, refute, or adjust our hypothesized causal loop diagram of school-level and student-level dynamics.

## **VI. Evaluation Data Management and Security**

### **Informed Consent**



Given requirements of local school IRBs or other authorities overseeing school-based research and program evaluation for a given HealthCorps **Living Labs** high school, procedures for either written Active Consent (by a parent or guardian), written Passive Consent (by a parent or guardian, i.e., opt-out), or exempt (i.e., informational flyer only, with oral consent) will be conducted.

**Active consent procedures.** Once the coordinator has received permission from the teachers of these classes to administer the Health-Me Snapshot, the Coordinator will visit the class and spend a maximum of 10 minutes to discuss with students the purpose of the evaluation (using the recruitment script provided) and what is being asked of them: 1) to bring home their parental consent form, 2) to return their signed parental consent form, 3) to sign the student assent form and 4) to complete the Healthy-Me Snapshot and subsequent SMART Goal forms and supporting documents as part of a HealthCorps classroom activity.

**Passive consent procedures.** Once the coordinator has received permission from the teachers of these classes to administer the Health-Me Snapshot, the Coordinator will visit the class and spend a maximum of 10 minutes to discuss with students the purpose of the evaluation (using the recruitment script provided) and what is being asked of them: 1) to bring home their parental consent form, 2) to return their signed parental consent form only if the parent wishes that data collected for program evaluation *not* be included, 3) to sign the student assent form and 4) to complete the Healthy-Me Snapshot and subsequent SMART Goal forms and supporting documents as part of a HealthCorps classroom activity.

**Exempt (Oral consent by students with informational flyer).** Where neither active nor passive consent is required by a local IRB and/or other authorities overseeing school-based research or program evaluation, as the proposed program evaluation is deemed consistent with educational activities in traditional educational settings, the Coordinator will visit the class and spend a maximum of 10 minutes to discuss with students the purpose of the evaluation activities and how their completed Healthy-Me Snapshot and subsequent SMART Goal forms will contribute to evaluating HealthCorps programming in their school.

**Wellness Champion Survey Staff & Stakeholders Informed Consent and Parent/Guardian Permission and Student Assent (Active Consent by all nominees).** Part of this study is focused on how students, teachers and staff, and other persons at your school work together to support or 'champion' health and wellness policies, programs and activities in your school community. To be recruited to this part of the study, the designated HealthCorps Coordinator must nominate specific individuals whom she/he has recognized supporters/champions of the HealthCorps Program. Those who are nominated will be consented using an additional, dedicated consent form.

Eligible participants for the Wellness Champions Survey include students, teachers and staff, other persons, including parents and others who have been recognized by your school's HealthCorps Coordinator as someone who is actively supporting wellness programming at your school. For student supporters/champions, participation is open to all male and female students enrolled in schools that are partnered with HealthCorps. Students must be between the ages 13-21. For all other supporters/champions, such as school staff or others, participation is open regardless of gender or age.

Nominees who agree to participate will provide a preferred e-mail link that we will use to share a link to an online survey (available via a secure RedCap instrument). The HealthCorps Coordinator will be available to answer any questions or concerns nominees may have about the survey or any items in the survey. The survey can be filled out in 15 minutes or less.

**Electronic data security.** REDCap and other secure DropBox servers used by Einstein to capture evaluation data are compliant with standards such as HIPPA, 21 CFR Part 11, FISMA, and international standards. Online data storage plans have been developed to ensure that data collected through REDCap and secure DropBox servers will remain confidential. Only Einstein evaluation team personnel at the Albert Einstein School of Medicine and HealthCorps will have access to these data. During live data collection stages, the de-identified data will be stored in Einstein's REDCap server. As soon as the surveys have been collected, the data will be downloaded from the server and kept on a secure and locked desktop computer in the Healthcorps office for data analysis. All data will be destroyed after three

years. An electronic shredder will be used to destroy the survey data and disposed of through a secure source. Electronic databases will be permanently removed from all locked sources.

**Risks and Benefits.** The risks of this evaluation include potential uncomfortable thoughts or emotions regarding one's health (as the result of unhealthy eating, physical activity, or mental health behaviors) or impact on others.

Each student participant will be assigned a unique identifier, and each participant's data will be stored according to this identifier. Data inputted in the computer will not contain participants' names, only unique identifiers. Therefore there is minimal risk of a breach of confidentiality.

To minimize any emotional risks, the person who will conduct the evaluation surveys and activities with the participants will be the HealthCorps Coordinator, who has a strong relationship, rapport and trust with the students and school administration. The participants will be assured in the consent forms, assent forms, recruitment scripts and verbally that the surveys are entirely voluntary, that they can skip any questions they prefer not to answer and that they may withdraw at any time.

Professional and experienced researchers at Einstein will oversee all evaluation procedures as well as data analysis to ensure proper confidentiality is maintained. The subject identification roster will be kept in a locked file separate from the rest of the data. The digital version of the roster will be kept on a secure hard drive separate from the other data.

**Potential benefits to students from participating in the evaluation include:**

- The opportunity to learn about and reflect on their behaviors
- The opportunity to interact with health educator
- Increased awareness and participation in health promotion techniques
- Pride in contributing to the improvement of the program and towards scientific advancement.

**Potential benefits to HealthCorps include:**

- Better understanding of the impact of the HealthCorps program
- The opportunity to make modifications to the program based on lessons learned from evaluation
- The opportunity to demonstrate to schools and the school districts the quantifiable impact of the program
- The potential opportunity to publish findings of the program's impact
- Increased chances for funding.

**Potential benefits to participating *Living Labs* high schools include:**

- Better understanding of the impact of the HealthCorps program for students and school
- The opportunity to receive quantifiable data demonstrating impact of the program
- Recognition as a district that promotes and supports program evaluation to ensure that programs being implemented are producing positive outcomes.
- Positive recognition in any published articles that arise from this evaluation
- Provision of the final evaluation report and lessons learned from the study
- Potential increases in nutrition knowledge and healthy behaviors, and ultimately school performance as indirect benefits of this program
- Insights about the utility of raising awareness and fostering implementation of school wellness policies for the school community.

**Evaluation incentive.** No payment will be provided to participants for their participation in the evaluation.

## **VII. Evaluation Timeline**

All data collection and processing for program evaluation purposes will be completed within the academic year, between the months of September and June.

## References

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## **APPENDIX**

### **List on Contents**

#### **PART 1 – Principal Approval Form**

#### **PART 2 – Informed Consent**

- (1) Active Consent (completed by parents and students)
- (2) Passive Consent (completed by parents and students who do not wish to participate in program evaluation)
- (3) Oral Consent Script
- (4) Wellness Champion Survey Active Consent (for staff, parents, and students)

#### **PART 3 – Student Level Program Evaluation Instruments**

- (1) Healthy-Me Snapshot
- (2) SMART Goal Worksheet
- (3) SMART Goal Lesson Assessment
- (4) Healthy Me Reflection Exercise

#### **PART 4 – School Level Program Evaluation Instruments**

- (1) School Community Assessment Survey
- (2) HealthCorps Monthly Impact Reports
- (3) Café-O-Yea Student-Led Demonstration Evaluation Instrument
- (4) Café-O-Yea Student-Led Demonstration Student Feedback Survey
- (5) Wellness Champion Survey