

Michigan Evaluation of School-based Health

Baseline Child Health Status Report

Descriptive Data for the Entire Sample

Miles McNall

Community Evaluation and Research Center

Lauren Lichty

Department of Psychology

Jason Forney

Department of Psychology

Brian Mavis

Office of Medical Education, Research, & Development, College of Human Medicine

Laura Bates

Community Evaluation and Research Center

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MICHIGAN STATE
UNIVERSITY



Michigan State University
East Lansing, Michigan

Copies of this report are available from:

Community Evaluation and Research Center

University Outreach & Engagement

Michigan State University

Kellogg Center, Garden Level

East Lansing, Michigan 48824

Phone: (517) 353-8977

Fax: (517) 432-9541

E-mail: outreach@msu.edu

Web: <http://outreach.msu.edu/cerc/>

or

Michigan Department of Community Health

Web: www.michigan.gov/cahc

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Executive Summary

Purpose of the Evaluation

The primary purpose of the Michigan Evaluation of School-based Health (MESH) Project is to evaluate the impact of state-funded clinical school-based health centers (SBHCs)¹, known in Michigan as Child and Adolescent Health Centers, on the health outcomes, school attendance, and healthcare costs of children attending the schools in which they are located. This evaluation is based on a sample of children in 16 middle and high schools both with and without SBHCs throughout the state of Michigan. The overall aim of the evaluation is to determine if students attending schools with health centers experience better health outcomes and lower healthcare costs in the area of emergent care.

This report presents descriptive health status data from two sources: the self-administered *Parent Survey* and the self-administered *Child Health and Illness Profile—Adolescent Edition (CHIP-AE)*. Analyses of differences in the health status and school attendance of children attending middle vs. high schools, rural vs. urban schools, and intervention vs. comparison schools will be presented in subsequent reports. This report presents descriptive data from all 16 sites.

Participants

We received parental consent for a total of 1134 students, representing 26% of eligible sixth and ninth grade students across all schools. In addition, 1027 parents consented to participate in the study. Of the 1134 students whose parents provided consent, 969 (85%) provided their written assent to participate in the study and completed a survey. Of the 969 completed surveys, 959 were usable. Surveys were completed by 350 sixth grade students and 609 ninth grade students, whose average age was 13 years. Of the 1027 parents who consented to participate in the study, 922 were mailed a copy of the survey. A total of 419 parents returned surveys, for a participation rate of 44%.

Findings

Although the overall findings from the *Parent Survey* and the *CHIP-AE* indicate that students in this study are in good health, some students are either experiencing or are at risk of experiencing serious health problems. Throughout this report, we will present the results for the entire sample, while also drawing attention to the small, but noteworthy numbers of students at risk for poor health outcomes.

Parent Survey

The vast majority of parents (76%) reported that their child's health was "excellent" or "very good." In addition, most parents reported that their child does not have behavioral (87%) or attention (79%) problems that affect his or her school performance. Nevertheless, a small but significant minority of parents reported that their child suffers from one or more of the following health conditions: asthma (15%), headaches (15%) and ADHD or ADD (14%)

¹ One school-based health center included in this evaluation is not state-funded. This health center follows the same policies, practices, and regulations as state-funded health centers and therefore is appropriate for inclusion in the study.

Student Survey

On average, students report a moderate to high degree of satisfaction with their health and well-being, a low level of physical and emotional discomfort, a low level of personal risk, a moderate level of resilience, a high level of personal achievement, and few physical medical conditions or psychosocial disorders. However, these average values obscure the fact that some students are experiencing problems in one or more of these areas. Below, we highlight a selection of these problems.

Satisfaction. Students reported a moderate level of satisfaction with their health and a high level of self-esteem. When asked “How is your health in general?” 92% of students responded “excellent” to “good.” However, 8% of students reported that their health is “fair” to “poor.”

Discomfort. Students reported a low level of physical discomfort, a low level of emotional discomfort, and few limitations on their daily activities. Students reported the following problems related to physical and emotional discomfort:

- ***Days Free of Pain:*** 20% of students reported that there were *no days* when they were free of pain in the preceding four weeks.
- ***Tiredness and Lack of Energy:*** 37% of students woke up feeling tired and 11% tired easily or felt like they had no energy on more than seven days in the preceding four weeks.
- ***Self-harm and Suicide:*** 9% of students reported that they had ever tried to seriously hurt or kill themselves. Of those who reported they had harmed themselves or attempted suicide, 59% did so more than a year ago, and 41% did so in the past year.
- ***Disordered Eating:*** 8% of students reported vomiting on purpose to lose weight, and 24% reported going on an eating binge in the last year.
- ***Feeling Loved or Wanted:*** 10% of students reported *not* feeling loved or wanted in the past four weeks.

Risk. Students reported overall low levels of individual risk, threats to achievement, and negative peer influences. However, a substantial number of students are placing themselves at risk for poor health outcomes.

- ***Sexual Activity:*** 17% of students reported that they had ever had sexual intercourse. Of those, 11% were middle school students and 89% were high school students.
 - ***Age First Had Sex:*** Of the students who reported ever having sex, 56% reported that they first had sex when they were 13 years old or younger. Among high school students, of those who had ever had sex, 50% had done so when they were 13 years old or younger..
 - ***Contraception Use:*** Of the students who reported having sex, 18% reported using *no* form of contraception the last time they had sex, 76% reported using a condom, 15% reported using the birth control pill, and 15% reported using withdrawal. Failure to use contraception increases the risk for pregnancy and sexually transmitted infections.

Resilience. Students reported a moderate level of family involvement, a moderate level of active interpersonal problem solving, a moderate level of physical activity, and high level of home

health and safety. Despite this generally positive picture, substantial numbers of students are experiencing circumstances or are engaging in behaviors that are not conducive to good health.

- **Supportive Adults:** 13% of students reported that they do *not* have any adult to turn to for help if they have a real problem.
- **Exercise:** 22% of students had not once engaged in exercise hard enough to make them breathe hard, make their heart beat fast, or make them sweat for more than 20 minutes in the previous four weeks.
- **Nutrition:** 45% of students reported eating fast foods such as fried chicken, french fries, onion rings, or hamburgers at least several times a week, if not every day, in the past four weeks, and only 54% of students reported eating fruits and vegetables every day.
- **Television and Videos:** 46% of students reported watching three or more hours of television or videos on an average school day in the past four weeks.
- **Feeling Safe:** 13% of students reported not feeling safe in their schools and 15% reported not feeling safe in their neighborhoods.

Achievement. Students reported a moderate level of academic achievement and, among gainfully employed students, a high level of work performance. When asked to report how they perceived themselves as students, 72% reported that they were either “excellent” or “good” students. However, some students appeared to be struggling in school.

- **Failing a subject:** 31% of students reported failing a subject in the past two years.
- **Repeating a grade:** 7% of students reported repeating a grade in the past two years.

Physical and Mental Health Conditions. With the exception of common seasonal illnesses, students reported low levels of physical conditions or psychosocial disorders. The most commonly reported minor conditions were the cold or flu, with 78% of participants indicating they had a cold or flu in the past year. The most common major medical condition that students reported was a broken bone, dislocated joint, or broken nose (13%). The three most commonly reported recurrent medical conditions were sinus trouble or sinusitis (50%), migraine headaches (29%) and hay fever or allergies (25%). The most troubling finding was the number of students who have been victims of interpersonal violence:

- **Physical Abuse:** 21% of students reported that someone had tried to physically hurt them on purpose in the last year. Of these students, 37% reported that this caused a change in their feelings, such as fear or depression, 31% reported this caused a change in what they did (e.g., where they went or how they acted), and 26% reported this caused a physical injury.

Discussion

This pattern of findings suggests that, while the majority of students report positive health outcomes, there are still areas in which students’ health could be improved and/or their risks for poor health outcomes reduced. Below, we briefly review some of the major areas of concern in order of average overall prevalence.² When reviewing the areas of concern below, it is worth keeping in mind that this report is based on data obtained from students in the 6th and 9th grades and

² Average overall prevalence was arrived at by taking the mean of the overall prevalence of the items constituting the area of concern.

their parents. As such, the risks to the health and well-being of students identified below are likely to increase with age.

Nutrition and Physical Activity

The first major area of concern is student eating habits and amount of physical activity. The lack of regular exercise, regular consumption of fast food, and excessive television watching reported by some students are of particular concern given the youth obesity epidemic in the U.S. Clearly, additional efforts to promote healthy eating habits and regular physical exercise are needed.

Interpersonal Violence

The second area of concern is interpersonal violence and personal safety. As we reported, a considerable number of students reported carrying a weapon, threatening to hurt someone else, or physically attacking another person. In addition, 21% of students reported that someone had tried to physically hurt them on purpose in the last year, an experience that often resulted in negative feelings or changes in the victim's behavior. Reflecting this level of interpersonal violence, many students do not feel safe in their schools or neighborhoods. Although we have not yet fully explored these relationships, exposure to such violence is likely to have significant consequences for the health, well-being, and academic performance of students.

Tiredness and Difficulty Sleeping

The third area of concern is the frequency with which students reported feeling tired or having difficulty sleeping. As we reported, many students wake up feeling tired, tire easily, or feel like they have no energy. Furthermore, several students reported difficulty sleeping or not waking up feeling refreshed. Taken together, these findings paint a portrait of students who, given their level of sleeplessness and fatigue, are unlikely to perform well in school. The reasons for and consequences of such a high level of fatigue and sleeplessness among middle and high school students need further exploration.

Sexual Activity

The fourth area of concern is the number of middle and high school students who are engaging in sexual intercourse and the inconsistent use of contraceptives when they do so. As we reported, 17% of students have had sex. Among sexually active students, 18% reported not using contraception the last time they had sex. Such findings highlight the importance of reproductive health education and access to pregnancy testing and sexually transmitted infection (STI) testing and treatment. And, given that fact that 56% of sexually active students reported first having sex at age 13 or younger, when they would have been in middle school, it would appear that such education, testing, and treatment should be provided at both the high school and middle school level.

Lack of Adult Support

The final area of concern has to do with the perceived lack of adult support and encouragement. Among the children in our study, nearly one in five said that neither their parents nor any other adult in their family had talked with them or listened to their opinions or ideas in the last four weeks. Significant numbers of students also said that they do not have any adult to turn to for help if they have a real problem, and one in ten said that they do not feel loved or wanted. The perceived lack of adult support among these children is likely to have a variety of negative consequences, including psychological distress, high-risk behaviors, and poor school performance.

Implications for Practice

Given such threats to the health and well-being of a small, but noteworthy number of middle and high school students in our study, what are potential strategies for reducing those threats? Because most children spend the majority of their waking hours for nine months of the year in school, the school setting provides an opportunity for reaching young people. Some of the identified challenges to student health and well-being might be effectively addressed at a school-wide level. For example, with regard to poor nutrition and lack of physical exercise, strategies for fostering healthy behavior change might include school-wide health education campaigns, increased opportunities for physical activity, and increased healthy lunch options. Other issues may be most appropriately addressed by experts within the school setting. For example, for youth struggling with emotional problems and interpersonal violence, trained social workers may be best positioned to assist students in identifying healthy coping strategies and assessing the need for more intensive intervention. With many potential mechanisms for promoting student health, the school setting is a well-suited environment in which to promote the health and well-being of young people.

Future Directions: Evaluating School-Based Health Centers

In forthcoming reports we will examine the impact of an additional resource for addressing threats to school-aged children's health: school-based health centers. Housed within schools and staffed by trained medical and mental health providers, SBHCs have the potential to offer ameliorative as well as preventative health services. Through qualitative interviews with center and school staff, we will investigate the specific services SBHCs provide that may address the health concerns identified here. In addition, through the quantitative data we have collected, we will examine whether students attending schools with health centers experience better health outcomes. Ultimately, through this evaluation we will better understand the ways in which school-based health centers promote student health.

Report

Background and Purpose

The state of Michigan funds 45 clinical school-based and school-linked health centers, known as Child and Adolescent Health Centers³, to provide a wide range of primary care, preventative, and early intervention services to more than 30,000 children at all grade levels throughout the State of Michigan. To date, there has been no state-wide evaluation to assess the impact of these centers on the health outcomes and health care costs of the children they serve. The primary purpose of the Michigan Evaluation of School-based Health (MESH) Project is to evaluate the impact of state-funded clinical school-based health centers (SBHCs) on the health outcomes, school attendance, and healthcare costs of children attending the schools in which they are located. This evaluation is based on a sample of children in 16 middle and high schools both with and without SBHCs throughout the state of Michigan. The overall aim of the evaluation is to determine if students attending schools with health centers experience better outcomes and lower healthcare costs in the area of emergent care.

Design

The MESH Project has three components:

- An **outcomes evaluation** that assesses the impact of SBHCs on the health outcomes and school attendance of children
- A **process evaluation** that documents the numbers and types of services that SBHCs deliver to middle and high school students in Michigan and the characteristics of the children served by SBHCs
- A **cost evaluation** that assesses the impact of SBHCs on the health care costs of Medicaid-enrolled children

All components of the study are longitudinal and follow the same cohort of students over a three-year period (2006-2009). In the first year of the study (2006-2007), we enrolled sixth⁴ graders, ninth graders, and their parents. In the second and third years of the study, we will follow the same cohorts of middle school students as they progress through seventh and eighth grade and high school students as they move through tenth and eleventh grade.

The outcomes evaluation uses a comparison group design in which the health outcomes and school attendance of children attending schools with SBHCs (intervention group) are compared to the outcomes of children attending matched schools without SBHCs (comparison group). Comparison schools were matched to intervention schools based on three criteria: racial and ethnic composition of the student body, number of students receiving free and reduced price lunch (a proxy for socioeconomic status), and school size.

³ Also called school-based health centers (SBHCs)

⁴ The exception to this is a single middle school that consists of the seventh and eighth grades only.

The data sources for this study include:

- Quantitative child survey (self-report of health status)
- Quantitative parent survey (self-report of access to healthcare and child's health status)
- Qualitative interviews of school and clinic staff
- Clinic service records
- School attendance records
- Medicaid claims records

This report presents descriptive health status data from two sources: a self-administered *Parent Survey*⁵ and a self-administered *Child Health and Illness Profile—Adolescent Edition (CHIP-AE)*.⁶ Analyses of differences in the health status and school attendance of children attending middle vs. high schools, rural vs. urban schools, and intervention vs. comparison schools will be presented in subsequent reports. This report presents descriptive data from all 16 sites.

Methods

Recruitment

Parental consent was obtained through a variety of means including mailing consent documents and cover letters to the homes of all children in grades six or nine in the selected schools and having research staff attend back-to-school events or parent-teacher conferences. When participation rates remained unsatisfactory in certain schools, we sponsored in-school competitions between classrooms for the most consent forms, regardless of whether consent to participate in the study was granted. As a result of our recruitment efforts, we received parental permission for a total of 1134 students, representing 26% of eligible students across all schools. In addition, 1027 parents consented to participate in the study.

Survey Administration

For the CHIP-AE child health survey, we arranged survey dates with each school and sent research staff to conduct on-site group administrations. Members of the research staff were on hand to answer any student questions about the survey. Bilingual school and/or research staff were also present in schools with significant Spanish-speaking populations.⁷ At survey administration sessions, students were asked to read and sign a Student Assent Form, which informed them of their rights as research participants and gave them the option to refuse to participate. Of the 1134 students whose parents provided consent, 969 (85%) provided written assent to participate in the study and completed a survey. Of the 969 completed surveys, 959 were usable.⁸

Parent surveys were mailed to all parents who consented to participate in the study. Parents were offered a \$5.00 gift card for each returned survey. Parent surveys were mailed to all parents who consented to participate in the study. Of the 1027 parents who consented to participate in the study,

⁵ The Parent Survey is a revised version of the parent survey used in the *Prescription for Success* study of school-based health centers funded by the Health Foundation of Greater Cincinnati.

⁶ © Johns Hopkins University 1995, 2000

⁷ Eight students completed Spanish versions of the survey. However, many of the questions on the Spanish version of the survey provided by Johns Hopkins were not equivalent to the English versions, so the eight Spanish surveys were not included in the analyses.

⁸ Some surveys were excluded due to problems with the Spanish version of the survey and incompleteness.

922 were mailed a copy of the survey.⁹ A total of 419 parents returned surveys, for a participation rate of 45%.

The MESH project study protocol was reviewed and approved by the Michigan State University and Michigan Department of Community Health Institutional Review Boards.

Sample

Sites. The outcomes evaluation includes five schools with long-established SBHCs (i.e., in operation for six years or longer) and their comparison sites. In contrast, the SBHCs at the implementation sites were in their first full year of operation. The outcome evaluation sites are located in urban settings with large populations of low-income residents. The implementation sites are a mix of urban and rural settings. Two of the three middle schools and two of the three high schools are in small, rural communities (see Table 1).

Table 1. MESH sites

	New SBHCs		Established SBHCs		Total
	Middle Schools	High Schools	Middle Schools	High Schools	
Urban	1	1	4	6	12
Rural	2	2	0	0	4
<i>Total</i>	3	3	4	6	16

Students. Of the 959 students surveyed, 350 were in sixth grade (37%) and 609 were in ninth grade (64%). Participants’ ages ranged from 10 to 16 years old, with an average age of 13 years. Among the middle school participants, the average age was 11.5. Among the high school students, the average age was 14.4. Fifty-five percent of the participants were female, 45% were male, and two participants (0.2%) did not report their gender. Regarding students’ racial/ethnic background, 40% were White, 32% were African American, 13% were Hispanic, 4% were American Indian, 2% were Asian Pacific Islander, and 9% reported “other.” The vast majority of the participants who selected “other” were multi-racial. Approximately 52% of participants reported receiving free or reduced-cost lunches, although 10% did not know if they received this service.

To assess the extent to which the total MESH study sample reflects the demographic composition of the combined student bodies of the schools participating in the study, we compared the racial and ethnic composition of each MESH school subsample to 2005 school demographic data from Standard and Poor’s SchoolMatters.com website. Although there are significant variances at the level of individual schools, the entire MESH sample is very similar to the combined student bodies of participating schools. Considering the three largest racial and ethnic groups in the MESH sample, White students and African American students are slightly underrepresented (5% and 3%, respectively) in the MESH sample when compared to the combined student bodies of all 16 schools. There is virtually no difference in the percentage of Hispanic students in the combined student bodies of participating schools and the MESH sample.

⁹ The remaining parents had left the district or invalid or unavailable addresses and therefore did not receive the survey.

Parents. Of the parents/guardians who completed and returned a survey, 92% were birth parents, 3% were step-parents, 2% were adoptive parents, and 2% were grandparents. The remaining 1% identified themselves as foster parents, aunts/uncles, or legal guardians. The vast majority of parents/guardians were female (92%), meaning that the parent survey sample is composed almost entirely of mothers. Parents'/guardians' ages ranged from 27 to 70 years old; their average age was 41. Of the parents/guardians who completed the survey, 62% were White, 25% were African American, 7% were Hispanic, 3% were multi-racial, 2% were Native American, and less than one percent identified themselves as Asian-Pacific Islanders (0.7%) or "other" (0.5%).

The educational backgrounds of parents/guardians were diverse. Eleven percent reported they did not possess a high school degree or equivalent; 29% had graduated from high school or received a GED; 38% had some college or a 2-year degree; and 22% possessed a 4 year college degree or beyond. Regarding employment, 54% of parents/guardians were working full time; 15% were home-makers; 14% had a part-time job; 7% were unemployed, laid-off, or looking for work; and 7% were disabled. The remaining participants were retired (2%), in school (2%), or reported "other" (6%) as their work status. The annual household incomes reported by parents/guardians varied widely: 30% earned less than \$19,999, 23% earned between \$20,000-\$39,999, 18% made \$40,000 to \$59,999, and the remaining 29% reported incomes over \$60,000. Thus, the majority (53%) of parents/guardians reported annual household incomes below \$40,000—well below the median family income of \$48,043 for Michigan residents,¹⁰ indicating that low-income families are overrepresented in the study sample. This is not surprising, however, in that SBHCs have historically been sited in low-income neighborhoods in order to make health care services available to children in poverty.

Findings

Although the overall findings from the *Parent Survey* and the *CHIP-AE* indicate that the students in this study are in good health, some students are either experiencing or are at risk of experiencing serious health problems. Throughout this report, we will present the results for the entire sample, while also drawing attention to the small but noteworthy numbers of students experiencing serious health problems.

Parent/Guardian Survey

The parent¹¹ survey contains eleven items that ask parents to rate their child's overall health, health conditions, and whether the child's health conditions affect how well he/she does in school.

Overall health. Parents were asked to rate their child's health on a five-point scale ranging from to "poor" to "excellent." The majority of parents (95%) reported their child's health as "good" to "excellent." However, 5% of parents rated their child's health as "poor" or "fair."

Health conditions. Parents were asked whether or not a health care professional had diagnosed their child with one or more of eight specific health conditions. The three most common health conditions parents reported their children having were asthma (15%), headaches (15%) and ADHD or ADD (14%).

¹⁰ This figure represents the 2005-2006 average median income from the U.S. Census Bureau's Current Population Survey, 2005 to 2007 Annual Social and Economic Supplements

¹¹ For the sake of simplicity, we refer to both parents and guardians as "parents" in this report.

School performance. Finally, parents were asked if their child has a behavioral or attention problem that affects how well he/she does at school. Twelve percent of parents reported their child had a behavioral problem, and 17% reported their child had an attention problem that affected school performance.

Student Survey: CHIP-AE

The CHIP-AE is composed of 6 major health domains (areas) and 20 sub-domains (see appendix A). Because the CHIP-AE consists of 216 items, we highlight selected findings in the body of the report and present all findings in the appendices. In Appendix B we present the overall means and standard deviations for each domain and sub-domain. In Appendix C, we provide the percentages for each response category of every item in the survey.

Satisfaction

The Satisfaction scale measures perceived level of health and well-being and consists of two sub-scales: Satisfaction with Health and Self-esteem. On a scale of 1 to 4.5,¹² students reported a mean satisfaction score of 3.21, indicating a moderate level of satisfaction with their health and well-being.

Satisfaction with Health. This scale measures overall perceptions of and beliefs about one's health and includes such items as the extent to which one feels full of energy, resists illness well, or is physically fit. Overall, students indicated a moderate level of satisfaction with their health, reporting a mean satisfaction score of 3.07 on a scale of 1 to 5.

- When asked "How is your health in general?" 92% of students said that their health was "excellent" to "good;" 8% said their health was "fair" to "poor."

Self-esteem. This scale measures an individual's general self-concept and includes such items as the degree to which one believes he/she has a lot of good qualities, has much to be proud of, and feels socially accepted. Overall, students indicated high levels of self-esteem, reporting a mean self-esteem score of 3.34 on a scale of 1 to 4.

- When asked how much they agreed with the statement "I have a lot of good qualities," 87% of students either completely agreed or mostly agreed.

Discomfort

The Discomfort scale measures specific physical and emotional sensations or feelings that interfere with comfort and is composed of three sub-scales: Physical Discomfort, Emotional Discomfort, and Limitations of Activity. Students reported a low level of discomfort; on a scale of 1 to 5 (1 = low discomfort; 5 = high discomfort),¹³ students reported a mean discomfort score of 1.60. Despite the low level of discomfort, some students are experiencing noteworthy physical and emotional problems.

¹² The maximum score for Satisfaction is the average of the maximum scores for Satisfaction with Health and Self Esteem, which are 5 and 4, respectively.

¹³ CHIP-AE scoring instructions direct the user to reverse code the items so that the higher the score, the less discomfort. Since we thought this approach might cause confusion among our readers, we chose to score the items so that the higher the score, the greater the discomfort. We applied this same approach to items in the Risk and Disorder domains so that the higher the risk or disorder, the higher the score.

Physical Discomfort. This scale measures both positive and negative somatic feelings and symptoms. Items in this scale ask individuals to identify how many days in the past four weeks they have experienced a particular source of physical discomfort, such as a cough, a headache, or a stomachache. Overall, students reported a low level of physical discomfort. On a scale of 1 to 5 (1 = no days; 5 = 15 to 28 days), students reported a mean physical discomfort score of 1.68, meaning that they experienced 3 or fewer days of physical discomfort in the past 4 weeks. Despite the overall low level of physical discomfort among students, substantial numbers are experiencing fatigue, lack of energy, and chronic pain.

- *Fatigue and Lack of Energy:* 37% of students woke up feeling tired, and 11% tired easily or felt like they had no energy on more than seven days in the preceding four weeks. This finding is troubling and suggests that students may not be getting adequate sleep (see Sleep Disturbances below).
- *Days Free of Pain:* 20% of students reported that there were *no days* when they were free of pain in the preceding four weeks.

Emotional Discomfort. This scale measures both positive and negative emotional feelings and symptoms. Items in this scale ask individuals to identify how many days in the past four weeks they experienced a particular source of emotional discomfort, such as trouble sleeping, feeling depressed, or feeling nervous. Overall, students reported a low level of emotional discomfort. On a scale of 1 to 5 (1 = no days; 5 = 15 to 28 days), students reported a mean emotional discomfort score of 1.79, meaning that, on average, they experienced 3 or fewer days of emotional discomfort in the past 4 weeks. However, this average obscures the fact that many students are experiencing emotional discomfort in various forms, including self-harm or suicide, sleep disturbances, disordered eating, and not feeling loved or wanted.

- *Self-harm and Suicide:* 9% of students reported they had tried to seriously hurt or kill themselves. Of those who reported they had harmed themselves or attempted suicide, 59% did so more than a year ago, and 41% did so in the past year.
 - *Middle School Students:* 5% of middle school students reported ever trying to seriously hurt or kill themselves.
 - *High School Students:* 11% of high school students reported ever trying to seriously hurt or kill themselves.
- *Sleep Disturbances:* 14% of students reported difficulty sleeping on more than seven days in the preceding four weeks, and 21% reported that they had *never* woken up feeling refreshed in the past four weeks. These findings may, in part, explain the findings above regarding student fatigue and lack of energy.
- *Disordered Eating:* 8% of students reported vomiting on purpose to lose weight, and 24% reported going on an eating binge in the last year.
- *Feeling Loved or Wanted:* 10% of students reported *not* feeling loved or wanted in the past four weeks.

Limitations of Activity. This scale measures restrictions in age-appropriate activities and limitations in mobility. The items composing this scale ask students to identify how many days in the past four weeks they experienced a limitation in their activities, such as missing school, trouble walking, or trouble bending and lifting. Overall, students reported few limitations on their activities. On a scale of 1 to 5 (1 = no days; 5 = 15 to 28 days), students reported a mean limitation score of

1.33, meaning that they experienced 3 or fewer days of limitations on their activities in the past 4 weeks. The most common limitation to activity was missing more than a half a day of school or work (39%) in the past 4 weeks.

Risks

The Risks scale measures states and behaviors that increase the likelihood of illness or injury and consists of three sub-scales: Individual Risks, Threats to Achievement, and Peer Influences. Overall, students report a low level of risk. On a scale of 1 to 4.67,¹⁴ students reported a mean risk score of 1.56. Nevertheless, many students are engaging in behaviors that put their health and personal achievement at risk.

Individual Risks. This scale measures activities that threaten an individual's health and development and includes items related to the consumption of alcohol, tobacco, and other drugs; items related to sexual activity; and other high-risk behaviors. On average, students reported a low level of individual risk. On a scale of 1 to 5, students reported a mean risk score of 1.56. The following are some of the more noteworthy individual risks:

- *Substance Use:* The most frequently used substances were beer, wine, or wine coolers, with 16% of high school students and 3% of middle school students reporting that they had drunk beer, wine, or wine coolers in the past month.
- *Sexual Activity:* One hundred fifty-eight participants (17%) reported that they had ever had sexual intercourse. Of those, 18 (11%) were middle school students and 140 (89%) were high school students.
 - *Age First Had Sex:* Of the students who reported ever having sex, 56% reported that they first had sex when they were 13 years old or younger. All middle school students who had ever had sex had done so when they were 13 years old or younger, and 50% of high school students who had ever had sex had done so when they were 13 years old or younger.
 - *Number of Sexual Partners:* Of the students who reported having sex, 45% reported having two or more opposite-sex partners, and 14% reported having at least one same-sex partner.
 - *Contraception Use:* Of the students who reported having sex, 18% reported using no form of contraception the last time they had sex, 76% reported using a condom, 15% reported using the birth control pill, and 15% reported using withdrawal.

Threats to Achievement. This scale measures behaviors that have the potential to disrupt social development, such as carrying a weapon, gang involvement, and theft. On average, students reported a low level of threats to their achievement. On a scale of 1 to 5, students reported a mean threat score of 1.69. Below are some of the more notable threats to students' achievement:

- *Violence:* 14% of students reported ever carrying a weapon for protection, 29% threatened to hurt someone else, and 30% physically attacked another person.
- *Trouble at School:* 52% of students reported trouble concentrating or paying attention in school, and 53% reported trouble getting their school work done in the past four weeks.

¹⁴ The maximum score for Risks is the average of the maximum scores for Individuals Risks, Threats to Achievement, and Peer Influences, which are 5, 5, and 4, respectively.

In addition, 32% reported being expelled or suspended from school in the past two school years.

Peer Influences. This scale measures the extent of an individual's involvement with peers who engage in risky behaviors such as the use of ATOD and sex. On average, students reported a low level of negative peer influence. On a scale of 1 to 4, students reported a mean negative peer influence score of 1.43. Some of the risky peer behaviors worth mentioning are:

- *Peer Sexual Activity:* 46% of students reported at least some of their friends have sexual intercourse.
- *Peer Alcohol Consumption:* 42% of students reported at least some of their friends drink alcohol.
- *Peer Cigarette Smoking:* 36% of students reported at least some of their friends smoke cigarettes.

It is worth noting that the estimates of peer sexual activity (46%) and alcohol consumption (42%) are considerably higher than self-reports of sexual activity (17%) and alcohol consumption (26%), suggesting that students overestimate the extent to which their peers are drinking and having sex. Only the estimate of peer cigarette smoking (36%) is consistent with self-reports.

Resilience

The resilience domain captures states and behaviors that are predictive of good health and is composed of four sub-domains: Family Involvement, Social Problem Solving, Physical Activity, and Home Health and Safety. On average, students reported a moderate level of resilience. On a scale of 1 to 4.75,¹⁵ students reported a mean resilience score of 3.34. Although, on average, students reported a moderate level of resilience, some students are experiencing considerable threats to their resilience.

Family Involvement. This scale measures the extent of an individual's activities with his/her family and perceived degree of family support. Students reported a moderate level of family involvement. On a scale of 1 to 5, students reported a mean family involvement score of 3.91. A number of students were lacking supportive adults in their lives.

- *Supportive Adults:* Approximately 13% of participants reported that they do *not* have an adult to turn to for help if they have a real problem, and 12% report that they do *not* have adults in their lives who are really interested in what they do and encourage them to do their best.
- *Parent/Adult Conversations:* In addition, 19% of students reported that neither their parents nor any other adult in their family had talked with them or listened to their opinions or ideas in the last four weeks.

Social Problem Solving. This scale measures the degree to which an individual uses active approaches to solving interpersonal problems. Students reported a moderate level of active interpersonal problem solving. On a scale of 1 to 4, students reported a mean social problem solving score of 2.71.

¹⁵ The maximum score for Resilience is the average of the maximum scores for Family Involvement, Social Problem Solving, Physical Activity, and Home Health and Safety, which are 5, 4, 5, and 5, respectively.

- *Common Problem Solving Strategies:* The three most common strategies for coping with a social problem included trying to calm down (75%), trying to solve the problem directly (73%), and thinking and wishing the problem had never happened (66%). It is worth noting that only 1% of participants reported relying *exclusively* on passive coping strategies such as wishing the problem had never happened.

Physical Activity. This index¹⁶ measures the extent of an individual's involvement in activities that promote physical fitness. Students reported a moderate level of physical activity. On a scale of 1 to 5, students reported a mean physical activity score of 3.02. Although most students reported engaging in some form of physical exercise in the past four weeks, a noteworthy number had not engaged in any strenuous form of physical activity.

- *Overall Physical Activity:* On average, 789 students (83%) reported engaging in the past four weeks, to some degree, in the four forms of physical activity (sit-ups, walking, running, team sports) measured.
- *Exercise:* 22% of students did *not* engage in exercise hard enough to make them breathe hard, make their heart beat fast, or make them sweat for more than 20 minutes in the previous four weeks.

Home Health and Safety. This index taps aspects of the home environment that either reduce or increase the likelihood of harm to self. Students reported a high level of home health and safety; on a scale of 1 to 5, students reported a mean home health and safety score of 3.70. However, for a number of students, there were elements of their home environment that posed threats to their health, including poor nutrition, possible exposure to second-hand smoke, and excessive television and video watching.

- *Nutrition:* 45% of students reported eating fast foods such as fried chicken, french fries, onion rings, or hamburgers at least several times a week, if not every day, in the past four weeks, and only 54% of students reported eating fruits and vegetables every day.
- *Exposure to Cigarette Smoke:* 49% of students reported that someone in their home smokes cigarettes, suggesting possible exposure to second-hand smoke.¹⁷
- *Feeling Safe:* 13% of students reported not feeling safe in their schools and 15% reported not feeling safe in their neighborhoods.
- *Television and Videos:* 46% of students reported watching three or more hours of television or videos on an average school day in the past four weeks.

¹⁶ The CHIP-AE consists of both scales and indexes. Whereas scales measure single, unitary, underlying constructs by summing the scores of correlated items, indexes are composite measures of several different, but related, things. For example, self-esteem is measured by summing the scores of 5 different items, all of which are strongly associated with each other. Having a high score on one item predicts a high score on another item. In contrast, the physical activity index is computed by summing scores across 5 activities, but these activities are not necessarily associated with each other; involvement in one activity does not predict engaging in another.

¹⁷ We cannot assume that students who report that someone in their home smokes are exposed to second-hand smoke as the smoker may not smoke in the home.

Achievement

This scale measures performance in school and workplace settings and is composed of Academic Performance and Work Performance indexes. Overall, students reported a high level of personal achievement. On a scale of 1 to 4.5,¹⁸ students reported a mean achievement score of 3.65.

Academic Performance. This index includes such items as what type of student the individual was in school in the past month—excellent, good, average, or below average—and whether the student failed a class. Students reported a moderate level of academic achievement. On a scale of 1 to 4 (1 = low performance; 4 = high performance), students reported a mean academic performance score of 2.84. Although students reported doing quite well in school, nearly one-third had failed a subject within the past two years.

- *Overall Student Performance:* When asked to report how they perceive themselves as students, 72% reported that they were either an “excellent” or “good” student, and 28% reported they were an “average” or “below average” student.
- *Honor Roll:* 63% of participants reported that they were on the honor roll in the past two years
- *Failed a Subject:* 31% of participants reported that they failed a subject within the past two years.

Work Performance. This index includes items such as the number of days one was either late for or did not show up for work in the past four weeks. Overall, students who were employed reported a high level of Work Performance. On a scale of 1 to 5 (1 = low performance; 5 = high performance), students reported a mean work performance score of 4.50.¹⁹

Physical and Mental Health Conditions²⁰

This domain covers diagnostic conditions, injuries, or impairments and consists of six sub-domains: Acute Minor Medical Conditions, Acute Major Health Conditions, Recurrent Medical Conditions, Long-term Medical Conditions, Long-term Surgical Conditions, and Psychosocial Disorders. Overall, students reported few physical or psychosocial conditions. On a scale of 1 to 5 (1 = low conditions; 5 = high conditions), students reported a mean condition score of 1.47. Students also reported a low level of conditions captured by the condition sub-scales. For the following conditions subscales, 1 represents a low level of medical conditions and 5 represents a high level of medical conditions. While serious medical conditions are uncommon among most students, a noteworthy number are suffering from a variety of conditions.

Acute Minor Medical Conditions. This index includes minor medical conditions such as colds, tonsillitis, and sprains. On a scale of 1 to 5, students reported a mean acute minor medical condition score of 1.75. The most commonly reported minor medical condition was a cold or flu,

¹⁸ The maximum score for Achievement is the average of the maximum scores for Academic Performance and Work Performance, which are 4 and 5, respectively.

¹⁹ To be eligible to answer the Work Performance items, students needed to have been employed during the four weeks preceding the survey. Consequently the sample size for these items is relatively smaller—339 as compared to a low of 918 for all other scales and sub-scales.

²⁰ The CHIP-AE refers to this domain as the Disorders domain. To be consistent with common terminology, we have chosen to call disorders health or medical conditions instead.

with 78% of participants indicating they had a cold or flu in the past year. Of these students, 13% of students reported having a cold or flu four or more times in the past year.

Acute Major Health Conditions. This index captures conditions such as pneumonia, broken bones, and hepatitis. On a scale of 1 to 5, students reported a mean acute major condition score of 1.21. The most common major health condition that youth reported was a broken bone, dislocated joint, or broken nose (16%). The most troubling finding among this group of conditions was the number of students who reported being the targets of physical violence.

- ***Physical Abuse:*** 21% of students reported that someone had tried to physically hurt them on purpose in the last year. Of these students 37% reported that this caused a change in their feelings, such as fear or depression, 31% reported this caused a change in what they did (e.g., where they went or how they acted), and 26% reported this caused a physical injury.

Recurrent Medical Conditions. Conditions such as ear infections, asthma, and allergies are captured by this index. On a scale of 1 to 5, students reported a mean recurrent medical condition score of 1.45. The three most commonly reported recurrent medical conditions were sinus trouble or sinusitis (50%), migraine headaches (29%) and hay fever or allergies (25%).

Long-term Medical Conditions. This index includes chronic medical conditions such as arthritis, diabetes, and epilepsy. On a scale of 1 to 5, students reported a mean long-term medical condition score of 1.07. No long-term medical conditions were reported by more than 6% of participants. Arthritis, joint diseases, or joint problems was the most frequently reported problem, with 3% of the youth reporting they had a joint problem in the past year.

Long-term Surgical Conditions. Scoliosis and vision or hearing problems are some of the conditions that are captured by this index. On a scale of 1 to 5, students reported a long-term surgical condition score of 1.42. Very few long-term surgical conditions were reported by participants. The only condition reported by more than 10% of the participants was vision problems (35% of participants reported this problem).

Psychosocial Disorders. This index captures disorders such as speech problems, eating disorders, and learning disabilities. On a scale of 1 to 5, students reported a mean psychosocial disorder score of 1.27. The most frequently reported psychosocial disorder was an emotional, mental, or behavioral problem (reported by 12% of participants).

Summary and Conclusions

Although the overall findings from the *Parent Survey* and *CHIP-AE student survey* indicate that students in this study are in good health, noteworthy numbers of students are experiencing either serious health problems or potential threats to their health, well-being, and achievement in a variety of areas.

Parent Survey

The vast majority of parents (76%) reported that their child's health was "excellent" or "very good." In addition, most parents reported that their child does not have behavioral (87%) or attention (79%) problems that affect his or her school performance. Nevertheless, a small but significant minority of

parents reported that their child suffers from one or more of the following health conditions: asthma (15%), headaches (15%) and ADHD or ADD (14%).

Student Survey: CHIP-AE

On average, students report a moderate to high degree of satisfaction with their health and well-being, a low level of physical and emotional discomfort, a low level of personal risk, a moderate level of resilience, a high level of personal achievement, and few physical or psychosocial disorders. Nevertheless, a considerable number of students are experiencing problems in one or more of these areas. What follows is a selection of what we view as the more significant health-related problems and health-compromising behaviors or environmental conditions that students reported.

Physical Discomfort

- ***Fatigue and Lack of Energy:*** 37% of students woke up feeling tired, and 11% tired easily or felt like they had no energy on more than seven days in the preceding four weeks.
- ***Days Free of Pain:*** 20% of students reported that there were *no days* when they were free of pain in the preceding four weeks.

Emotional Discomfort

- ***Self-harm and Suicide:*** 9% of students reported they had tried to seriously hurt or kill themselves.
 - ***Middle School Students:*** 5% of middle school students reported ever trying to seriously hurt or kill themselves.
 - ***High School Students:*** 11% of high school students reported ever trying to seriously hurt or kill themselves.
- ***Sleep Disturbances:*** 14% of students reported difficulty sleeping on more than seven days in the preceding four weeks; 21% reported that they had *never* woken up feeling refreshed in the past four weeks.
- ***Disordered Eating:*** 8% of students reported vomiting on purpose to lose weight; 24% reported going on an eating binge in the last year.
- ***Feeling Loved or Wanted:*** 10% of students reported *not* feeling loved or wanted in the past four weeks.

Individual Risks

- ***Sexual Activity:*** 17% of students reported that they had ever had sexual intercourse. Of those, 11% were middle school students and 89% were high school students.
 - ***Age First Had Sex:*** 56% of students reported that they first had sex when they were 13 years old or younger. Among high school students who had ever had sex, 50% had done so when they were 13 years old or younger.
 - ***Contraception Use:*** Of the students who reported having sex, 18% reported using *no* form of contraception the last time they had sex, 76% reported using a condom, 15% reported using the birth control pill, and 15% reported using withdrawal. Failure to use contraception increases the risk for pregnancy and sexually transmitted infections.

Threats to Achievement

- ***Violence:*** 14% of students reported ever carrying a weapon for protection, 29% threatened to hurt someone else, and 30% physically attacked another person.
- ***Trouble at School:*** 53% of students reported trouble getting their school work done in the past four weeks; 32% reported being expelled or suspended from school in the past two school years.

Peer Influences

- ***Sexual Activity:*** 46% of students reported at least some of their friends have sexual intercourse.
- ***Alcohol Consumption:*** 42% of students reported at least some of their friends drink alcohol.
- ***Cigarette Smoking:*** 36% of students reported at least some of their friends smoke cigarettes.

Family Involvement

- ***Supportive Adults:*** 13% of participants reported that they do *not* have an adult to turn to for help if they have a real problem; 12% report that they do *not* have adults in their lives who are really interested in what they do and encourage them to do their best.
- ***Parent/Adult Conversations:*** 19% of students reported that neither their parents nor any other adult in their family had talked with them or listened to their opinions or ideas in the last four weeks.

Physical Activity

- ***Exercise:*** 22% of students did *not* engage in exercise hard enough to make them breathe hard, make their heart beat fast, or make them sweat for more than 20 minutes in the previous four weeks.

Home Health and Safety

- ***Nutrition:*** 45% of students reported eating fast foods such as fried chicken, french fries, onion rings, or hamburgers at least several times a week, if not every day, in the past four weeks.
- ***Exposure to Cigarette Smoke:*** 49% of students reported that someone in their home smokes cigarettes, suggesting possible exposure to second-hand smoke.
- ***Feeling Safe:*** 13% of students reported not feeling safe in their schools and 15% reported not feeling safe in their neighborhoods.
- ***Television and Videos:*** 46% of students reported watching three or more hours of television or videos on an average school day in the past four weeks.

Physical and Mental Health Conditions

- ***Physical Abuse:*** 21% of students reported that someone had tried to physically hurt them on purpose in the last year. Of these students 37% reported that this caused a change in their feelings, such as fear or depression, 31% reported this caused a change in what they did (e.g., where they went or how they acted), and 26% reported this caused a physical injury.

Discussion

This pattern of findings suggests that, while the majority of students report positive health outcomes, there are still areas in which students' health could be improved and/or their risks for poor health outcomes reduced. Below, we briefly review some of the major areas of concern in order of average overall prevalence.²¹ When reviewing the areas of concern below, it is worth keeping in mind that this report is based on data obtained from students in the 6th and 9th grades and their parents. As such, the risks to the health and well-being of students identified below are likely to increase with age.

Nutrition and Physical Activity

The first major area of concern is student eating habits and amount of physical activity. The lack of regular exercise, regular consumption of fast food, and excessive television watching reported by some students are of particular concern given the youth obesity epidemic in the U.S. Clearly, additional efforts to promote healthy eating habits and regular physical exercise are needed.

Interpersonal Violence

The second area of concern is interpersonal violence and personal safety. As we reported, a considerable number of students reported carrying a weapon, threatening to hurt someone else, or physically attacking another person. In addition, 21% of students reported that someone had tried to physically hurt them on purpose in the last year, an experience that often resulted in negative feelings or changes in the victim's behavior. Reflecting this level of interpersonal violence, many students do not feel safe in their schools or neighborhoods. Although we have not yet fully explored these relationships, exposure to such violence is likely to have significant consequences for the health, well-being, and academic performance of students.

Tiredness and Difficulty Sleeping

The third area of concern is the frequency with which students reported feeling tired or having difficulty sleeping. As we reported, many students wake up feeling tired, tire easily, or feel like they have no energy. Furthermore, several students reported difficulty sleeping or not waking up feeling refreshed. Taken together, these findings paint a portrait of students who, given their level of sleeplessness and fatigue, are unlikely to perform well in school. The reasons for and consequences of such a high level of fatigue and sleeplessness among middle and high school students need further exploration.

Sexual Activity

The fourth area of concern is the number of middle and high school students who are engaging in sexual intercourse and the inconsistent use of contraceptives when they do so. As we reported, 17% of students have had sex. Among sexually active students, 18% reported not using contraception the last time they had sex. Such findings highlight the importance of reproductive health education and access to pregnancy testing and sexually transmitted infection (STI) testing and treatment. And, given that fact that 56% of sexually active students reported first having sex at age 13 or younger, when they would have been in middle school, it would appear that such education, testing, and treatment should be provided at both the high school and middle school level.

²¹ Average overall prevalence was arrived at by taking the mean of the overall prevalence of the items constituting the area of concern.

Lack of Adult Support

The final area of concern has to do with the perceived lack of adult support and encouragement. Among the children in our study, nearly one in five said that neither their parents nor any other adult in their family had talked with them or listened to their opinions or ideas in the last four weeks. Significant numbers of students also said that they do not have any adult to turn to for help if they have a real problem, and one in ten said that they do not feel loved or wanted. The perceived lack of adult support among these children is likely to have a variety of negative consequences, including psychological distress, high-risk behaviors, and poor school performance.

Implications for Practice

Given such threats to the health and well-being of a small, but noteworthy number of middle and high school students in our study, what are potential strategies for reducing those threats? Because most children spend the majority of their waking hours for nine months of the year in school, the school setting provides an opportunity for reaching young people. Some of the identified challenges to student health and well-being might be effectively addressed at a school-wide level. For example, with regard to poor nutrition and lack of physical exercise, strategies for fostering healthy behavior change might include school-wide health education campaigns, increased opportunities for physical activity, and increased healthy lunch options. Other issues may be most appropriately addressed by experts within the school setting. For example, for youth struggling with emotional problems and interpersonal violence, trained social workers may be best positioned to assist students in identifying healthy coping strategies and assessing the need for more intensive intervention. With many potential mechanisms for promoting student health, the school setting is a well-suited environment in which to promote the health and well-being of young people.

Future Directions: Evaluating School-Based Health Centers

In forthcoming reports we will examine the impact of an additional resource for addressing threats to school-aged children's health: school-based health centers. Housed within schools and staffed by trained medical and mental health providers, SBHCs have the potential to offer ameliorative as well as preventative health services. Through qualitative interviews with center and school staff, we will investigate the specific services SBHCs provide that may address the health concerns identified here. In addition, through the quantitative data we have collected, we will examine whether students attending schools with health centers experience better health outcomes. Ultimately, through this evaluation we will better understand the ways in which school-based health centers promote student health.

Study Limitations

The findings presented in this report should be considered in light of some limitations of the study. Because the process evaluation component of this study depends on high quality SBHC billing data to accurately assess the numbers and types of healthcare services delivered by SBHCs, the schools with SBHCs that were selected to participate in this study were those with a demonstrated track record of submitting high quality billing data. For each school with an SBHC that was selected to participate in this study, a school without an SBHC with a similar student demographic profile was selected. As such, the schools in this study represent a non-probability (non-random) sample. Because of this, caution should be exercised in generalizing from the results for the students in this study to the population of students attending public middle and high schools in Michigan. In addition, because we were advised by our school and SBHC partners that probability sampling

strategies were likely to yield extremely low participation rates, we instead used a variety of strategies (described in the Methods section) to enroll as many students as possible at each school. As such, caution should be exercised in generalizing from the sample of students in the study at a particular school to the entire population of students at that school. Since parents were enrolled in the same manner as students, a similar caution applies to generalizing parent survey findings at a particular school to all parents at that school. Despite these limitations, the descriptive data reported here point to potential areas of concern regarding the health and well-being of middle and high school students in public schools in Michigan.

Appendix A

Child Health and Illness Profile-Adolescent Edition Domains and Sub-domains

Domain	Sub-domain	Description
Satisfaction Perceived level of health and well-being	Satisfaction with Health	Overall perceptions of and beliefs about one's health
	Self-esteem	General self concept
Discomfort Specific physical and emotional sensations/ feeling that interfere with comfort	Physical Discomfort	Positive and negative somatic feelings and symptoms
	Emotional Discomfort	Positive and negative emotional feelings and symptoms
	Limitations of Activity	Restrictions in age-appropriate activities and limitations in mobility
Risks States and behaviors that increase the likelihood of subsequent illness or injury	Individual Risks	Activities that threaten individual health and development
	Threats to Achievement	Behaviors that typically disrupt social development
	Peer Influences	Involvement with peers who engage in risky behaviors
Resilience States and behaviors potentially associated with positive future health	Family Involvement	Level of activities with family and perceived family support
	Social Problem Solving	Active approaches to solving an interpersonal problem
	Physical Activity*	Level of involvement in activities related to fitness
	Home Health and Safety*	Aspects of home that reduce/increase likelihood of harm
Achievement Expectations for role performance in school and/or work	Academic Performance*	School performance and involvement
	Work Performance*	Work involvement and performance
Physical and Mental Health Conditions Diagnostic conditions, injuries, and impairments	Acute Minor Medical Conditions*	Colds, tonsillitis, sprains...
	Acute Major Health Conditions*	Pneumonia, broken bones, hepatitis...
	Recurrent Medical Conditions*	Ear infections, asthma, allergies...
	Long-term Medical Conditions*	Arthritis, diabetes, epilepsy...
	Long-term Surgical Conditions*	Scoliosis, vision/hearing problems...
	Psychosocial Disorders*	Speech problem, eating problem, learning disability...

Appendix B

CHIP-AE domain and sub-domain ranges, means, and standard deviations

	N	Min	Max	Mean	SD
SATISFACTION	955	1.00	4.50	3.21	.57
Satisfaction with health	955	1.00	5.00	3.07	.61
Self-esteem	955	1.00	4.00	3.34	.66
DISCOMFORT	939	1.00	5.00	1.60	.43
Physical discomfort	947	1.00	5.00	1.68	.46
Emotional discomfort	946	1.00	5.00	1.79	.62
Limitations of activity	946	1.00	5.00	1.33	.41
RESILIENCE	918	1.00	4.75	3.33	.49
Physical activity	949	1.00	5.00	3.02	.94
Social problem solving	940	1.00	4.00	2.71	.74
Home safety & health	944	1.00	5.00	3.70	.49
Family involvement	938	1.00	5.00	3.91	.93
RISKS	921	1.00	4.67	1.56	.43
Individual risks	943	1.00	5.00	1.55	.42
Threats to achievement	938	1.00	5.00	1.69	.60
Peer influences	948	1.00	4.00	1.43	.51
HEALTH CONDITIONS	925	1.00	5.00	1.47	.28
Acute minor medical conditions	939	1.00	5.00	1.75	.51
Acute major medical conditions	942	1.00	5.00	1.21	.33
Recurrent medical conditions	940	1.00	5.00	1.45	.44
Long-term medical conditions	939	1.00	5.00	1.07	.22
Long-term surgical conditions	932	1.00	5.00	1.42	.54
Psychosocial disorder	938	1.00	5.00	1.27	.54
ACHIEVEMENT	326	1.00	4.50	3.65	.50
Academic performance	944	1.00	4.00	2.84	.63
Work performance	328	1.00	5.00	4.50	.70

Appendix C

Percentages for CHIP-AE Items²²

1. SATISFACTION DOMAIN

1.1 Satisfaction with Health Sub-domain

	N	Completely Agree	Mostly Agree	Agree a Little	Do Not Agree
I am full of energy	951	39.5	39.7	16.9	3.8
I resist illness very well	937	21.1	36.4	29.9	12.6
When I get sick, I usually recover quickly	946	30.2	32.7	24.9	12.2
I am well-coordinated	932	42.0	37.2	16.4	4.4
I am very physically fit	949	33.6	35.6	21.4	9.4
My muscle strength is really good	946	32.1	39.7	21.2	6.9

How is your health in general?	N	%
Excellent	255	27.4
Very good	350	37.6
Good	256	27.5
Fair	62	6.7
Poor	9	1.0

1.2 Self-Esteem Sub-domain

	N	Completely Agree	Mostly Agree	Agree a Little	Do Not Agree
I have a lot of good qualities	942	55.7	31.7	10.1	2.4
I have much to be proud about	951	59.5	25.3	10.8	4.3
I like being the way I am	949	61.5	22.7	11.0	4.8
I am satisfied with how I live my life	946	51.9	29.2	11.7	7.2
I feel socially accepted	941	46.0	36.1	12.8	5.1

²² Due to rounding, not all columns or rows of percentages will sum to 100.

2. DISCOMFORT DOMAIN

2.1 Physical Discomfort Sub-domain

In the PAST 4 WEEKS, on how many days. . .	N	No days	Less than 7 days	More than 7 days
Did you feel really sick?	956	46.0	47.2	6.8
Did you wake up feeling tired?	957	14.8	48.1	37.1
Did you tire easily or feel like you had no energy?	947	44.5	44.6	11.0
Did you have watery or itchy eyes	952	63.6	29.9	6.5
Did you have skin problems, such as itching or pimples?	945	51.3	33.9	14.8
Did you have a cough?	951	48.1	42.8	9.1
Did you have fever or chills?	953	71.9	24.0	4.1
Were you dizzy?	953	69.8	25.3	4.9
Did you have wheezing or trouble breathing (when you weren't exercising)?	953	83.0	12.9	4.1
Did you have chest pain?	949	74.5	22.1	3.4
Did you have a headache?	950	33.4	54.4	12.2
Did you have aches, pains or soreness in your muscles or joints?	948	45.8	43.6	10.7
Did you have a stomach ache?	953	50.4	43.2	6.4
Did you have pain that really bothered you?	947	59.6	34.5	5.9
Did you vomit or feel like vomiting?	949	72.4	25.2	2.4
Did you have an unusual discharge from your sex organs?	929	94.9	4.2	0.9
Did you have trouble passing your urine (peeing) or have burning when you urinated?	940	96.9	2.8	0.3
Did you have trouble eating or have a poor appetite?	944	71.4	23.4	5.2
Did you have diarrhea or loose bowel movements?	936	90.1	8.9	1.1
Did you have constipation or hard bowel movements?	934	93.5	5.9	0.6
<i>FOR GIRLS ONLY</i> : did you have menstrual problems (with your period)?	509	84.5	11.8	3.7

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

In the past four weeks, have you lost weight without trying?	N	%
No, never	597	64.4
Yes, 1 to 4 pounds	234	25.2
Yes, 5 to 9 pounds	64	6.9
Yes, 10 to 14 pounds	18	1.9
Yes, more than 15 pounds	14	1.5

2.1 Physical Discomfort Sub-domain continued...

In the past four weeks on how many days...	N	No days	Less than 7 days	More than 7 days
Were you free of pain?	942	19.9	24.9	55.2
Did you feel really healthy?	931	12.1	30.2	57.7

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

2.2 Emotional Discomfort Sub-domain

In the past four weeks, on how many days...	N	No days	Less than 7 days	More than 7 days
Did you have trouble falling asleep or staying asleep?	945	49.7	36.3	14.0
Did you feel depressed or blue?	943	61.0	31.0	8.1
Did you have trouble relaxing?	945	64.1	29.3	6.6
Were you nervous or uptight?	947	60.3	33.9	5.8
Were you moody?	944	49.8	40.1	10.1
Were you irritable or grouchy?	940	48.8	43.0	8.2
Did you cry a lot?	945	74.8	20.2	5.0
Were you afraid of things?	938	72.3	22.2	5.5

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

Have you EVER tried to seriously hurt yourself or kill yourself?	N	%
No, never	855	91.3
Yes, more than a year ago	48	5.1
Yes, in the past year	25	2.7
Yes, in the past 4 weeks	5	0.5
Yes, in the past 7 days	3	0.3

In the past 12 months, how many times did you...	N	Never	Once or Twice	Several Times
Vomit on purpose to lose weight?	939	91.8	7.0	1.2
Go on an eating binge (you could not stop eating)?	937	75.6	18.9	5.5

In the past four weeks on how many days...	N	No days	Less than one week	More than 7 days
Did you wake up feeling refreshed?	943	20.6	38.0	41.5
Did you feel like you were doing everything just right?	932	17.2	35.7	47.1
Did you feel loved and wanted?	934	10.1	18.8	71.1

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

2.3 Limitations of Activity Sub-domain

In the PAST 4 WEEKS, on how many days did a health or emotional problem cause you to. . .	N	No Days	Less than one week	More than 7 days
Miss more than a half day of school or work?	949	61.4	34.7	3.9
Stay in bed more than half a day, but not miss school or work?	946	73.5	22.8	3.7
Cut down on other things you usually do, but not miss school or stay in bed?	927	67.3	27.4	5.3
Have trouble walking?	946	85.9	12.5	1.6
Have trouble running?	947	81.2	15.8	3.0
Have trouble bending, lifting, stooping or reaching?	942	83.4	13.7	2.9
Have trouble using your hands or fingers, like writing with a pencil, tying your shoelaces, or buttoning clothing?	946	92.2	7.1	0.7

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

3. RISKS DOMAIN

3.1 Individual Risks Sub-domain

In the PAST 12 MONTHS, how many times did you do the following?	N	None	Once or Twice	Several Times
Race on a bike, skateboard or in a boat or car for excitement?	954	34.1	27.0	38.9
Do something risky or dangerous on a dare?	951	61.6	28.2	10.2
Break a rule that your parents set just for the thrill of seeing whether you could get away with it?	946	57.4	30.0	12.6
Steal or shoplift?	947	86.1	11.7	2.2
Slip out at night when your parents thought you were asleep?	945	84.4	11.4	4.1
Willingly ride in a car with someone you knew would drive dangerously?	951	82.2	11.7	6.1

When was the last time you did this?	N	Never	More than one month ago	In the past month
Rode a bicycle?	951	4.1	38.4	57.5
Wore a helmet when riding a bicycle?	944	57.2	35.2	7.6
Rode a motorbike (motorcycle, minibike or ATV – all terrain vehicle)?	943	44.2	37.4	18.3
Wore a helmet when riding a motorbike?	933	63.7	25.6	10.7
Drove a car?	947	51.7	21.2	27.0
Drank alcohol or used drugs before driving a car or riding a motorbike?	950	97.8	1.1	1.2

Note: For the purposes of this report, the original five response categories (never, more than a year ago, in the past year, in the past month, and in the past week) were collapsed into three.

3.1 Individual Risks Sub-domain continued...

When was the last time you did this?	N	Never	More than a year ago	In the past year	In the past month	In the past week
Smoked cigarettes?	945	87.2	5.2	3.1	2.0	2.5
Chewed or dipped tobacco, used snuff or clove cigarettes?	948	97.0	0.6	0.9	0.7	0.6
Drank beer, wine, or wine coolers?	944	74.2	5.2	9.3	7.5	3.8
Drank hard liquor or mixed drinks?	944	80.7	4.0	7.4	4.2	3.6
Had 5 or more drinks in a row (like in one night or at a party)?	947	88.6	2.6	4.1	3.1	1.6
Used marijuana?	947	89.3	3.2	3.3	2.6	1.6
Injected steroids to help build your muscles?	951	98.9	0.6	0.1	0.2	0.1
Used inhalants such as airplane glue or white out?	944	95.0	1.8	0.7	1.4	1.1
Used any kind of cocaine, ice, or crack?	951	98.9	0.6	0.3	0.1	0.0
Used or injected (shot up) any other type of illegal drug such as LSD, PCP, mushrooms, speed, downers or heroin?	953	99.1	0.5	0.1	0.1	0.2

Have you ever had sexual intercourse?*	N	%
No	694	72.4
Yes	158	16.5
Don't know	9	0.9
Did not answer	98	10.2

How old were you when you had sexual intercourse for the first time?	N	%
Younger than age 13	46	29.1
Age 13	42	26.6
Age 14	53	33.5
Age 15	16	10.1
Age 16 or older	1	0.6

	N	None	One	Two	Three	Four or more
How many people of the opposite sex have you had sex with?	148	2.7	52.7	19.6	12.2	12.8
How many people of the same sex have you had sex with?	150	86.0	8.7	3.3	0.7	1.3

3.1 Individual Risks Sub-domain continued...

Which of the following did you or your partner use to prevent pregnancy or sexually transmitted diseases (STDs) or VD the last time you had sexual intercourse? Check all that apply	N	No	Yes
Nothing	152	81.6	18.4
Birth control pill, Nuvaring, Norplant, or Depo Provera	152	85.5	14.5
Foam, cream, jelly, or suppository	152	99.3	0.7
Diaphragm or sponge	152	100.0	0.0
Rubber or condom	152	24.3	75.7
Withdrawal or pulling out	152	85.5	14.5
Something else	152	100.0	0.0

Have you ever been pregnant (GIRLS) or gotten someone pregnant (BOYS)?	N	%
No	125	85.0
Yes	10	6.8
Don't know	12	8.2

3.2 Threats to Achievement Sub-domain

When was the last time you did this?	N	Never	More than one month ago	In the past month
Carried a weapon, such as a gun, razor, or big knife, for protection?	947	86.5	7.1	6.4
Belonged to a gang?	949	92.5	4.6	2.8
Ran away from home?	955	87.2	11.4	1.4
Threatened to hurt someone?	952	70.7	15.9	13.4
Physically attacked someone?	952	69.7	21.1	9.1
Stole something worth more than \$10?	950	87.4	10.4	2.2
Destroyed something belonging to someone else?	951	67.3	24.5	8.2

Note: For the purposes of this report, the original five response categories (never, more than a year ago, in the past year, in the past month, and in the past week) were collapsed into three.

3.2 Threats to Achievement Sub-domain continued...

In the PAST 4 WEEKS, on how many days...	N	No days	Less than 7 days	More than 7 days
Did you lie or cheat?	932	50.1	37.1	12.8
Did you argue a lot?	928	27.2	44.6	28.2
Did you hang around with others who get into trouble?	939	59.3	27.5	13.2
Disobey at school?	935	70.5	24.6	4.9
Have trouble getting along with your teachers?	938	66.4	26.2	7.4
Have trouble concentrating or paying attention in school?	935	47.9	38.7	13.4
Have trouble getting your school work done?	937	47.4	39.6	13.0

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

Have you done any of the following things in the PAST 2 SCHOOL YEARS?	N	No	Yes
Expelled or suspended	947	68.2	31.8

3.3 Peer Influences Sub-domain

How many of your friends would you say do the following:	N	None	Some	Most	All
Smoke cigarettes	949	64.1	31.3	4.0	0.6
Drink alcohol	949	57.7	30.1	10.5	1.6
Smoke marijuana	945	69.6	22.3	6.8	1.3
Use other drugs (cocaine, stimulants, pills)	946	91.0	7.7	1.2	0.1
Have sexual intercourse	942	54.4	27.8	12.6	5.2

4. RESILIENCE

4.1 Family Involvement Sub-domain

How many days in the PAST 4 WEEKS did your parents or other adults in your family...	N	No Days	Less than one week	More than 7 days
Spend time with you doing something fun?	941	10.3	44.7	45.0
Talk with you or listen to your opinions and ideas?	937	19.0	38.8	42.2
Eat meals with you?	941	9.6	23.9	66.5
Have you liked being a member of your family?	939	6.7	16.2	77.1
Did you and your family get along?	937	5.3	20.6	74.1

Note: For the purposes of this report, the original five response categories (no days, 1 to 3 days, 4 to 6 days, 7 to 14 days, and 15 to 28 days) were collapsed into three.

4.1 Family Involvement Sub-domain continued...

Do you feel that...	N	No	Yes
There is an adult you could turn to for help if you have a real problem?	928	13.4	86.6
There are any adults who are really interested in what you do and encourage you to do your best?	924	12.0	88.0

4.2 Social Problem Solving Sub-domain

“The next questions are about how you would deal with a common problem. *IMAGINE: You have had a big fight with a close friend and you think that he or she did not understand you and would not listen to what you were saying.*”

For each statement below, decide how likely you would be to act that way ...	N	Very Unlikely	Somewhat Unlikely	Somewhat Likely	Very Likely
I would talk to others to get advice.	944	22.1	14.8	36.2	26.8
I would try to see the good that could come out of the situation.	933	21.9	17.6	35.0	25.5
I would figure out who was to blame for the situation, and blame them (or myself).	933	35.8	19.0	28.7	16.5
I would try to solve the problem directly.	936	14.0	13.1	31.9	40.9
I would talk about how I was feeling to a friend.	938	23.9	15.2	24.9	35.9
I would try to calm myself down.	941	13.8	11.4	29.8	45.1
I would keep thinking and wishing this thing had never happened.	933	18.5	15.5	29.8	36.1
I would turn to my family or other adult to help me feel better.	937	30.7	16.9	24.9	27.5

4.3 Physical Activities Sub-domain

In the PAST 4 WEEKS, on how many days did you exercise or play sports hard enough to make you breathe hard, make your heart beat fast, or make you sweat for 20 minutes or more?	N	%
No days	212	22.3
1 to 9 days	331	34.8
10-13 days	124	13.0
14-20 days	98	10.3
21 or more days	187	19.6

4.3 Physical Activities Sub-domain continued...

In the PAST 4 WEEKS, how many sit-ups did you do the last time you did them?	N	%
No sit-ups	204	21.5
1-10 sit-ups	133	14.0
11-20 sit-ups	158	16.7
21-50 sit-ups	225	23.8
51 or more sit-ups	227	24.0

In the PAST 4 WEEKS, how far did you walk at any one time without resting and without getting tired?	N	%
I didn't walk at all	89	9.4
Less than ¼ mile	152	16.1
¼ mile to ½ mile	208	22.0
½ mile to 1 mile	224	23.7
More than 1 mile	274	28.9

In the PAST 4 WEEKS, what is the longest time you ran without stopping?	N	%
I didn't run	138	14.5
1 to 10 minutes	439	46.1
11 to 19 minutes	168	17.6
20 to 29 minutes	88	9.2
30 minutes or more	119	12.5

In the PAST 12 MONTHS, how often did you play on a team that has a coach, other than in gym class?	N	%
Never	295	31.1
Once or twice	265	27.9
Several times	390	41.1

4.4 Home Safety and Health Sub-domain

In the PAST 4 WEEKS, how often did you eat the following types of foods...	N	Rarely or never	A few days a month	Several days a week	About every day	More than once a day
Fruits or vegetables?	943	5.6	14.8	26.0	30.0	23.5
Meat, chicken, or fish that was not fried?	936	25.3	17.4	23.5	19.6	14.2
2% or skim milk, or yogurt?	937	22.2	15.4	16.2	22.7	23.5
Grains and cereals like whole-wheat bread, bran cereals, or beans?	940	10.5	13.5	21.8	32.7	21.5
Fast foods, such as fried chicken, french fries, onion rings, and hamburgers?	937	9.3	45.9	26.7	10.7	7.5
Salty foods, such as salted pretzels, chips, or pickles?	938	14.1	33.2	29.5	14.8	8.4
Sweets such as regular soda, doughnuts, candy bars?	937	8.2	26.6	30.6	17.8	16.5

	N	No	Yes
Do you wear a seat belt in a car or truck?	945	5.8	94.2
Is there a working fire extinguisher in your home?	766 ^a	49.9	50.1
Is there a working smoke detector or smoke alarm in your home?	859 ^b	6.6	93.4
Does anyone in your home smoke cigarettes?	941	51.3	48.7
Are there any guns in your home?	837 ^c	69.8	30.2
Do you feel that you are safe in school?	937	13.0	87.0
Do you feel that you are safe in your neighborhood?	939	14.9	85.1
Overall, you are challenged to do your best?	942	12.5	87.5

^a181 participants did not know if there a working fire extinguisher in their home.

^b89 participants did not know if there was a working smoke detector in their home.

^c114 participants did not know if there were any guns in their home.

In the PAST 4 WEEKS, how many hours did you watch TV or videos on an average school day?	N	%
None	36	3.9
Less than 1 hour	162	17.6
1 to 2 hours	298	32.4
3 to 4 hours	174	18.9
4 or more hours	250	27.2

4.4 Home Safety and Health Sub-domain continued...

In general, is there a certain time of night when you have to be home on a SCHOOL NIGHT?*	N	%
Not usually permitted to go out on school nights	42	15.5
Have to be in by 8:00 pm	60	22.1
Have to be in by 9:00 pm	61	22.5
Have to be in by 10:00 pm	53	19.6
No particular time	55	20.3

*This item was accidentally omitted from the first 688 surveys administered

5. ACHIEVEMENT DOMAIN

5.1 Academic Performance Sub-domain

Which of the following statements best describes how you did in school in the PAST 4 WEEKS?		
	N	%
Excellent student	283	30.3
Good student	390	41.8
Average student	222	23.8
Below average student	38	4.1

Which of the following statements best describes how you did on your homework in the PAST 4 WEEKS?		
	N	%
Did very well, could not do better	216	23.2
Did about as well as I could	390	41.8
Could have done a little better	241	25.9
Could have done much better	85	9.1

Have you done any of the following things in the past two years?	N	No	Yes
I failed a subject.	945	69.5	30.5
I failed a grade (had to repeat a year).	944	92.8	7.2
I was on the honor roll.	945	37.4	62.6
I received a school award or prize.	944	35.1	64.9
I was an officer in a school club or organization	942	85.1	14.9

5.2 Work Performance Sub-domain

In the PAST 4 WEEKS, how often did you do the following...	70 N	Never	Once or Twice	Several Times
23. I was late for work.	328	82.6	14.9	2.4
24. I was absent from work.	328	80.8	17.7	1.5
25. I failed to do the things I was supposed to do.	326	75.2	20.9	4.0
26. I had trouble getting my work done.	328	73.8	21.6	4.6

6. PHYSICAL AND MENTAL HEALTH CONDITIONS DOMAIN

6.1 Acute Minor Medical Conditions Sub-domain

In the PAST 12 MONTHS, how many times did you have...	N	None	Once	Two Times	Three Times	4 or More Times
A cold or flu?	944	22.2	29.7	24.2	11.3	12.6
A sore throat or tonsillitis?	938	35.0	29.7	16.8	8.7	9.7
Upset stomach with vomiting or diarrhea or fever?	934	50.2	23.6	11.1	7.9	7.2
Bronchitis?	929	89.2	6.8	1.8	1.2	1.0
A skin infection?	938	90.0	6.5	1.4	0.7	1.4

Has a doctor ever said you had...	N	No, Never	Yes, but NO PROBLEMS in the last year	Yes, and HAD PROBLEMS in last year
A sexually transmitted disease (STD) or venereal disease (VD) like gonorrhea (clap), syphilis, Chlamydia, genital warts, or genital herpes?	931	98.9	0.8	0.3

In the PAST 12 MONTHS, did you have any of the following injuries...	N	No, Never	Yes, but I DID NOT see a doctor or a nurse	Yes, and I DID see a doctor or a nurse
A bad cut or scrape?	950	35.7	51.3	13.1
A bad sprain or torn ligament?	939	75.4	10.4	14.2
A bite from another person or animal?	947	81.9	14.9	3.2
A bad burn?	948	82.2	14.2	3.6

6.2 Acute Major Health Conditions Sub-domain

In the PAST 12 MONTHS, how many times did you have...	N	None	Once	Two Times	Three Times	4 or More Times
Pneumonia?	932	96.8	2.5	0.5	0.1	0.1
Infectious mononucleosis (mono)?	934	97.3	2.2	0.3	0.0	0.1

Has a doctor ever said you had...	N	No, Never	Yes, but NO PROBLEMS in the last year	Yes, and HAD PROBLEMS in last year
Hepatitis?	940	99.4	0.4	0.2
Rheumatic fever?	936	98.4	1.3	0.3

In the PAST 12 MONTHS, did you have any of the following injuries...	N	No, Never	Yes, but I DID NOT see a doctor or a nurse	Yes, and I DID see a doctor or a nurse
A broken bone, dislocated joint, or broken nose?	944	84.3	3.1	12.6
A bad head injury or concussion?	946	91.2	4.1	4.7
A gun shot wound or stab wound?	947	97.7	1.1	1.3

In the PAST 12 MONTHS, how many times did anyone physically hurt you on purpose?	N	%
None	737	78.6
1 time	82	8.7
2 times	42	4.5
3 times	19	2.0
4 or more times	58	6.2

Did being hurt by someone. . .	N	No	Yes
Cause a change in your feelings (like fear or depression)?	205	63.4	36.6
Cause a change in what you do (like where you go and how you act)?	206	69.4	30.6
Cause a physical injury?	205	73.7	26.3
Cause you to get medical treatment?	205	95.1	4.9

6.3 Recurrent Medical Conditions Sub-domain

In the PAST 12 MONTHS, how many times did you have...	N	None	Once	Two Times	Three Times	4 or More Times
Sinus trouble or sinusitis?	935	50.1	16.3	13.2	7.2	13.4
An ear infection?	934	75.4	14.8	5.0	2.4	2.5
A bladder infection or urinary tract infection?	940	92.8	5.0	1.1	0.2	1.0
Any fungal diseases like athlete's foot or ringworm?	943	89.6	7.8	1.6	0.5	0.4

Has a doctor ever said you had...	N	No, Never	Yes, but NO PROBLEMS in the last year	Yes, and HAD PROBLEMS in last year
Serious acne, eczema or other allergic rashes?	943	80.6	11.5	8.0
Hay fever or allergies?	934	75.2	13.1	11.8
Gum disease (not tooth cavities)?	942	94.1	4.1	1.8
Anemia, tired or thin blood?	936	97.2	2.0	0.7
Asthma?	939	83.2	8.0	8.8
Migraine headaches?	936	70.8	15.3	13.9
FOR GIRLS ONLY: Pelvic inflammatory disease (PID)?	505	99.0	0.8	0.2

6.4 Long-Term Medical Conditions Sub-domain

Has a doctor ever said you had...	N	No, Never	Yes, but NO PROBLEMS in the last year	Yes, and HAD PROBLEMS in last year
Lead poisoning?	935	98.5	1.3	0.2
Arthritis or any joint disease or joint problem?	938	94.0	2.8	3.2
Epilepsy (seizures or fits)?	935	98.5	1.3	0.2
Heart disease or a heart condition?	938	96.2	2.2	1.6
Sugar diabetes (sugar in the blood)?	939	97.8	1.4	0.9
Sickle cell anemia?	941	99.0	0.7	0.2

6.5 Long-Term Surgical Conditions Sub-domain

Has a doctor ever said you had...	N	No, Never	Yes, but NO PROBLEMS in the last year	Yes, and HAD PROBLEMS in last year
Any other condition affecting the bone, cartilage, muscle, or tendon?	936	92.6	3.3	4.1
Curvature of the spine or scoliosis?	936	95.6	2.4	2.0

6.5 Long-Term Surgical Conditions Sub-domain continued...

Do you NOW have...	N	No	Yes
A hearing problem?	939	94.1	5.9
A vision problem?	944	65.4	34.6
A part of your body that is disabled or deformed?	943	96.5	3.5

6.6 Psychosocial Disorders Sub-domain

Has a doctor ever said you had...	N	No, Never	Yes, but NO PROBLEMS in the last year	Yes, and HAD PROBLEMS in last year
An emotional/mental problem or behavior problem?	933	87.9	5.9	6.2
An eating disorder like anorexia or bulimia?	937	97.4	1.3	1.3
A learning disability or attention disorder?	937	90.7	5.7	3.6

Do you NOW have...	N	No	Yes
A speech problem such as a lisp, stammering or stuttering?	944	90.9	9.1

6.7 Dental Health

About how many tooth cavities have you ever had?*	N	%
None	264	28.3
1 or 2 cavities	300	32.1
3 or 4 cavities	163	17.5
5 or more cavities	116	12.4
Don't know	91	9.7

* This item was not part of any Sub-domain, but it was used to calculate the overall Disorders domain.