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Teaching Health Literacy To Underrepresented Adolescents: A Curriculum For High School Advisory Teachers

Anya Dmytrenko

Hamline University, admytrenko01@hamline.edu

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TEACHING HEALTH LITERACY TO UNDERREPRESENTED ADOLESCENTS: A CURRICULUM FOR HIGH SCHOOL ADVISORY TEACHERS

by

Anya Dmytrenko

A Capstone in partial fulfillment of the requirements for the degree Master of Arts in Teaching

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Primary Advisor: Rachel Endo, Ph.D.
Secondary Advisor: Caleb Chisholm, M.Ed.
Peer Reviewer: Shane O’Reilly, M.Ed.
“Education and healthcare are the two great pillars of human service.”
Shane O’Reilly

“[L]ife is in the end about fixing holes…it’s an apt metaphor for our profession…we are all fixing what is broken. It is a task of a lifetime. We’ll leave much unfinished for the next generation.”

Abraham Verghese, Cutting for Stone
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I dedicate this capstone to my daughter. Your kicks helped me stay awake and focused as you were my constant companion during the many long days and late nights that completing this project required.
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CHAPTER ONE

Introduction

“Healthcare? I don’t think I have any of that,” said a young man I offered to give a ride one very cold day. I had asked him where he went to get his healthcare, since his home was in one of the more economically disadvantaged neighborhoods in Minneapolis; I was curious to know what community clinics were closest to his home. I had already begun thinking about what I wanted to research for my capstone project and this response further strengthened my interest. He also told me that he graduated from eighth grade, after which he “went to [one school] and [then another], but that didn’t last long.” Although he was not much older that I, he looked weathered by life and I sensed that he had seen a lot in it. He did not look healthy; he was very thin, kept his hand on his lower back as if suffering from pain, and judging by the condition of his skin, he was likely frequently dehydrated. It concerned me that he did not know where to go to see a doctor.

My research question is, “How can high schools use advisory classes to influence their students’ health literacy?” My interest in this topic is grounded in my personal pursuit of a career in healthcare and from my experience as a teacher first in Chicago, then in the heart of Minneapolis, and finally in Saint Paul, Minnesota. My passion for this topic lies in the belief that all people, regardless of socioeconomic status, deserve access to an excellent education and to excellent healthcare because that is fair. Today, good education and healthcare are not equally accessible by all Americans.

Motivation

I was born in Kiev, Ukraine into a family that placed tremendous value on education. In part because my parents struggled financially and in part because there were reports of elevated
radiation levels in Kiev following the Chernobyl explosion in 1986, I spent a great deal of my childhood in a small village on the shores of Lake Teletskoye in Southern Siberia. We returned to Kiev in time for me to start first grade and to get three painful fillings at the dentist’s office. We did not have a family dentist because that was not typical to have in Ukraine, nor did we have a family doctor, because there was really no such title for physicians. When we lived in Siberia we received our medical care from a woman that we now know had no medical training and whose standard of care was a shot of an antibiotic. Once or so per year, a doctor arrived to our village by helicopter. Due to my mother’s own interest in healthcare, our hut was transformed into the village clinic. I carefully observed the doctor – a different one each season – perform the elegant ritual of the physical exam and hand each patient a unique medication to help with their unique medical concern. Medical care seemed to be both effortlessly simple and incredibly complex, unique and one-size-fits-all, and, perhaps most prominently, it felt special. The doctor came to treat and help us.

I moved to America when I was ten years old. My mother accepted an offer to attend the University of Minnesota for graduate school in the Department of Civil Engineering although she already held a Ph.D. from the State University of Ukraine. We came to the United States for a better life and both worked very hard to learn English and to be successful contributors to the country of which we are now citizens. However, the only medical system we knew was one where if we were ill, we could either call an ambulance and a doctor would come to our home, or we would go to a clinic without an appointment and be seen that same day. As a result, we went to the closest emergency room to get the initial shots for my school requirement and any time we were a little sick. Eventually, we learned to make appointments through Boynton Health Clinic,
the university’s clinic for students and staff, but until we did, the emergency department is where we received our medical care because we simply did not know that this was not standard.

During the summer of 2014, I was one of about forty research associates at the Hennepin County Medical Center’s Department of Emergency Medicine. Research Associates’ roles were to screen for patients who might be eligible for one of our seventeen studies using the hospital’s medical record system, to contact the provider or a national hotline if an eligible patient were identified, and to obtain informed consent from eligible patients so that they could be enrolled in an appropriate study. More than once, however, some of my colleagues made jokes about patients from diverse backgrounds coming in for treatment for sexually transmitted infections, pregnancy tests, toothaches, allergies, or fevers. They would mention that people “should” go to their doctor or dentist for these concerns, not to the emergency department. I would respond by letting them know that these patients likely do not have a personal doctor or dentist because they might not even know that they are supposed to have one, but then a colleague responded to me by saying, “Everyone knows you should have a doctor.” This colleague was a White male from an upper-middle class family and went to high school at one of the top schools in the state. His comment made me think more deeply about the great inequity that people of color face regarding healthcare.

Why Advisory Classes?

My experience at HCMC made me reflect on who taught me that I should ask a pharmacist about my cold symptoms instead of going to the doctor or who was the first person to tell me that I should get my teeth cleaned professionally every six months. If this knowledge is so “common,” why is it that so many people do not have it? I realized that I learned much of what I know now about our healthcare not in school but from the American family I grew to be a
part of when my mother married an American man. Had I never had the chance to be part of the American culture in such a special way, I realized, much of this information would have remained unknown.

I began to think about the best way to teach our community about America’s healthcare system. Naturally, I thought that there is no better place to teach than at a school, but I immediately wondered what class would be the best class for students to learn about co-pays and deductibles, drug interactions, depression, and end-of-life care? Immediately, I thought of the traditional health class. As I thought more, however, I realized that some of the topics that I would like to cover in this curriculum require the student to have a better relationship with the teacher and classmates so that open and honest conversations could take place. Most health classes are made up of a heterogeneous group of students who are only together for a time just long enough to learn that genital warts are bad. It is often difficult to build a relationship between teacher and student and I simply did not think that a health class would be an effective ground for doing this learning.

Most schools, however, have an assigned advisory period each day and from my experience, this time was rarely truly productive. Each night I had to prepare to teach three to four different courses each day, to work on homework for my graduate classes, to respond to dozens of parent emails, to plan the next day’s professional learning community’s topic and printouts, and to somehow fit in a little time to walk my dog and sleep. My four years in the classroom were incredibly stressful and, unfortunately, I often simply did not have time to plan for the advisory period that I wanted to have. I had many standards to cover before end-of-year testing in my math classes, but my advisory period was relatively free. Occasionally we had to
go over school expectations, field trip forms, or go on the computers to check grades, but we still had a few periods each week that could have been used to learn more.

A couple teachers at my school developed lessons to teach students about character that were titled, “Character Development Lessons.” It did not take long for me to see that these lessons were aimed largely toward our White students who struggled with fitting in socially. These lessons sounded great on paper, but in practice to me they were really quite useless to my students of color and to me as a teacher. The lessons involved goofy games and silly crafts and they did not seem to do much to me besides fill time with what seemed to be useless content. Many students found these lessons to be childish, which I think was because these students had already struggled, built character, and were mature enough to realize that these lessons were not applicable to their own experience. What many students lacked, however, was information. If only I had more time, I used to think, I would come up with some great and useful lessons for teachers to use that might actually affect small ripples of change in students’ lives. Thus, my idea to develop a curriculum for advisory classes was born.

**Researcher Background**

After studying biochemistry in college as an enthusiastic and hard-working premedical student, I applied to Teach For America (TFA) during my senior year. My initial motivation to do so came from attending a panel of physicians who were former TFA teachers; each spoke poignantly about the impact that teaching had on his or her development into a more empathetic physician. I had a really wonderful experience during my senior year of college when all my science classes started to come together beautifully to help me see the amazing complexity of biological systems. Yet, TFA placed me to teach math, which I liked, but did not love.
I completed my five-week teacher training on Chicago’s South Side. Prior to teaching here, I had never before thought about students having to pass through metal detectors to be able to go to class. There were no doors on bathrooms, no athletic facilities, and we were advised against driving to the school since cars frequently got broken into. It was at this school that I first learned that although America was certainly a land of opportunity for my mom and me, it was a very different land for the residents of South Chicago, who lived below the poverty level, were Black and Latino, and whose families suffered generations of institutionalized racism. My students did not come from educated families who attended great schools and were taught how to navigate the complex professional world of healthcare. Moreover, because of negative experiences with the healthcare system in the past, some of my students deliberately avoided going to get medical care.

I fell in love with teaching at this school, however. Actually, I thought I fell in love with teaching when, in reality, I fell in love with helping others through teaching. I realized that there is no other career like teaching where one could help a lot of people each day build a better life. I grew to really love my first class and leaving these students was difficult; we all cried on the last day of summer school. I was excited about moving forward with a career that gave me so much purpose. Unlike my undergraduate years, where most of the activities were more or less for my own advancement, teaching was all about advancing others.

Back in Minneapolis, TFA placed me to teach math at an alternative school. I was blessed with a supervisor that year who also taught in Chicago and who understood the challenges that teachers face but also why teachers continue to teach. Our students were between sixteen and twenty-one years old and they were at our school to make up credits lost in a traditional school setting. I taught students who belonged to gangs, students who have been
incarcerated, students who are or were previously pregnant, students who suffered from severe anxiety and could not attend larger high schools, students that were recent refugees from Somalia, and students who moved around so much during their life that they did not accumulate enough credits to be able to attend a traditional high school. Most of my students were at least five years below grade-level. TFA placed a tremendous emphasis on getting my students to perform at grade level in mathematics on the end-of-year assessment and that is how teachers were evaluated for effectiveness. I quickly learned, however, that teaching my students how to solve a system of equations was surely important, but what was really important was teaching students how to become successful and productive adults and educated consumers of healthcare. I filled my walls with brochures about local health clinics and food shelves, resume examples, job postings, symptoms of basic illnesses and possible home remedies, and other health articles I found might be beneficial for my students.

In the spring of my first year, with my school director’s permission, I organized a health day for all our students. There were no regular classes; instead, students went from classroom to classroom to sessions led by medical students and nurse practitioners on sexual health, general health, community resources, and goal setting. I felt that it would be better if information were presented from people who students did not know. It stood out as the most exciting day of the year where learning was visible, students asked a lot of important questions, and everyone had a great time. This experience further strengthened my interest in teaching through medicine.

During my first year of teaching, I decided that I would no longer apply to medical school and instead pursue a teaching career. I must admit that my main reason for this was that I lacked confidence in myself as an applicant. I feared that I would do terribly on the Medical College Admissions Test (MCAT) because of my past struggles with test anxiety. I also felt
encouraged by my successes in the classroom and felt a great deal of purpose in my work. I felt that perhaps I was supposed to stay a teacher, but I also maintained an inexplicable pull toward medicine.

For my third year of teaching, I applied to teach at a more traditional school in St. Paul. The school was still small, but I was excited about working with middle school students because that is where I felt I could make the most impact. Whereas at my previous job student attendance was quite poor and it was difficult to track student progress, at this new school, I could observe student growth over time, which I found very rewarding. At this school I learned that I really enjoyed teaching middle school students and my students’ state test results were among the top three in the district. My motivation for pursuing a career in teaching was reignited.

**Significance**

I believe that knowledge of social structures and norms – such as preparing for appointments and seeing the doctor as a provider of healthcare rather than an authority figure – is not often taught in schools. The reason for this is not malicious intent to leave information out, but there is often simply not enough time for teachers to build teaching about healthcare into their curriculum. Additionally, since many teachers might assume that their students receive knowledge about healthcare from their families. Being a first-generation American from a well-educated family, I now know that this general assumption is simply not the case. Some students simply do not know what they do not know and schools are a wonderful ground for this new, practical learning to take place.

This is also significant for local hospitals and clinics in terms of time and money savings. Each uninsured patient presented to the emergency department for STI testing costs the department not only thousands of dollars in provider compensation and lab materials, but a great
deal of time that could be allocated to handling more severe cases. When a person’s mental
illness goes undiagnosed, untreated, or is severely stigmatized by the community, the person’s
quality of life suffers tremendously; he or she might not able to go to school or work, his or her
relationships with others might suffer, that person might become aggressive with a checkout
clerk or a bus driver and potentially end up in jail or a mental institution, which could in large
part be attributed to not having the knowledge of available services in the community. Patients
who do not know to read a medication label could overdose or underestimate how much
medicine they need to take, accidentally might mix medications, skip a dose and, depending on
the medication, lose its effectiveness or build up toxic levels of the medicine in their system. As
one example, I can personally recall a time in my classroom in 2012 when a female student
announced that she needed to take a birth control pill because she planned on seeing her
boyfriend that evening. Fortunately, another student opened the door for discussion by letting her
know that birth control is only effective if taken at the same time each day, regardless of one’s
intent to have intercourse. It was the student’s simple lack of information that we fortunately
managed to address in class. This same student was also later prescribed an antibiotic but a
provider failed to tell her that the antibiotic reduces the effectiveness of birth control pills.
Fortunately, since this student felt comfortable with me, she brought her medication to me and
asked, “Ms. D, what am I supposed to do with this?” I wonder how many pregnancies, changed
lives, and thousands of dollars could have been saved had students received proper instruction on
birth control and medication interactions. This is my main motivation for writing this Capstone:
to help young adults from underrepresented backgrounds make informed decisions about their
healthcare.
Concerns and Considerations

One of my main concerns as I begin this process is not being able to test out my lessons with my own students. I am not employed at a school and, even though I believe I might be able to ask my former colleagues and supervisor about piloting this curriculum at my old school, I worry that its content might make getting parental and district permission a little more difficult. A very important aspect of my Capstone question is the implication that all students’ health literacy improves. I hope that all students, regardless of socioeconomic status, race, ethnicity, and zip code may successfully navigate the healthcare system. Some students will naturally have an additional advantage over others, especially, for example, students whose parents work in healthcare. Although incredibly important for students that live in communities where teen pregnancy rates are high, topics about birth control and locations for STI testing clinics might not agree with some parents’ views about sex education. Part of my research will inevitably include school and district policies, which, unfortunately, can sometimes be incredibly limiting to teachers who simply want to inform.

Summary

In conclusion, my main motivation for developing a series of lessons about increasing health literacy among adolescents is so that students who lack information get information that will help them make better choices that will subsequently lead to better health, stronger communities, and more efficient healthcare. Additional motivation for answering the question, “How can high schools use advisory classes to influence their students’ health literacy?” stems from my own interest in healthcare and medicine and from my experience of learning about the American health system as first-generation immigrant. Since advisory classes are already scheduled into many schools’ days and teachers lack time to plan for additional classes, these
lessons will be developed to help fill this time with meaningful activities that connect school to the “real world” for all students.
CHAPTER TWO

Review of Relevant Literature

In order to answer the question, “How can high school advisory classes increase health literacy among urban adolescents?” it is necessary to present my understanding of three important aspects of this question. In this chapter I present my findings on three important aspects of designing effective lessons aimed at preparing students to successfully navigate the healthcare system. First, it is essential to understand the value of the homeroom and advisory period and why so many schools forgo valuable instructional time in order to have an advisory period. Thus, I begin my discussion with current research on the effectiveness of homerooms on preparing students for adulthood. In order to understand around which topics to frame the curriculum lessons, I review current literature on healthcare disparities and present current findings on primary observations among researchers on current gaps in knowledge about healthcare. I give special consideration to individuals from underrepresented backgrounds, such as populations of color. Lastly, I give examples of current school-based clinics and the rationale of their founders for the classroom-clinic partnership in order to offer support for the setting in which I propose these lessons to take place.

A Case for High School Advisory Programs

Introduction. In order to understand if high school advisories would create a good environment for students to learn about healthcare, it was necessary to investigate the following topics: 1) how common and effective advisory periods are in schools across the nation, 2) the underlying beliefs and theories of school designers for having an advisory period amidst already-limited classroom instructional time, and 3) whether discussing health issues constitutes appropriate use of advisory periods’ time. This section of the chapter thus summarizes current
uses and implementations of advisory periods and offers support for utilizing this period to teach students about navigating the healthcare system.

**Prevalence, structure, and effectiveness of advisory groups.** According to McClure, Yonezawa, and Jones (2010), advisory programs began in the mid-1980s in response to increasing research on adolescents’ social and emotional stresses. Other authors attribute the growth in popularity of advisory classes to “distributed counseling,” or the idea that teacher should share the responsibility with guidance counselors to support students’ academic and social development because guidance counselors’ caseloads are often too great to manage effectively (Tocci, Hochman & Allen, 2005). The goal of advisories when they were established was to create a more closely-knit school community to which students feel a greater sense of belonging.

MacIver (1990) states that advisory periods are more common among communities with large numbers of economically disadvantaged and predominantly African American students because of its apparent positive influence on achievement of these students when the student-teacher ratio is reduced (Imimbo, Morgan, & Plaza, 2009; McClure, Yonezawa, & Jones, 2010; ). Students may develop a relationship with an adult who serves as their advocate, mentor, and life coach, who holds them accountable for their actions (Imimbo, Morgan, & Plaza, 2009; Johnson, 2009). This connection is especially important for keeping students motivated and engaged, for preventing dropouts, and for developing healthy lifestyle choices among teens and adolescents particularly in larger schools (McClure, Yonezawa, & Jones, 2010). These students become more involved in school activities and to hold leadership positions (Tocci, Hochman, Allen, 2005).
Most recently, research in support of advisories has focused on the impact of smaller learning communities such as smaller schools and class sizes on student achievement, but studies that directly measure the impact of advisory classes on factors such as dropout rates and GPAs are difficult to find. When Johnson (2009) surveyed 25 public schools about their advisory programs, the overwhelming response about the intended impact of the advisory period was academic, social, and emotional support. However, there was great variability in how school leaders believed this support should be offered. For example, while one school may focus on sports as a means to build camaraderie and learn about physical fitness, a teacher at another school might choose to provide articles about the benefits of physical exercise and come up with in-class activities that facilitate students’ understanding of one another’s backgrounds through sharing stories. The structure and amount of time dedicated to advisory periods also varies greatly from school to school (Johnson, 2009). While at some schools advisories met for 10 minutes 3 days per week, others met every day for 35 minutes. There is also great variability in how advisory time is viewed at different schools. While at some schools the advisory time is of paramount importance to school culture, at others it feels as a mere formality used to touch base with students.

There appears to be relative consensus among researchers that advisory time must be carefully planned and structured to have a lasting impact, which in turn requires a great time investment time on the part of the teacher and the entire administrative leadership team (Johnson, 2009; Imimbo, Morgan, & Plaza, 2009; MacIver, 1990; Tocci, Hochman & Allen, 2005). Additionally, new teachers often do not feel prepared to handle the additional workload, which is further exacerbated because resources to hold advisory classes and create curricula for these classes are often unavailable or even nonexistent in schools (Tocci, Hochman & Allen, 2005).
These teachers also express frustration about the lack of clarity about what advisory is to accomplish. However, other studies suggest that rigid structures could have the opposite of the intended effect and make advisory periods seem less authentic, which effectively ruptures the relationships between student and teacher (McClure, Yonezawa, & Jones, 2010).

According to Johnson (2009), at many schools, the success of advisory classes is highly questionable despite the class’ widespread implementation across the United States. Among the challenges of implementing an effective advisory period is that the focus of the advisory is too often on making school announcements, disseminating school-related paperwork, taking attendance, fundraising for trips, and checking grades, rather than on social and emotional development of individual students (MacIver, 1990; Johnson, 2009). Advisory teachers also carry the additional responsibility of communicating academic performance and school announcements to teachers through regular communication with parents (Johnson, 2009).

**Support for advisory periods.** The most cited reason for including an advisory period at the middle and secondary levels is that adolescents and young adults need supportive and reliable adult guidance as they themselves learn how to become independent adults. Students also greatly benefit from time intentionally dedicated to social growth and development (McClure, Yonezawa, & Jones, 2010). Advisory is also one of the key principles of Coalition of Essential Schools because of its emphasis on ensuring that each student will feel connected and as if he is “known well” (Sizer, 1980, as cited in Tocci, Hochman & Allen, 2005). That is, “Students who feel connected to school are less likely to use substances, exhibit emotional distress, demonstrate violent or deviant behavior, experience suicidal thoughts or attempt suicide, and become pregnant” (Waloff, 2010, p. 14). Additionally, advisory classes have been found to increase the sense of connectedness and improve school climate in large high schools (Waloff, 2010), to
increase parental involvement, and improved standardized state assessment results and graduation rates (DiMartino & Clarke, 2008, as cited in Walloff, 2010).

MacIver (1990) also found that schools with strong advisory programs had reduced the number of students who did not graduate from high school. In some schools, the availability of an advisory period eased the transition from middle to high school, between each high school grade, and the final transition between high school to post-secondary institutions and adulthood (MacIver, 1990). Advisories also offer tremendous support to students who are going through difficult life challenges such as not feeling like they belong, discovering their racial and sexual identities, and dealing with loss and grief (Imimbo, Morgan, & Plaza, 2009).

Rather than focus on socioemotional support and development, some principals reported deliberate planning of advisory lessons that teach students about the changes they might expect in curricula, available school activities and resources that develop students’ social and academic engagement, and meeting with school counselors and older students (MacIver, 1990). Although many schools use advisory time is used to check on students’ academic progress and to support their academic advancement (Tocci, Hochman, & Allen, 2005), it is necessary to consider that many students do not continue to post-secondary education upon graduating from high school, and would benefit from advisory activities that prepare them for independent living. Thus, a significant limitation of using advisory classes to prepare students for post-secondary education is that it leaves out students that will not be going on to college. If advisory classes focused on life skills and knowledge that is applicable to all students, schools will likely see a greater engagement from students and greater success of advisory periods. As a result, advisories that prepare all students to navigate the complex adult world possess greater relevance than advisories that focus merely on academic monitoring.
Interestingly, in the research done by Johnson (2009), teachers cited advisory time as vital not only for student development, but also for their own. When teachers step outside the preferred lesson plans and topics and engage students in new ideas, growth occurs on two fronts – both of the students and the teacher – which is certainly the goal of this project. The curriculum proposed herein contains a lesson on preparing for going to the doctor. Withholding information from a doctor out of fear of feeling embarrassed is not unique to any age or racial/ethnic group. When teachers and students have an opportunity to discuss what topics are relevant to share with one’s healthcare provider, teachers themselves might become more open about their health history. Students, on the other hand, will enter the world of healthcare as much more confident and secure consumers.

**Healthcare topics in advisory.** According to MacIver (1990), advisories should support students by offering them a breadth of activities that aim to improve their social and emotional development. Among discussion topics that MacIver recommends are “health issues” and “personal or family problems” that fall within the scope of this project. MacIver (2009) also commented on the success of programs that maintain diverse activities as part of the school curriculum. Topics on mental health and sexual health would effectively counter the academic advising that many advisors already practice. In other words, since students already receive academic advising from counselors, a broader use of advisory time would help students understand more topics that pertain to life outside high school, rather than think strictly in terms of academics. Students need not only to be able to independently navigate college without much parental guidance, but also know when to see a doctor or go the emergency room if their parents are not available. Tocci, Hochman & Allen (2005) provide additional support for using advisories to teach students about “substance abuse, health, sexual education, [and] violence.
prevention,” (p. 17) but these authors urge the schools to provide adequate time for teachers to plan such lessons. From these authors’ interviews, health education was not cited as one of the primary goals of advisory, but this may be due to teachers’ own perceptions and lack of familiarity about the need for healthcare education.

Additionally, there exists great support of increasing the involvement of students’ families in school activities (MacIver, 1990). Among the lessons in the curriculum I created are activities that require students to involve their family members or guardians. Advisory time must also be highly structured with intentional outcomes determined by a teacher, administrative team, or a chosen curriculum (Johnson, 2009). Johnson also cited that the most common response among teachers for not effectively implementing advisory time was that they did not have enough time to plan for the additional period. The lessons developed in this project would offer advisory teachers precisely the structure and outcomes that these authors suggest and would ease some of the time-planning burden.

McClure, Yonezawa, and Jones (2010) use the idea of personalization to support and investigate the impact of advisories on student achievement: “Personalization involves the development of a school climate and organization that produces strong, personal support for each student and a feeling on the part of the student that the adults in the schools believe that the student can and will succeed” (Avalon Unified, public communication on website, March 12, 2002, as cited in McClure, Yonezawa, and Jones, 2010, p. 5). Thus, personalization efforts embody the socioemotional needs of students on many levels of schools organizational structure, not simply in advisory classes. Although higher personalization resulted in higher weighted grade point averages (WGPAs) in White, Latino, and African American students, an inverse relationship was found between the WGPAs and students’ feelings about the meaningfulness of
advisory classes. One interpretation of this finding is that students with higher WGPAs naturally place greater value on academic work and might therefore find advisory time be somewhat wasteful.

**Additional findings.** McClure, Yonezawa, and Jones (2010) posit that the effectiveness of advisory classes has not been thoroughly investigated and that advisories’ impact on student’s achievement and socioemotional development is often merely theoretical as opposed to developed through empirical observation and careful study despite its widespread implementation. The same study also suggested that students may not feel that their teachers genuinely cared for them – as the advisory period is intended to do – *because* of the rigid structure that some advisory classes require. Rather than discussing topics that are relevant to students’ lives outside of school, advisory classes that focus solely on academic monitoring bring even greater focus on academics alone. Students who continue to struggle with getting good grades might get tired of constantly revising their grades and might instead benefit from knowing that they could go to the doctor and discuss issues such as difficulty focusing or not being able to see the board. Tocci, Hochman & Allen (2005) suggest that advisories must contain an inherent degree of flexibility for teachers within a greater set of clear goals set by a school leader or leadership team for the advisory program. In the context of advisory lessons that focus on helping adolescents navigate the healthcare system, it may be necessary for school leaders to intentionally and purposefully include these lessons throughout the school calendar, providing ample time in the beginning of the school year for school-related activities and throughout the year for other administrative tasks.

Walloff (2010) discussed a high school in Chicago in which upperclass mentors were in charge of delivering the advisory curriculum and the teachers served merely as supervisors.
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(Lampert, 2005, as cited in Walloff, 2010). Although this may be effective in building a school climate, a degree of pedagogical knowledge among teachers would be essential to facilitate some of the lessons the curriculum in this project requires.

**Summary of advisory findings.** This first section of the review or relevant literature explained the rationale of many schools for devoting precious instructional time to advisory classes. The chief of these reasons were to increase students’ feelings of belonging to their school and to provide opportunities for socio-emotional growth and essential life skills. At other schools advisories are seen as “distributed counseling.” Connectedness has been found to yield educationally significant results as measured by standardized tests and WGPAs. This information provides support for using advisories to teach students about the healthcare system and topics that are highly personal to them, such as mental and sexual health. In order to be effective, scholars (Johnson, 2009; MacIver, 1990; McClure, Yonezawa, and Jones, 2010; Walloff, 2010) suggest that advisories must include lessons that are varied, relevant, well planned, structured, and offer flexibility in pace and content for advisors to be able to teach them with genuine care.

With the support for structured and relevant advisory lessons clearly established, the next section reviews literature about the specific topics and lack of knowledge about those topics around which subsequent advisory lessons are to be developed. Special emphasis is placed on how this particular knowledge operates within the greater framework of reducing healthcare disparities.

**Current Trends in Health Literacy and Medical Needs in Urban Populations**

**Introduction.** In recent years, there has been increasing concern about the pervasive role of health disparities in the United States’ health system. The National Center of Minority Health and Health Disparities (NCMHD) and research by the Institutes of Medicine (IOM) are two
examples of how policymakers seek to understand the underlying causes of why some racial
groups have reduced utility and knowledge of certain health services that then leads to reduced
usage (Snowden, 2012). Health literacy is defined by IOM as “the degree to which individuals
can obtain, process, and understand basic health information and services they need to make
appropriate health decisions” (Institute of Medicine, 2004, n.p.) and is cited as a major predictor
of health outcomes (Griffey et al., 2014). The curriculum proposed in this project would directly
address the first aspect of the health literacy by allowing individuals to obtain important health
information. This includes tasks like taking a prescription medication properly, knowing where
to go to obtain a flu shot, reading a nutrition label, and understanding a doctor’s discharge notes
and recommendations (Speirs, Messina, Munger, & Grutzmacher, 2012). Health literacy
incorporates reading, numeracy, oral communication, and writing skills: “Individuals use health
literacy skills when interacting with health professionals, printed materials such as food labels,
and physical spaces such as grocery stores” (p. 1083). The benefits of health-literate citizens are
clear, as lower health literacy among individuals has been linked to reduced consumption of
fruits and vegetables and use of nutrition labels, as well as increased number of visits to the
emergency department and a higher number of unintended pregnancies among youth (Speirs,
Messina, Munger, & Grutzmacher, 2012).

The purpose of the following section of the literature review was to identify precisely
which topics are cited as factors that add to the disparity in health care because of their value in
promoting health literacy. The topics covered in this section are 1) mental health causes and
services, 2) utilization of the emergency department for nonemergent care, 3) contraceptives and
their link to STI knowledge, 4) HPV vaccination and women’s health, 5) nutrition and 6)
advance directives and end-of-life care. Authors cited above topics as opportunities for
improving health literacy through educational intervention. Implications for curriculum based on the knowledge obtained for each category is included in each subsection of this review.

**Mental health.** The publication of *Mental Health: Culture, Race, and Ethnicity – A Supplement to Mental Health: A Report of the Surgeon General* (U.S. Department of Health and Human Services, 2001) brought to light the disparities between medical treatment of racial and ethnic minorities compared to their White counterparts. Since its publication, additional efforts have been put forth to study these disparities in order to effect changes in current mental health practices, as “Elimination of Black-White disparities in any outpatient mental health care translated to providing care for 1.285 million black individuals with probable mental illness…[that] would save nearly $30 million in emergency department expenditure… and $833 million in total inpatient expenditure” (Cook, Liu, Lessios, Loder, & McGuire, 2015, p. 4). Eliminating Latino-White disparities could open access to 2.625 million Latinos and save taxpayers $1.57 billion. Clearly, mental health disparity affects a substantial sector of the population and greatly affects the operations of our health care system.

The National Survey of American Life (NSAL), as part of the National Institute of Mental Health’s Collaborative Psychiatric Epidemiology Surveys, investigated the types of mental health treatment, especially in regards to African Americans. It found that just 17.9% of the general population and 10.1% of African Americans used mental health services in the past year (Snowden, 2012). The study also found that chronic and severe major depressive disorder (MDD) is more prevalent among African American patients with MDD (57%) than among white Americans with MDD (39%). Differences among the types of mental health conditions prevalent among different racial groups suggest a need for comprehensive education about a large variety of mental health topics: “Whereas White Americans were at an elevated risk for generalized
anxiety disorder, panic disorder, and social anxiety, Caribbean Black respondents and African American respondents were more likely to meet criteria for posttraumatic stress disorder (PTSD)” (Himple, Baser, Taylor, Campbell, & Jackson, 2009, as cited in Snowden, 2012, p. 526), which could be attributed to stress associated with ongoing discrimination and segregation. These finding confirmed earlier findings that more severe mental health issues are more prevalent among African Americans than whites, and supports the need for integration of comprehensive and inclusive mental health education in the advisory curriculum.

Jimenez, Bartels, Cardenas, Daliwal, and Alegria (2012) researched differing cultural beliefs about the causes of mental health illness. The results from their study indicated that increased access to comprehensive information about mental health is needed in urban communities. For example, 63.7% of Latino participants (N = 303) cited medical illness as a cause of mental health illness. 38.3% of this population group also cited that moving to a different place as cause of mental health illness, compared to 9.1% of non-Latino whites, 8% of African Americans, and 8% of Asian Americans. For Asian Americans (N = 112) medical illness was believed to be the most common (56.3%) reason for mental health illness, citing an important connection this demographic group sees between physical and mental health. 32.5% of African Americans surveyed reported preferring spiritual advice as a form of mental health treatment, reinforcing previous studies’ findings on the view this group holds of social support (Beach et al., 2008, as cited in Bartels, Cardenas, Daliwal, & Alegria, 2012). Asian American participants reported being least likely to use group counseling (3.6%) and private counseling (21.4%) compared to other groups. Interestingly, 45.5% of Latino participants reported preferring pills or medications to treat mental health, the highest percentage of any group. 44% of Latinos also reported the loss of a family or friend as a chief reason for mental health,
compared with just 19% of Asian Americans. Mental health visits to the emergency department are discussed in greater detail in the next section.

The great differences in both the perceived causes of mental health illness and preferences about mental health treatment provide valuable support for teaching students about the multifaceted elements of mental health. It will be important not to diminish students’ mental health needs against others. For example, one student may suffer from debilitating anxiety that is affecting performance at school, whereas another student, who recently immigrated to the United States with a large family, could suffer from a different kind of psychological distress that comes from saying goodbye to old friends, moving to a country with an unfamiliar language and unfamiliar customs, and having a difficult time making new friends. Both cases, although different, have profound effects on these individuals’ lives and must therefore be addressed with equal care in the classroom.

**Preventable emergency visits.** As many as 88% of people who present to the emergency department (ED) for nonemergent situations have low rates of health literacy (Griffey, Kennedy, McGownan, Goodman, & Kaphingst, 2014). Health literacy in the ED pertains to the patient’s understanding of doctor’s questions, patient’s ability to read discharge instructions, and patient’s ability to fill out a medical history questionnaire. Revisiting the ED is not uncommon in urban populations, but it is costly for patients and the clinic, and it has the potential to hinder improvement in the delivery of health care in these settings. Among 431 patients that presented to the emergency department in one study, 13.2% of patients had inadequate health literacy and 10.4% had marginal health literacy (Griffey, Kennedy, McGownan, Goodman, & Kaphingst, 2014). The same study also found that patients were 1.64 times more likely to visit the ED than patients with adequate functional health literacy. These authors suggest that, “For patients with
low health literacy, unscheduled returns to the ED may reflect a lack of comprehension of instructions for medications, return instructions, follow-up plans, or other reasons resulting in failure of patients to activate follow-up plans as intended” (Griffey, Kennedy, McGownan, Goodman, & Kaphingst, 2014, p. 1113). Additionally, EDs are not visited solely for medical emergencies; people visit EDs for help with psychiatric disorders, alcohol or drug withdrawals, for food or shelter, or because EDs’ round-the-clock operation allows for access to medical care when other clinics may be closed. Educating students about where to get access to these services outside the hospital will possibly help conserve its resources and allow for more effective and focused delivery of needed services for the patients.

One important aspect to consider when teaching students about visiting the ED is emergency mental health care. Research indicates that 41% people who visited the ED for a mental health concern returned to the ED within the year (Aratani & Addy, 2014). Black youth were more likely than white youth to return to the ED for a mental health visit, which implies the possibility that these youth either do not know where to access mental health services or that they required more acute psychiatric help versus extensive care that would require in-patient treatment. The most common diagnosis was drug or alcohol use disorder (46%) and the second most common diagnosis was anxiety disorder (18%). Diagnoses for depressive, psychotic, bipolar, behavioral, and developmental disorders (8%, 4%, 3%, 2%, and 1%, respectively) were also given. Thus, lessons on managing, preventing, and treating these mental health issues must be included in the curriculum with a special emphasis on community resources where providers are able to give more attention and time to these health concerns.

Lastly, an important consideration for nonemergent ED visits was children’s use of the ED for asthma emergencies. With good primary care and adherence to medication regimens,
asthma can be managed well and the use of ED is not necessary (Nath & Hsia, 2014). Although asthma visits to the ED have been on the decline in recent years, asthma-related visits to the ED have increased 13.3% between 2001 and 2010 visits by children who are racial minorities, male, and are insured through a state health insurance program such as Children’s Health Insurance Program (CHIP). This trend is especially prevalent in urban EDs, suggesting a lack of information about alternative resources, such as clinics or pharmacies, or a lack of access to those resources. Manning (2009) suggests that living in urban communities puts low-income children at an increased risk of having asthma because of lower-quality living conditions, such as poorly ventilated rooms, mold, and greater outdoor pollution.

In summary, developing a lesson on reading discharge notes and medical labels, as well as teaching students to look for community resources outside the ED will have great benefits for the students and health care providers alike. Redirecting students to various community resources is associated with tremendous costs savings (Cook, Liu, Lessios, Loder, & McGuire, 2015). ED doctors are highly trained, but they are not specialists or experts in all aspects of physical and mental health. Additionally, their time is limited due to the high volume of patients they see. The EDs may also lack the necessary equipment to be able to provide proper and thorough medical care. Students should be taught about factors that affect serious and chronic conditions such as asthma because, when controlled, many ED visits can be prevented. It is imperative that we teach our students how to access high quality, specialized, and attentive care.

**Contraceptive knowledge.** Each year, there are nearly 7 million pregnancies in the United States, half of which are unintended (Finer & Zolna, 2011, as cited in Craig, Dehledndorf, Borrero, Harper, & Rocca, 2014). The largest proportion of these unintended pregnancies occurs among racial minorities, especially among black and Hispanic women. This topic is very
relevant to developing this curriculum because when I was a teacher at an urban high school, I witnessed that these statistics were largely accurate. Contraceptive knowledge is important for adolescents in order to protect them from consequences of impulsivity and other risky behaviors that tend to affect this age group. When evaluating contraceptive knowledge, however, it is important to consider the various methods of contraception and the knowledge women have about these methods. From personal experience of working in high schools, I recalled that condoms were frequently referenced in health textbooks and posters by the nurse’s office. Other birth control methods, such as intra-uterine devices (IUDs), hormone injections, and birth control pills, most of which are more effective at preventing unintended pregnancies when used properly, were sparsely seen at the school I attended and in schools in which I worked. Perhaps it was the goal of the standards and curriculum writers to promote barrier methods that not only prevent pregnancy but also prevent sexually transmitted infections (STIs). However, teaching students solely about the use of condoms not only emphasized heterosexual relationships, but also seems to ignore the need for women to proactively protect themselves. Additionally, although health curricula often teach about STIs, the cases presented are quite extreme and impose a sense of fear onto student. A curriculum that places greater emphasis on getting medical help and teaching the student to be open with his or her provider, could address some of these concerns.

Research has suggested that Latina women have the lowest awareness of various contraceptives and that overall knowledge about particular contraceptive methods was especially low in this group, whereas White women appeared to have the most knowledge about a diverse range of contraceptive methods (Craig, Dehledndorf, Borrero, Harper, & Rocca, 2014). In a study of 1800 unmarried women, 77% of Latina teenage girls reported hearing about intrauterine
devices (IUDs) and 59% of vaginal ring compared to 90% and 95% of white girls, respectively. Only 22% of all women surveyed knew that IUDs do not cause infertility, 24% knew that oral contraceptive pills (OCPs) offer protection against certain types of cancer in addition to contraceptive effects, and 75% of women incorrectly believed that a pelvic examination is required to obtain OCPs. Although awareness of condoms and OCPs was extensive among all females, almost 20% of women did not know that they could change their OCP to a different pill if they were to experience negative side effects. 73% of women surveyed have not heard of female sterilization and only 58% of black females reported knowing of natural family planning.

In a larger study of 7,214 women, only 37% reported using a highly effective contraception method such as an IUD or female sterilization (Dehlendorf et al., 2014). Additional disparities were found in condom use, which is a lower-efficacy contraceptive option, between Black and Latina women and their white counterparts and between younger and older women: “Compared to Whites, Blacks were less likely to use any contraceptive method (adjusted odds ratio, 0.65); and blacks and Hispanics were less likely to use a highly or medically effective method (adjusted odds ratio, 0.49 and 0.57, respectively)” (Dehlendorf et al., 2014, p. 526.e7). These findings suggest that educating girls and young women of all backgrounds about the various methods of contraception has the potential to close the health literacy gap on issues of pregnancy prevention.

Overall, researchers have found that there are many misconceptions about IUDs and health effects of hormones in OCPs among young women of underrepresented groups (Craig, Dehlendorf, Borrero, Harper, & Rocca, 2014). The authors suggest a need for family planning education at school, especially since it appears that the rate of discontinuation of OCPs are higher in adolescents, a group at a high risk of unintended pregnancies. Dehlendorf et al. (2014) suggest that great sensitivity is needed when delivering information about highly effective
contraception to minority women because of the history in the United States of coercing women of certain groups to sterilization.

In order to make this curriculum relevant to all students, it was important to investigate the knowledge young males have about contraceptive methods as well as their female counterparts. In one study, when 903 male participants were interviewed in a 2009 National Survey of Reproductive and Contraceptive Knowledge, profound findings indicated that men had substantial deficits in knowledge about the various contraceptive methods (Borrero, Farkas, Dehlendorf, & Rocca, 2013). Although there was great knowledge among men about condoms and OCPs, (99% and 95%, respectively), just 64% of men had heard of IUDs and 45% knew that a woman could get an IUD if she has never had children. Consistent with findings among women, 23% of men incorrectly believed that their partner would need a pelvic examination to obtain OCPs and only one-fifth of those surveyed knew that OCPs could help reduce the risk of certain cancers in women who take them. Almost 30% of men surveyed incorrectly believed that a woman cannot get pregnant if she misses 2 or 3 days of the OCP and that a woman is unable to get pregnant for 2 months following discontinuation of the OCP regimen.

The above findings support the need for comprehensive education about contraception for male and female students to lessen the number of misunderstandings about how to use different contraceptives properly, the effects of which could lead to unintended pregnancies. Moreover, since many STIs can be transmitted between same-sex partners, education on all aspects of sexual health, not just the context of prevention of pregnancy, will benefit a lot of students. Historical context will need to be taken into account when presenting information to students, and special emphasis will have to be made on effectiveness of IUDs, safety of
hormonal contraceptive use, transmission of infections between same-sex partners, and male influence on choosing a method of preventing pregnancy.

**Women’s health and human papillomavirus.** Another topic of extreme importance to adolescent females is the acquisition and monitoring of human papillomavirus (HPV). HPV is generally asymptomatic but is associated with 99.7% of all cervical cancers (Walboomers et al., 1999, as cited in Gelman, Nikolajski, Schwarz, & Borrero, 2011). It is the most prevalent sexually transmitted infection in the United States and can only be definitively diagnosed through a Pap smear. Although the rates of cervical cancer have been on the decline in recent years, “In some low-income communities, cervical cancer incidence and mortality rates approach the rates seen in developing nations” (Joseph et al., 2014, p.84). Its prevalence also increases drastically each year among women who are between 14 and 24 years of age (Joseph et al., 2014). Most women (83%) have heard of HPV, but their knowledge about it and the vaccine to protect against HPV was limited (Joseph et al., 2014).

Gelman, Nikolajski, Schwarz, and Borrero (2011) studied 4088 women and found that, compared to White women, black and Latina women were much less knowledgeable about HPV. However, they also found that having a college degree, good income, having received STD counseling in the past, and having received a Pap smear within the last year increased the level of HPV awareness. The odds ratio of awareness for both Hispanic and black women was 0.39 against white women. 26% of white women in the group indicated that they had received the HPV vaccination compared to 18% of Hispanic women and 11% of black women. Additionally, black women have been found to be especially skeptical about the vaccine to prevent HPV, which has been attributed to general distrust of the medical profession (Scarini, Garces-Palacio, & Partridge, 2007 as cited in Gelman, Nikolajski, Schwarz, & Borrero, 2011).
The HPV vaccine, however, can prevent 70% of cancers caused by the most common high-risk strains of HPV (Joseph et al., 2014). It is most effective if young girls complete the vaccine series before they become sexually active. The administration of the vaccine has also been found to have tremendous implications for general women’s health and to be a strong indicator of health literacy and trust in the medical provider (Gelman, Nikolajski, Schwarz, & Borrero, 2011). Thus, there is great support for including a lesson on HPV in this curriculum in order to increase women’s knowledge of risks and benefits.

The results of literature on HPV offer additional support for including women’s health and HPV in the school curriculum proposed by this project. Because this curriculum is aimed towards racially diverse groups and schools in which African American students make up at least 30% of the student body, access to information about HPV and the HPV vaccine could have profound implications on the health of the community and on closing the health literacy gap. Simply getting the girls to the doctor’s office to get the vaccine opens up three independent opportunities for them to speak to a provider about other concerns. Additionally, the authors emphasize that the differences in HPV awareness in black and Hispanic populations would be best addressed through “effective educational interventions [that] reduce the racial gap” (Gelman, Nikolajski, Schwarz, & Borrero, 2011, p. 1172). Study participants and women also support HPV education in school (Joseph et al., 2014).

Health literacy and nutrition. Low health literacy has been linked to lower consumption of fruits and vegetables and reduced use of nutrition labels. Nutrition labels provide consumers valuable information about the size of a serving and the number of calories, grams of fiber, fat, carbohydrates and other nutrients in that serving. Nutrition labels offer consumers an indicator a food’s relative health value. Fruit and vegetable consumption gives insight into a
person’s consumptions of vitamins, fiber, and antioxidants. When 154 people from 11 SNAP offices in Maryland participated in health literacy assessment using the Newest Vital Sign (NVS) and Short Format of the Diet and Health Knowledge Survey (SFDHKS), 22% of participants were found to have high likelihood of limited health literacy (Speirs, Messina, Munger, & Grutzmacher, 2012). Just 37% of the sample in the SNAP study had adequate health literacy, only 37% reported reading the Nutrition Facts label, and less than 29% reported reading the list of ingredients. 51% of people admitted to eating peels of fresh fruit (which are high in fiber and nutrients) and 43% ate peels of fresh vegetables. Only 23% of 326 low-income parents in another study “were able to read and correctly use the dosage information on a medicine bottle” (Lo, Sharif, & Ozuah, 2006, as cited in Speirs, Messina, Munger, & Grutzmacher, 2012). The authors of this study thus recommend using plain language to provide instructions to low-income populations owing to poor numeracy skills in that population. For example, a person might have a difficult time following a guideline to eat 120 grams of protein per day, but might have a higher likelihood of eating more protein if they are given specific examples, such as, “Eat more black beans, yogurt, and chicken without fat.”

In summary, teaching students about reading nutrition labels, about the specific benefits of eating fruits and vegetables, and about reading dosage information on bottles will help reduce one additional aspect of the health literacy gap in urban communities where this information may not be widely known because of historical barriers.

**Advance directives.** Events such as the death of Brittany Maynard and the Terri Schiavo case inspired many conversations and legislation around end-of-life preferences among Americans. Advance directives (ADs) are legal documents that allow individuals to record their preferences for medical treatment in the event that they are unable to do so themselves. ADs
empower individuals to take control over an important aspect of their lives and thus represent an important indicator of engagement in medical care. However, only about one-third of American adults have medical directives in place (Waite et al., 2013). Race, health status, amount and quality of education, and income have been determined as factors that influence the probability that an individual has an AD (Hanson & Rodgman, 1996; Stelter, Elliott, & Bruno, 1992; and Hussain et al., 2010 as cited in Waite et al., 2013).

Waite et al. (2013) studied the effect of literacy on having an advance directive in 784 adults aged 55 to 74 using the Test of Functional Health Literacy in Adults (TOFHLA) and found that having an AD was strongly associated with literacy skills and race. Only 12.4% of participants who have low literacy indicated that they had an AD, compared with 49.5% of people with adequate literacy. Additionally, just 22.9% of African American participants reported having an AD, compared with 57.2% of whites. This disparity demonstrates yet another aspect of health literacy that affects medical care. The authors cite that this difference is difficult to explain, but that it could be attributed to cultural differences in perceptions about death and the subsequent caution people may use when discussing it, as well as general distrust of the healthcare system and poor communication by providers with African American patients about advance care planning. The important point here is that many people simply do not know about ADs or do not have the literacy skills required to complete the associated paperwork. Including this important topic in a school curriculum could lead more people to have important conversations about end-of-life medical care preferences with their families and could subsequently increase the number of people of all races and SES who have ADs. Although it may seem out of place to teach young students about advance directives, the rationale for doing
so makes intuitive sense when one considers that there exist few other known options that teach people about end-of-life care.

**Takeaways for advisory curriculum.** Because Waite et al. (2013) recommends that ADs be rewritten at the fifth-grade reading level so that more adults are able to complete the paperwork required for an AD, I believe that it is essential that the curriculum materials written for this project be at a similar level. Although the intended students for this curriculum are high school student, I hope to avoid the reading literacy obstacle by writing the materials largely using fifth-grade reading level strategies. Effective teaching practices such as frequent checks for understanding, differentiation, use of visual aids, and opportunities for discussion are assumed. Additional research may be necessary on various cultural beliefs about conversations about death and end-of-life.

**Summary.** The overwhelming theme in the literature is the great disparities in knowledge about healthcare between a range of historically underserved populations including those living in poverty and people of color compared to affluent and middle-class White Americans. The topics covered in the previous section of the review included mental health, visits to the emergency department, effective contraceptive knowledge, HPV and women’s health, nutrition, and advance directives. The following section provides examples of how schools have been effective grounds for reaching communities through the school-based health clinics.

**Bridging Health Services and Schools**

**Introduction.** In order to provide additional support for writing a curriculum aimed to improve health literacy among adolescents, I examined the history and foundations of school-based health centers (SBHCs) and the establishment of primary care services in schools. I
examine historical background of school-based medical care and examine its relevance to my research topic. Subsequently, I describe characteristics of SBHCs. The reader might note striking parallels between the services SBHCs provide and the recommendations by the authors in the previous section. I conclude with the description of services offered by a SBHC and the implications of the learning gained from the review of literature on SBHC on the development of the advisory curriculum.

**Historical background and prevalence.** Health services have been offered in schools since 1902 when Lina Rogers became the first American school nurse (Gustafson, 2005): “Her [Rogers’] role was to address the large number of children excluded from school for communicable diseases and to educate parents, teachers, and children about disease control and prevention. She also made home visits to follow up on children to facilitate early recovery and return to school,”(p. 596), and her successes were so impressive that surrounding schools began to hire nurses for their own staff. Lina Rogers’ success at vaccinating large numbers of children and educating their families about various healthcare topics marked the beginning of the era of using schools as grounds for epidemiological efforts. The presence of nurses became more common in schools. Moreover, the medical community learned more about disease control and prevention, nurses were utilized at schools to administer and monitor immunizations and soon began to offer regular health screenings. School nurses were also responsible for referring students to physicians and on monitoring dental care. With the passing of The Education for All Handicapped Children Act (1974), nurses acquired additional responsibility of monitoring the conditions of chronically ill children and communities became increasingly reliant on nurses’ expertise. Indeed, the school nurses’ increasingly important role in providing primary care to
students was the chief motivator in establishing the first Nurse Practitioner Program in the mid-1970s.

The growth in popularity and utility of school nurses served to illuminate the need for and practicality of onsite medical services at schools (Manning, 2009). Correspondingly, the first school-based health center was established in Dallas in 1969 at two elementary schools, with another, similar service established in Cambridge, Massachusetts. Since then, SBHCs have been established in each of the 50 states and their total number has grown to almost 2000 (School-based health clinic establishment act of 2007, as cited in Manning, 2009; O’Leary et al., 2014). SBHCs have also not only experienced great success, but maintain consistent support from healthcare providers not directly involved with a SBHC (Gustafson, 2005). Gustafson also points out that, “Today, in many schools that have SBHCs, the concept of providing healthcare in the same building in which children attend class is as accepted as having a school library” (p. 598) Just as a library, however, SBHCs require physical space, money, and a substantial amount of time investment by the school administrators and additional staff.

SBHCs were found to be so incredibly valuable that in 2005 61% of SHBCs were identified in urban areas, 27% in rural areas and 12% in suburban areas (Gustafson, 2005). As much as one-third of adolescents rely on SBHCs as their main source of healthcare (O’Leary et al., 2014), which is significant because many adolescents need medical care but might not know where to get it.

**Characteristics of SBHC.** The goals of SBHCs are to increase access to medical care to the underserved, to teach students and their families about health in a comfortable and convenient setting, and to keep students in school (Gustafson, 2005; Juszczak, Melinkovitch, & Kaplan, 2003). Access to care is especially limited for adolescents who are poor and/or members
of minority populations because of barriers to access such as transportation options, lack of confidentiality, restriction to access because of legal regulations, and the relative emphasis in healthcare on care of either children or adults (Juszczak, Melinkovitch, & Kaplan, 2003). Students living in impoverished areas are least likely to receive routine medical care and preventive services because neighborhood health services are more and more difficult to find in those areas (Manning, 2009). Thus, students would benefit from knowing precisely what services are offered in their communities.

Often, SBHCs collaborate closely with local hospitals and community health providers (Manning, 2009). Their funding comes largely on donations from private foundations (11%), community health centers (18%), and from direct affiliation to local area hospitals (51%) (Gustafson, 2005; Manning, 2009; O’Leary et al., 2014) and offer physical, social, and mental services to both students and their families. Most SBHCs are connected directly to large area hospitals which makes possible referrals for more comprehensive care and bridges the connection between schools and healthcare through quick intervention (Gustafson, 2009). Although SBHCs accept all forms of insurance, no patient is ever turned away if he/she lacks insurance or cannot demonstrate an ability to pay. For example, because 6.9 million children were uninsured in 2003 and Hispanic families are the most likely to lack the ability to pay or to qualify for insurance (Children’s Global Health Fund, 2003), SBHCs serve a particularly important role for the underrepresented populations: “Without the SBHC, it is likely that many of these adolescents would seek care only through urgent care centers or emergency rooms in perceived emergent situations, thus having little or no access to preventive services such as contraception or vaccinations” (O’Leary et al., 2014, p. 954).
SBHCs provide more opportunities for students to have more meaningful and personal conversations with providers than at other community health clinics (Gustafson, 2005). There is more conversation at SBHCs and more comprehensive care than health clinics could offer. 35% of parents reported getting help with arranging their child’s physical or mental care and 77% of students reported being offered a variety of services to help with their unique needs (O’Leary et al., 2014).

**Structure and organization.** SBHCs are led by an interdisciplinary team of health care providers that hold advanced degrees, such as nurse practitioners or physician’s assistants and are always overseen by physicians with medical degrees, such as pediatricians (O’Leary et al., 2014). Health educators, medical assistants, nutritionists, outreach workers, substance abuse counselors, and dental hygienists are often also included on this team (Gustafson, 2005).

The physical proximity to the school increases access to healthcare and, importantly, allows for preventative services and regular follow-ups that other health clinics may not have the ability to provide. During a 38-month study by Juszczak, Melinkovitch, & Kaplan (2003), it was determined that “Hispanic users made an average of 6.6 visits to SBHCs, and 3.45 to a community healthcare network (CHN); African American adolescents made an average of 10.6 and 3.4 visits to SBHCs and CHN sites, respectively. White and others made 8.8 visits to SBHCs and 2.4 visits to CHN sites” (p. 115). These data above clearly demonstrate that when access to care is increased, adolescents, including nonwhite adolescents who are more likely to miss needed medical care, will use it.

**Physical services.** In a study by O’Leary et al. (2014), the top three reasons students and parents visited their SBHC were for illness (78%), vaccines (69%), and sexual health education (63%). SBHCs also offer prescription services, pregnancy testing, vision and hearing screening,
sports physicals, health assessments, anticipatory guidance, treatment of acute and chronic illnesses such as asthma, and treatment and laboratory services for sexual transmitted infections and general health conditions such as diabetes (Gustafson, 2005; Juszczak, Melinkovitch, & Kaplan, 2003; Manning, 2009; O’Leary et al., 2014).

**Mental health services.** Despite the great need for mental health services, “only 29.3% of schools have a mental health/social services worker on staff at least part time, and this figure includes guidance counselors, whose primary role is academic placement and employment guidelines” (Brener, Jones, Kann, & McManus, 2003, as cited in Manning, 2009, p. 48). Among the overarching themes in literature on SBHCs, there is a notable consensus on SBHCs’ importance in providing mental health services, which are rarely adequately provided by health providers elsewhere (Gustafson, 2005). Additionally, risky behaviors such as substance abuse and violence are rarely discussed and addressed by mainstream healthcare providers but are regular components of healthcare offered by SBHC. For example, “The most frequent mental health services provided in SBHCs include screening, assessment, referrals, and crisis intervention, [with] the most common mental health diagnoses [being] posttraumatic stress disorder, anxiety disorder, dysthymia, and adolescent adjustment disorder” (Pastore & Techow, 2004, as cited in Gustafson, 2005, p. 596). In regular community health clinics, mental health services are often limited only to individual counseling and is often difficult to schedule in the day of clinic visit (Juszczak, Melinkovitch, & Kaplan, 2003). In SBHCs, however, mental health services are often immediately available (O’Leary et al., 2014).

Juszczak, Melinkovitch, & Kaplan (2003) made an incredibly powerful discovery with important implications for our adolescent males: an adolescent male is 45 times more likely to visit a SBHC for a mental health visit than a community health center network (CHN). All
adolescents were 21 times more likely to come to a SBHC than a CHN. The above findings clearly supports the need adolescents – especially adolescent males – have for mental health services and their willingness to use it if it is accessible and confidential.

An interesting point discovered in the process of this literature review is the connection between chronic illness and mental health. Gustafson (2005) writes that students may suffer from anxiety related to a health concern and that SBHCs provide an important place for treating both the physical condition and the anxiety it brings to the patient. This does not appear to be prevalent in other community health clinics and hospitals, the reasons for which may be attributed to distance between patient’s home or workplace and hospital which interfere with regularly seeing patients, and the higher turnover of staff, and therefore less continuity in care, in larger clinics and hospitals.

**Social services.** SBHCs also provide individual counseling, group therapy, family therapy, family planning counseling and social work services to students (Gustafson, 2005). This includes counseling around sexual orientation, confidentiality, HIV/AIDS, loss and bereavement, tobacco prevention/cessation, detecting depression, reporting abuse, and bullying and referral to external social service agencies for “basic needs [such as] food, shelter, clothing legal and employment services and public assistance” (Juszczak, Melinkovitch, & Kaplan, 2003, p. 112). SBHCs have also been seen as a vehicle for increasing high school graduation rates (Gustafson, 2005), likely owing this consequence to the ability to keep more young people in school.

**Learnings and takeaways for curriculum development.** The development of SBHCs stems from policy makers’ and healthcare leaders’ recognition of the need to increase access to healthcare in underserved communities and has led to the development of creative ways to bring more healthcare to the community (Juszczak, Melinkovitch, & Kaplan, 2003). Although in recent
years there has been increasing conversation and policy surrounding health insurance coverage, it is important to consider that simply having health insurance does not equate with receiving medical care. Patients must be aware of the services they need, where to receive these services, and how to get these services. Thus, the research cited herein supports the need for a curriculum on educating students about health care.

Overwhelmingly, literature supports the use of SBHCs for mental health services. This offers additional support for including mental health lessons as part of schools’ curricula in schools that do not have a SBHC and suggests adding a special focus on reducing mental health stigma in advisory lessons. Additionally, the prevalence of asthma and asthma-related care (Manning, 2009) in urban communities was much higher than I previously considered. This suggests that adding lessons about asthma to the curriculum might increase the lessons’ relevancy and may subsequently reduce healthcare costs to the system by preventing ED visits when asthma symptoms are not controlled.

The value that patients placed on confidentiality was addressed in all studies and adds a level of complexity to the design process of this project. Will students feel comfortable asking questions related to sexual health and orientation in class with their friends and advisory teachers? Will undocumented status make some students reluctant to participate? Will it be possible to establish a climate in which a student does not feel that a family member will find out about their questions and concerns?

One of the main motivators for this project was my personal experience in the emergency department of a large county hospital. My sense was that some patients went to the emergency department to receive care that they could otherwise receive in smaller clinics. Research supports this finding, as adolescents who either did not have access to a SBHC or chose to never use it,
were four times more likely to access medical care in an emergency setting (Juszczak, Melinkovitch, & Kaplan, 2003; U.S. Department of Health and Human Services, 2004, as cited in Manning, 2009). O’Leary et al. (2014) also found that the emergency department was the main source of medical care for 3% of adolescents and 3% of parents among the study’s 1000 participants.

As a culmination of these research findings, I began to clearly see the incredible connection between healthcare and education. I also became increasingly more passionate about increasing the number of SBHCs everywhere because their effectiveness is so great! The rationale for SBHCs was to increase access to healthcare and to prevent dropout rates. Although the former intention made immediate sense to me, the latter was less clear. I began to realize, however, how much less school students would miss if their medical condition, be it physical or mental, was adequately managed. When serious dental, mental, and physical health issues are addressed when students are at school, they miss less class time and are better able to focus on academics and their future.

Summary and conclusion. Manning (2009) writes, “schools have been a hub of physical health initiatives…from the turn of the 20th century” (p. 40). As a classroom teacher, I certainly witnessed the impact schools could have on a community’s and individual’s healthcare choices. In schools that do not have SBHCs, alternative ways to provide information to students is essential. One such initiative is the development of advisory lessons that improve students’ health literacy and self-advocacy.

This investigation of SBHCs is highly relevant to this project because the goal of both is to educate students so that they may become effective and educated healthcare consumers and to make wise decisions that impact their current and future health (Gustafson, 2005). SBHCs’
popularity continues to grow because they play an important role in the community because of the services they provide. These services offer valuable insight into the perceived medical needs of community members. Among the chief themes of this section of the literature review is the high utilization of mental health services, especially by males, in SBHCs and the value placed by students on confidentiality. A big challenge of my project will be developing effective lessons that equip students to seek the myriad services in the entire community that SBHCs offer in one place.

**Summary of Chapter Two**

The literature review focused on investigating the rationale for including advisory classes in already-busy school days and the likely utility of health literacy lessons in this setting in order to answer the question, “*How can high school advisory lessons improve health literacy in adolescents?*” Current disparities in health literacy were discussed along with an in-depth look at specific topics that contribute to these disparities. The chapter concluded with a review of current school-based health clinics and their overwhelming success in providing access to care to students and their families.

The major themes in this review include the great need for mental health education, maintaining confidentiality, and increasing access to healthcare to the most disadvantaged groups, of which African Americans and other populations often bear the greatest burden due to socioeconomic barriers that stem from United States’ history of racism and discrimination.

**Connection to Chapter Three**

With greater knowledge of topics necessary to include in the advisory curriculum, the following section is written to address the specific details of curriculum development. Understanding by Design (UbD) (Wiggins & McTighe, 2005) model will be described in detail.
UbD was chosen because the topics covered in this review provided measurable knowledge outcomes for students. UbD provides an excellent model for curriculum design based on backward design. Methods in data collection are also discussed, along with the curriculum’s setting and participants.
CHAPTER THREE

Methods

Chapter two reviewed articles that provided a comprehensive overview of the important issues to consider when answering the question, “How can high school advisory lessons improve health literacy in adolescents?” The literature highlighted three important aspects to support the development of this curriculum. First, it was determined that advisory periods offer valuable opportunity for students to develop social and academic skills. Research also supported the idea that advisory teachers would benefit from structured lessons that provide meaningful and relevant learning opportunities for adolescents. Second, statistics on current health literacy gaps and racial-ethnic disparities in healthcare supported the need for a curriculum to teach students about the healthcare system. Six different topics ranging from mental health to advance directives were reviewed and supported by literature. Lastly, school-based health clinics were analyzed for their effectiveness, and it was determined from literature findings that uniting health literacy efforts with education efforts could yield fruitful results. Throughout the chapter, direct connections to the development of the curriculum were made. The goal of this comprehensive literature review was to demonstrate the multifacetedness and significance of the question, “How can high school advisory lessons improve health literacy in adolescents?”

This chapter builds on the information gained from the literature review and describes a curriculum model and the rationale for using said model for designing lessons for high school advisory classes on navigating the healthcare system. For this project, the understanding by design approach was used in structuring the curriculum. Content included in the curriculum was determined by the review of relevant literature in the previous chapter. Further qualitative research was conducted in order to create lessons that would be relevant to students’ lives. This
section discusses the following: curriculum development model, structure of the lessons, and strategies and recommendations for teaching students about health literacy.

**Research Paradigm**

The design of this curriculum was based off of my personal experiences as a teacher and as a medical researcher. These experiences included observation of student and patient dialogue and questions, conversations with school and hospital staff about their perception of student and patient needs, and new ideas encountered in scholarly articles and books. Additional information was gathered from conversation with friends and colleagues about issue of race and equality.

**Curriculum Development Model**

I employed the Understanding by Design (UbD) model (Wiggins & McTighe, 2005) to design this curriculum. I have used this model in my own teaching when I developed unit plans for mathematics and quickly discovered that having specific goals and a specific audience produces not only extremely effective end results, but also meaningful learning experiences for both the student and the teacher throughout the process. Because I am developing a new curriculum as opposed to modifying an existing curriculum, I felt tremendous value in the UbD’s framework for achieving specific results. The specific knowledge outcomes were discussed in chapter two.

I chose UbD to teach students about their health because “The end goal of UbD is understanding and the ability to transfer learnings – to appropriately connect, make sense of, and use discrete knowledge and skills in context” (Wiggins & McTighe, 2005, p. 23). Because my motivation for writing this unit is to effect change by making the content of the lessons meaningful to students, UbD is an excellent choice. UbD focuses on “developing and deepening understanding of important ideas” (Wiggins & McTighe, 2005, p. 21) and is intended for
teachers of all levels and subject matter. Additionally, the UbD curriculum development model is highly transferable across disciplines and has been used by organizations ranging from the Peace Corps to the California State Leadership Academy (McTighe & Seif, 2011). With this information, I concluded that UbD would make an excellent model for designing a curriculum as unique as the one described herein.

**Elements of UbD.** According to Wiggins & McTighe (2005), the three stages of UbD are to identify desired results, determine acceptable evidence of learning, and plan learning experiences and instruction. Thus, the first step of designing the curriculum was writing the unit plan (Appendix A). To write the plan, data was collected, organized, and analyzed in order to extract the most relevant lesson topics. Much of my motivation for choosing the topics discussed in the literature review stemmed from personal encounters with patients and students in the clinic and in the school, respectively. A backward design template was used to write the unit plan (Wiggins & McTighe, 2005). I began by first identifying goals, understandings, and essential questions for the unit on health literacy. I then determined what evidence of learning would be appropriate for the unit. Lastly, I designed seven lessons aimed specifically at helping students reach the learning goals established in unit design.

**Data collection.** I collected qualitative data from three sources: from past qualitative observation at my school site, from qualitative observation at a local area hospital where I served as a research associate in the emergency department, and from qualitative documents through the review of literature. The use of multiple sources of data (Mills, 2014) is consistent with the qualitative approach. The qualitative approach suits this research well because it considers that my own questions, views, and direction may change as additional information is collected over
time (Mills, 2014). An overview of each data collection source is presented in Figure 1. An explanation of each form of data collection follows.

<table>
<thead>
<tr>
<th>Setting</th>
<th>What I Saw/Heard</th>
<th>Reflection/Relevance to Curriculum</th>
<th>Evidence of Implementation in Final Curriculum</th>
</tr>
</thead>
<tbody>
<tr>
<td>School</td>
<td>Student shared with the class that she needed to take a birth control pill because she intended to have intercourse that night</td>
<td>Student clearly did not know that birth control pills have to be taken with high fidelity to be effective</td>
<td>Lesson 4: Taking medication correctly</td>
</tr>
<tr>
<td>School</td>
<td>School counselor shared information with me about the high number of students with anxiety, depression, and PTSD during my first year teaching</td>
<td>Students would benefit from knowing where to get help and treatment for mental illness</td>
<td>Lesson 2: Mental health</td>
</tr>
<tr>
<td>School</td>
<td>Student who knew of my intentions to become a doctor approached me asking for help with figuring out how to take her antibiotic medicine</td>
<td>Even as a fairly successful student, this student needed help with understanding basic medication instructions and warnings</td>
<td>Lesson 4: Taking medication correctly</td>
</tr>
<tr>
<td>School</td>
<td>Large number of teenage girls who were or have been pregnant and boys who have fathered a child</td>
<td>Students might need additional information about contraceptive measures</td>
<td>Lesson 5: Talking to provider about sexual health</td>
</tr>
<tr>
<td>Clinic</td>
<td>Patients brought to the stabilization room with no identifying information; doctors and chaplains struggling to find out whom to call to notify of patient’s status</td>
<td>Having an emergency identification card could potentially help all students be reunited with family should emergencies occur</td>
<td>Lesson 6: Making an In-Case-of-Emergency card for the wallet</td>
</tr>
<tr>
<td>Clinic</td>
<td>Seeing a large number of patients return to ED for previously treated and minor concerns</td>
<td>Students might benefit from learning to read discharge notes and learning to ask the doctor a lot of questions while in the ED</td>
<td>Lesson 3: Resources for emergent and nonemergent medical needs</td>
</tr>
<tr>
<td>Clinic</td>
<td>Seeing patients’ primary concerns on the electronic record tracker.</td>
<td>Students and families would benefit from</td>
<td>Lesson 3: Resources for emergent and</td>
</tr>
</tbody>
</table>
Many patients came for flu-like symptoms and STI testing; occasionally patients came for runny nose or ear ache knowing that pharmacists, nurse lines, urgent care clinics, and primary physicians are all good sources for medical care that is not an emergency

Lesson 5: Talking to provider about sexual health

Lesson 6: Preparing for appointments

| Literature | Read that middle class parents prepare their children for appointments by reviewing what the child will tell the doctor and what questions they will ask Poor and working class families in this text (Lareau, 1998), did not prepare their children for medical appointments. Additionally, parents themselves often viewed doctors with a great deal of authority and believed that they should not question them. Thus, students might not develop this skill on their own | Lesson 6: Preparing for appointments |

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**School.** Data was collected through qualitative observation of students in their natural setting over time (Mills, 2004) at an alternative high school in a large urban school district. A natural setting implies that the researcher gathers detailed information about participants by observing and directly interacting with participants (Mills, 2014). During my two years as a teacher, a topic that frequently came up among students was pregnancy and prenatal care. Of the students who were pregnant, only one student kept her scheduled appointments. Another student continued to smoke while she was pregnant because she insisted that she did not want to gain extra weight. Another female student did not know how to properly take birth control pills.
Questions posed during our school’s annual health day offered additional pieces of data. Questions such as, “Where can I get tested?” and, “What if I don’t have papers?” indicated to me that students must be educated on available local community resources.

**Hospital.** The second type of data collected included observational data from my time as a research associate at a large county hospital. While practicing directed screening for potential candidates for our studies, I would occasionally come across “STI Testing,” “Pregnancy Test,” “Fever,” “Emergency Contraception,” “Medical Concern,” and “Stomach Ache” as chief complaints for presenting to the emergency department. These chief complaints indicated to me that members of the community near that hospital were not necessarily aware that some of these concerns could be solved by local pharmacists, called in on a health hotline, or addressed by making an appointment at a smaller local health clinic.

Additionally, I observed unconscious patients brought in by ambulance without any identifying information or information about their existing medical conditions and medications. This has tremendous potential consequences for the treatment a person receives in the stabilization room after, for example, a serious car accident. If the medical care team must wait for lab results before performing a potentially life-saving procedure, the patient’s care is delayed. I also observed chaplains and providers debate what to do with the body of a young man who was found unconscious and died later on at the hospital. Because of this experience, one of the lessons in this curriculum calls for creating an identification card with blood type, allergies, and emergency contact information. In the same lesson is also an activity for the student to ask his or her family members about their family medical history in order to be better prepared for an effective office visit.
**Literature.** In addition to the topics addressed in the literature review, the text that had the most profound impact on my development into a more compassionate and empathetic teacher and future doctor is the book *Unequal Childhoods* (Lareau, 2003). Lareau examines the U.S. class system and how social class privilege fuels institutionalized inequality. One key point that stood out to me is how middle class families prepare their children for medical appointments by practicing with the child what the child will tell the doctor, which then contributes to better medical care for the child when he or she learns to be their own advocate. This key point was an important motivator in developing a lesson on preparing for appointments and appointment follow-ups.

**Data analysis.** During data analysis, data were continuously categorized and organized because qualitative research requires continuous coding of new findings (Jacob, 1987, as cited in Mills, 2014). After identifying the experiences that shaped my interest in the design of a unit on health literacy, these experiences were analyzed and specific outcomes and learnings were extracted for the development of the unit. Insight gained through the review of relevant literature is discussed in chapter two.

**Human Subject Review**

The curriculum contained herein does not include any student or staff names because this curriculum is not written for any particular school. Personal experience references are free of any student names or identifying information. There are no teacher names of teachers that might use the curriculum because no specific teachers have been identified. The school data that I use in the next section does not include any student names and merely represents demographic groups.

**Intended Audience**
The intended setting for this unit design is a high school advisory class. The intended participants of this design are high school students and their advisory teachers. The lessons intend to serve classrooms of any size, although a desired group size for activities is twenty students composed of ten male and ten female students in order to allow for potentially rich discussion that includes multiple perspectives. Thus, the activities were drafted with the urban student population in mind and is especially designed to build health literacy adolescents from underrepresented backgrounds such as ELLs and students of color.

From the literature review, I found dramatic gaps in health literacy between Black and Latino/a students and their white counterparts. As a result, this curriculum is intended for schools where the population of students is at least 20% Black and 10% Latino/a. Using one sample school, the number of students enrolled is 406, of which 78.3% qualify for free and reduced lunch and 21.2% qualify for special education services during the 2012-2013 academic year (Minnesota Department of Education, 2014). In that particular school, 36% of students are Black and 17.5% are Latino/a. 10% of these students were proficient on the Grade 11 MCA II math test and 21% were proficient on the Grade 10 MCA II Reading test.

Summary of Chapter Three

This chapter provided the methodology I used when designing the curriculum to answer the question, “How can high school advisory lessons improve health literacy in adolescents?” I used Understanding by Design model (Wiggins & McTighe, 2005) with which I have had previous experience as a model for writing the curriculum. The curriculum includes information gathered from the literature review and contains lessons on mental health, contraceptives, women’s health, nutrition, emergency department utilization, and advance directives. The
methods of data collection used are mainly qualitative and consist of teacher observation, books, literature sources, and personal experience working at a large county hospital.

Chapter four describes the curricular materials in greater detail and includes a discussion about the unit’s implementation, assessments, and additional special considerations and possible modifications.
CHAPTER 4

Results and Discussion

This chapter provides an understanding of the design of this curriculum that aims to address the question, “How can high school advisory classes increase health literacy among urban adolescents?” The ultimate goals of this curriculum is to teach students to be completely open with their provider, to ask when they do not understand a question on a form or what the provider is explaining verbally, and to become proactive about addressing their healthcare concerns and needs. In other words, it is my hope that this curriculum teaches students to be prepared to receive medical care and to self-advocate for their healthcare. Research has shown that people with low health literacy have, among other trends, more frequent visits to the emergency room, are less likely to use effective contraceptive methods, and are less likely to follow medical plans prescribed by their providers for managing chronic health conditions (Griffey, Kennedy, McGownan, Goodman, & Kaphingst, 2014; Dehlendorf et al., 2014; Speirs, Messina, Munger, & Grutzmacher, 2012). Research has also shown that bridging schools and healthcare is an effective means of reaching underserved populations and increase their utilization of medical resources (Manning, 2009). When schools can provide additional education on various healthcare topics, especially by utilizing available time already built into student schedules by advisory periods, historically underserved groups such as racial and ethnic minorities will become better equipped to navigate the complex world of healthcare.

Target Audience

The target population for this curriculum is high school students in grades 9 through 12 who are currently enrolled in advisory classes. The curriculum is intended to be used by teachers and advisories that have already established a strong sense of community. Students should feel
comfortable working in pairs and having a dialogue about potentially complex topics. Thus, it is not recommended that these activities be used at the beginning of a school year because trust and familiarity between teachers and students must be established first. Additionally, this curriculum aims to supplement existing activities and structures advisors have already established. For example, the curriculum assumes that norms around classroom discussion already exist and that students know how to organize their notes in notebooks.

Potential challenges of this curriculum as they pertain to the target audience are acceptance from families, student engagement, and students’ and families’ English language proficiency. For example, parents might wish to conceal certain aspects of their family’s medical history from their child. Alternatively, they might not support their child discussing a scenario about two people engaged in same-sex activity. Depending on the student population and their overall attitude about school and advisory class, students might not engage with the content in a way that is necessary for them to internalize the enduring understandings. Irregular attendance would also impact how much information students would take away. Lastly, limited English-language proficiency would make it nearly impossible for students and families to fill out the medical health questionnaire, to sign the necessary parent forms, and to understand the content of each lesson. Thus, teachers who have students whose parents do not speak English should consider translating these documents.

Curriculum Design

This health literacy curriculum was created using guidelines and framework established in Understanding by Design (Wiggins & McTighe, 2005) and it contains seven lessons. Lessons vary by length and complexity, but each can be completed in a forty-five minute period. Some lessons may take more time and require the teacher to plan ahead to distribute content over
multiple days. Lessons do not have to be used consecutively, and were intentionally planned to be spread over about three weeks to allow for traditional advisory activities, such as academic check-ins and school announcements, to take place. In order to accommodate the teacher’s comfort level with certain topics, lessons do not have to be completed in order, with the exception of the first and last lessons.

**Unit Plan**

The unit plan (Appendix A) was created using a backwards planning template from Grant Wiggins and Jay McTighe’s *Understanding by Design Curriculum Planning* book (2005). Once desired learning outcomes were identified and summarized as seven established goals, understandings and essential questions were determined in order to provide the instructor with big ideas that students should take away upon completing the course of seven lessons. Performance tasks and other evidence of learning were determined next. Special consideration was given to two main factors: diversity of activities to ensure student engagement each day, and protection of private health information. None of the activities or lessons required students to share any private information. Rather, all activities were designed to prompt students to reflect on hypothetical scenarios.

**Common Themes**

While progressing through the unit and lessons, several common themes shall emerge. The first is that one should be open with his or her medical provider about medical concerns, personal activities, and past and present events that affect one’s physical and mental wellbeing. The second is that students should be proactive about taking care of their health, but also to be immediately reactive if medical attention is needed. Special emphasis is placed on following up with a doctor following unprotected sex and on identifying medical emergencies. The last theme
is that students should be strong self-advocates of their physical and mental wellbeing. This includes using medical providers as resources of information rather than seeing them as figures of authority and learning to ask many questions. Planning and asking questions was stressed throughout the curriculum and was explicitly planned at the conclusion of every lesson.

Structure of Lessons

**Design.** Lessons (Appendix B) were structured using a backwards design model similar to the backward design model used in planning the original unit (Wiggins & McTighe, 2005). Learning goals that were identified in the unit planning stages of the curriculum were used to determine the learning objectives for each lesson. Key points were then identified so that the teacher has added clarity of takeaways she should emphasize to her students during the lesson. Assessment for each lesson was determined next, so that the teacher knows the task toward which to guide the students throughout the lesson. Connection to the overall achievement goal for the unit, which is to prepare students to be successful consumers of the complex world of healthcare, is explicitly stated in each lesson.

Lesson components were also planned using backward design. Independent practice was determined first, since this practice allows students to internalize the key points contained in the lesson. Gradual release of responsibility then calls for attention to the guided practice portion of the lesson, where the teacher is involved with student learning, but students are transitioning to thinking about and working with content on their own. Introduction to new material is intentionally planned last, in order to avoid planning lessons that center on the teacher. Since the curriculum is for the students, the greatest amount of time in these lessons is dedicated to the student doing most of the work. The opening and closing components of the lesson plan are included to ensure fluidity between lessons, especially since the flow could be interrupted due to
the required administrative tasks of advisory classes such as grade monitoring and school announcements. At the end of each lesson, the students are asked to prepare questions related to the lesson’s content. Students will use these questions to quiz one another at the end of the unit. This is intentional, as it gives students the opportunity to practice using some of the new language. It is also directly related to preparing questions for medical appointments. During closing of a lesson students are given an opportunity to summarize what they learned either through class discussion, exit ticket, or written reflection. Lastly, some possible modifications are suggested to teachers at the end of each lesson.

**Effective teaching.** Since the curriculum focuses on delivering particular information to students and engaging students in the content, it is assumed that the teacher will use good teaching practices with his or her students. Frequent checks for understanding either through cold calling, using Popsicle sticks, or any other participation strategies are required to keep students engaged. Some suggested questions to ask students are included in italics or brackets. It is also assumed that the teacher will use his or her own strategies for teaching the students how to organized their notebooks and take notes, and that the teacher might even use poster paper and follow along with students for note taking as a form of modeling. Though most student materials were written in student-friendly language, depending on his or her student population and expertise with ELLs, the teacher should modify the lessons to suit the student population.

PowerPoints and notes are not included with the lessons and the teacher may use key points, content contained in lesson plans, or other sources to create visual aids. These practices are not included in the lesson plans but are assumed part of any teacher’s practice.

**Pacing.** There is no suggested amount of time for each of these lessons. The teacher is encouraged to use the lessons and adjust the pacing to the time allotted for advisory at his or her
school. The teacher might also choose to spend half advisory time attending to school announcement and academic monitoring and half the time working with the content included in the lessons.

**Content of Lessons and Possible Considerations**

Learnings from literature review and personal experience were used to determine the content to cover in each lesson (Figure 1). However, there were many challenges to writing this curriculum, the chief of which was the sheer scope and complexity of some topics and the limited amount of time in which to teach these topics. For example, it became quickly apparent that allocating just one class period to complex topics like depression and PTSD would not be enough to provide adequate knowledge about these mental health illnesses to students. Below is a more detailed description of each lesson design and the considerations and challenges relevant to each.

**Lesson 1: Introduction to health literacy.** This lesson was designed in order to provide students with a preview of the unit and to ensure that students took home the health history questionnaire that students’ parents/guardians anticipated. The Mount Sinai Medical History Questionnaire (Lesson 1) was chosen for its applicability and similarity to many forms I encountered while working in healthcare. This lesson includes a video component, which was intentionally planned to alleviate the teacher of introducing a new and unfamiliar unit herself. This video would also help the teacher get a better understanding what the entire unit aims to address. A handout to follow the video was created in order to ensure that students watched the video actively. The video is intended for medical providers but contains many examples of patients struggling with doctor’s notes or directions to which some students might relate.
A challenge of this lesson was how to emphasize to students the tremendous value of reviewing their family’s medical history right away. Because each medical health questionnaire contains private health information, it may not be collected. This presents an additional challenge because there is no accountability for actually completing the long form. However, I included the same questionnaire in lesson six to ensure that all students get a chance to work with the entire form, even though in lesson six they will be using it to fill it out for a fictional character.

**Lesson 2: Mental health.** This was the most difficult lesson to create because of the amount of information that is both available and important to communicate to students regarding topics on mental illness. Literature review covered the need for mental health education and the various mental illnesses that are more prevalent in certain racial or socioeconomic groups (Bartels, Cardenas, Daliwal, & Alegria, 2012). I decided to focus on three mental health conditions: depression, anxiety, and PTSD. Depression and anxiety were frequently cited as mental health concerns for adolescents and I decided that these topics would be inherently relevant. PTSD was included because it is often associated with veterans, yet research shows that Black respondents who have not necessarily been to war also suffer from PTSD (Himple, Baser, Taylor, Campbell, & Jackson, 2009, as cited in Snowden, 2012). I wanted students to understand the impact of lived experiences on the mental health of an individual. However, the language in the lesson plan also stresses how important it is to understand that only medical professionals can diagnose mental illness. Assessment questionnaires are included in the lesson in order to provide the student with possible symptoms of each mental illness. They are not intended to be used to have students diagnose themselves.

There are many resources on mental health and it was difficult to choose the best handouts to use. I decided to have the teacher give an introductory lecture and then allow
students time to read over student-friendly handouts on each condition. In the process, I came across a special curriculum on mental health for high school students, which I included in the lesson plan for the teacher to reference and potentially use. The lesson I created gives a very limited view of each mental health condition and omits other mental illnesses such as bipolar disorder. It is highly recommended that the teacher consult a school counselor or social worker for additional resources or recommendations for teaching these topics. However, this lesson was designed to give an introduction to these topics and the activities contained therein accomplish this goal.

**Lesson 3: Resources for emergent and non-emergent needs.** As many as 88% of people who present to the emergency department (ED) for non-emergent situations have low rates of health literacy (Griffey, Kennedy, McGownan, Goodman, & Kaphingst, 2014). When I was a research associate at a large county hospital, I witnessed firsthand how frequently patients came to the emergency department for minor health concerns. This lesson was designed to teach students to consider alternative providers of medical attention and I hoped to place the greatest emphasis on establishing a primary care provider and on utilizing the knowledge that pharmacists possess.

An important consideration for this lesson is to ensure that students tend to real emergency situations and do not unintentionally get an idea that they should not use the emergency room for medical concerns. The sorting activity was created using resources from National Institutes of Health and provides students an opportunity to consider various medical conditions. Due to time constraints, there was not time to teach students to read ED discharge notes, which contain important information on treatment and follow-up.
Lesson 4: Taking prescribed and over-the-counter medication correctly. Although research cited the ability to read and interpret nutrition facts labels and to make certain dietary choices as an indicator of health literacy (Speirs, Messina, Munger, & Grutzmacher, 2012), I chose instead to focus on creating a lesson that prepares students to correctly read and use dosage information on a medicine bottle. I noticed that students will learn about nutrition in biology and health classes but I struggled to identify a class in which they would learn to perform medication dosage calculations. I also recalled the information in the video from lesson one and the struggle that many patients expressed with taking their medicines correctly. Thus, the lesson mainly focuses on creating a medication schedule that requires that students read dosage and timing information on bottles.

Although rate calculations and unit conversions are typically taught in middle school, my teaching experience has taught me that many people still struggle with these calculations as adults. A limitation of this lesson is that it does not explicitly state how to perform calculations with dosage, but provides students an opportunity to apply prior knowledge to problems involving calculations with medicine. Additionally, the lesson does not include information about disposing of unused and expired medication, but this information is important and is usually taught in high school environmental science classes.

Lesson 5: Talking to your doctor about sexual health. Research has suggested that women and men who are members of racial minority groups have higher rates of unintended pregnancies and lower rates of health literacy as it pertains to contraceptive knowledge (Craig, Dehledndorf, Borrero, Harper, & Rocca, 2014). Women and men of all racial and ethnic backgrounds also had limited knowledge about the human papillomavirus, the prevalence of complications of which is higher in women who are Black or Latina (Joseph et al., 2014). With
this information, I knew that including a lesson on contraception and sexual health would be valuable, but I also realized that traditional health classes cover many of the same topics. I also wondered how comfortable teachers would feel teaching these topics and how inclusive this information would be of LGBTQ students. Thus, I shifted the focus of the lesson to preparing students to discuss concerns related to sexual health with their providers.

I created two scenarios for students to discuss: one that concerns heterosexual relationships and another that concerns same-sex relationships. In both cases, students are asked what they would recommend hypothetical teenagers do in certain situations. This was intentional because I sought to ensure that students could have an open dialogue and not feel like they are revealing something private about themselves. The teacher’s role is to facilitate the conversation and also to emphasize the importance of seeing the doctor for regular check-ups both before and after planned or unplanned intercourse. From personal experience as a student, health classes teach students how to be proactive and how to avoid pregnancy and infection, but do little in terms of teaching students what to do in the event that they had unprotected sex. Teenagers, like many adults, make a lot of mistakes and for the first time in their lives are asked to navigate the world as adults. The goal of this lesson was to teach them how to be responsible when unforeseeable events, such as unprotected sex with an unfamiliar partner, happen.

A limitation of this lesson is that it does not discuss the emotional component of intimacy and it does not address some of the additional emotional difficulties students who are LGBTQ have to deal with. It also does not teach students about HPV, which research suggests is an important topic (Gelman, Nikolasjski, Schwarz, & Borrero, 2011). I omitted information about HPV simply because it would have made the lesson too long. In a revised curriculum, I might add a lesson on HPV because it is relevant to all gender identities since it is asymptomatic but
causes cancer of the cervix in women and of the throat in women and men (Gelman, Nikolajski, Schwarz, & Borrero, 2011).

**Lesson 6: Preparing for appointments and creating an emergency wallet card.**
Motivation for this lesson came from a previous case study I read in my teacher preparation program (Lareau, 2003) and from learning about how health literacy affects the probability that an individual creates an advance directive. I decided to omit a lesson on advance directives because I realized that it was not particularly relevant to high school students. By teaching students to prepare for appointments and getting comfortable asking their provider questions, I decided that students would be better equipped to get information on writing advance directives from their doctor.

This is my favorite lesson in the curriculum because it is a culmination of the previous lessons and also forces students to work directly with a health questionnaire. However, an obvious limitation in this lesson is the medical terminology that is asked on the form. Words like, “triglycerides,” “hyperthyroidism,” and “lymph nodes” may not be familiar to students and they might mark incorrect responses on their own forms in the future if they do not know what these words mean in “living room language.” Ideally, students would have access to the Internet during this lesson so that they could look up meanings of unfamiliar words. An additional limitation is that students might not know all the information to put on their emergency card. They might not know their blood type and it is likely that they do not have a primary care physician whose contact information to list. However, this lesson is important because it prompts students to seek this information out.

**Lesson 7: Conclusion.** As part of any good teaching and planning, students should be given time to review the material they learned and to apply it in a different context. I decided that
creating a bookmark would be a good end-of-unit activity because it can be done in one lesson, the teacher would be able to explicitly see which lessons and what information stood out to students the most (which would offer the teacher ideas for future lessons), and it forces the students to reflect on their learning. Because this curriculum includes many topics rather than a thorough examination of one, a more complicated project might be too difficult for students to do well. Some suggestions for extension activities or additional lessons are included in the lesson plan. A rubric was also created to assist the teacher with assessing the final product.

**Assessment.** Assessment in this unit included performance tasks and other evidence. Performance tasks included filling out a medical questionnaire, completing a Jigsaw activity on mental illness and creating an Emergency Wallet Card. Other evidence included checks for understanding using teacher questioning, exit tickets, worksheets, written student questions at the end of each lesson, written student reflections, informal observation of student dialogue and participation, and an end of unit product.

**Letters to students, parents, administrators, and teachers.** As a final step in developing this curriculum, letters to students, parents, administrators, and teachers were written to provide an overview of the benefits of this curriculum to each party involved. Special emphasis was placed on the benefits of the knowledge gained through the activities embedded in the lessons to the students. Special considerations for implementation were included in letters to teachers and administrators and some possible concerns about implementation were addressed.

**Additional Considerations**

It is important to remind students at the beginning of the unit as throughout the unit that the teacher is a mandated reporter and, although information shared during class discussion will remain private and stay within the classroom, a teacher must absolutely make clear that any
information a student shares about harming herself or harming others will be shared with appropriate authorities.

Although this curriculum can be implemented in any advisory class, the teacher must make sure that the lessons comply with local school and district policies and make necessary modifications and omissions. Ideally, a teacher would use these lessons only once he or she determines that students feel comfortable with one another and with the instructor. Topics like mental health and sexual health could be very personal and, although none of the lessons require students to disclose any information about their personal lives, an environment in which students feel free to ask any question – in person or by utilizing a bucket for students to submit questions anonymously – is essential. There must exist a certain level of empathy among students and teacher where the discussion that takes place in the classroom and in the context of the lesson does not affect the student’s comfort level outside the classroom. These lessons intend to inform, rather than to prescribe and modifications may be necessary, depending on the characteristics of particular advisory groups. Sample guardian/parental permission letters and forms are included in Appendix C.

One particular consider should be given to LGBTQ youth and the relevance of the curriculum to them. The lesson on sexual health was intentionally modified to be inclusive of all students and the goal of that lesson is to get students comfortable with telling the provider their gender identity and sexual orientation. Being an LGBTQ youth could bring additional challenges such as depression and only a healthcare provider or mental health professional is able to adequately address these concerns. Thus, despite my own unfamiliarity with issue pertaining to LGBTQ youth, the lesson was designed to be inclusive of all students.
Conclusion

This chapter thoroughly addressed how the curriculum aimed at answering the question, “How can high school advisory classes increase health literacy among urban adolescents?” was designed. Notes about implementation and evaluation of this curriculum were discussed. Motivation and content for each lesson were drawn explicitly from the literature review and these connections were better elucidated. The next and final chapter discusses the learning gained from designing this curriculum, the curriculum’s implications and limitations, and recommendations for future research.
CHAPTER 5

Conclusion

Review of Curriculum

In order to answer the question, “How can high school advisory classes increase health literacy among urban adolescents?” I presented current literature on effectiveness of homerooms, on current findings of primary observations among researchers of current gaps in knowledge about healthcare, and on school-based health clinics. Advisories exist in schools in order to support counselors by providing students opportunities for academic and social development (Tocci, Hochman & Allen, 2005). Additionally, research is inconclusive on the effectiveness of advisory periods and some researchers argue that this is due to a lack of effective resources, such as time, money, and curricula for teaching students essential life skills (Johnson, 2009; Imimbo, Morgan, & Plaza, 2009; MacIver, 1990; Tocci, Hochman & Allen, 2005).

In order to support teaching students about healthcare in advisory classes, a clearer connection had to be made between healthcare and education; thus, additional research was done on school-based health clinics (SBHCs) and nursing services provided in schools. The first American school nurse was named Lina Rogers and she assumed her position in 1902 (Gustafson, 2005). Her main responsibility was to vaccinate school children and to educate families about communicable diseases. It is because of her initial success at educating students and their families that school nurses are so prevalent in today’s society. Focusing efforts on vaccinating and educating children had and continues to have tremendous public health implications. This offers tremendous support for using schools as grounds for addressing some of our nation’s most pressing healthcare needs. Additional research was conducted on the effectiveness and popularity of school-based health clinics and research showed overwhelming
support for bringing health services to school sites (O’Leary et al., 2014). Thus, using advisory classes to teach high school students topics related to health had established support in existing research.

Literature-based research was also conducted on health literacy and medical needs in urban populations. Health literacy is defined as “the degree to which individuals can obtain, process, and understand basic health information and services they need to make appropriate health decisions” (Institute of Medicine, 2004). Research suggested that tasks like understanding medical forms, interpreting a medication label correctly, and knowing where to go to obtain medical services are important aspects of health literacy that were lower in historically underserved communities (Speirs, Messina, Munger, & Grutzmacher, 2012). Topics to teach in a health literacy curriculum were extracted from literature review and were narrowed to 1) mental health and services, 2) resources for emergent and non-emergent medical needs, 3) taking medication correctly, 4) talking to a provider about sexual health and 5) preparing for appointments and medical emergencies.

A unit plan was designed using the Understanding by Design framework (Wiggins & McTighe, 2005). Seven total lessons were created, which included the five topics listed above and two additional lessons that served to introduce and conclude the unit. These lessons were backwards planned, using the goals established in the unit plan and designing learning activities to meet and assess these goals.

**Reflection on Major Learning**

The biggest takeaway for me from writing this curriculum was how difficult it is to refine so much information down to a few key ideas. I have been fortunate because, as a mathematics teacher, daily objectives and goals were fairly easy to come up with using the “students will be
able to” language. The steps for teaching how to solve a particular type of problem may be transferred to a series of similar problems. Yet, in creating a curriculum about healthcare, I was overwhelmed by the sheer number of possible scenarios that students might encounter. I also struggled with creating the lessons so that teachers would understand them. It is likely that I have much more background knowledge about healthcare than some teachers and I struggled to determine what knowledge teachers who would teach these lessons possess. Thus, I learned that it is much more difficult to write a series of lessons on increasing health literacy than I previously thought.

I also learned how much I really care about delivering quality healthcare to people who need it and how excited I am about entering the medical profession and being a medical student. My hope is that many young adults will come to my office for screening and routine medical care and that my patients will feel comfortable telling me about their lives and their concerns.

**Relationship to Hamline University’s School of Education’s Conceptual Framework**

According to Hamline University’s School of Education’s (HSE) Conceptual Framework (2015), educators should be developed as leaders who promote equity in schools and society. The first of two of HSE’s beliefs concerns the interdependence between schools and society and that teachers should develop an understanding of the role that education plays in shaping said society. Development of this curriculum was a result of my understanding of issues surrounding racism and classism’s role in decreased access to healthcare for underrepresented groups such as Black and Latino students and their families. HSE’s second belief is that educators should act as agents of change in their classrooms, schools, and communities. This curriculum was developed especially to effect change in how our youth approach various health-related issues and is inclusive of race, class, gender, and other social and cultural characteristics. Thus, this project
directly meets HSE’s goals of developing an empathetic teacher who acts to deliver equitable education to all her students.

**Possible Implications**

An important possible implication of this curriculum is that the knowledge students obtain from it could substantially improve the quality of their health. If students are able to learn about their family’s medical history, they will be more likely to adhere to stricter visits to the doctor if, for example, they learn that they have a history of breast cancer in their families. If students establish a clinic and a provider for routine medical care, diseases will be caught and treated early. If students take their medication correctly because they understand their medication’s label and how and when to take it, chronic and transient medical conditions will be treated effectively and there will be fewer unintended pregnancies. Countless hours would open up in emergency departments for patients with more serious medical concerns and millions of dollars would be saved for taxpayers if patients manage their health proactively and effectively. Students that are able to get their medical needs met will be less likely to miss school and will likely have improved educational and social outcomes. We would likely have lower high school dropout rates and lower rates of teen pregnancy, which would in turn mean that we have a more educated, available workforce of young people. Effective implementation of a health literacy curriculum might lead to a development of health literacy standards and possible additional emphases on providing and teaching about healthcare in the schools.

Another important implication of this curriculum is that students might become more interested in certain healthcare topics and seek out a career in healthcare. If students from underrepresented backgrounds learn about a career in healthcare that they previously did not know existed, they might feel more motivated to pursue that career and will then add to a more
diverse force of healthcare providers. For example, students might learn about the responsibilities of a pharmacist and might begin to pursue this rewarding and challenging career. This curriculum also allows for building connections between various content areas. For example, upon completing a lesson on medication dosage and drug interactions, a math teacher might present additional problems related to bacterial growth or drug metabolism and a science teacher might present a number of lectures on drug design, herbal medicines, the human body, or a number of other topics. An economics teacher could build a series of lessons on economics of healthcare or drug company profits and an English teacher might choose to teach a non-fiction book or discuss a series of short stories about patients or healthcare providers.

**Limitations of the Curriculum**

There are many limitations to this curriculum. The main limitation is that the curriculum currently does not include training for educators on how to teach the lessons it contains. It is likely that there would also be teachers who would not want to teach these topics either because of their own comfort level with these topics, because they are personally against some of the lessons in this curriculum, or because they simply do not want to teach about healthcare in general. There may be advisory classes that work very well with the structure and lessons that a teacher would have already established and to this teacher an interruption in the flow of his or her advisory structure would not be beneficial, despite the possible benefits the knowledge this curriculum brings might have for his or her students. Teachers might also feel that they are being asked to take on the responsibility of parents, which they often do already, and they may be unwilling to take on additional preparation and work. Despite having created these lessons with special attention to reducing the workload for teachers, there is still work required for teachers to
do before class. Though some lessons require minimal work, such as making extra copies, others require assembly of medication bottles or cutting cardstock paper for the sorting activity.

Another limitation is that this curriculum is currently geared toward high school students and would therefore not reach students in middle school, some of who drop out of school before they enter high school. It is also not designed for a particular city or state, so even though students might understand that they need to establish a primary care provider, figuring out how to actually do so presents another challenge. There is also very little time allotted to covering many topics. Entire curricula for high school students exist on depression alone. To address several mental illnesses in one short lesson was a great challenge.

It may also be necessary to provide training to teachers on using this curriculum and certain topics in order to alleviate fears some teachers might have about delivering wrong information to their students. Special consideration must also be given to how prevention of pregnancy is taught. In some communities and families, it is acceptable and even desired that a young girl have children early. Students not involved in heterosexual relationships might ask additional questions with which the teacher might not be familiar enough to find the answer. Thus, an important limitation is that one cannot assume that teachers know very much about healthcare or that they are able to address the unique needs of their entire student population. Lastly, students who do not live with their biological parents might struggle with completing certain activities. One idea to address is to have the adult with whom the student lives fill out the medical questionnaire about the adult and not the student. If families are not open to discussing health-related problems, the student could be excused from this particular activity.

It is important for the educator to consider her specific context of teaching. For example, though this capstone focuses primarily on Black and Latino/a youth, different urban, suburban,
and rural districts might contain a uniquely large presence of Asian American and Somali students, among many other demographics. Teachers will need to be mindful of cultural considerations and possible modifications for each of their own student groups. Finally, it may be potentially dangerous to blur lines between the services that a doctor delivers and the services that a teacher delivers. Although the goal of this curriculum was to provide students with enough information to get them through the door to a doctor’s or mental health professional’s office, much of the curriculum requires teachers to teach outside their content area. Thus, teachers are asked, once again, to fill in the gaps that medical providers or students’ own families have not filled for our young people.

**Using Potential Results**

If this curriculum were to be used in an advisory program, results from this research might help support the need for more health literacy education in schools. Teachers might find that students really enjoy these topics and lessons, or they might find certain topics to be very difficult in which to engage students. Health literacy could potentially be incorporated into already-existing health classes if advisory classes are deemed too short to cover all necessary information.

**Recommendations for Future Research**

Chapter two discussed current research on advisory classes and their effectiveness. As previously discussed, research is inconclusive about whether advisory classes are effective at achieving the goals that they are intended to achieve, yet schools keep advisory classes despite not having conclusive evidence that these classes are effective. Thus, one recommendation is to use this curriculum in an advisory class and measure whether the desired learning takes place.
This would provide an excellent foundation of results that would either support or oppose the use of advisory time during the school day or week.

It would also be extremely valuable to gain additional information about how much knowledge from the curriculum students actually apply to their daily lives. For example, additional research could be done to find out how many students actually establish a primary care provider if they did not have one already, how many students report asking questions to a doctor or nurse that they would not have known to do previously, and how many students end up changing or modifying their medication schedule after learning about the importance of following medication directions closely.

Next Steps

This project illuminated the great potential for positive change in our communities if professionals from healthcare and education fields engage in interprofessional collaboration. One of my goals as I transition to medical school is to engage my classmates in community outreach programs at local schools. Specifically, I seek to organize more visits to local schools by medical students in order to provide for them an opportunity to educate our youth. Another goal is to expand patient education into waiting rooms and local media sources. One idea is to design a contest in which students from local high schools create informative videos and education materials that clinics could distribute to their patients in waiting and patient rooms. Lastly, in order to gauge effectiveness of lessons and to gain feedback, I seek to share my lessons with a small group of school social workers who work with students from underrepresented backgrounds. After making the necessary modifications, I will look into expanding this curriculum to a broader audience.

Conclusion
Through my own experience and research, I conclude that using advisory lessons to teach students healthcare topics can have a positive impact on our community’s level of health literacy and its members’ overall health. Although this health literacy curriculum sought to provide teachers with a resource that would eliminate the need for additional preparation, it became apparent that the topics contained in these lessons would require not only dedicated time on the part of the teacher, but dedicated time on the part of the school district or school in order to train teachers how to present this information correctly. The more knowledge and resources the instructor has, the more effective this curriculum will be for their students. I feel that this curriculum serves as a good starting point for districts and teachers to use, but I also feel that if schools take on this additional responsibility of doctors and parents, local health centers should fund the development of a health literacy program and healthcare professionals should support teachers in teaching our young people.
APPENDIX A

Unit Overview
### Unit Cover Page

<table>
<thead>
<tr>
<th>Unit Title: Health Literacy</th>
<th>Designed by: Anya Dmytrenko</th>
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</thead>
<tbody>
<tr>
<td>Grade Levels: 9-12</td>
<td>Time Frame: About 3 weeks</td>
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<tr>
<td>Subject/Topic Areas: Health and Wellbeing</td>
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</tr>
<tr>
<td>Key Words: health literacy, mental health, primary care, health education</td>
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**Brief Summary of Unit:** This unit focuses on improving high school students’ health literacy by using already-scheduled advisory time. Main emphasis is placed on students communicating openly with their providers and being proactive about healthcare needs. Students will become familiar with filling out medical forms and understand the importance of reading them, they will work with dosage calculations and understand the importance of taking medication as prescribed. Students will also consider emergency cases that warrant immediate medical attention and learn what other resources are available to get help with a medical concern.

---

### Stage 1 – Desired Results

#### Established Goals:

1. Students will define health literacy and draft their personal definitions of health and disease
2. Students will be able to correctly identify characteristics of anxiety, depression, and PTSD; students will know that mental illness has physical as well as mental manifestations
3. Students will be able to identify a health setting to obtain medical care for various emergent and nonemergent situations
4. Students will be able to determine the necessary dosage of a medication; students will be able to make a medication sheet to keep track of medication
5. Students will understand that providers are specially trained to discuss sexual health, regardless of sexual orientation of patient; students will know to be honest about their sexual practices with their provider
6. Students will fill out a medical history questionnaire and prepare questions to ask a provider using a hypothetical patient’s short story; students will make a Medical Emergency Identification Card to keep in their wallets
7. Students will create a product that will demonstrate their takeaways from the unit

#### Understandings:

*Students will understand that…*

- It is important to carefully read medication labels for correct dosage information and discharge instructions to ensure proper execution of medical care
- It is important to establish a primary care physician and visit emergency rooms only in cases of emergency
- Mental health has a physical basis and

#### Essential Questions:

- What is disease? How and when does it start and how is it treated?
- What is my family’s medical history?
- What is my experience with the medical system and what kind of relationship do I want to have with my primary care doctor?
- What does it mean to be healthy?
- Am I healthy?
- Why is it important to my life to know...
mental illness needs to be treated as seriously as physical illness
- Asymptomatic sexually transmitted infections are preventable and treatable, yet pose serious risk to both partners if left untreated
- A healthcare provider will be able to discuss and provide more relevant protection and contraceptive methods if the patient is honest about his or her lifestyle
- Health care providers should not make their patient feel judged. If a provider or clinic does not seem helpful or understanding, students should look for a different clinic for their care and it is perfectly acceptable to self-advocate.
- It is important to ask the medical provider many questions, especially when the provider presents information in a way that is difficult to understand.
- Healthful living requires a person to act on available information about good nutrition even if it means breaking comfortable habits.

about the medical system?
- What is preventive care?
- How is mental illness a true illness?
- How will I be able to use this new information about health and healthcare to improve the health of my family?
- Where would be the best place for me to take care of my health concern?
- What is the right way to take medication?

<table>
<thead>
<tr>
<th>Students will know…</th>
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<tbody>
<tr>
<td>• Common mental illnesses and the populations in which each illness is more prevalent</td>
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<tr>
<td>• To be completely honest regarding family, mental, behavioral, and sexual history with providers</td>
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<tr>
<td>• To establish a primary care provider and sign up for online medical record access</td>
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<tr>
<td>• How to read medication labels and discharge instructions</td>
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<tr>
<td>• That providers keep all information private (PHI)</td>
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<tr>
<td>• That pharmacists are true experts on drug interactions and can suggest medication to take to feel better and that nurses and nurse hotlines are great resources to contact with questions and save potentially unnecessary</td>
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<tr>
<td>• Specific health problems that primary care providers, emergency providers, and specialists treat</td>
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<tr>
<td>• Reading and keeping discharge notes and other medical information in a medical file is important</td>
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<table>
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<tr>
<th>Students will be able to…</th>
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<tr>
<td>• Explain main differences between ED and primary care clinics and correctly identify which cases warrant an ED visit and which ones are best to bring to providers</td>
</tr>
<tr>
<td>• Develop their own questions to ask providers at their next appointment</td>
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</table>
- Read and interpret medication and nutrition labels and discharge instructions and patient information handouts
- Plan visits to the doctor for themselves and family members
- Fill out a medical history questionnaire and ask questions about questions on the questionnaire that they do not understand

### Stage 2 – Assessment Evidence

#### Performance Tasks:
- Fill out a medical history questionnaire with family members
- Complete a handout on mental illness in a Jigsaw activity
- Develop a card to carry in student’s wallet with emergency information.
- Draft a list of questions for provider given a unique medical condition
- Develop a bookmark destigmatizing a given mental illness
- Fill out medical history forms with families (at home; ungraded because PHI)
- Use the internet to find local phone numbers for
  - Nurse hotline
  - Mental crisis hotline
  - County medical assistance
  - County assistance for emergency housing, transportation, food
- Sort a variety of medical concerns and conditions based on a variety of medical provider resources

#### Other Evidence (quizzes, tests, prompts, observations, dialogues, work samples):
- Questions that students develop at the end of each lesson
- Observations of participants’ understandings, questions, misconceptions, and frustrations
- Quality of responses on exercises and worksheets
- Participant self-assessments and reflections of understandings and design
- Written and oral feedback to teacher
- Content of final bookmark

#### Student Self-Assessment and Reflection:
- If I had to take a lot of different medications, what specific things could I do to help me follow the right schedule? (pill box, ask family member to remind/help, program into phone, keep medicine in a visible location)
- To what extent am I a good at taking care of my health? What areas do I need to improve?
- I am interested in a career in healthcare? What specific topics piqued my interest?
- Do I have a primary care doctor? Do I like him or her? Do I feel like I could tell my doctor everything about my health and lifestyle?
### Stage 3 – Learning Plan

**Learning Activities (consider WHERE TO elements):**

- Overview of unit; performance/learning goal
- Exercise on current health knowledge (pretest alone first, then check answers with group)
- Preview of medical health questionnaire form
- Mental health jigsaw activity on anxiety, depression, and PTSD
- Read and discuss various scenarios and determine the next course of action for patient in various emergent and non-emergent situations
- Watch and discuss relevant video clips
- Fill out family history questionnaire with family at home
- Construct a medication schedule and calculate the right dose of a medication
- Discuss scenarios related to caring for one’s sexual health
- Lecture and discussion on mental health elements and issues
- Construct a bookmark with takeaways
APPENDIX B

Created Curriculum
## Lesson 1: Introduction to Health Literacy

<table>
<thead>
<tr>
<th>OBJECTIVE.</th>
<th>KEY POINTS.</th>
</tr>
</thead>
</table>
| • Students will draft their personal definitions of health and disease  
  • Students will begin to compile their medical history  
  • Students will define health literacy | • **Health literacy** is the degree to which individuals have the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions.  
  • Disease can be physical or mental, visible or invisible  
  • Having a medical history for a patient helps providers determine the likelihood of some diseases and how to proceed with treatment. |

| Suggested prereading for the teacher from the Office of Disease Prevention and Health Promotion:  
  Literacy and Health Outcomes:  

### ASSESSMENT.

There will be no formal assessment for this lesson.

### CONNECTION TO THE ACHIEVEMENT GOAL.

This lesson introduces the student to the topic of health literacy. The goal of today’s lesson is to get the student to start thinking about health in broader terms since they are likely to initially define disease in terms of physical pain. The definition of disease that students draft should contain aspects of mental health. It is also important that students begin to start thinking about their medical histories and begin collecting information from living family members about diseases that may be more prevalent in their families.

### OPENING

• Introduce the next few days as a series of lessons aimed to help students understand how to take better care of their health. Rather than prescribing treatment and telling students what to eat or do, students should know that this curriculum is more about providing them with information that they can apply when they visit the doctors. Students should learn to advocate for themselves and their families and begin to let go of the fear many people have of appearing uneducated to their medical provider.  
• Tell students that today’s lesson will begin with a few minutes of quiet time where they will be asked to write their own definitions of disease and health. Then, they will watch a video about health literacy and answer questions that accompany the video. When the video is over, there will be a class discussion of the questions and a short presentation by the teacher. Finally, students will take home a medical history questionnaire to work on with their families.

| MATERIALS | |
|-----------| |
| Agenda written on the board  
Notebook | |
### INTRODUCTION OF NEW MATERIAL

1. Post the following question on the board and ask students to write two separate definitions for health and disease in their notebooks: “What does it mean to be healthy? What does it mean to be sick?” Let students know that this there is no right or wrong answer and the definitions can be as long as they would like.

2. Ask 3 students to share their definitions and poll the class to see if they had similar definitions. Jot down on the board or overhead what students are saying. Students will likely define wellness and illness in terms of physical symptoms. Ask students, “What role does mental health play in a person’s overall health?” and jot down these responses as well.

3. Tell students that they will watch a video that was designed for physicians. The goal of the video was to get physicians to be better communicators with their patients because of the great divide that exists between the information that the doctor thinks she delivers and what the patient actually takes away. Ask students to be prepared to write down on key takeaway that they will take from the video and to be on the lookout for the information that they find the most interesting or surprising.

4. Hand out the note sheet that accompanies the video and watch American Medical Association’s (AMA’s) “Health Literacy and Patient Safety” video  ([https://www.youtube.com/watch?v=cGtTZ_vxjyA](https://www.youtube.com/watch?v=cGtTZ_vxjyA)). If the hyperlink is not active, simple search on YouTube will bring you to the site. Remind students to watch for one most interesting or relevant piece of information from the video. Check for understanding of directions.

5. Some possible takeaways from the video:
   - Disconnect in communication leads to confusion, frustration, and helplessness
   - Doctors sometimes don’t use living room language and it is OK to ask them
   - It is OK to get family members involved in your medical care and visits to the doctor
   - You can ask to see a model or visual or for a way to explain something
   - Medication compliance sheet can help individuals keep track of complicated medication schedules

Guided questions to fill out during the video.
<table>
<thead>
<tr>
<th>GUIDED PRACTICE</th>
<th>Poster paper and markers</th>
<th>Projector</th>
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<tbody>
<tr>
<td>Once the video concludes, tell students to pair up and share overall reactions to</td>
<td></td>
<td></td>
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<tr>
<td>the video. Post the following questions on the board to guide student discussion:</td>
<td></td>
<td></td>
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<tr>
<td>- What information in the video shows that doctors really care about the patient</td>
<td></td>
<td></td>
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<tr>
<td>getting the correct information about appointments?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- After watching this video, will you feel more comfortable telling the doctor or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>nurse if you don’t understand something they are saying?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- What were some key pieces of the doctor’s visit that the video focused on?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Students also have the option to go over their note sheet and check each other’s</td>
<td></td>
<td></td>
</tr>
<tr>
<td>answers. Using popsicle sticks or cold-calling or simply asking students to raise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>their hand, ask students to share their one takeaway. Write down student responses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>on poster paper and try to get as many students to speak as possible.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Tell students that the video they just watched was about helping doctors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>understand how to get important medical information to their patients in a more</td>
<td></td>
<td></td>
</tr>
<tr>
<td>effective way. There is a need for that in the medical community because doctors</td>
<td></td>
<td></td>
</tr>
<tr>
<td>find that patients often miss important information when they come to appointments.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proceed to give students a short presentation with the following key points.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional information can be included based on teacher’s prereading of the</td>
<td></td>
<td></td>
</tr>
<tr>
<td>materials on the Health.gov website on health literacy. These key points can be</td>
<td></td>
<td></td>
</tr>
<tr>
<td>typed on separate pieces of paper and handed out to students to hold up on queue</td>
<td></td>
<td></td>
</tr>
<tr>
<td>and then hung in the room. They could also be presented in a</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PowerPoint format or on poster paper. Either way, as good teaching, information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>should be presented in more ways than only verbal. Depending on the group of</td>
<td></td>
<td></td>
</tr>
<tr>
<td>students, the teacher can decide whether students take notes or simply follow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>along. If they follow along, teacher should naturally pause to check for</td>
<td></td>
<td></td>
</tr>
<tr>
<td>understanding.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Health literacy** is the degree to which individuals have the capacity to obtain, process, and understand basic **health** information and services needed to make appropriate **health** decisions. [What does this mean in your own words?]

Limited health literacy affects people’s ability to: Search for and use health information / Adopt healthy behaviors / Act on important public health alerts
GUIDED PRACTICE  (continued)

| Health is defined as a person’s physical or mental condition. We often think of health simply in terms of our physical wellbeing, but it is also very important to take care of our mental health. Disease is defined as a disorder of structure or function in a human, animal, or plant, especially one that produces specific signs or symptoms or that affects a specific location and is not simply a direct result of physical injury. Having good health literacy has been shown to affect how likely it will be that a person will:
| - get a mammogram (screens for breast cancer)
| - get screened for cervical cancer
| - get proper care for their child following a diagnosis
| - understand what to do after visiting an emergency room
| - have the knowledge necessary to have habits for a healthy heart
| - agree to participate willingly in studies (informed consent)
| Low reading skill and poor health have been shown to be clearly related. However, it is not necessary to be a good reader to be a good consumer of healthcare. The most important thing is to advocate for yourself and ask the doctor questions when you don’t understand something he or she is saying. You can ask for help with forms so you don’t end up agreeing to a procedure you didn’t want. You can and should bring medications that you are taking so that the doctor or nurse can explain how to take each one properly.
| Tell students that in the next part of the lesson they will receive a medical history questionnaire that they will take home to their parents. Because it is mentioned in the parent letter, the parent/guardian will know to expect it. | Poster paper and markers
| Projector |
INDEPENDENT PRACTICE

For independent practice, tell students that they will take home a medical history questionnaire. Most medical history questionnaires are quite long. Students should be informed that it is best if they go to the same clinic or hospital for their primary care because then their information gets updated automatically and they don’t have to fill out the same questionnaire over and over. Medical records could also be sent between clinics free of charge, but this often takes about a week. Because a person’s medical record contains private health information, it should not be collected and graded and students should be told this. Students should also know to keep this information extremely private, with the exception of sharing it with a few close family members. Teachers are encouraged to tell students to practice filling this form out because there are some potentially confusing questions on the form. If the student is a caregiver to a family member, teachers should also encourage students to sit down with that person and fill out a form together. This form will be revisited in Lesson 6: Preparing for Appointments, but because it is long, it should be given to students early.

Students should be encouraged to think about why some questions are on the sheet. For example, doctors benefit from knowing where the patient works. If the patient works at a desk, he might experience more back pain and better treatment might involve physical therapy. If the patient’s job is to work at a chemical plant, the doctor might consider potential damage to lung or skin tissue.

Lastly, the teacher should allow about 5-10 minutes for students to create a special page in their notebooks for quiz-like questions they would draft at the end of each lesson. These could be questions students have or questions students already know the answer to. They will write a minimum of one question for each lesson, including today’s. All questions will be revisited on the last day of the unit. Sample questions may be posted for today as models:

1. What is health literacy in your own words?
2. What stood out to you in the video about health literacy?
3. Why do you fill out a medical history questionnaire before going to the doctor?

CLOSING

In closing, students should revisit their definitions of disease, health, and health literacy.

1. Have student pair-share about today’s topic and what questions they anticipate they will have
2. Ask students to review their notes and make sure that they have a date and are complete
3. Tell students that next lesson will be on mental health, after which there will be five additional lessons on physical health and literacy
4. Remind students to keep their medical history questionnaire private but also to take some time to fill it out with their families
ADDITIONAL TEACHER RESOURCES AND CONSIDERATIONS


Depending on the amount of available time, teacher and students could go through the various parts of the medical history questionnaire and brainstorm why that information is asked. For example, asking about weight and height helps the doctor determine the bodily mass index (BMI) and perform dosage calculations that are frequently based on weight. Knowing whether a patient smokes helps the doctor assess the patient’s risk of developing lung cancer and the doctor would know to monitor lung function more closely.

Teachers could have students brainstorm a list of ways that they are already good consumers of healthcare. Some students might bring up using MyChart for electronic medical record access and using Google to look up information about their health or for help with filling out forms.

Some students might be homeless and might not be staying with their biological families. In this case, ask students to get as much information as they can from sources that they are still in contact with. If a student was adopted, for example, adoptive parents likely have paperwork about the health history of birth parents. If a student is homeless and does not know much of their medical history, instruct them to practice writing about that on their medical form. Explain that all information is also valuable to the provider.
Health Literacy Video Note Sheet

Name ______________________________________ Date ______

Health literacy and patient safety: Help patients understand
(https://www.youtube.com/watch?v=cGtTZ_vxjyA)

<table>
<thead>
<tr>
<th>Question</th>
<th>Answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. At what grade level does an average American read?</td>
<td>8th grade</td>
</tr>
<tr>
<td>2. At what grade level is most medical information often communicated?</td>
<td>College graduate level</td>
</tr>
<tr>
<td>3. True or False: Patients that have inadequate health literacy are more likely to be hospitalized for their chronic illnesses</td>
<td>True</td>
</tr>
<tr>
<td>4. True or False: It is the physician’s job to help the patient understand important medical information.</td>
<td>True</td>
</tr>
<tr>
<td>5. It is OK to not feel safe when talking to a doctor or nurse.</td>
<td>Answers will vary</td>
</tr>
<tr>
<td>6. What should you do if you are not sure about what the medical form is asking?</td>
<td>Ask for help/explanation</td>
</tr>
<tr>
<td>7. True or False: It would help your doctor take better care of you if brought your medications in to the office (“The Brown Bag Test”).</td>
<td>True</td>
</tr>
<tr>
<td>8. What should you ask your provider to do if she speaks too quickly for you to understand?</td>
<td>Ask them to slow down</td>
</tr>
<tr>
<td>9. How many things does an average person remember from a conversation?</td>
<td>2 or 3</td>
</tr>
</tbody>
</table>
The Mount Sinai Medical Center

THE PROGRAM FOR DIAGNOSTIC AND PREVENTIVE MEDICINE

Date:________________

Dear________________________:

Welcome to The Mount Sinai Program for Diagnostic and Preventive Medicine.

You are scheduled to meet with Dr. __________________ on (day) ____________ (date) ____________ at (time) _____________. If for any reason you are unable to keep this appointment, please let us know as soon as possible. Our office is located on Fifth Avenue at 100th street, entry level.

Please return the following items to us in advance of your visit:
(1) medical records you think may be relevant, including reports of any testing carried out within the past year
(2) the attached questionnaire, completed as best you can
(3) a list of particular questions you would like the doctor to answer.

Sincerely,

The Program for
Diagnostic and Preventive Medicine
PATIENT INFORMATION

Physician: ___________________________  Date of Visit: _______________________

Please complete the following:

Name of patient (if indicated incorrectly): ________________________________

Address: __________________________________________________________________

Telephone: Day ( ) ___________________________  Evening ( ) ______________

Email address: __________________________________________________________

Fax: ( ) __________________________________________________________________

Social Security Number: ________________________________________________

Date of Birth: __________________________________________________________________

Birthplace: __________________________________________________________________

Mount Sinai Unit Number (if available): ________________________________

Are you employed?  Yes  No  Retired?  Yes  No

Occupation: __________________________________________________________________

Who should be contacted regarding appointments and other matters?

Self:  Other person: _____________________________

Marital status:  Married  Single  Divorced  Widowed

Have you signed an Advanced Healthcare Directive? ________________________________

Who can be contacted in case of an emergency? ________________________________

Name: __________________________________________________________________

Address: __________________________________________________________________

Telephone: Day ( ) ___________________________  Evening ( ) ______________

Relationship to you: __________________________________________________________________
### Program for Diagnostic and Preventive Medicine

#### B
Please list the names and telephone numbers of others involved in your care:

<table>
<thead>
<tr>
<th>Physician</th>
<th>Specialty</th>
<th>Address</th>
<th>Telephone</th>
<th>Receive Report</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

#### C
Are you currently under a physician’s care for any ailment or injury?  Yes []  No []

Why have you scheduled an appointment with the doctor at this time, and what are your expectations?

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

#### D
Are you taking any prescription medications?  Yes []  No []  *(If no skip to next)*

Please have these available at your visit.

<table>
<thead>
<tr>
<th>Name of Medication</th>
<th>Dosage</th>
<th>Frequency</th>
<th>Any Side Effects?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
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<td></td>
</tr>
</tbody>
</table>

#### E
Are you taking any OTC/non-prescription medications?  Yes []  No []  *(If no skip to next)*

<table>
<thead>
<tr>
<th>Name of Medication</th>
<th>Dosage</th>
<th>Frequency</th>
<th>Any Side Effects?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>
F
Are you taking any vitamins, homeopathics, herbal medicines or supplements?  
(If no skip to next)

<table>
<thead>
<tr>
<th>Name of Supplement</th>
<th>Dosage</th>
<th>Frequency</th>
<th>Any Side Effects?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

G
Have you ever had a bad reaction to any medication or supplement?  
(If no skip to next)

<table>
<thead>
<tr>
<th>Name of Medication / Supplement</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

H
Are you allergic to any other substances?  
(If no skip to next section)

<table>
<thead>
<tr>
<th>Name of Medication / Supplement</th>
<th>Reaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

I
CONSTITUTIONAL/SYSTEMIC:
What is your current weight? ____________________________ lbs
What is your height? ____________________________ lbs
What is the least you have weighed in the past 5 years? ____________________________ lbs
What is the most you have weighed in the past 5 years? ____________________________ lbs
Have you had recent unexplained weight gain?  
Have you had recent unexplained weight loss?  
How many hours do you sleep on average at night? ____________________________ hours
Are you frequently tired?  
Are you having trouble sleeping?  
If yes, please explain: ______________________________________
Have you had recent fevers, night sweats or chills?  
Do you regularly use a seatbelt in automobiles?
## Program for Diagnostic and Preventive Medicine

### Medical History

Please do not leave urgent information on this form.
If you need medical advice or are not sure what type of care you need, please call 1-800-MD-SINAI

#### A

Have you had any major illnesses or surgeries?

<table>
<thead>
<tr>
<th>Condition</th>
<th>Year</th>
<th>Where Treated</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
</tbody>
</table>

#### B

**Lifestyle**

a.) Have you ever smoked cigarettes?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

How many years have you smoked?

<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

How many packs per day?

<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

If you have quit, what year did you quit?

<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Have you used tobacco in other forms (pipe, cigars, chew)?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Are you exposed to "second-hand" smoke?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

b.) Do you drink alcoholic beverages?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

How many drinks per day?

<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Do you have or do others express concerns about your drinking?

<table>
<thead>
<tr>
<th>Year</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Do you drink coffee or tea?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

What are your hobbies?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Do you have any pets or animals?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
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</tbody>
</table>

Have you lived outside the United States?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

Have you or your family recently experienced any life changes or unusual psychological stress?

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
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</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

#### C

**Diet and Nutrition**

a.) Please characterize your current diet, describing your typical breakfast, lunch and dinner:

__________________________________________________________________________

b.) Do you have intolerance of any particular foods (lactose, gluten, etc.)?

__________________________________________________________________________
**Program for Diagnostic and Preventive Medicine**

**D** **Exercise**

a.) Do you exercise regularly? [ ] Yes [ ] No

b.) What type of exercise and how often?

[caption]

<table>
<thead>
<tr>
<th></th>
<th>Living</th>
<th>Deceased</th>
<th>Age</th>
<th>Major Illnesses / Cause of Death</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Grandmother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maternal Grandfather</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal Grandmother</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Paternal Grandfather</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sisters, Brothers (please specify):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aunts, Uncles (please specify):</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Children (please specify):</td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

[caption]
### Program for Diagnostic and Preventive Medicine

**F. Have you had the following immunizations?**
- Pneumonia Vaccine
  - Year: __________
- Influeza ("flu")
  - Year: __________
- Tuberculin (TB) skin test
  - Year: __________
- BCG (to prevent TB)
  - Year: __________
- Diptheria/Tetanus
  - Year: __________
- Measles/Mumps/Rubella
  - Year: __________
- Hepatitis A (2 shot series)
  - Year: __________
- Hepatitis B (3 shot series)
  - Year: __________

**G. Have you traveled recently or plan to travel in the immediate future?**

**H. Have you ever had or tested positive for:**
- Chicken Pox
- Tuberculosis
- HIV
- Hepatitis: Type: ____________________________
- Venereal (sexually transmitted) disease: Specify: ____________________________

**H. Other tests:**

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest X-Ray</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cholesterol Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triglyceride Level</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Lipid Data</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Colonoscopy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mammogram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pap Test</td>
<td></td>
<td></td>
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<tr>
<td>Bone Density Test</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
PROGRAM FOR Diagnostic AND Preventive Medicine

SYMPTOM REVIEW

A  ENDOCRINE/GLANDULAR
Do you suffer from:
- Feeling hot or cold all the time
- Thyroid problems or goiter
- Diabetes
- Excessive thirst
- Hyperthyroidism
- Hyperparathyroidism
- Testosterone deficiency
- Cushing’s syndrome
- Treatment with: steroids (prednisone etc.?)
- Intestinal disease, malabsorption
- Gaucher’s disease

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

B  DERMATOLOGIC/SKIN
Do you suffer with:
- Skin trouble or rash
- Flushing
- Change in hair or nails

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C  HEENT
Do you suffer with:
- Headache or migraine
- Eye or vision problem
- Eyeglasses or contact lenses?
  If so, when was your most recent change in lens prescription?
- Have you had a LASIK or other corrective eye surgery?
- Have you ever had any other surgeries of your eyes?
- Have you had cataracts or surgery to correct cataracts?
- Have you had glaucoma?
- Nose congestion or sinus trouble
- Ear or hearing problem
- Dental (tooth) problems
- Dental plate, bridgework, or false teeth
- Gingival (gum) problems or bleeding
- Temporomandibular joint (TMJ) problems
- Sore throat
- Postnasal drip or secretions
- Swollen lymph nodes

<table>
<thead>
<tr>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
# Program for Diagnostic and Preventive Medicine

## BREASTS
Do you have:
- Breast cancer or a lump
- Pain, tenderness or discharge

## RESPIRATORY/LUNGS
Do you:
- Have a cough
- Have wheezing or shortness of breath
- Snore
- Have tuberculosis or pneumonia
- Blood in sputum

## CARDIOVASCULAR
Do you have:
- Chest pain or tightness
- Palpitations (skipped beats)
- Swollen legs or feet
- Hypertension (high blood pressure)
- Hyperlipidemia (cholesterol, etc.)
- Heart attack, angina
- Heart murmur
- Rheumatic fever
- Claudication or leg pain on walking
- Blood clots or “phlebitis”
- Varicose veins

## ABDOMINAL/DIGESTIVE
Do you have:
- Abdominal pain
- Nausea or vomiting
- Bloating, gas or indigestion
- Heartburn
- Ulcer
- Difficulty swallowing
- Jaundice
- Liver disease
- Gallbladder problems
- Pancreatitis
- Change in bowel habits
- Black or bloody stool
- Colon Cancer or Colon Polyps
- Hemorrhoids
### Program for Diagnostic and Preventive Medicine

#### H. Genital/Urinary
- Do you have:  
  - Urinary problems (pain or frequency)  
  - Blood in urine  
  - Kidney stones  
  - Urinary infections  
  - Sexual dysfunction  
  - Do you use a contraceptive?  

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urinary problems</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Blood in urine</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Kidney stones</td>
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<tr>
<td>Urinary infections</td>
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<td></td>
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</tr>
<tr>
<td>Sexual dysfunction</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Use a contraceptive?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### I. Musculoskeletal
- Do you have:  
  - Joint or muscle pain or stiffness that limit mobility  
  - Joint swelling, redness or deformity  
  - Back pain  
  - Fracture  
  - Implantated plates, pins or screws  
  - Osteoporosis

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint pain</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swelling</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Deformity</td>
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<td></td>
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<tr>
<td>Back pain</td>
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<tr>
<td>Fracture</td>
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<td></td>
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<tr>
<td>Implant plates</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Osteoporosis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### J. Neurological
- Have you had or do you have:  
  - Numbness or muscle weakness  
  - Temporary loss of vision, speech or strength  
  - Loss of consciousness (black-out spells)  
  - Dizziness of lightheadedness  
  - Impaired memory or confusion  
  - Difficulty concentrating  
  - A stroke  
  - Panic attacks  
  - Epilepsy or seizures

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Numbness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Speech loss</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consciousness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lightheadedness</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Memory confusion</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concentrating</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stroke</td>
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<td></td>
</tr>
<tr>
<td>Panic attacks</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Epilepsy</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

#### K. For Men
- Do you have:  
  - Prostate problems?  
  - Pain or lump in scrotum or testicles  
  - Impaired libido (sex drive)  
  - Difficulty with ejaculation  
  - Discharge from penis

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
<th>Not Sure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate problems</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pain or lump</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Impaired libido</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Difficulty with ejaculation</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Discharge from penis</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Other tests:</th>
<th>Date</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prostate exam</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PSA level</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### FOR WOMEN

**Could you be pregnant?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Are you still having menstrual periods?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**At what age did your menstrual periods begin?**

**Number of pregnancies**

**Number of live births**

**Miscarriages**

**If you no longer have periods:**
- At what age did they stop?

**Do you experience hot flashes?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Do you experience vaginal dryness?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Have you had any bleeding since menopause?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**If you still have menstrual periods:**
- How often do they occur?
- How many days do your periods last?
- When did your last period begin?

**Do you have severe cramps?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Do you have PMS/moodiness?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Do you spot/bleed between menstrual periods?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Do you have any vaginal discharge**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Have you ever taken birth control pills?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Have you ever had an abnormal PAP smear?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

**Do you perform breast self-examination?**
- Yes [ ]
- No [ ]
- Not Sure [ ]

### Other tests:

<table>
<thead>
<tr>
<th>Test</th>
<th>Date</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammogram</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pap test</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bone density test</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Are you taking medication for osteoporosis?

<table>
<thead>
<tr>
<th>Medicine</th>
<th>Date Began</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Estrogen</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fosamax</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evista</td>
<td></td>
<td></td>
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<tr>
<td>Miacalcin</td>
<td></td>
<td></td>
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<tr>
<td>Actonel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Calcium</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vitamin D</td>
<td></td>
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</tbody>
</table>
Mount Sinai Medical Health Questionnaire
(http://www.mountsinai.org/static_files/MSH/Files/Patient%20Care/Executive%20Health%20Program/MedicalHistoryQuestionaire.pdf)
Lesson 2: Mental Health

<table>
<thead>
<tr>
<th>OBJECTIVE.</th>
<th>KEY POINTS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students will be able to correctly identify characteristics of anxiety, depression, and PTSD that they will take away from the lesson. &lt;br&gt; • Students will know that mental illness has physical roots and can be effectively treated with medication and/or therapy.</td>
<td>1. Mental illness has physical origins and manifestations. &lt;br&gt; 2. Untreated mental illness may lead to death if untreated, just as untreated physical illness may lead to death if untreated. &lt;br&gt; 3. PTSD is associated with high levels of adrenaline that are caused by constant flashbacks to past traumatic events. If untreated, PTSD can lead to suicide. &lt;br&gt; 4. Depression is associated with lower levels of neurotransmitters (brain chemicals). If untreated, depression can lead to suicide. &lt;br&gt; 5. Anxiety is often associated with worry about the future and, if untreated, can lead to panic attacks. &lt;br&gt; 6. The only way a mental illness can be diagnosed is by a health professional. Medication, psychotherapy, or a combination of both can be very effective for the treatment of mental illness.</td>
</tr>
</tbody>
</table>


Preparation: Make four posters with the following headings: Anxiety, Depression, Post-Traumatic Stress Disorder (PTSD), and Questions

<table>
<thead>
<tr>
<th>ASSESSMENT.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short quiz administered as exit ticket. Teachers may make copies of the questions below.</td>
</tr>
</tbody>
</table>

1. Depression is the same thing as feeling a little sad. T F  
2. PTSD stands for post-traumatic stress disorder. T F  
3. Anxiety can often lead to serious medical complications. T F  
4. The best way to diagnose a mental illness is through questionnaires that you do yourself. T F  
5. The only way to diagnose mental illness is by a medical professional such as a doctor or therapist. T F  
6. All three illnesses can manifest themselves as changes in sleep quality and patterns. T F  
7. Depression is thought to be closely connected to a decreased level of brain chemicals called neurotransmitters. T F  
8. In PTSD levels of adrenaline stay high for a long time because of flashbacks and lead you to be tense, irritable, and unable to relax or sleep well. T F  
9. PTSD is associated with what hasn’t happened yet, whereas anxiety is associated with what has already happened. T F  
10. If your mom has been diagnosed with depression, it might mean that you might have depression at some point in your life, too. T F  

OPENING: Teacher Introduction.

Tell students that yesterday we began the unit that will teach us many aspects of health. Today, we are going to officially start the unit by learning more about three mental illnesses that affect teenagers: anxiety, depression, and PTSD. The important thing that the teacher will push students to think about as they progress through the curriculum is how mental illness is truly like a real illness: there can often be something that causes it, it has a physical and chemical basis, and it can be treated. We are only going to scratch the surface today, but the teacher should stress to students that he or she hopes that it will be enough to get students thinking about mental health in a way that doesn’t label people who have mental illnesses as weak or different. Tell students that as they look around the room, they will notice four posters with different headings [ask for volunteer to read them]. Tell them to take a moment to jot down three things they already know about the first three topics. They can be on all three or on just one. After they jot these things down, students should be instructed to stand up so that the teacher knows that they are finished.

[Do a check for understanding of directions]

When all students are standing, thank them for jotting down three or more things they already knew about these topics. Ask a student to share one thing they wrote [this is a gauge for where students are at the beginning of the lesson/after one student shares, ask student to choose another student to share and sit down/this adds accountability/do this for 5 students after which everyone may sit down]

Provide an overview of the day to students by telling them that the day will start with the teacher giving a little bit of an overview of today’s topic. Then, students will do a jigsaw activity where they will get into groups of 3 and each read about a separate mental illness. They will be responsible for teaching their group about the assigned topic and will be given a notesheet to fill in and glue in your notebook for later. Throughout the lesson, encourage students to use the post-its available in the table groups to jot down key points or questions and place them on each poster. This will help students that might be absent today. At the end of the lesson, students will get a couple handouts to keep, the class will discuss what students learned, and the lesson will conclude with a quiz that will be reviewed as a class. There will be time for questions at the end but students should feel free to post questions on the Questions poster throughout the lesson. Tell students that the teacher might not be able to answer all of them, but that he or she will do their best to find answers to these questions during or after class.

Hand out Lesson 1: Activity 1 Mental Health Questionnaire (http://www.cibhs.org/sites/main/files/file-attachments/mental_health_and_high_school_curriculum_guide.pdf) and give students 5-7 minutes to fill it out. Then either give students time to pair and share with a partner, to solicit class responses. Alternatively, collect student worksheets and without identifying the name read aloud some of the responses.

<table>
<thead>
<tr>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notebooks specifically for class</td>
</tr>
<tr>
<td>Post-its/markers</td>
</tr>
<tr>
<td>Posters with headings:</td>
</tr>
<tr>
<td>1. Anxiety</td>
</tr>
<tr>
<td>2. Depression</td>
</tr>
<tr>
<td>3. PTSD</td>
</tr>
<tr>
<td>4. Questions</td>
</tr>
</tbody>
</table>

Lesson 1: Activity 1 Mental Health Questionnaire
### INTRODUCTION OF NEW MATERIAL: PowerPoint Presentation.

The teacher should create slides for this portion of the lesson using the key points provided, information from the pre-reading, and information from the handouts. The following may be used as a guide:

1. **Depression**
   - Depression is a mental illness characterized by feelings of severe sadness that affect daily life of the person
   - Depression is believed to be related to lower levels of certain chemicals in the brain. Since these chemicals are produced by our cells, depression is believed to have genetic roots, meaning it can be more prevalent in some families
   - Depression can only be diagnosed by a professional and can be effectively treated with medication and therapy
   - Depression is more than passing sadness; it is constantly affecting the person’s ability to live and can be very serious
   - It cannot be cured quickly and it sometimes takes a person a long time to recover
   - It might stem from a particular experience, such as death of a loved one, or have identifiable root
   - Depression often affects a person’s sleep. The person might wake up frequently and then in the morning have trouble getting out of bed because they simply do not see a “purpose”

2. **Anxiety**
   - Anxiety is a feeling that many of us feel from time to time when we worry
   - It affects our thoughts, feelings, and actions
   - It can be general where a person always feels worried, or specific, when a person feels nervous about speaking in front of the class
   - It has physical effects where you would notice yourself breathing faster, your heart racing, and your stomach feeling like you’re going to throw up
   - It usually involves thinking about what has not happened and what we worry might happen
   - Anxiety can lead to panic attacks, which are severe episodes of mental and physical distress that sometimes require medical information
   - People with chronic anxiety may only be diagnosed by a healthcare professional and may be treated with medication and therapy
   - Anxiety affects your sleep: you might find that you cannot fall asleep because you are so worried

---

<table>
<thead>
<tr>
<th>Powerpoint created by teacher</th>
<th>Student notebooks</th>
</tr>
</thead>
</table>
3. Post-Traumatic Stress Disorder
   - We often hear of PTSD in the context of veterans returning home from war, but it affects many more people.
   - PTSD is associated with high levels of adrenaline that are caused by constant flashbacks to past traumatic events. If untreated, PTSD can lead to suicide.
   - It is directly related to something that happened to a person in their past and includes any experience that caused a person to fear for their wellbeing or life.

A person may have PTSD after witnessing or experiencing physical or emotional abuse, being in a car accident, hearing gun

<table>
<thead>
<tr>
<th>Powerpoint created by teacher Student notebooks</th>
<th>INTRODUCTION OF NEW MATERIAL (continued)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Post-Traumatic Stress Disorder</td>
<td></td>
</tr>
<tr>
<td>- We often hear of PTSD in the context of veterans returning home from war, but it affects many more people.</td>
<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>- It is directly related to something that happened to a person in their past and includes any experience that caused a person to fear for their wellbeing or life.</td>
<td></td>
</tr>
<tr>
<td>A person may have PTSD after witnessing or experiencing physical or emotional abuse, being in a car accident, hearing gun.</td>
<td></td>
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</tbody>
</table>
**GUIDED PRACTICE: Article Jigsaw**

<table>
<thead>
<tr>
<th>Activity</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Split students up into groups of 3. As a modification, students could also be paired up on each article.</td>
<td>Give students 20 minutes to read and annotate the handouts.</td>
</tr>
<tr>
<td>Instruct students to fill out the part of the table that corresponds to their assigned topic.</td>
<td>Tell students that the scales are not to diagnose themselves, but to see what kinds of questions providers ask to gauge whether a person has a given mental illness! This is important! The teacher could also omit handing out the Traumatic Events and Hamilton Depression scales and the HAM Questionnaire for Anxiety.</td>
</tr>
<tr>
<td>After 20 minutes, students spend 5 minutes each sharing about their topic and the rest of the group fills in their table.</td>
<td>Teacher’s role is to circulate the class and answer questions.</td>
</tr>
<tr>
<td>Each student should then write down at least one thing that they will take away from today’s class and post it on the appropriate board.</td>
<td>With most questions, the teacher should encourage individual students to write them on a post-it and place it on the Questions board for a whole-class discussion.</td>
</tr>
<tr>
<td>If finished early, students may compare each other’s notes and glue the note sheet into their notebook.</td>
<td>If finished early, students may compare each other’s notes and glue the note sheet into their notebook.</td>
</tr>
</tbody>
</table>

PTSD Handout for Patients: [http://www.ufrgs.br/ppgneo/artigos/PTSD.pdf](http://www.ufrgs.br/ppgneo/artigos/PTSD.pdf)

Traumatic Events Scale: [http://homepage.psy.utexas.edu/homepage/faculty/Pennebaker/questionnaires/TRAUMA.pdf](http://homepage.psy.utexas.edu/homepage/faculty/Pennebaker/questionnaires/TRAUMA.pdf)


Anxiety Handout [http://www-old.hud.ac.uk/schools/hhs/research/mhrg/Intro_anxiety.pdf](http://www-old.hud.ac.uk/schools/hhs/research/mhrg/Intro_anxiety.pdf)

HAM Questionnaire for Anxiety: [https://outcometracker.org/library/HAM-A.pdf](https://outcometracker.org/library/HAM-A.pdf)


Penn State Worry Questionnaire: [https://outcometracker.org/library/PSWQ.pdf](https://outcometracker.org/library/PSWQ.pdf)
<table>
<thead>
<tr>
<th>INDEPENDENT PRACTICE</th>
<th>Depression (2 single-page handouts):</th>
</tr>
</thead>
<tbody>
<tr>
<td>End-of-class quiz (see “Assessment” at the top of lesson”). Give students 10</td>
<td><a href="http://www.cci.health.wa.gov.au/docs/">http://www.cci.health.wa.gov.au/docs/</a></td>
</tr>
<tr>
<td>minutes, and then go over responses as a class. Instruct students to silently</td>
<td>info-What%20causes%20depression.pdf</td>
</tr>
<tr>
<td>read the handouts (→) if they are finished early. Alternatively, give students</td>
<td><a href="http://www.cci.health.wa.gov.au/docs/">http://www.cci.health.wa.gov.au/docs/</a></td>
</tr>
<tr>
<td>the introduction to anxiety quiz that is below.</td>
<td>info-Dep-MHP-What%20is%20depression.pdf</td>
</tr>
<tr>
<td></td>
<td>Anxiety:</td>
</tr>
<tr>
<td></td>
<td>ACF3C57.pdf</td>
</tr>
<tr>
<td></td>
<td>ACF3C5F.pdf</td>
</tr>
</tbody>
</table>
CLOSING

Teacher should thank all students for participating
Next, teacher should attend to each poster and share some key trends or unique findings that students post as a way for the class to review and revisit key points about mental illness
If possible, the teacher should answer several questions that students post or open the class up to discussion.
To conclude, it would be a good idea if the teacher addressed the class similar to the following way:
“Thank you, everyone, for participating. It is important that we take some time to talk about mental illness because some people feel that mental illness is just a temporary state of emotion. I hope that today you learned that it is a lot more than that. Namely, that PTSD originates as one or a series of traumatic events, depression is closely linked to a lower level of brain chemicals in the brain and can be genetic, and anxiety can affect anyone at any time. All these, and many other, illnesses have a biological basis and exhibit physical symptoms, which often show up as unusual changes in sleep patterns and quality. The goal of today’s lesson was for you to start thinking about mental health and mental illness as something beyond temporary emotion and to begin to think of them as illness with which a doctor or mental health professional could help. To some of you, today might have been extremely relevant, based on your own experiences or the experiences of your loved ones. To others, I simply hope that knowing about these illnesses will help steer you, a friend, or a family member in the direction of help.”
Depending on the amount of available time, teacher could start introducing next day’s lesson: Resources for Emergent and non-Emergent Medical Needs.
Conclude by having students revisit their questions page and write one or more questions that are relevant to today’s topic.
### ADDITIONAL TEACHER RESOURCES AND CONSIDERATIONS.

<table>
<thead>
<tr>
<th>Excellent website with handouts, activities, and information on mental illness:</th>
<th><a href="http://psychology.tools/download-therapy-worksheets.html">http://psychology.tools/download-therapy-worksheets.html</a></th>
</tr>
</thead>
<tbody>
<tr>
<td>Prereading for teacher on mental illness:</td>
<td><a href="http://www.ncbi.nlm.nih.gov/books/NBK20369/">http://www.ncbi.nlm.nih.gov/books/NBK20369/</a></td>
</tr>
<tr>
<td>Children’s Mental Health Disorder Sheet for the Classroom:</td>
<td><a href="http://www.schoolmentalhealth.org/Resources/Educ/MHClassroomFactSheet.pdf">http://www.schoolmentalhealth.org/Resources/Educ/MHClassroomFactSheet.pdf</a></td>
</tr>
</tbody>
</table>

Some students might find an increased interest in learning about mental health and becoming professionals in this field. Encourage students to explore career opportunities such as therapist, counselor, social worker, psychologist, psychiatrist, and others in order to build on the career exploration aspect of advisory.

If teachers notice signs of some of the mental illnesses, they should contact their school counselor or social worker because their licenses permit them to provide referrals.

### CONNECTION TO THE ACHIEVEMENT GOAL.

Mental health affects all aspects of a person’s life. If students are able to recognize that mental illness has chemical origins and physical manifestations, they then can begin to appreciate how everything in our body is connected. From the research collected, there is tremendous support for teaching our students about PTSD, anxiety, and depression, especially in terms of how education about these illnesses can address the tremendous stigma around mental illness. There are many limitations to this lesson, however, and those will be discussed in chapter four.
### Lesson 2 Note Taking Sheet

Name ____________________________ Date ____________

<table>
<thead>
<tr>
<th>Mental Illness</th>
<th>Physical Symptoms</th>
<th>Mental/Emotional Symptoms</th>
<th>Causes</th>
<th>Treatment Options</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anxiety</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>PTSD</td>
<td></td>
<td></td>
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</tbody>
</table>
Quiz – Introduction to anxiety

The following questions are for you to check your own understanding of the ‘Introduction to anxiety’ section. Remember that this pack is for you to keep, so you can re-read and look back over sections as often as you wish.

1. Anxiety is a perfectly normal response to _______ and can even be helpful because

2. What are the main ways in which anxiety affects us?
   • Physical
   • T
   • M
   • B

3. Give two examples of how anxiety can develop into a problem
   1)
   2)

4. It is important to maintain a healthy balance between p________ and a________

5. What are some of the reasons anxiety remains?
   • Fear of fear
   • H
   • A
   • A
   • P________ and H________

6. What physical symptoms is a panic attack characterised by?

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Answers to Quiz Section

1. Fear
2. Thoughts
3. Performance in certain situations
4. Any two of the following: behavior, mood
5. Introduction to anxiety

South West Yorkshire Mental Health NHS Trust & the University of Huddersfield
LESSON 1

Activity 1

QUESTIONNAIRE

Questionnaire: What do you think?

Write two or three sentences to answer each of the following questions:

1) What is mental health?

2) What is mental illness?

3) Name some mental illnesses that you have heard about.

4) How would a person with mental illness look or act?

5) If you learned that a new student at school has a mental illness, how would you act toward him or her? How would you feel about him or her?

6) What causes someone to be mentally ill?

*Adapted from The Science of Mental Illness, http://science.education.nih.gov/supplements/mental

Post Traumatic Stress Disorder (PTSD)

Introduction

In our everyday lives, any of us can have an experience that is overwhelming, frightening, and beyond our control. We could find ourselves in a car crash, the victim of an assault, or see an accident. Police, fire brigade or ambulance workers are more likely to have such experiences - they often have to deal with horrifying scenes. Soldiers may be shot or blown up, and see friends killed or injured.

Most people, in time, get over experiences like this without needing help. In some people, though, traumatic experiences set off a reaction that can last for many months or years. This is called Post-Traumatic Stress Disorder, or PTSD for short.

This leaflet is for anyone who has been through a harrowing experience, or who knows someone to whom this has happened.

How does PTSD start?

PTSD can start after any traumatic event. A traumatic event is one where we can see that we are in danger, our life is threatened, or where we see other people dying or being injured. Some typical traumatic events would be:

- serious road accidents
- military combat
- violent personal assault (sexual assault, physical attack, abuse, robbery, mugging)
- being taken hostage
- terrorist attack
- being a prisoner-of-war
- natural or man-made disasters
- being diagnosed with a life-threatening illness.

Even hearing about an unexpected injury or violent death of a family member or close friend can start PTSD.

When does PTSD start?

The symptoms of PTSD can start after a delay of weeks, or even months. They usually appear within 6 months of a traumatic event.

What does PTSD feel like?
Many people feel grief-stricken, depressed, anxious, guilty and angry after a traumatic experience. As well as these understandable emotional reactions, there are three main types of symptoms produced by such an experience:

1. Flashbacks & Nightmares
You find yourself re-living the event, again and again. This can happen both as a "flashback" in the day, and as nightmares when you are asleep. These can be so realistic that it feels as though you are living through the experience all over again. You see it in your mind, but may also feel the emotions and physical sensations of what happened - fear, sweating, smells, sounds, pain.

Ordinary things can trigger off flashbacks. For instance, if you had a car crash in the rain, a rainy day might start a flashback.
2. Avoidance & Numbing
It can be just too upsetting to re-live your experience over and over again. So you distract
yourself. You keep your mind busy by losing yourself in a hobby, working very hard, or
spending your time absorbed in crossword or jigsaw puzzles. You avoid places and people
that remind you of the trauma, and try not to talk about it.

You may deal with the pain of your feelings by trying to feel nothing at all - by becoming
emotionally numb. You communicate less with other people, who then find it hard to live or
work with you.

3. Being "On Guard"
You find that you stay alert all the time, as if you are looking out for danger. You can't relax.
This is called "hypervigilance". You feel anxious and find it hard to sleep. Other people will
notice that you are jumpy and irritable.

Other Symptoms
Emotional reactions to stress are often accompanied by:
- muscle aches and pains
- diarrhoea
- irregular heartbeats
- headaches
- feelings of panic and fear
- depression
- drinking too much alcohol
- using drugs (including painkillers).

Why are traumatic events so shocking?

They undermine our sense that life is fair, reasonably safe, and that we are secure. A
traumatic experience makes it very clear that we can die at any time. The symptoms of PTSD
are part of a normal reaction to narrowly avoided death.

Does everyone get PTSD after a traumatic experience?

No. But nearly everyone will have the symptoms of post traumatic stress for the first month or
so. This is because they help to keep you going, and help you to understand the experience
you have been through. This is an "acute stress reaction". Over a few weeks, most people
slowly come to terms with what has happened, and their stress symptoms start to disappear.

Not everyone is so lucky. About 1 in 3 people will find that their symptoms just carry on and
that they can't come to terms with what has happened. It is as though the process has got
stuck. The symptoms of post traumatic stress, although normal in themselves, become a
problem - or Post Traumatic Stress Disorder - when they go on for too long.

What makes PTSD worse?

The more disturbing the experience, the more likely you are to develop PTSD. The most
traumatic events:

- are sudden and unexpected
- go on for a long time
- you are trapped and can't get away
- are man-made
- cause many deaths
- cause mutilation and loss of arms or legs
- involve children.
What about ordinary "stress"?

Everybody feels stressed from time to time. Unfortunately, the word "stress" is used to mean two rather different things:

- our inner sense of worry, feeling tense or feeling burdened.

or

- the problems in our life that are giving us these feelings. This could be work, relationships, maybe just trying to get by without much money. Unlike PTSD, these things are with us, day in and day out. They are part of normal everyday life, but can produce anxiety, depression, tiredness, and headaches. They can also make some physical problems worse, such as stomach ulcers and skin problems. These are certainly troublesome, but they are not the same as PTSD.

Why does PTSD happen?

We don't know for certain. There are several possible explanations for why PTSD occurs.

Psychological

When we are frightened, we remember things very clearly. Although it can be distressing to remember these things, it can help us to understand what happened and, in the long run, help us to survive.

- The flashbacks, or replays, force us to think about what has happened. We can decide what to do if it happens again. After a while, we learn to think about it without becoming upset.
- It is tiring and distressing to remember a trauma. Avoidance and numbing keep the number of replays down to a manageable level.
- Being "on guard" means that we can react quickly if another crisis happens. We sometimes see this happening with survivors of an earthquake, when there may be second or third shocks. It can also give us the energy for the work that's needed after an accident or crisis.

But we don't want to spend the rest of our life going over it. We only want to think about it when we have to - if we find ourselves in a similar situation.

Physical

- Adrenaline is a hormone our bodies produce when we are under stress. It "pumps up" the body to prepare it for action. When the stress disappears, the level of adrenaline should go back to normal. In PTSD, it may be that the vivid memories of the trauma keep the levels of adrenaline high. This will make a person tense, irritable, and unable to relax or sleep well.
- The hippocampus is a part of the brain that processes memories. High levels of stress hormones, like adrenaline, can stop it from working properly - like "blowing a fuse". This means that flashbacks and nightmares continue because the memories of the trauma can't be processed. If the stress goes away and the adrenaline levels get back to normal, the brain is able to repair the damage itself, like other natural healing processes in the body. The disturbing memories can then be processed and the flashbacks and nightmares will slowly disappear.
How do I know when I've got over a traumatic experience?

When you can:

- think about it without becoming distressed
- not feel constantly under threat
- not think about it at inappropriate times.

Why is PTSD often not recognised?

- None of us like to talk about upsetting events and feelings.
- We may not want to admit to having symptoms, because we don't want to be thought of as weak or mentally unstable.
- Doctors and other professionals are human. They may feel uncomfortable if we try to talk about gruesome or horrifying events.
- People with PTSD often find it easier to talk about the other problems that go along with it - headache, sleep problems, irritability, depression, tension, substance abuse, family or work-related problems.

How can I tell if I have PTSD?

Have you have experienced a traumatic event of the sort described at the start of this leaflet?

If you have, do you:

- have vivid memories, flashbacks or nightmares?
- avoid things that remind you of the event?
- feel emotionally numb at times?
- feel irritable and constantly on edge but can't see why?
- eat more than usual, or use more drink or drugs than usual?
- feel out of control of your mood?
- find it more difficult to get on with other people?
- have to keep very busy to cope?
- feel depressed or exhausted?

If it is less than 6 weeks since the traumatic event, and these experiences are slowly improving, they may be part of the normal process of adjustment.

If it is more than 6 weeks since the event, and these experiences don't seem to be getting better, it is worth talking it over with your doctor.

Children and PTSD

PTSD can develop at any age.

Younger children may have upsetting dreams of the actual trauma, which then change into nightmares of monsters. They often re-live the trauma in their play. For example, a child involved in a serious road traffic accident might re-enact the crash with toy cars, over and over again.

They may lose interest in things they used to enjoy. They may find it hard to believe that they will live long enough to grow up.

They often complain of stomach aches and headaches.
Treatment

Just as there are both physical and psychological aspects to PTSD, so there are both physical and psychological treatments for it.

Psychotherapy
All the effective psychotherapies for PTSD focus on the traumatic experiences that have produced your symptoms rather than your past life. You cannot change or forget what has happened. You can learn to think differently about it, about the world, and about your life.

You need to be able to remember what happened, as fully as possible, without being overwhelmed by fear and distress. These therapies help you to put words to the traumatic experiences that you have had. By remembering the event, going over it and making sense of it, your mind can do its normal job, of storing the memories away and moving on to other things.

If you can start to feel safe again and in control of your feelings, you won’t need to avoid the memories as much. Indeed, you can gain more control over your memories so that you only think about them when you want to, rather than having them erupt into your mind spontaneously.

All these treatments should all be given by specialists in the treatment of PTSD. The sessions should be at least weekly, every week, with the same therapist, and should usually continue for 8-12 weeks. Although sessions will usually last around an hour, they may sometimes last up to 90 minutes.

Cognitive Behavioural Therapy (CBT) is a way of helping you to think differently about your memories, so that they become less distressing and more manageable. It will usually also involve some relaxation work to help you tolerate the discomfort of thinking about the traumatic events. For further information, see our factsheet on CBT.

EMDR (Eye Movement Desensitisation & Reprocessing) is a technique which uses eye movements to help the brain to process flashbacks and to make sense of the traumatic experience. It may sound odd, but it has been shown to work.

Cognitive behavioural therapy is a way of helping you to think differently about your memories, so that they become less distressing and more manageable. It will usually also involve some relaxation work to help you tolerate the discomfort of thinking about the traumatic events.

Group therapy involves meeting with a group of other people who have been through the same, or a similar traumatic event. The fact that other people in the group do have some idea of what you have been through can make it much easier to talk about what has happened.

Medication
SSRI antidepressant tablets will both reduce the strength of PTSD symptoms and relieve any depression that is also present. They will need to be prescribed by a doctor.

This type of medication should not make you sleepy, although they all have some side-effects in some people. They may also produce unpleasant symptoms if stopped quickly, so the dose should usually be reduced gradually. If they are helpful, you should carry on taking them for around 12 months. Soon after starting an antidepressant, some people may find that they feel more:
- anxious
- restless
- suicidal
These feelings usually pass in a few days, but you should see your doctor regularly.

If these don’t work for you, tricyclic or MAOI antidepressant tablets may still be helpful. For more information, see our factsheet on antidepressants.

Occasionally, if someone is so distressed that they cannot sleep or think clearly, anxiety-reducing medication may be necessary. These tablets should usually not be prescribed for more than 10 days or so.

**Body-focussed Therapies**
These can help to control the distress of PTSD. They can also reduce hyperarousal, or the feeling of being “on guard” all the time. These therapies include physiotherapy and osteopathy, but also complementary therapies such as massage, acupuncture, reflexology, yoga, meditation and tai chi. They all help you to develop ways of relaxing and managing stress.

**Effectiveness of Treatments**
At present, there is evidence that EMDR, psychotherapy, cognitive behavioural therapy and antidepressants are all effective. There is not enough information for us to say that one of these treatments is better than another. There is no evidence that other forms of psychotherapy or counselling are helpful to PTSD.

**Which treatments first?**
The National Institute for Clinical Excellence (NICE) guidelines suggest that trauma-focussed psychological therapies (CBT or EMDR) should be offered before medication, wherever possible.

**For friends, relatives & colleagues**

**Do ........

- watch out for any changes in behaviour - poor performance at work, lateness, taking sick leave, minor accidents
- watch for anger, irritability, depression, lack of interest, lack of concentration
- take time to allow a trauma survivor to tell their story
- ask general questions
- let them talk, don’t interrupt the flow or come back with your own experiences.**

**Don’t ........

- tell a survivor you know how they feel - you don’t
- tell a survivor they’re lucky to be alive - they’ll get angry
- minimise their experience - “it’s not that bad, surely ...”
- suggest that they just need to ‘pull themselves together’.

Source: [http://www.ufrgs.br/ppgneuro/artigos/PTSD.pdf](http://www.ufrgs.br/ppgneuro/artigos/PTSD.pdf)
Childhood Traumatic Events Scale

For the following questions, answer each item that is relevant. Be as honest as you can. Each question refers to any event that you may have experienced prior to the age of 17.

1. Prior to the age of 17, did you experience a death of a very close friend or family member? ________ If yes, how old were you? ________
   If yes, how traumatic was this? (using a 7-point scale, where 1 = not at all traumatic, 4 = somewhat traumatic, 7 = extremely traumatic) ________
   If yes, how much did you confide in others about this traumatic experience at the time? (1 = not at all, 7 = a great deal) ________

2. Prior to the age of 17, was there a major upheaval between your parents (such as divorce, separation)? ________ If yes, how old were you? ________
   If yes, how traumatic was this? (where 7 = extremely traumatic) ________
   If yes, how much did you confide in others? (7 = a great deal) ________

3. Prior to the age of 17, did you have a traumatic sexual experience (raped, molested, etc.)? ________ If yes, how old were you? ________
   If yes, how traumatic was this? (7 = extremely traumatic) ________
   If yes, how much did you confide in others? (7 = a great deal) ________

4. Prior to the age of 17, were you the victim of violence (child abuse, mugged or assaulted -- other than sexual)? ________ If yes, how old were you? ________
   If yes, how traumatic was this? (7 = extremely traumatic) ________
   If yes, how much did you confide in others? (7 = a great deal) ________

5. Prior to the age of 17, were you extremely ill or injured? ________ If yes, how old were you? ________
   If yes, how traumatic was this? (7 = extremely traumatic) ________
   If yes, how much did you confide in others? (7 = a great deal) ________

6. Prior to the age of 17, did you experience any other major upheaval that you think may have shaped your life or personality significantly? ________ If yes, how old were you? ________
   If yes, what was the event? ____________________________
   If yes, how traumatic was this? (7 = extremely traumatic) ________
   If yes, how much did you confide in others? (7 = a great deal) ________

Source:
http://homepage.psy.utexas.edu/homepage/faculty/Pennebaker/questionnaires/TRAUMA.pdf
Recent Traumatic Events Scale

For the following questions, again answer each item that is relevant and again be as honest as you can. Each question refers to any event that you may have experienced within the last 3 years.

1. Within the last 3 years, did you experience a death of a very close friend or family member?
   
   If yes, how traumatic was this? (1 = not at all traumatic, 7 = extremely traumatic)

2. Within the last 3 years, was there a major upheaval between you and your spouse (such as divorce, separation)?
   
   If yes, how traumatic was this?

3. Within the last 3 years, did you have a traumatic sexual experience (raped, molested, etc.)?
   
   If yes, how traumatic was this?

4. Within the last 3 years, were you the victim of violence (other than sexual)?
   
   If yes, how traumatic was this?

5. Within the last 3 years, were you extremely ill or injured?
   
   If yes, how traumatic was this?

6. Within the last 3 years, has there been a major change in the kind of work you do (e.g., a new job, promotion, demotion, lateral transfer)?
   
   If yes, how traumatic was this?

7. Within the last 3 years, did you experience any other major upheaval that you think may have shaped your life or personality significantly?
   
   If yes, what was the event?

Source:
http://homepage.psy.utexas.edu/homepage/faculty/Pennebaker/questionnaires/TRAUMA.pdf
what is depression?

Many people experiencing the symptoms of depression might begin to wonder if there is something really wrong with them. One typical fear is that they might be going crazy. Unfortunately, the reactions and comments from other people such as, “just get yourself together!” are not very helpful.

Although you might feel alone in your struggle against depressive moods, the reality is that many people experience these moods from time to time, or even regularly. In fact, it is estimated that 1 in every 4 people experience significantly depressed mood at some time in their life.

Depression can affect any kind of person at any stage of their life. You may be an introvert or an extrovert, socially active or shy, youthful or elderly, male or female, wealthy or poor. Whatever your distinction, you can become depressed. That means that any person you know is fair game. So remember, you are not alone.

**Depression** is a word used in everyday language to describe a number of feelings, including sadness, frustration, disappointment and sometimes lethargy. However, in clinical practice, the term “Depression” or “Major Depression” differs from these everyday ‘down’ periods in three main ways:

- Major Depression is more intense
- Major Depression lasts longer (two weeks or more)
- Major Depression significantly interferes with effective day-to-day functioning

In this handout, the word **depression** is referring to Major Depression or a clinical depression.

**Depression as a Syndrome**

A syndrome is a collection of events, behaviours, or feelings that often go together. The depression syndrome is a collection of feelings and behaviours that have been found to characterise depressed people as a group. You may find that you experience all or some of these feelings and behaviours. There are many individual differences to the number of symptoms and the extent to which different symptoms are experienced. These symptoms are described in this next section.

**Mood**

Depression is considered to be a disorder of mood. Individuals who are depressed, describe low mood that has persisted for longer than two weeks. In mild forms of depression, individuals may not feel bad all day but still

describe a dismal outlook and a sense of gloom. Their mood may lift with a positive experience, but fall again with even a minor disappointment. In severe depression, a low mood could persist throughout the day, falling to lift even when pleasant things occur. The low mood may fluctuate during the day – it may be worse in the morning and relatively better in the afternoon. This is called ‘diurnal variation,’ which often accompanies a more severe type of depression.

In addition to sadness, another mood common to depression is anxiety.

**Thinking**

Individuals who are depressed think in certain ways, and this thinking is an essential feature of depression. It is as much a key symptom of depression as mood or physical symptoms. Those who are depressed tend to see themselves in a negative light. They dwell on how bad they feel, how the world is full of difficulties, how hopeless the future seems and how things might never get better.

People who are depressed often have a sense of guilt, blaming themselves for everything, including the fact they think negatively. Often their self-esteem and self-confidence become very low.

**Physical**

Some people experience physical symptoms of depression.

- Sleep patterns could change. Some people have difficulty falling asleep, or have interrupted sleep, others sleep more and have difficulty staying awake
- Appetite may decline and weight loss occurs, while others eat more than usual and thus gain weight
- Sexual interest may decline
- Energy levels may fall, as does motivation to carry out everyday activities. Depressed individuals may stop doing the things they used to enjoy because they feel unmotivated or lethargic

**Interacting with Other People**

Many depressed people express concern about their personal relationships. They may become unhappy and dissatisfied with their family, and other close, relationships. They may feel shy and anxious when they are with other people, especially in a group. They may feel lonely and isolated, yet at the same time, are unwilling or unable to reach out to others, even when they have the opportunities for doing so.

what causes depression?

It is important to understand that depression is not caused by one thing, but probably by a combination of factors interacting with one another. These factors can be grouped into two broad categories — biology and psychology. Many biological and psychological factors interact in depression, although precisely which specific factors interact may differ from person to person.

**Biological Factors**
The biological factors that might have some effect on depression include: genes, hormones, and brain chemicals.

**Genetic Factors**
Depression often runs in families, which suggests that individuals may inherit genes that make them vulnerable to developing depression. However, one may inherit an increased vulnerability to the illness, but not necessarily the illness itself. Although many people may inherit the vulnerability, a great many of them may never suffer a depressive illness.

**Hormones**
Research has found that there are some hormonal changes that occur in depression. The brain goes through some changes before and during a depressive episode, and certain parts of the brain are affected. This might result in an over- or under-production of some hormones, which may account for some of the symptoms of depression. Medication treatment can be effective in treating these conditions.

**Brain Chemicals (Neurotransmitters)**
Nerve cells in the brain communicate to each other by specific chemical substances called neurotransmitters. It is believed that during depression, there is reduced activity of one or more of these neurotransmitter systems, and this disturbs certain areas of the brain that regulate functions such as sleep, appetite, sexual drive, and perhaps mood. The reduced level of neurotransmitters results in reduced communication between the nerve cells and accounts for the typical symptoms of depression. Many antidepressant drugs increase the neurotransmitters in the brain.

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**Psychological Factors**

**Thinking**
Many thinking patterns are associated with depression. These thinking patterns include:
- overstressing the negative
- taking the responsibility for bad events but not for good events
- having inflexible rules about how one should behave
- thinking that you know what others are thinking and that they are thinking badly of you

**Loss**
Sometimes people experience events where loss occurs, and this can bring on depression. The experience of loss may include the loss of a loved one through bereavement or separation, loss of a job, loss of a friendship, loss of a promotion, loss of face, loss of support, etc.

**Sense of Failure**
Some people may stake their happiness on achieving particular goals, such as getting 'As' on their exams, getting a particular job, earning a certain amount of profit from a business venture, or finding a life partner. If for some reason they are not able to achieve those goals, they might believe that they have failed somehow, and it is this sense of failure that can sometimes bring on, or increase, depression.

**Stress**
An accumulation of stressful life events may also bring on depression. Stressful events include situations such as unemployment, financial worries, serious difficulties with spouses, parents or children, physical illness, and major changes in life circumstances.

**Conclusion**
While we cannot do much about the genes we have inherited, there are a number of things we can do to overcome depression, or to prevent us from becoming depressed. Your doctor may have suggested medication, especially in a severe depression. While taking medication can be of assistance in overcoming depression, psychological treatments are also available. Ask your doctor or mental health practitioner for more details.

Depression is among the most painful and difficult of all human experiences. It robs those who have it of energy, interest, and the will to make things better. It brings with it a profoundly negative view of the self, the world, and the future. During depression, it seems as though nothing can change, as though you will never get better.

But depressed people do get better and depression does end. There are effective treatments and self-help skills to deal with depression. Health care professionals give depression treatments, but you can learn self-help skills and apply them to your own life. This guide teaches a set of antidepressant skills you can use to manage depression. Sometimes the skills can be used on their own, when the depression isn’t too severe. Sometimes they have to be used along with treatments by professionals.

The emphasis in this book is on three steps: reactivating your life; changing negative thinking habits; and solving problems as they arise. In addition, some of the lifestyle choices associated with reducing depression are discussed in the Useful Information section at the back of the book. Although medication-based approaches are discussed briefly, most of our emphasis is on these other approaches: antidepressant skills rather than antidepressant pills.

We hope that the workbook will be helpful for you. But reading it will not be enough. For the approaches to work, you will have to put them into practice. We have tried to present all of the strategies in a clear, step-by-step format that will help you to work steadily toward your goals.
WHAT IS DEPRESSION?

Most times when you feel down, you’re not depressed. Feeling sad or low is a big part of life and can’t be avoided. When something goes wrong in your life, whether it’s an argument with your partner, conflict with your boss, or a physical illness, your mood might drop.

Depression is not...

Most times when you feel down, you’re not depressed. Feeling sad or low is a big part of life and can’t be avoided. When something goes wrong in your life, whether it’s an argument with your partner, conflict with your boss, or a physical illness, your mood might drop.

If you feel especially sad or irritable because of this situation, maybe with poor sleep, not wanting to see friends or family, eating too much or not enough – then you’re probably experiencing low mood. Low mood will typically go away in a week or two, especially if there’s an improvement in the situation that started it.

Depression is...

But suppose it doesn’t go away and just gets worse. You might be depressed:

1. If your mood is very low or you have almost no interest in your life almost everyday, and this feeling goes on for weeks, AND

2. If you have other problems like:
   ■ big changes in weight or appetite;
   ■ not being able to sleep enough or sleeping too much;
   ■ feeling that you are always restless or slowed-down;
   ■ thinking that you are worthless or guilty;
   ■ feeling really tired much of the time;
   ■ feeling numb or empty;
   ■ having a lot of trouble concentrating or making decisions;
   ■ thinking about death or suicide.
WHAT IS DEPRESSION?

The two most common types of depression are called mild depression and major depression.

Each of these includes the same kinds of problems (the ones we’ve listed above) but major depression is more severe. Usually, when a person gets depressed, it’s the mild kind. Your family physician, a psychiatrist or a psychologist can tell you whether you have a depression.

FEELING OKAY

MILD DEPRESSION
- Feeling sad because something happened.

LOW MOOD
- Feeling sad because something happened.

MAJOR DEPRESSION
- Misery, despair, it goes on and on. Feeling numb or empty.

UNHAPPY DEPRESSION
- The sadness goes on too long. Very hard to get out of the low mood.
WHAT IS DEPRESSION?

A few observations about depression.

- Depression is hard to diagnose on your own. Our moods affect our judgment of ourselves. So it's often hard to judge whether we are really depressed. Usually it takes a trained professional to make the diagnosis.
- If you have depression, you are not alone. More than 4% of adults are depressed at any given time, and more than 15% of adults will be depressed at some time in their lives.
- Depression is not a sign of weakness. Many capable, intelligent, and extremely accomplished people have been depressed. Being depressed does not mean that you have a “weak personality” or a character flaw.

If you think you have depression.

If you think that you have depression, it is important that you find help. The skills in this workbook are meant to help you with your depression, but you shouldn't have to do it alone. Getting another opinion from someone you trust can help you understand your problems or put them in perspective. If you continue to feel depressed, seek the help of a health care professional. This can be your family physician, a psychologist, psychiatrist or other mental health professional. They can help you with a number of different treatments for depression. A good thing about these treatments is that they work well alongside skills you learn from this workbook.

If you feel like hurting yourself.

For many people, depression makes life seem hopeless and unmanageable. Most depressed people feel this way from time to time. For a small number of individuals this feeling of hopelessness gets so strong that they begin to think that life itself is not worth living. If this happens to you or someone you know, it's time to get help. Find a health care professional to help you get past these feelings. If you can't wait for an appointment, there are a number of crisis lines, staffed 24/7, that you should call. Go to your yellow pages and look under Crisis Centres to find the numbers in your area. You might also visit the Emergency Room at your local hospital.

Remember, things CAN get better.
People become depressed for a wide variety of reasons.

Research has identified a number of factors associated with causing and continuing the depressed state. The diagram below shows the five major factors: situation; thoughts; emotion; physiology; and action. Each of these areas of your life can play a role in the development of depression, and depression itself can have an impact on all of them. On the following pages we consider each of these factors in more detail.

**Situation**
- loss
- isolation
- conflict
- stress

**Action**
- social withdrawal
- reduced activity level
- poor self-care

**Physiology**
- altered sleep
- low energy
- changes in brain chemistry

**Thoughts**
- negative thinking habits
- harsh self-criticism
- unfair & unrealistic

**Emotion**
- discouragement
- sadness
- despair
- numbness
- anxiety
WHAT CAUSES DEPRESSION?

Not doing small duties.
A depressed person often neglects or procrastinates doing small, necessary duties, like running errands, taking out the garbage, cleaning house, or caring for the garden. Failing to complete these chores adds to the depressed person’s sense of inadequacy and lack of control over life. It also creates friction with others and places further stress on relationships.

Withdrawing from family and friends.
Social invitations are refused, phone calls are ignored, and habitual get-togethers with family or friends somehow just don’t happen. Social isolation is a strong contributor to depressed mood, taking you away from the warmth and sense of connection to others, basic to all of us. Depressed people often believe that others have no interest in their company, given how miserable or emotionally flat they are feeling.
WHAT CAN YOU DO ABOUT DEPRESSION?

MILD DEPRESSION

- Talking to family and trusted friends about how you’ve been feeling is usually a good thing to do. They can help you figure out solutions to some of the problems you’ve been dealing with; besides, just knowing that people care about you is helpful.
- Write about problems you’re facing, your feelings and thoughts, and possible solutions. This can help you understand what you’re going through and what choices you have.
- Speak to a family physician, psychiatrist or psychologist. A professional can help you figure out what’s been going on and can make useful suggestions.
- In some cases, antidepressant medications can be helpful in overcoming Mild Depression. But for most individuals with Mild Depression, the answer does not lie in medication.

Learning and practicing the antidepressant skills in this guide is likely to be very helpful in overcoming Mild Depression.
WHAT CAN YOU DO ABOUT DEPRESSION?

MAJOR DEPRESSION

In addition to the actions described previously...

- Definitely see your family physician if you think you might be depressed. Major Depression is a serious problem and should be diagnosed by a family physician, psychiatrist or psychologist.
- Antidepressant medications are the most commonly prescribed treatments for Major Depression and are usually effective.
- An equally effective treatment for most cases of Major Depression is Cognitive Behavioural Therapy (CBT). CBT is a talking therapy that teaches new skills for thinking and acting more effectively. This guide is based on CBT methods.
- Yet another effective treatment is interpersonal therapy (IPT), a talking therapy that teaches new skills for dealing with partners, friends and family.
- For long-lasting or recurrent depression, the most powerful approach is to combine antidepressant medication with one of these kinds of talking therapy.

Learning and practicing the antidepressant skills in this guide is likely to help in overcoming Major Depression. BUT remember that the skills taught in this guide will not be enough by themselves to fix something this serious. If you have a Major Depression, you should seek professional help.

how worry works

Worry and Problematic Worry
Worry is generally regarded as a form of verbal mental problem solving about potentially negative future events. Normal worry is generally short-lived and leads to positive problem-solving behaviour. Worry becomes unhelpful when it is about a number of things, it is very frequent, and is difficult to control or dismiss. Prolonged or frequent worry generates more anxiety and more worry, which may actually prevent positive thinking and action.

What Triggers Worry?
Worrying can be triggered by various things. Some triggers may be more obvious and linked to external things, for example:
- Seeing a certain image (e.g. in the newspaper or on TV)
- Hearing certain information (e.g., on the radio or in a conversation)
- Being put in a certain situation (e.g., having to make decisions, perform a task, lead others, or face uncertainty)

Some triggers may be less obvious. These may be thoughts or images that seem to just pop into your head out of the blue. An initial “What if…” question that comes to mind for no apparent reason, can even be a trigger for worrying. For example, the thought “What if I left the iron on?” might pop into your head. If I think “I probably didn’t” and decide not to worry about it, chances are I will forget about it, and the thought will slip my mind. However, if instead I start to ‘chase’ the thought further (e.g., “The ironing board might catch fire and that will spread to the whole house.” “The house might burn down and then I will lose everything!”), then the original “What if…” question has now triggered a worry episode.

What Maintains Worry?
People who describe themselves as chronic worriers are often disturbed that they seem to spend much of their waking hours worrying excessively about a number of different life circumstances. They do not understand why this activity continues. They often ask, “Why do I do it?” and “What keeps my worrying going?”

There are two types of thoughts or beliefs about worry which work to maintain the worry, in a vicious cycle. These are negative beliefs about worrying, and positive beliefs about worrying. Unhelpful strategies such as avoidance and thought control also maintain worry.

Negative Beliefs About Worrying
In addition to the specific things people worry about, people with generalised anxiety disorder may also worry about the fact that they are worrying. In this case, such worriers are often concerned that worrying is “bad” and may believe that:
- Worrying is uncontrollable, and will take over and result in a loss of control (e.g., “I won’t be able to control my worrying, and it will never stop”).
- Worrying is dangerous, and will cause either physical or mental harm (e.g., “if I keep worrying like this I will go crazy/have a breakdown/become ill”).

Holding these (false) negative beliefs about worrying makes the process of worrying very distressing for you, and this will even keep your worrying going.

Positive Beliefs About Worrying
Worriers often hold (false) positive beliefs that worrying is beneficial and “good,” which can keep worriers worrying. Some positive beliefs may be:
- Worrying motivates me to do things
- Worrying helps me find solutions to problems
- Worrying prepares me for the worst
- Worrying helps me avoid bad things
- Worrying prevents bad things

Avoidance and Thought Control
Avoidance may take the form of avoiding a feared outcome (e.g., passing up a promotion to avoid the feared outcome of not doing a good job) or avoiding worrying itself (e.g., not watching the TV news in case a worry is triggered, or asking for reassurance from loved ones that nothing bad will happen to you). Avoidance limits a person’s opportunity to have experiences that disconfirm their worries and their beliefs about worrying, in a sense, not confronting your worries keeps the worrying going.

People who worry often attempt unsuccessfully to control their worrisome thoughts in a number of ways. These may include trying to suppress their worries, trying to reason with their worrisome thoughts, distracting themselves or thinking positively. These attempts at thought-control rarely work, as trying to suppress a thought usually has the opposite effect of making that thought occur more, which in turn fuels the belief that worries are uncontrollable.

In other information sheets, we can explore some better strategies to manage worry.

Source: http://www-old.hud.ac.uk/schools/hhs/research/mhrg/Intro_anxiety.pdf
The Penn State Worry Questionnaire (PSWQ)

Instructions: Rate each of the following statements on a scale of 1 ("not at all typical of me") to 5 ("very typical of me"). Please do not leave any items blank.

<table>
<thead>
<tr>
<th></th>
<th>Not at all typical of me</th>
<th>Very typical of me</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. If I do not have enough time to do everything, I do not worry about it.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>2. My worries overwhelm me.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>3. I do not tend to worry about things.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>4. Many situations make me worry.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>5. I know I should not worry about things, but I just cannot help it.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>6. When I am under pressure I worry a lot.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>7. I am always worrying about something.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>8. I find it easy to dismiss worrisome thoughts.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>9. As soon as I finish one task, I start to worry about everything else I have to do.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>10. I never worry about anything.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>11. When there is nothing more I can do about a concern, I do not worry about it any more.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>12. I have been a worrier all my life.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>13. I notice that I have been worrying about things.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>14. Once I start worrying, I cannot stop.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>15. I worry all the time.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
<tr>
<td>16. I worry about projects until they are all done.</td>
<td>1 2 3 4 5</td>
<td></td>
</tr>
</tbody>
</table>
Scoring the PSWQ

In scoring the PSWQ, a value of 1, 2, 3, 4, and 5 is assigned to a response depending upon whether the item is worded positively or negatively. The total score of the scale ranges from 16 to 80.

Items 1, 3, 8, 10, 11 are reverse scored as follows:
- Very typical of me = 1 (circled 5 on the sheet)
- Circled 4 on the sheet = 2
- Circled 3 on the sheet = 3
- Circled 2 on the sheet = 4
- Not at all typical of me = 5 (circled 1 on the sheet)

For items 2, 4, 5, 6, 7, 9, 12, 13, 14, 15, 16 the scoring is:
- Not at all typical of me = 1
- Ratings of 2, 3, and 4 are not transformed
- Very typical of me = 5

Citation: Meyer TJ, Miller ML, Metzger RL, Borkovec TD: Development and Validation of the Penn State Worry Questionnaire. Behaviour Research and Therapy 28:487-495, 1990

Source: https://outcometracker.org/library/PSWQ.pdf
What is anxiety?

Anxiety is a term used to describe uncomfortable feelings of nervousness, worry, and tension, which we all feel from time to time. Anxiety can affect anyone, whatever their age, gender etc. It affects our thoughts, physical reactions, moods and behaviours. Anxiety can also cause us to feel panicky and frightened and prevent us from doing things. Too much stress in our lives can result in higher levels of anxiety.

Anxiety is also a perfectly normal response to threat, and in some situations that are really threatening it can be helpful in preparing us for action. Some degree of anxiety can improve our performance in certain situations such as job interviews, taking exams, sporting events, or even helping us to pay our bills on time. However, if anxiety occurs too often and for no apparent reason, or if it begins to interfere with our life, then it has become a problem.

We know from research that at any one time, there are many people experiencing anxiety that is a problem to them. Anxiety can either be very general; affecting many areas of our lives, or it may be more specific to certain situations such as crowded places, talking to people or travelling on buses. It could even occur as a specific phobia such as a fear of lifts or a fear of spiders.

How does anxiety affect us?

Anxiety affects us in four main ways:

1. **Physical effects** – when we are anxious we will feel many physical symptoms of anxiety, such as a pounding heart, a churning stomach, or breathing difficulties. Long-term stress also affects us physically.

2. **Thoughts** – when we are anxious we tend to worry and have negative thoughts like “What if I make a fool of myself”, or “What if I suffocate / faint / have a heart attack”. As well as thoughts, we may experience images or pictures in our mind such as an image of a car crash or someone criticising us.

3. **Mood** – anxiety itself is a type of mood. Anxiety and prolonged stress can also affect our moods in other ways. For example, if we experience anxiety that restricts our lives over a long period of time, we may feel guilty, down and depressed.

4. **Behaviour** – anxiety also affects our behaviour, changing the things we feel able to do. This can result in avoidance of many things, such as going into a supermarket or going to the dentist. When we can’t avoid things we may do things to make us feel safe, such as always having someone with us, or carrying tablets that we don’t really need.

We will look at how to deal with problems in these four areas in the following sections. Although we look at these areas in separate sections, it is important to realise that they affect one another. For example, our thoughts about something affects our feelings and our feelings affect us physically. This is an important part of understanding anxiety and we will say a lot more about this throughout the pack.
The diagram below shows how these four areas (thoughts, mood, behaviour, physical) all link together and affect each other. It shows how every aspect of a person’s life influences all the others. For example, changes in our thoughts influence our physical reactions which influences our mood and behaviour. It also shows that the environment (stresses, stressful situations) can cause anxiety and problems in these four areas.

The next section describes various ways in which anxiety can develop.


**How does anxiety develop into a problem?**

There are many different reasons why anxiety develops into a problem, and these vary from person to person. Examples of common reasons leading to increased anxiety are included below – you may be able to think of additional ones.

**Increased anxiety can develop:**
- after a long or intense period of stress and worry.
- as a result of unpleasant or stressful life events. These may include, the death of a loved one, serious illness (yours or someone close to you), the break up of a relationship, or losing or changing jobs.
- the experiences we have had in our lives and how we have learned to cope with them will influence which situations we find stressful and how we deal with them now.
- following a sequence of unhelpful/negative thinking, such as “I can’t do this” “I’m going to faint”.
- when you lack confidence and self esteem.
- after being involved in an incident that we experience as threatening. This may result in us feeling anxious the next time we are in similar circumstances. For example following a car accident, you may feel anxious driving.
- following a bout of depression where you lose confidence, though you can be anxious and depressed at the same time.
Coping Styles

Some people may feel that they have never coped very well with stress and may describe themselves as a ‘born worrier’. They may have experienced anxiety problems for a long time and in a variety of situations, although some situations may cause more anxiety than others.

For other people, there may seem to be no obvious event linked with their recent increase in anxiety. These people may feel that their anxiety has come out of the blue. On closer inspection however, anxiety may result from a gradual build up of pressure related to minor events and life stresses.

Some people have always coped well, and anxiety may only have recently developed into a problem. This may have followed a difficult and stressful time in their life. For these people, anxiety can seem a very big problem because they had always seen themselves as strong and able to cope with things. It may be the first time they have really struggled to cope. All these coping styles are common and can be worked on.

Here is an example of the type of anxiety problem that has followed a stressful time in their life:

Bob, aged 53, no previous history of anxiety problems. Happily married with a teenage daughter. He has recently been promoted to a management position in the car industry, which has put him under a lot of stress due to his long hours. He had always felt he was good at coping with work and was a hard worker. Two months ago Bob noticed he was having palpitations and dizziness as he rushed from one meeting to another. He began worrying he had a serious physical problem which put more stress on him. Despite the fact that his GP confirmed that Bob was physically fit, he still suffered from the following symptoms:

**Physical:** palpitations, sweating, dizziness, and chest pains.

**Thinking:** “I’m going to have a heart attack” “I can’t cope with this, I’ve got to take it easy.”

**Behaviour:** avoiding strenuous activity, making excuses at work not to attend meetings he feels may cause him stress, moving slowly, taking regular rests and sitting or lying down, ensuring he always has his mobile and his car nearby (so he can get help easily).

**Mood:** anxiety, low, and frustrated. Begins to feel guilty that he is not doing his job well enough.
The diagram below shows how Bob’s thinking, behaviours, moods and physical reactions all affect each other.

- **Thoughts** - “I’m going to have a heart attack”, “can’t cope with this, I’ve got to take it easy
- **Physical effects** - palpitations, sweating, dizziness, chest pain
- **Mood** - Anxiety, low, frustrated, guilty
- **Behaviour** - avoidance, moving slowly, taking regular rests, sitting or lying at every opportunity

**ENVIRONMENT**
e.g. Being promoted to a management position, working long hours

**How do I get an even balance between pressure and activities that reduce pressure?**

Anxiety levels can increase when our perceived ability to cope is outweighed by the pressures placed upon us. It is important to maintain a healthy balance between pressure and activities that reduce pressure. The build-up of pressure can be due to any number of things. The impact of events will vary from person to person.

Some things you may have identified as pressures in your life could be more difficult to change, for example, low income, poor housing. However, working through this exercise may help you come up with activities that might ease some of these pressures and thereby reduce some of your anxieties. We all have our own methods of coping with life’s pressures, some more healthy than others.

Source: [http://www-old.hud.ac.uk/schools/hhs/research/mhrg/Intro_anxiety.pdf](http://www-old.hud.ac.uk/schools/hhs/research/mhrg/Intro_anxiety.pdf)
### SPENCE CHILDREN’S ANXIETY SCALE

**Your Name:** __________________________  **Date:** __________________________

**PLEASE PUT A CIRCLE AROUND THE WORD THAT SHOWS HOW OFTEN EACH OF THESE THINGS HAPPEN TO YOU. THERE ARE NO RIGHT OR WRONG ANSWERS.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Never</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
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</thead>
<tbody>
<tr>
<td>1. I worry about things.</td>
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<tr>
<td>2. I am scared of the dark.</td>
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<tr>
<td>3. When I have a problem, I get a funny feeling in my stomach.</td>
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<tr>
<td>4. I feel afraid.</td>
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<td>5. I would feel afraid of being on my own at home.</td>
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<td>6. I feel scared when I have to take a test.</td>
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<td>7. I feel afraid if I have to use public toilets or bathrooms.</td>
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<td>8. I worry about being away from my parents.</td>
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<tr>
<td>9. I feel afraid that I will make a fool of myself in front of people.</td>
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<td>10. I worry that I will do badly at my school work.</td>
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<tr>
<td>11. I am popular amongst other kids my own age.</td>
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<tr>
<td>12. I worry that something awful will happen to someone in my family.</td>
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<tr>
<td>13. I suddenly feel as if I can’t breathe when there is no reason for this.</td>
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<td></td>
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<tr>
<td>14. I have to keep checking that I have done things right (like the switch is off, or the door is locked).</td>
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<tr>
<td>15. I feel scared if I have to sleep on my own.</td>
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<tr>
<td>16. I have trouble going to school in the mornings because I feel nervous or afraid.</td>
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<tr>
<td>17. I am good at sports.</td>
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<tr>
<td>18. I am scared of dogs.</td>
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<tr>
<td>19. I can’t seem to get bad or silly thoughts out of my head.</td>
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<tr>
<td>20. When I have a problem, my heart beats really fast.</td>
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<td></td>
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<td></td>
</tr>
<tr>
<td>21. I suddenly start to tremble or shake when there is no reason for this.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>22. I worry that something bad will happen to me.</td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>23. I am scared of going to the doctors or dentists.</td>
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<tr>
<td>24. When I have a problem, I feel shaky.</td>
<td></td>
<td></td>
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<tr>
<td>25. I am scared of being in high places or lifts (elevators).</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>26.</td>
<td>I am a good person.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>27.</td>
<td>I have to think of special thoughts to stop bad things from happening (like numbers or words).</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>28.</td>
<td>I feel scared if I have to travel in the car, or on a Bus or a train.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>29.</td>
<td>I worry what other people think of me.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>30.</td>
<td>I am afraid of being in crowded places (like shopping centres, the movies, buses, busy playgrounds).</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>31.</td>
<td>I feel happy.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>32.</td>
<td>All of a sudden I feel really scared for no reason at all.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>33.</td>
<td>I am scared of insects or spiders.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>34.</td>
<td>I suddenly become dizzy or faint when there is no reason for this.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>35.</td>
<td>I feel afraid if I have to talk in front of my class.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>36.</td>
<td>My heart suddenly starts to beat too quickly for no reason.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>37.</td>
<td>I worry that I will suddenly get a scared feeling when there is nothing to be afraid of.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>38.</td>
<td>I like myself.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>39.</td>
<td>I am afraid of being in small closed places, like tunnels or small rooms.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>40.</td>
<td>I have to do some things over and over again (like washing my hands, cleaning or putting things in a certain order).</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>41.</td>
<td>I get bothered by bad or silly thoughts or pictures in my mind.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>42.</td>
<td>I have to do some things in just the right way to stop bad things happening.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>43.</td>
<td>I am proud of my school work.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>44.</td>
<td>I would feel scared if I had to stay away from home overnight.</td>
<td>Never</td>
<td>Sometimes</td>
<td>Often</td>
<td>Always</td>
</tr>
<tr>
<td>45.</td>
<td>Is there something else that you are really afraid of?</td>
<td>YES</td>
<td>NO</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please write down what it is:

How often are you afraid of this thing? | Never | Sometimes | Often | Always

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Lesson 3: Resources for Emergent and Non-Emergent Medical Needs

<table>
<thead>
<tr>
<th>OBJECTIVE.</th>
<th>KEY POINTS.</th>
</tr>
</thead>
</table>
| • Students will be able to identify a health setting to obtain medical care for various emergent and nonemergent situations  
• Students will know that they can ask a pharmacist for help with understanding medication and interactions, and for over-the-counter remedies for various conditions | • Students should prepare now to know what choices they have for addressing their medical needs  
• The website of your health insurance company will have additional information on where you can/should go  
• If you are not sure where to go, a nurse hotline is a good resource; program one into your phone  
• To get some over-the-counter medicine without going to the doctor, your nearest pharmacist is a great resource; pharmacists go to a lot of extra school and know a lot about health and medication, but they are often underutilized  
• Primary care doctor is the one you can go to for everything except emergencies. This doctor can refer you to specialists for any concern that he or she cannot address directly  
• Have your doctor’s phone number and clinic address programmed into your phone or written down in a spot that you can reference easily  
• Nurse hotlines are great to call if you aren’t sure if or where you need to go. The number for these hotlines is often listed on your medical insurance card |

Preparation: make copies on cardstock and cut out the cards for the card sort activity.

<table>
<thead>
<tr>
<th>ASSESSMENT.</th>
</tr>
</thead>
</table>

Students will complete an exit ticket at the conclusion of the lesson.

Is it an emergency? Exit ticket  Name ___________________________ Date _________

Directions: write E next to each situation if you believe the person needs to call 911 or go to the emergency room and write N if you believe the health concern is not an emergency. If you write N, give one example of what the person could do.

1. Your cousin confides in you and tells you that he is worried that he has an STI. He is really nervous and wants to get seen right away. **N: This is not an emergency situation. Although the cousin could be nervous, he should call to schedule an appointment with a clinic or his doctor to make sure that all necessary tests get done.**

2. You are spending time with your aunt and suddenly she says that she can’t see on one side of her vision. **E: This could be sign of a stroke.**
**CONNECTION TO THE ACHIEVEMENT GOAL.**

Preventable emergency room visits were cited by a number of sources as an indicator of lower health literacy in individuals. Many people also do not know how incredibly helpful pharmacists can be. There is usually little to no wait time and they can suggest non-prescription medications to help with common conditions such as constipation, cold symptoms, and pain relief. By knowing where to turn to get appropriate attention for the students’ medical concerns, students will be able to have their concerns addressed and avoid going to the ED where the wait times are usually quite long and the doctors triage to deal with the most severe cases first.

**OPENING**

Begin by telling the students that today they will learn about various resources to help them receive appropriate medical care. Tell students that sometimes people go to the emergency room when their concern would be better dealt with in an urgent care clinic or with a primary care doctor.

**3. INTRODUCTION OF NEW MATERIAL: Handouts.**

Distribute copies of information on emergencies, urgent care clinics, nurse hotlines, and pharmacists. Give students 5-10 minutes to look over the handouts and instruct them to jot down any trends they notice about each medical care location. They may write on the handouts themselves or in their notebooks. Ask students what they learned from the handouts about what each provider is able to address. Ask students the main differences they notice between Urgent Care and Emergency Situations.

Tell students that if they schedule an appointment with their provider, the provider will likely be able to see them within 15 minutes of the scheduled appointment time. In the emergency room, however, if a triage nurse determines that the concern is not serious, it might take as long as 4 or more hours to see a doctor and get to go home. Emergency Departments are intended for emergencies and most severe cases get treated first. If a hospital is hit with a lot of severe cases, patients who come to ED looking to get tested for STIs or with concerns of a fever or back pain will not be seen for a while. In these cases, it would be better for the patient to stay home and go to an urgent care in the morning or schedule an appointment with a doctor.

<table>
<thead>
<tr>
<th>OPENING</th>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin by telling the students that today they will learn about various resources to help them receive appropriate medical care. Tell students that sometimes people go to the emergency room when their concern would be better dealt with in an urgent care clinic or with a primary care doctor.</td>
<td>Copies of handouts on emergencies, urgent care clinics, and pharmacists <a href="http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000593.htm">http://www.nlm.nih.gov/medlineplus/ency/patientinstructions/000593.htm</a></td>
</tr>
</tbody>
</table>
**GUIDED PRACTICE: Card Sort**

Tell students that they will work on a card sort activity where they will be able to use the handouts they just received to organize cards according to medical need. They can work in partners or groups of 3-4. This activity should take about 15 minutes.

As students work, circulate the room and ask students why they placed each card in each category. Ask students what trends they notice.

At the end of the activity, show students the answer key and give them time to check if they sorted the cards correctly. Discuss any questions.

| Card sort pieces, cut apart and shuffled |

**INDEPENDENT PRACTICE: Worksheet**

Directions: write E next to each situation if you believe the person needs to call 911 or go to the emergency room and write N if you believe the health concern is not an emergency. If you write N, give one example of what the person could do.

1. Jen has a runny nose and cannot stop sneezing. N: it would be good for Jen to go to a pharmacist who could tell her the best medication to take. Jen should remember to tell the pharmacist of any medical conditions or other medications that she is taking.
2. Jared was playing basketball and landed on his head. He seems to be ok, but you’re not sure. E: Even though he seems to be OK, head injury is serious. EDs have machines that would be able to see if there is any bleeding in the brain.
3. Judy, who is 3 years old, ingested some dishwasher soap. You are not sure how much. E: Judy is likely experiencing poisoning. Take her to ED!
4. Julie thinks she is getting the flu. She took her own temperature and it was 101.2F. N: Urgent care is best.
5. Aunt Jean, who is pregnant, has had some unusual pain in her stomach area. E: Pregnancy-related problems are considered emergencies.
6. Uncle Josh’s asthma seemed to be acting up the last couple of days. N: Since asthma is acting up, he might need an adjustment on his medication or a check up with a doctor. Urgent care or call to doctor’s office is best.
7. Your friend went to a party and had a lot to drink. It is the next day and she is throwing up a lot. N: Your friend is probably dehydrated. Urgent care could help get her hydrated.
8. Your cousin went to gym class and is now having severe difficulty breathing. He forgot his inhaler at home. E: Severe difficulty breathing is life threatening and your cousin needs to be taken to the hospital ASAP.
9. Your friend tells you that she thinks she might have Chlamydia, and STI. N: She should definitely get tested, but this is not an emergency. A primary care clinic would be best, but an urgent care clinic could also run tests.
## CLOSING

<table>
<thead>
<tr>
<th>Give students the exit ticket</th>
</tr>
</thead>
<tbody>
<tr>
<td>After collecting the exit ticket, ask students to share what they learned today</td>
</tr>
<tr>
<td>Do checks for understanding and ask questions that prompt students to think about using pharmacists for information. However, the teacher should stress to students that if they feel that a medical issue is an emergency, it is better not to second-guess.</td>
</tr>
<tr>
<td>Real emergencies are life-threatening</td>
</tr>
<tr>
<td>Address one more key point: DISCHARGE NOTES. When a patient leaves the emergency room, the doctor will almost always give them special directions to read about follow-up care. It is really important that people read their discharge notes. If patients struggle with reading, there are often many resources in the building, such as translators and social workers, who could help understand the notes before the patient leaves the hospital. Discharge notes might contain prescriptions, information about those prescriptions, information about the diagnosis the doctor has made, and any follow-up instructions. People should keep their discharge notes and other medical communication in a special folder or file.</td>
</tr>
<tr>
<td>Conclude by having students revisit their questions page and write one or more questions that are relevant to today’s topic.</td>
</tr>
</tbody>
</table>

### Possible Modifications.

| Copies of exit ticket, one per student |
| Student notebooks (questions page) |

<p>| If time permits, students could use computers to look up local nurse hotlines and the phone numbers of their doctors and clinics online. The teacher could add an additional lesson on reading discharge notes. Many sample notes are available online with a simple search. |</p>
<table>
<thead>
<tr>
<th>Card Sort Activity</th>
<th>Go to Emergency Room or Call 911</th>
<th>Go to Urgent Care</th>
<th>Schedule an Appointment with Your Doctor</th>
<th>Call the Nurse Hotline</th>
<th>Ask a Pharmacist</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chest pains that last longer than 2 minutes</td>
<td>Sore throat and fever and already talked to pharmacist</td>
<td>Concerns of depression</td>
<td>Not sure where to go or what to do</td>
<td>Sore throat and fever; would like to treat at home</td>
<td></td>
</tr>
<tr>
<td>Asthma attack</td>
<td>Urinary tract infection</td>
<td>STI testing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Broken bone</td>
<td>Sprain</td>
<td>Annual physical</td>
<td></td>
<td>Wondering if taking birth control pill correctly</td>
<td></td>
</tr>
<tr>
<td>Severe head injury</td>
<td>Inhaled a lot of dust when helping uncle clean, now can’t stop coughing</td>
<td>Pap smear (for females)</td>
<td></td>
<td>Wondering if using inhaler correctly</td>
<td></td>
</tr>
<tr>
<td>Fever accompanied by severe diarrhea, rash, or ongoing vomiting for 24 hours or more</td>
<td>Earache</td>
<td>Concerns of persistent anxiety</td>
<td></td>
<td>Simple rash after going camping</td>
<td></td>
</tr>
<tr>
<td>Pneumonia</td>
<td>Minor cut from doing arts and crafts</td>
<td>Feeling a little dizzy for the past week</td>
<td></td>
<td>Mild headache that came on gradually</td>
<td></td>
</tr>
<tr>
<td>Signs of stroke (vision changes, weakness on one side of body)</td>
<td>Broken finger</td>
<td>Difficulty sleeping for a couple weeks</td>
<td></td>
<td>Itchy eyes and watery nose</td>
<td></td>
</tr>
<tr>
<td>Loss of consciousness</td>
<td>Needing stitches</td>
<td>Flu vaccine</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inhaled hazardous fumes or poisoning</td>
<td>Getting an eye checked after a minor injury</td>
<td>Vaccinations for school or travel</td>
<td></td>
<td>Questions about antibiotic prescription label</td>
<td></td>
</tr>
<tr>
<td>Severe burn</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Severe allergic reaction with trouble breathing, swelling, and hives</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Suicidal</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

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**Go to Emergency Room or Call 911**
- Chest pains that last longer than 2 minutes
- Sore throat and fever and already talked to pharmacist
- Concerns of depression
- Not sure where to go or what to do
- Sore throat and fever; would like to treat at home

**Go to Urgent Care**
- Asthma attack
- Urinary tract infection
- STI testing

**Schedule an Appointment with Your Doctor**
- Broken bone
- Annual physical
- Pap smear (for females)

**Call the Nurse Hotline**
- Severe head injury
- Fever accompanied by severe diarrhea, rash, or ongoing vomiting for 24 hours or more
- Earache
- Concerns of persistent anxiety

**Ask a Pharmacist**
- Pneumonia
- Minor cut from doing arts and crafts
- Feeling a little dizzy for the past week
- Difficulty sleeping for a couple weeks
- Itchy eyes and watery nose

**Inhaled hazardous fumes or poisoning**
- Getting an eye checked after a minor injury
- Vaccinations for school or travel

**Severeburn**
- Help quitting smoking

**Severe allergic reaction with trouble breathing, swelling, and hives**
- Help quitting smoking
Handout on *What is an Emergency?*

Call 911 to have the emergency team come to you right away if you cannot wait, such as for:

- Choking
- Stopped breathing
- Head injury with passing out, fainting, or confusion
- Injury to neck or spine, especially if there is loss of feeling or inability to move
- Electric shock or lightning strike
- Severe burn
- Severe chest pain or pressure
- Seizure that lasted 3 to 5 minutes

Go to an emergency department or call 911 for help for problems such as:

- Trouble breathing
- Passing out, fainting
- Pain in the arm or jaw
- Unusual or bad headache, especially if it started suddenly
- Suddenly not able to speak, see, walk, or move
- Suddenly weak or drooping on one side of the body
- Dizziness or weakness that does not go away
- Inhaled smoke or poisonous fumes
- Sudden confusion
- Heavy bleeding
- Possible broken bone, loss of movement, especially if the bone is pushing through the skin
- Deep wound
- Serious burn
- Coughing or throwing up blood
- Severe pain anywhere on the body
- Severe allergic reaction with trouble breathing, swelling, hives
- High fever with headache and stiff neck
- High fever that does not get better with medicine
- Throwing up or loose stools that does not stop
- Poisoning or overdose of drug or alcohol
- Suicidal thoughts
- Seizures
**Handout on When to Go to an Urgent Care Clinic**

When you have a problem, do not wait too long to get medical care. If your problem is not life threatening or risking disability, but you are concerned and you cannot see your doctor soon enough, go to an urgent care clinic.

The kinds of problems an urgent care clinic can deal with include: Common illnesses, such as colds, the flu, earaches, sore throats, migraines, low-grade fevers, and limited rashes, minor injuries, such as sprains, back pain, minor cuts and burns, minor broken bones, or minor eye injuries.

**What is Considered an Urgent Medical Condition?**

Urgent medical conditions are ones that are not considered emergencies but still require care within 24 hours. Some examples of such conditions include:

- Accidents and falls
- Sprains and strains
- Moderate back problems
- Breathing difficulties (i.e. mild to moderate asthma)
- Bleeding/cuts -- not bleeding a lot but requiring stitches
- Diagnostic services, including X-rays and laboratory tests
- Eye irritation and redness
- Fever or flu
- Vomiting, diarrhea or dehydration
- Severe sore throat or cough
- Minor broken bones and fractures (i.e. fingers, toes)
- Skin rashes and infections
- Urinary tract infections

**If You Are Not Sure, Talk to Someone**

If you are not sure what to do, and you don't have one of the serious conditions listed above, call your doctor. If the office is not open, your phone call may be forwarded to someone. Describe your symptoms to the doctor who answers your call, and find out what you should do.

Your doctor or health insurance company may also offer a nurse telephone advice hotline. Call this number and tell the nurse your symptoms for advice on what to do.
Handout on Pharmacists

A good day for registered pharmacist Michelle Kasperowitz, 37, is when she's peppered with questions. They can range from which blood pressure monitor to buy to whether a rash is poison ivy. And, because she works in a supermarket, she gets lots of food-related inquiries as well. "One man came up to me recently, waving a bag of broccoli," says Kasperowitz, who works at the ShopRite Pharmacy in Woodbridge, N.J. "He's on a blood thinner, and he wanted to know if he could eat it."

Kasperowitz's job is to fill prescriptions. But she also offers advice and dispenses information about medication side effects, disease prevention, nutrition, tobacco cessation, diabetes management, and more. Kasperowitz is happy to assist and has done so since high school, when she worked in her neighborhood pharmacy. "I love it when people ask me questions. It motivates me to learn more, although I do have to say that I'm rarely stumped," Kasperowitz says. Pharmacists learn how to engage with patients as part of their six to eight years in pharmacy school training. Students take such courses as medicinal chemistry, pathophysiology, and pharmacotherapy, and must pass both national and state licensing exams, says Jennifer Cerulli, PharmD, associate professor at the Albany College of Pharmacy and Health Sciences in New York. They also practice communication skills with other students and community pharmacists, who volunteer their time to pose as patients, and they spend more than 1,700 hours of their training interacting with patients in doctor's offices and hospitals. Here are just some of the things your pharmacist can help you do:

See the forest, not just the trees. Your pharmacist can review your entire medication record for potential interactions, see if you're taking drugs with duplicate effects, and check on prescription refills.

Learn what to take when. Is your asthma medication taken during an attack or all the time? Can you sip wine if you're on an antibiotic? When should you take your new birth control pill? Your pharmacist has the scoop.

Ease side effects. Is the niacin you are taking causing a burning sensation? Is your blood pressure drug causing impotence? Or is your antidepressant robbing you of sexual desire? A schedule change could do the trick, or your pharmacist might offer options you can discuss with your doctor.
Pocket savings. Medication bills skyrocketing? Talk to your pharmacist. A generic antiviral medication that costs $9 might take the place of a new-to-the-market prescription brand priced at $65.

Spill it. Taking ginseng for focus? St. John's Wort for depression? Black cohosh for hot flashes? These and other kinds of supplements could potentially interact with your new prescription. Confess all to your pharmacist, who will know whether you might encounter problems and can advise you accordingly.

Source: http://www.webmd.com/a-to-z-guides/features/pharmacists-they-do-more-than-fill-prescriptions?page=2
### Lesson 4: Taking Prescribed and Over-the-Counter Medicines Correctly

<table>
<thead>
<tr>
<th><strong>OBJECTIVE.</strong></th>
<th><strong>KEY POINTS.</strong></th>
</tr>
</thead>
</table>
| • Students will be able to determine the necessary dosage of a medication  
• Students will be able to make a medication sheet to keep track of medication | • Taking the correct dose for the correct amount of time will help ensure that the disease gets treated properly  
• Setting an alarm or reminder on your phone is one way to keep track of medication that you have to take daily  
• “Capsule” means pill  
• Tell your doctor everything  
• OTC = Over The Counter; you can buy OTC medication without going to the doctor and without a prescription |

**Preparation:** medication bottle assembly  
(directions are in the guided practice portion of lesson)

### ASSESSMENT.

Exit ticket questions:

1. You cousin weighs 162 lbs. His doctor prescribed him a medication and the label reads, “Take one capsule for every 50lbs of body weight.” How many capsules should your cousin take? [3]

2. You pick up your prescription for azithromycin and the directions tell you to take one pill twice a day with food for 3 days. Which of the following statements is true?  
   a. If your symptoms improve after 2 days, it is ok to skip the last dose.  
   b. You should take one pill with breakfast and one pill with dinner. ✗  
   c. You can take both pills at once.  
   d. Since you don’t always eat two meals, you can take one pill with whatever meal you have that day.

### CONNECTION TO THE ACHIEVEMENT GOAL.

An important component of health literacy is being able to follow doctor’s orders for taking medicine or for being able to read and interpret information on OTC medication labels. By understanding that how and when a patient takes his medicine affects that medication’s absorption and effectiveness, students will understand that they should adhere closely to instructions on labels.

Students will also make a Medication Management chart. The skills of organizing medication by type and time are directly transferrable should students need to make a chart for diet modification or exercise.
### OPENING: Children’s Benadryl dosage problem

Post the following problem on the board for students to work on in their notebooks:

- You visit your aunt for a couple weeks every summer. This year, you notice that 4 of your cousins are constantly sneezing and rubbing their eyes. You go to the pharmacy and ask the pharmacist for advice. She tells you to give your cousins Children’s Benadryl but to make sure that you give the right dosage. You’re feeling pretty confident with your math skills, so you buy the liquid Benadryl and head to your aunt’s. Determine the correct dosage for your four cousins:
  1. Nate (22lbs) → 4 ml
  2. Sherell (50 lbs) → give 10 ml
  3. Loria (104 lbs) → this child should take an adult dose of 50mg = 20ml
  4. Silas (12 lbs) → this child is too small and should not be given Benadryl since he is likely under 1 year old

End this activity by sharing with students that even though Benadryl is generally safe, too little will be ineffective and too much would cause drowsiness and sleepiness.

### MATERIALS

Student Notebook
Copies of dose table and info sheet (1 per group)
**INTRODUCTION OF NEW MATERIAL: Teacher presentation with information.**

Instruct students to take out their notebook. For organizational purposes, they could split a page of notes into three even sections and label each one with a part of the lecture. Teachers should implement the usual good teaching practices of checking for understanding through cold calling, asking for student input, engaging students in content posted on the slide, and pair-share and avoid simply talking at students. Using a whiteboard to jot down key points from each slide would help make going through the slides faster, since there is quite a bit of text.

**Dosage**
- It is important to take the correct dose in order for the medicine to be effective.
- The doctor often calculates dosage based on your weight and height, but OTC medication might require that you figure how much you need to take out yourself.
- Sometimes two or more pills are required to be taken in one dose because to make one pill would make the pill too large to swallow.

**Timing**
- Your body works in cycles and medicine gets processed by your body so the timing of medication is very important.
- For example, antibiotics and antidepressants have half-lives and after a certain number of hours their concentration in your blood could get too low for them to be effective. Some half-lives are long and last days, while others could wear off in two hours. If an antibiotic wears off, bacteria could start growing back up again and the infection won’t clear up as it should.
- Medication that asks you to take it multiple times per day should be based on the hours that you are awake. However, you need to talk to your doctor about the best strategy to do this. For example, Ritalin gets prescribed as a twice-daily pill, but it is a drug that helps with focus and energy. It should be taken at breakfast and around lunchtime. Taking it at bedtime would interfere with sleep. Anti-anxiety medication might work best if it is taken at breakfast and bedtime because it usually has more relaxing effects.
- Setting an alarm on your phone at different times during the day could help you stick to your medication schedule.
- You could also print a medication management chart and even glue different medicines to stay organized (we will do this next).

| Student Notebook | Pens/pencils/highlighters |
Other directions

- Taking with or without food: some medicine gets absorbed better with food, while other needs to be taken on an empty stomach because food keeps some of it from getting into your body. It could really make a big difference!
- Interaction with other medication: your doctor needs to know what other medicine you are taking, which includes vitamins and herbs (like tea). Things we think of as natural still do things in our body and might interfere with something that your doctor prescribes. Tell your doctor everything.
- All prescription and OTC medication comes with a lot of information. Do your best to read about warnings, but know that reactions to medication are extremely rare.
- If you think you might be pregnant, there probably won’t be as many medicines that you can take. It is important that you let your doctor know if you are pregnant or think you might be pregnant.

Generic and brand name medication are exactly the same and have to pass the same standards in order to be sold. Once a medication’s patent wears off (usually after 20 years of being on the market), it is often sold as a generic drug that is much cheaper. It is important to know both the brand and generic names of your medication.
### GUIDED PRACTICE: Medication Schedule in groups of 4.

<table>
<thead>
<tr>
<th>Medicine bottles</th>
<th>Medicine bottles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Labels</td>
<td>Labels</td>
</tr>
<tr>
<td>4 different kinds</td>
<td>4 different kinds</td>
</tr>
<tr>
<td>of candy</td>
<td>of candy</td>
</tr>
<tr>
<td>Copies of</td>
<td>Copies of</td>
</tr>
<tr>
<td>medication</td>
<td>medication</td>
</tr>
<tr>
<td>schedule (1 per</td>
<td>schedule (1 per</td>
</tr>
<tr>
<td>group)</td>
<td>group)</td>
</tr>
</tbody>
</table>

The teacher should collect medicine bottles (4 are needed per group of 3-4 students) prior to lesson and prepare them as if they were real medicine bottles but with candy. Hand-written labels are fine for this activity. Label the bottles in the following way (brand name is in parentheses):

1. Citalopram (Celexa) 40mg Take 20mg once per day for one week then increase to 40mg per day
2. Amphetamine/Dextroamphetamine (Adderall) 10 mg Take twice daily
3. Atarvostatin (Lipitor) 4mg Take once a day with food
4. Warfarin (Coumadin) 2mg Take one pill per day

Use the following candies for each bottle and fill the bottle to the top:

1. Sweet Tarts
2. M&Ms
3. Jelly Beans
4. Nerds

The teacher should hand one of each type of bottle to each group so that each group has four bottles. He should then instruct groups to designate one person as the writer and the rest of the group members should have one or two bottles each that they will be responsible for understanding. Post the following on the board:

1. Citalopram is used for depression
2. Adderall is used to treat ADHD
3. Lipitor is used to lower cholesterol and you can’t drink grapefruit juice when taking it
4. Warfarin is used as a blood thinner in people prone to blood clots

Have students assemble one medication schedule together. The teacher should highlight to students the fact that it is OK to get help making a medication schedule and that students might even have people in their families now that need help getting organized with their medicine.

### INDEPENDENT PRACTICE: Reading labels activity.

<table>
<thead>
<tr>
<th>Medical labels</th>
<th>Medical labels</th>
</tr>
</thead>
<tbody>
<tr>
<td>worksheet</td>
<td>worksheet</td>
</tr>
</tbody>
</table>

Next, the teacher should tell students that they will work on an additional worksheet that will give them more practice with reading labels. The teacher should emphasize to students that this activity is to get students thinking about refilling their medication and looking at expiration dates. When medicine expires, it is less effective. If medicine runs out, the patient can go through withdrawals or their medical condition could become more serious.
### CLOSING: Exit ticket.

- Revisit the key points about today’s lesson and to have students use their journals to jot down three things they will take away.
- Give students the exit ticket that follows this lesson.
- Instruct students to open their notebooks and write one or more questions about today’s topic on the questions page. Tell students to leave page open and circulate and initial the page to make sure that students are following directions.

### Exit ticket (1 per student)

- Notebooks (for questions page)

### ADDITIONAL TEACHER RESOURCES AND CONSIDERATIONS.

A good resource is Taking Medicine Reading Medical Labels from Queens Library Health Literacy Curriculum

[https://www.queenslibrary.org/sites/default/files/health_literacy/PDF_teachers/Session_11-We.pdf](https://www.queenslibrary.org/sites/default/files/health_literacy/PDF_teachers/Session_11-We.pdf)

from which the created medical labels were used.

An important component of health literacy is also understanding the medication information sheets that accompany all prescription medications and most over-the-counter medications. Depending on students interest level and need, the teacher could create a lesson on reading these information sheets, which contain information about what the medicine is used for, interactions, overdose warnings, and allergy information.
Teacher's Version

1. DVB Pharmacy
   - Location: 109 W Main St
   - Phone: 718-555-1144
   - Line: 01
   - Description: Lamictal 100 mg Tabs 100 tablets
   - Dosage: Take 1 tablet twice daily with food.
   - Refills: Yes, up to 3 times per month
   - Provider: Dr. David W. Haney
   - Date: 04-05-2007

2. CSV Pharmacy
   - Location: 122 W Main St
   - Phone: 518-567-4321
   - Line: 02
   - Description: Wellbutrin SR 450 mg Tabs
   - Dosage: Take 1 tablet twice daily with food.
   - Refills: Yes, up to 3 times per month
   - Provider: Dr. Charles Brown
   - Date: 03-02-2008

3. Xpress Scripts
   - Location: 123 W Main St
   - Phone: 202-567-4321
   - Line: 03
   - Description: Lisinopril 10 mg Tabs
   - Dosage: Take 1 tablet every day as needed.
   - Refills: Yes, up to 4 times per month
   - Provider: Dr. Michael Harris
   - Date: 03-26-2007

Source:
https://www.queenslibrary.org/sites/default/files/health_literacy/PDF_teachers/Session_11-We.pdf
<table>
<thead>
<tr>
<th>What is the name of the medicine?</th>
<th>What is the name of the medicine?</th>
<th>What is the name of the medicine?</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the doctor's name?</td>
<td>What is the doctor's name?</td>
<td>What is the doctor's name?</td>
</tr>
<tr>
<td>What is the patient's name?</td>
<td>What is the patient's name?</td>
<td>What is the patient's name?</td>
</tr>
<tr>
<td>What is the pharmacy's phone number?</td>
<td>What is the pharmacy's phone number?</td>
<td>What is the pharmacy's phone number?</td>
</tr>
<tr>
<td>How many pills do you take every day?</td>
<td>How many pills do you take every day?</td>
<td>How many pills do you take every day?</td>
</tr>
<tr>
<td>How many pills are in the bottle?</td>
<td>How many pills are in the bottle?</td>
<td>How many pills are in the bottle?</td>
</tr>
<tr>
<td>Can you get a refill?</td>
<td>Can you get a refill?</td>
<td>Can you get a refill?</td>
</tr>
<tr>
<td>When does the medicine expire?</td>
<td>When does the medicine expire?</td>
<td>When does the medicine expire?</td>
</tr>
</tbody>
</table>

Source: https://www.queenslibrary.org/sites/default/files/health_literacy/PDF_teachers/Session_11-We.pdf
<table>
<thead>
<tr>
<th>Brand/Generic Name</th>
<th>Description ie: blue/capsule</th>
<th>Purpose: pain/other</th>
<th>Dosage: How much?</th>
<th>When taken? Times/hour?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>
Opening Problem

Name ____________________

You visit your aunt for a couple weeks every summer. This year, you notice that 4 of your cousins are constantly sneezing and rubbing their eyes. You go to the pharmacy and ask the pharmacist for advice. She tells you to give your cousins Children’s Benadryl but to make sure that you give the right dosage. You’re feeling pretty confident with your math skills, so you buy the liquid Benadryl and head to your aunt’s. Determine the correct dosage for your four cousins:

1. Nate (22lbs)
2. Sherell (50 lbs)
3. Loria (104 lbs)
4. Silas (12 lbs)
When to Use. Treatment of allergic reactions, nasal allergies, hives and itching.

**Table Notes:**

- **AGE LIMITS.** For **allergies**, don't use under 1 year of age. (Reason: it causes most babies to be sleepy). For **colds**, not advised at any age. (Reason: no proven benefits). They should be not be given if under 4 years old. If under 6 years, don’t give products with more than one ingredient in them. (Reason: FDA recommendations 10/2008).

- **DOSE.** Find the child’s **weight** in the top row of the dose table. Look below the correct weight for the dose based on the product you have.

- **MEASURE the DOSE.** Syringes and droppers are more accurate than teaspoons. If possible, use the syringe or dropper that comes with the medicine. If not, you can get a med syringe at drug stores. If you use a teaspoon, it should be a measuring spoon. (Reason: regular spoons are not reliable.) Keep in mind 1 level teaspoon equals 5 ml and that ½ teaspoon equals 2.5 ml.

- **ADULT DOSE.** 50 mg

- **HOW OFTEN.** Repeat every 6 hours as needed.

Exit Ticket  Lesson 4  Name _________________________________

Read the following information from an over-the-counter medicine and answer the question as if you were a 17-year-old student with mild asthma.

<table>
<thead>
<tr>
<th>Drug Facts</th>
<th>Uses temporarily relieves these symptoms due to allergies sneezing runny nose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Ingredient (in each tablet)</td>
<td>Purpose</td>
</tr>
<tr>
<td>Chlorpheniramine Maleate 2 mg</td>
<td>Antihistamine</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Warnings</th>
<th>Warnings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask a doctor before use is you have glaucoma a breathing problem such as emphysema</td>
<td>When using this product be careful when driving a motor vehicle or operating machinery drowsiness may occur</td>
</tr>
</tbody>
</table>

Directions

<table>
<thead>
<tr>
<th>Adults and children 12 and over</th>
<th>take 2 tablets every 4 to 6 hours not more than 12 tablets in 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children 6 years to under 12 years</td>
<td>take 1 tablet every 4 to 6 hours not more than 6 tablets in 24 hours</td>
</tr>
<tr>
<td>Children under 6 years</td>
<td>ask a doctor</td>
</tr>
</tbody>
</table>

1. What is the name of the medication? Chlorpheniramine Maleate
2. What is it used for? It is used primarily to relieve allergy symptoms
3. Should you ask the doctor before using this medicine? Why or why not? Because you have asthma, you should ask your doctor if you could take this medicine
4. What is a possible side effect of this medication? Drowsiness
5. Suppose you take the first dose of this medicine at 10am. If your symptoms keep bothering you, list the next 7 times that you could take this medicine the soonest.
   2pm
   6pm
   10pm
   2am
   6am
   you could not take anymore medicine until 10am the next day because you would exceed the 12 tablet maximum
Lesson 5: Talking to Your Doctor About Sexual Health

<table>
<thead>
<tr>
<th>OBJECTIVE.</th>
<th>KEY POINTS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students will understand that providers are specially trained to discuss sexual health, regardless of sexual orientation of patient</td>
<td>• The provider needs to know the patient’s sexual orientation so that she may most effectively address certain risks and benefits unique to each lifestyle</td>
</tr>
<tr>
<td>• Students will know to be honest about their sexual practices with their provider</td>
<td>• Every provider has a legal obligation to maintain confidentiality</td>
</tr>
<tr>
<td>• Students will learn to trust but verify</td>
<td>• Information about your sexual health is considered private health information and will therefore not be released to anyone without your consent</td>
</tr>
<tr>
<td></td>
<td>• Your provider can help you find appropriate contraceptive and barrier methods unique to your lifestyle</td>
</tr>
<tr>
<td></td>
<td>• STI = Sexually transmitted infection; it is more appropriate to use STI over STD because “infection” implies that nearly all can be treated and cured, whereas “disease” implies a much more serious manifestation of the illness</td>
</tr>
<tr>
<td></td>
<td>• If you had unprotected sex, you cannot be sure that you did not contract an STI unless you get tested</td>
</tr>
<tr>
<td></td>
<td>• Nearly all STIs have easy and effective treatment and will not cause long-term health consequences if treated early and treated properly (follow the medication schedule!)</td>
</tr>
<tr>
<td></td>
<td>• Birth control pills only protect against pregnancy and only if they are taken properly! They do not protect against ANY STI</td>
</tr>
<tr>
<td></td>
<td>• You really shouldn’t trust what anyone says about their sexual health, unless they have recent results from a doctor’s visit to support what they are saying</td>
</tr>
<tr>
<td></td>
<td>• Just as you expect to be able to tell a doctor anything and get a professional opinion, if a friend confides in you, remember to be respectful and simply urge them to be responsible</td>
</tr>
<tr>
<td></td>
<td>• Finding a good doctor whom you trust could help you take even better care of your health. Sometimes it takes some switching around.</td>
</tr>
</tbody>
</table>

ASSESSMENT.

Revisit the problem from the Opening portion of the lesson. Hand out copies of the hypothetical scenario (Jon) and have students respond.
CONNECTION TO THE ACHIEVEMENT GOAL.

The purpose of this lesson is to teach students to advocate for themselves and to be proactive if they are sexually active. Much of the health class curricula today do a fine job teaching students about abstinence and about how unpleasant and scary STIs are. This places an unnecessary stigma on people who are sexually active. The “scariness” of diseases might deter students from going in and getting tested and potentially treated. This lesson does not seek to urge students to identify their gender and sexual identity; rather, the goal is for students to understand that medical providers are specially trained to be able to help all their patients. The theme in this lesson, as it is throughout the curriculum, is to be honest and open with your medical provider in order to ensure the best and most appropriate treatment.

OPENING: What do you tell your friend?

The teacher should post the following situation on the board, instruct students to read it silently to themselves, and write down a couple thoughts on what they would advise their friend to do in this situation. If they are not sure, they could write questions they would ask their friend to get more information.

Your heterosexual male friend, Jon, tells you that his girlfriend of a couple months was ready to have sex and they had sex last night. Your friend has had 3 other sex partners all of whom were female. His current girlfriend tells him that she was a virgin before they had sex. He isn’t worried about STIs because he says that the girls he’s been with are “classy” and that they do not sleep around and probably don’t have diseases. He says he used condoms with all of them but one and that is because she said she was on birth control. What, if anything, should you tell your friend?

Tell students that they will have a chance to respond to this problem in writing at the conclusion of the lesson.
INTRODUCTION OF NEW MATERIAL: Mary and Jude

Post the following situation on the board. Tell students that you will read it aloud and then discuss Mary’s actions and thoughts.

Mary is an 18-year-old girl who recently met Jude. Jude, who is 24, identifies herself as bisexual and both Mary and Jude have strong feelings for each other. Mary had one boyfriend in the past to whom she lost her virginity. After they broke up, Mary went to her doctor, whom she really likes and trusts, and got tested for STIs. She also had a Pap smear and the results were normal. She really likes Jude but worries about how many partners Jude has had. Mary wants to be intimate with Jude and she worries that if she brings up Jude’s sexual past, Jude will get upset and leave her. They plan to have a date night in about a week and Mary knows that Jude will invite her to spend the night. Whenever she finds herself worrying, she reminds herself that most STIs are spread between male and female partners and it is much safer to be in a same-sex relationship. Plus, it’s only for one night so she probably won’t contract anything. Is she correct? What should Mary do?

Ask students what they think and whether Mary’s reasoning is correct.
Remind students, again, that the point of this curriculum is not to prescribe any treatment or lifestyle, but to teach student to feel more comfortable discussing difficult topics. Then, as a model of responsible thinking, bring up the following points about the scenario.
Mary is doing several things right. First off, she followed up with a provider and found a provider that she likes and trusts. However, that provider likely still thinks that Mary is engaging in heterosexual activity. She is also wondering about safety and the right things to do.

There are several aspects of this scenario that are a little concerning. First off, Mary should prioritize her health and wellness over the possibility of her girlfriend getting upset. She has shown responsibility about her gynecologic health in the past and should continue to do so. Secondly, STIs can spread between any two partners if one of them is infected. Although the risk of transmission of HIV is lower, some other infections, such as yeast infections, trichomonas, and bacterial vaginosis are more likely to occur when two women engage in sex. Thirdly, it only takes one time to contract an STI and transmission is independent of the frequency of intercourse. Finally, it is unlikely that Mary and Jude would both be intimate with each other just this once. The best thing to do would be to be open and honest with each other and their providers and to both be screened regularly. Mary could also go to the clinic and receive more information about protection. Contraception is not a concern for this case, but barrier methods might be effective in preventing the spread of diseases, including HPV.

If Mary and Jude end up being intimate with each other, Mary should try to see her doctor within a couple weeks. Some infections take some time to show up. Testing usually involves peeing in a cup. She should tell her doctor that she had sex with a woman because same-sex intercourse has potential for unique infections.
**GUIDED PRACTICE: Review Key Points**

Create a PowerPoint with the Key Points from the top of this lesson. Have students read the key points aloud and pause to give time to discuss. This section is intentionally left for the teacher to tailor to class and student needs.

**INDEPENDENT PRACTICE: Revisit Jon’s Scenario**

Hand out the assessment for the lesson (Jon’s scenario) and give students 5 minutes to respond on paper and independently. Then have students pair up and share what they wrote with their partner. Next, proceed to the discussion.

**CLOSING: Discussion**

Ask the class the following questions for discussion:

1. What were some assumptions that Jon was making? 1. His previous partner took her medication perfectly and could not get pregnant. 2. Even though his previous partners were “classy,” it does not necessarily mean that they have never had sex or possibly contracted an STI. It does not make one “unclassy” to have an STI, either. However, it does make one irresponsible to not get it treated. 3. The partner he did not use a condom with was healthy.

2. Knowing what you know, do you think it would be very effective to tell him to not have sex until marriage? No. Jon has already had sex and it is unlikely that he will not have sex again. Therefore, the important thing that Jon needs to understand is that he needs to get tested and be very careful about choosing his partners. Using barrier methods like condoms is also very important.

3. Is Jon being safe? No. He has already had 3 sex partners and will likely have one more. Each time Jon has sex with another person, that person is essentially “sleeping” with all Jon’s previous partners. Also, just because Jon’s girlfriend said she is a virgin does not mean that she is actually a virgin. To be responsible, he should ask her to get tested and show him the test results.

4. What should Jon tell his doctor? Everything. The doctor needs to know of Jon’s lifestyle so that he can recommend testing each time Jon is in the office to protect Jon’s health and the health of his partner(s).

Conclude by telling the students that Jon is a prime candidate for frequent check-ups with the doctor. He would benefit greatly from finding a clinic near his home where he can get tested frequently, both to protect himself and his partners. Jon also needs some education on contraception and how possible it is that his partner might sometimes forget to take the pill. He should be advised to ask his partners questions such as, “How often do you take the pill? What kind of pill is it? Do you take it at the same time each day?” only to ensure that he does not get any girl pregnant. Jon should be advised to use condoms every time until he is in a committed relationship and both he and his girlfriend can go to a clinic together and get tested at the same time. He should also be reminded that even if people know they have an infection, they might not feel comfortable telling you. After all, what happens if they tell you? You won’t have sex with them and might tell other people, and that is not what most people would be OK with. As the old saying goes, students should be instructed to “trust, but verify.”

Lastly, instruct students to write two quiz questions for the end of the unit. These questions should be relevant to today’s lesson and could also be scenarios.
### ADDITIONAL TEACHER RESOURCES AND CONSIDERATIONS.

Not all sex and gender identities were considered in today’s lesson. The teacher could modify all scenarios to better fit their student population.

For homework, students could be assigned a homework assignment where they write their own scenario and the class discusses it the next day. Some students might use this as an opportunity to ask indirect questions about what they struggle with.

The teacher could modify the curriculum and collect notebooks at the end of the unit if the relationships with students are at a point where this would feel natural. If students know this in advance, they could express concerns or questions to the teacher and the teacher could write back and suggest resources or referral to counselors or social workers.

Depending on the sequence of lessons the teacher chooses, the teacher could also discuss where each student could go to get tested and thereby build on a previous lesson about healthcare delivery settings.
Jon’s Scenario

Name ______________________________ Date ____________

Reread the following situation and write down your thoughts about it. You might consider what Jon is doing/thinking correctly, what assumptions he might be making, and what recommendations you might make to him.

Your heterosexual male friend, Jon, tells you that his girlfriend of a couple months was ready to have sex and they had sex last night. Your friend has had 3 other sex partners all of whom were female. His current girlfriend tells him that she was a virgin before they had sex. He isn’t worried about STIs because he says that the girls he’s been with are “classy” and that they do not sleep around and probably don’t have diseases. He says he used condoms with all of them but one and that is because she said she was on birth control. What, if anything, should you tell your friend?

** If you finish early, open your notebooks and write down two questions concerning today’s lesson. Remember to do this on the special page we dedicated to questions. You can write a hypothetical scenario that you might be wondering about or some questions you think Jon should ask his provider.
Lesson 6: Preparing for Appointments + Emergency Wallet Card

<table>
<thead>
<tr>
<th>OBJECTIVE.</th>
<th>KEY POINTS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Students will revisit the medical questionnaire from Lesson 1 and fill it out for a hypothetical patient, Rose Marie Brown. Thus, students will be able to fill out a medical history questionnaire.</td>
<td>• Medical history questionnaires can be confusing and sometimes difficult to fill out to completeness.</td>
</tr>
<tr>
<td>• Students will prepare a set of questions for Rose to ask her medical provider.</td>
<td>• Some words on the medical history questionnaires might need explanation (i.e. hypertension=blood pressure).</td>
</tr>
<tr>
<td>• Students will create their own Emergency Identification Card to keep in their wallet.</td>
<td>• Emergency wallet card will help doctors decide the safest treatment for you should you be brought to the hospital when you are unconscious.</td>
</tr>
<tr>
<td></td>
<td>• It is important to be 100% honest on the questionnaire especially about alcohol use, sexual activity, and changes in health status. Good doctors use this information to prescribe safer medications and treatments. Reporting incomplete or false information to doctors could cost you your health.</td>
</tr>
<tr>
<td></td>
<td>• It is OK to use common “living room” language with doctors to discuss concerns; they are people too!</td>
</tr>
<tr>
<td></td>
<td>• Come to appointments early to fill out forms and ask questions.</td>
</tr>
<tr>
<td></td>
<td>• You can address multiple concerns at one appointment.</td>
</tr>
</tbody>
</table>

ASSESSMENT.

The Emergency Identification Card will serve as the assessment. Informal observation of student progress as they work on filling out the questionnaire will serve as additional informal assessment.

CONNECTION TO THE ACHIEVEMENT GOAL.

Being able to correctly fill out a patient history questionnaire is one of the hallmark pieces of health literacy. By gaining some practice with this process now, students will be better equipped to fill out complicated forms in the future.
## OPENING: Introduce Activity

Tell students that today they will practice filling out a medical history questionnaire for a hypothetical patient named Rose. Because their own health information is private and should not be made known to anyone except trusted family members and healthcare providers. Students will likely see that filling out this questionnaire is difficult and that not every question could be answered.

Students may work alone or with a partner. If time is very limited, students may also be assigned a paragraph from Rose’s story and the class can reconvene to fill out the form together. However, because patient histories are often complex, this activity is best for students to practice completing independently, despite the challenges.

<table>
<thead>
<tr>
<th>MATERIALS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rose’s Medical Story (1 per student)</td>
</tr>
<tr>
<td>Mount Sinai Patient Information Sheet (1 per student or partner set) (<a href="http://www.mountsinai.org/static_files/MSH/Files/PatientCare/ExecutiveHealthProgram/MedicalHistoryQuestionaire.pdf">http://www.mountsinai.org/static_files/MSH/Files/PatientCare/ExecutiveHealthProgram/MedicalHistoryQuestionaire.pdf</a>)</td>
</tr>
</tbody>
</table>

## INTRODUCTION OF NEW MATERIAL: Rose’s Medical Story

Once students receive Rose’s medical story, they should begin reading it right away and read it at least once before filling out the health history questionnaire. They should circle words they don’t understand. If technology is available, they can use the internet to look up the meanings of these words on their own. It is also a good idea for the teacher to pause class after about 15 minutes and ask students to call out the words they do not know and write them on board. More than likely, the teacher will know what the words mean and this will serve as an opportunity to help students understand the text. It is also recommended that the teacher have some activity to summarize the story, be it a brief class discussion, a couple key points, or verbal summary.
GUIDED PRACTICE: Prepare Rose’s medical history questionnaire.

For guided practice, students should pair up or get into groups of 3. It is important that students get the whole picture of Rose’s health so it would be best if each student went through the process of filling out the form himself but had people nearby with whom they could compare responses. The goal is to get students to see that even though filling out the form may be complicated, it is doable and important. This would also be good practice if students ever have to fill out a form for someone else, such as a family member or their child.

The teacher should encourage students to post questions on the board or on post-its and to work with other classmates to check for accuracy.

About 30 minutes should be given to this activity.

After guided practice, discuss the following questions as a class?

1. Some information on Rose’s questionnaire was not provided because we didn’t know enough about her. Do you think this is OK? Yes, it is OK to not know the answer to every question, but it is best to be as prepared for appointments as possible.
2. Would it be better if Rose visited the same clinic for her care of different ones? It would be best if she continued to go to the same clinic because then she wouldn’t have to fill out the form each time. Also, the record would automatically be updated each time she sees a doctor or nurse in the network of clinics.
3. Should Rose write how many drinks she had per day? Could the doctor report her for addiction? She should definitely report this information because the doctor needs to know what medicine would be safe to prescribe to her. Because she also thinks she might be pregnant, the doctor could help her find resources to drink less so that her baby is healthy. The doctor cannot report her to outside agencies for addiction, but can suggest resources that can help.
4. This questionnaire took us a while to fill out. What does that tell you about when you should arrive for an appointment at a new clinic? Arrive early because filling out the forms could take a long time.

| Pens/Pencils | Rose’s medical story |
| Mount Sinai Patient Information Sheet (1 per student or partner set) (http://www.mountsinai.org/static_files/MSH/Files/Patient%20Care/Executive%20Health%20Program/MedicalHistoryQuestionnaire.pdf) |
### INDEPENDENT PRACTICE: Prepare questions for Rose's provider.

Ask students to prepare a set of questions or concerns that Rose should bring up to her doctor on this visit. Tell students to keep in mind that Rose was originally here because she thinks she might be pregnant, but that going to the doctor and being physically present at the doctor’s office presents an excellent opportunity to discuss any physical concerns that she might have. Students might come up with many questions or a few. The following questions/concerns could be posted after students have about 10 minutes to come up with their own set:

2. Abnormal Pap results: Should I get retested for Chlamydia? What is HPV? I missed the appointment I was supposed to have; what should I do now?
3. I think I might be pregnant. My last period was 3 months ago but they are irregular. I continued drinking and taking birth control pills. Can you confirm that I am pregnant? What can I do now to make sure that my baby is healthy?
   OR
   I cannot afford to have a baby and don’t want one. What resources are available to help me?
4. I have really bad back pain in the lower part of my back. Could you please check it for me? What can I do to make it better?
5. I lost some weight recently and wasn’t trying and I have a hard time sleeping. What could be the cause?
6. I have had a really hard time going “number two.” What could be the cause and what can I do to feel better?
7. I have been drinking quite a bit of alcohol and it is becoming more of a habit. My dad was an alcoholic and so was my grandfather and I don’t think I am at all like them. I can still go to work and do everything normally. Is 4 drinks per day bad for my health? Will alcohol interfere with any medicine that I am currently taking?
8. I am wondering if I might be a little depressed or something. How can I know for sure? What can I do to feel better?
9. I have to fill out an emergency card for my health class. Can you tell me my blood type?
10. Am I taking my medicines correctly? Do my teas interfere with any of them? I noticed the form asked me about teas and I was surprised. Could something in tea be affecting my health and mood?
11. Can you post any results you get from my medical tests on MyChart?

About 15 minutes should be a good amount of time to prepare. Students may work in small groups to brainstorm questions together. If students come up with other questions, the teacher should add them to the list on the board.
CLOSING: Prepare medical emergency wallet card.

As a closing activity, have students fill out the In Case of Emergency card and put it in their wallet. Many students probably won’t know their blood type, but they could probably find it out from a parent or guardian or by calling the clinic they normally go to for their healthcare needs. The purpose, again, is to get student to be proactive about their healthcare. Tell students that the medical card would be useful if they ever get taken to the hospital when they are unconscious. Though unlikely, it is possible that some student might get into a car accident, get hit by a car while riding a bicycle, or maybe find herself in a scary situation where she drinks something that causes her to lose consciousness. When taken to the ED, doctors there have very little information on the patient and might sometimes struggle finding a person to contact to notify that you’re in the hospital. If a blood transfusion is needed, paramedics could give a patient life-saving blood much earlier if they know the blood type. Remind students that it is important to update the information on the card if their emergency contacts’ numbers change frequently.

Teacher should post Rose’s Emergency Wallet Card as a sample.

<table>
<thead>
<tr>
<th>Special Considerations and Possible Modifications.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because Rose’s Medical Story is quite long, one modification could be to split students up into groups and assign paragraphs to individual students or partners. Depending on available time and availability of resources, one way to work through the medical history questionnaire would be to fill it out as a class</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Name</th>
<th>Blood Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOB</td>
<td>Physician</td>
</tr>
<tr>
<td>Allergies</td>
<td>Medical Conditions</td>
</tr>
<tr>
<td>Current Medicines</td>
<td>In Case of Emergency, Contact</td>
</tr>
</tbody>
</table>

Emergency Wallet Card
Rose’s Medical Story

Rose Marie Brown is here to see Dr. Robert Hughes. She was born on November 24th, 1986 in Akron, OH to parents Sara Lee Johnson and Matthew Brown. Her parents split when she was very young so she does not know her dad very well. From what she knows, he is still alive but is still a very heavy drinker. He is 57 years old and sometimes works on small construction projects but he does not have a steady job. She kind of remembers her grandparents on her father’s side, but found out recently that the grandfather she knew was not her biological grandfather. The grandfather she knew died of heart failure and her paternal grandmother died of stomach cancer. During the last 5 or so years of her life, her paternal grandmother had diabetes and had to get insulin shots. Rose also remembers that grandma had to wear compression stockings and had very swollen hands and ankles. Her dad’s mom died at the age of 60. Both of these grandparents lived near a nuclear power plant in Ohio. Her biological grandfather was still alive when rose was 6 but she does not know whether he is still alive. He was in the army and fought in a lot of wars.

Her maternal grandparents are still alive and they are both 84 years old. Grandma cries a lot and seems to always be sad and anxious. Rose knows that they both complain of chest pain, but they’ve been complaining of it the past 20 years so she is not sure how serious it is. They take herbal medicine to help them sleep and they always measure their own blood pressure and sometimes it is high. Her maternal grandparents’ fathers both died in WWII and the mothers died when they were both in the 80s. Rose’s grandfather had skin cancer and grandmother had undergone a double mastectomy in her 30s to have both breasts removed. Today, both grandparents seem to be in general good health especially given the fact that they do not exercise and eat a diet pretty heavy in fat. They have already outlived many of their friends and do not suffer from what Rose thinks a lot of older people suffer from: they do not have arthritis, their memories are both good, and they live independently. Her grandfather was, however, a heavy drinker and smoker for much of his life, but he gave up smoking after a small heart attack about 10 years ago.

Rose knows that she should keep track of her health trends a little better, but she never much cared for going to the doctor. Today, she works as a secretary at a school. She lived on her own for a little while, but now she lives with her boyfriend, Joshua. About a year ago on November 11, 2014, when she first started seeing Joshua, she went in to get a full physical just to make sure everything was OK. She had a Pap smear, which the nurse later called her to tell her that it was abnormal and she found out that she has HPV and Chlamydia. She couldn’t believe it. She was almost certain that she got it from Josh and he ended up going to the doctor and finding out that he also had it. They both took the antibiotic pills, which the doctors told them would clear it up right away. She still worries that Josh might be cheating on her. She also didn’t get a lot of information about HPV from her doctor. She was supposed to follow up for another Pap smear after 6 months, but never got around to it. She takes her birth control pills but sometimes misses doses, but she figures it is OK since she almost always remembers to take them after she and Josh have intercourse. They do not use condoms because she is allergic to latex. She is here today because she is worried that she might be pregnant. Her last period’s start date was exactly 3 months ago today.

She has pretty bad migraines and uses a Zomig nasal spray to prevent them. She got a prescription from Zomig from her doctor and knows that each dose has 2.5mg of Zomig in it.
She also takes a daily women’s vitamin, which she surprisingly takes more regularly than her birth control pill. Sometimes she takes 2 Motrin (ibuprofen) pills for cramps or muscle aches, since she noticed more back pain from her secretarial job. She is very stressed at work and wonders if the worrying is the reason she lost about 10 pounds in the last month. She has also had a really stressful relationship with her mom since her mom really does not like Josh. Rose now weighs 142 lbs and she is 5’7” tall. She feels like she’s always tired and she doesn’t sleep very well at night, getting usually around 5 hours of sleep.

As far as Rose’s lifestyle, she would probably tell you that she is pretty healthy. She loves drinking herbal tea with chamomile and kava or valerian to try to help her sleep. She does not smoke, even though Josh does, but she drinks about 4 alcoholic drinks each night. She knows that this is too much but worries about telling her doctor out of fear that he will judge her. She has a cat named Hater, whom she’s had for about 5 years. He sleeps in her bed with her and Josh.

Rose eats a lot of dairy and tries to eat more vegetables. She probably has at least one type of vegetable per day but thinks she should eat more. She drinks 2 cups of coffee per day and often snacks on saltine crackers or pretzels. She is also always putting salt on her food. Rose wonders if that is the reason that she is always thirsty. Her dentist says she has excellent teeth, but Rose notices a little bit of blood from her gums when she flosses. She does not exercise regularly, but tries to take the stairs to her 3rd-floor office and sometimes does workout videos at home that leave her feeling short of breath. Since her back has been bothering her so much, she stopped doing a lot of different exercises. She also has asthma and has an albuterol inhaler that she uses about once a day.

Rose also noticed a lot more pain in her belly in recent weeks. Sometimes she sees a little bit of bright red blood in the toilet after going “number two.” She has had a lot more constipation and sometimes more than four days will pass before she is able to have a bowel movement. Even then, it doesn’t feel like she ever really “empties.” She is embarrassed to tell her doctor, but she has been so uncomfortable that she wonders what to do.

Her address is:
11111 North Virginia Road Apt 14a
Metropolis, MN 55555

She decides that for her emergency contact she will list Josh Lindquist, her boyfriend. His cell phone number is 612-612-6126.

Finally, Rose remembers that at her last appointment at Metropolis Regional Clinic she signed up for online access to some of her medical information through MyChart. She remembers that she was fasting for her morning appointment (she did not eat or drink anything for 10 hours before her appointment). She logs in and sees the following information:

<table>
<thead>
<tr>
<th>Immunization</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hepatitis B (Adult)</td>
<td>4/20/1998</td>
</tr>
<tr>
<td>Tdap</td>
<td>11/25/2008</td>
</tr>
</tbody>
</table>
### Lipid Panel

<table>
<thead>
<tr>
<th>Test</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cholesterol, total</td>
<td>150</td>
</tr>
<tr>
<td>Triglycerides</td>
<td>51</td>
</tr>
<tr>
<td>HDL Cholesterol</td>
<td>73</td>
</tr>
<tr>
<td>Chol/HDL ratio</td>
<td>2.13</td>
</tr>
<tr>
<td>LDL Cholesterol</td>
<td>84</td>
</tr>
</tbody>
</table>

### Vitals

<table>
<thead>
<tr>
<th>Test</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>BP Systolic</td>
<td>115</td>
</tr>
<tr>
<td>BP Diastolic</td>
<td>69</td>
</tr>
<tr>
<td>Pulse</td>
<td>64</td>
</tr>
<tr>
<td>Temp</td>
<td>98.2</td>
</tr>
<tr>
<td>Weight in lbs</td>
<td>153.2</td>
</tr>
<tr>
<td>Respiration</td>
<td>16</td>
</tr>
</tbody>
</table>

### Rose’s In Case of Emergency Wallet Card

<table>
<thead>
<tr>
<th>Field</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full Name</td>
<td>Rose Marie Brown</td>
</tr>
<tr>
<td>Blood Type</td>
<td>AB+</td>
</tr>
<tr>
<td>DOB</td>
<td>11/24/1986</td>
</tr>
<tr>
<td>Physician</td>
<td>Dr. Heidi Gormon</td>
</tr>
<tr>
<td>Medical Conditions</td>
<td>Pregnant; migraines; abnormal Pap</td>
</tr>
<tr>
<td>Current Medicines</td>
<td>Motrin (1x per day), Zomig (2.5mg 2x per day), Albuterol inhaler (4-6 times per day)</td>
</tr>
</tbody>
</table>
Lesson 7: Conclusion

<table>
<thead>
<tr>
<th>OBJECTIVE.</th>
<th>KEY POINTS.</th>
</tr>
</thead>
<tbody>
<tr>
<td>What will students know/be able to do?</td>
<td>What knowledge and skills are embedded in the objective?</td>
</tr>
<tr>
<td>• Students will be able to summarize their learnings from this curriculum</td>
<td>• Healthcare is cumulative</td>
</tr>
<tr>
<td>• Students will create a bookmark that will contain takeaways from the unit</td>
<td>• It is helpful and important to revisit topics you learned to ensure that you are up-to-date on your medical care</td>
</tr>
</tbody>
</table>

ASSESSMENT.

Students will create a bookmark either on their own or with a partner. The assessment rubric is included with this lesson.

CONNECTION TO THE ACHIEVEMENT GOAL.

How does the objective connect to the overall achievement goal?

This lesson is intentionally left to be more relaxed so that students may have more open discussion and take time to review their notes and reflect on their learning. This lesson also presents a good opportunity for students to interact with each other and ask any lingering questions.

OPENING

Tell students that this is the last lesson of this short unit and that today they will get to synthesize what they learned and create a small product: a bookmark. Most of today will be work time, but a little time will be left at the end for sharing the created product.

GUIDED PRACTICE: Sample Bookmark and Rubric

Show students a sample bookmark and give them a couple minutes to look through their notes and handouts and start brainstorming their key takeaways. Instruct students to create a sketch or “rough draft” of the bookmark that they will turn in with their final product. This will help ensure that the final products look neater.

Hand out the rubric and spend about 3 minutes explaining the expectations for final product.
**INDEPENDENT PRACTICE: Create a bookmark**

Instruct students to create a bookmark that meets the following criteria:

1. The bookmark contains at least 4 takeaways from the health literacy curriculum
2. The bookmark contains at least one image (computer processed or hand drawn)
3. The bookmark contains the name(s) of the designers
4. A “rough draft” of the bookmark is submitted
5. The bookmark is neat and shows effort

The bookmark can be single or double sided.

Students may work alone or with one other person

Ask students to look at the sample bookmark and see if it meets the above criteria.

| Paper (cardstock is preferred) |
| Pens and Pencils |
| Scissors |
| Computers (if students work on computers) |
| Notebooks (for students to reference past lessons) |

**CLOSING: Display Products**

Have students read aloud what they had on their bookmark or hang the bookmarks and give students about 5 minutes to do a gallery walk.

**Modifications and Considerations**

They bookmarks could be donated to health classes in the same school or to a different school.

Students could also switch bookmarks and take their new products home to share with families and put on the fridge.

Additionally, students could be assigned this project as homework.

An additional assignment could include students writing about why they chose the key points that they chose; in other words, writing might help students reflect on their learnings.

Since students have been accumulating questions on a special page they created in their notebooks, if time allows, the teacher might choose to do an activity where students use these questions. One idea is to pair students up and have them take turns being a doctor and patient.

Many extension activities could follow this unit. Students may choose to do additional research on a topic that they became more interested in and create a brochure or PSA. Other students might choose to look into career options since they learned more about some medical professions in this unit. Still others might use their language or artistic skills to create posters to hang in schools and the community about what they learned.
Health Literacy Takeaways
Anya Dmytrenko

• It is important to read your medication labels carefully
• Making a medication schedule is easy and can help keep track of confusing interactions
• It might take practice, but you should feel comfortable telling your doctor everything
• Depression is more than just feeling a little sad
• Pharmacists are good people to ask about drug interactions and for suggestions on what to take if you’re feeling a little under the weather
• When it comes to sex partners, trust but verify
Curriculum Assessment Document

<table>
<thead>
<tr>
<th>Class Period</th>
<th>Date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Content</th>
<th>4</th>
<th>3</th>
<th>2</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td>The bookmark</td>
<td>The bookmark contains 4 or more key points from the curriculum</td>
<td>The bookmark contains 3 key points from the curriculum</td>
<td>The bookmark contains 2 key points from the curriculum</td>
<td>The bookmark contains 1 or no key points from the curriculum</td>
</tr>
<tr>
<td>Relevance</td>
<td>They key points clearly show that the student clearly made connections between the curriculum and his or her own life</td>
<td>The key points show that the student made some connections between the curriculum and his or her own life</td>
<td>The key points show limited connections between the student's life and the curriculum content</td>
<td>The key points show no connection between the curriculum and the key points</td>
</tr>
<tr>
<td>Structure and Organization</td>
<td>The bookmark is clearly organized and is typed or handwritten neatly</td>
<td>The bookmark shows planning but lacks in organization or neatness</td>
<td>The bookmark has limited organization and neatness</td>
<td>The bookmark needs great improvement in organization and neatness</td>
</tr>
<tr>
<td>Directions</td>
<td>The student’s name is on the bookmark and the rough draft is submitted; the rough draft shows good planning and effort</td>
<td>The student’s name is on the bookmark and the rough draft is submitted</td>
<td>Either the name or the rough draft is missing from the submission</td>
<td>There is no rough draft and no name on the final submission</td>
</tr>
</tbody>
</table>
APPENDIX C

Letters to Teachers, Administrators, Parents, and Students and Consent Forms
Dear Fellow Educator,

The purpose of this letter is to provide you with a brief summary of the unit I created on improving high school students’ health literacy through advisory class lessons.

I was a classroom teacher for four years and taught at three different schools, all of which had built in a daily advisory period. I taught math and because of my workload, I struggled to fill advisory time with meaningful activities for my students. Throughout my teaching years, I was often shocked by some students’ lack of knowledge about important healthcare topics. As I transition to a career in healthcare, I developed a unit that I hope you will use in your advisory class to teach students about how to become better consumers of healthcare.

The unit covers five topics, all of which are supported by research as topics that contain essential knowledge that our students often lack. It also includes two lessons that serve to introduce and conclude the unit. All information and handouts that you need are included in the curriculum. The topics covered are 1) mental health and services, 2) resources for emergent and nonemergent medical needs, 3) taking medication correctly, 4) talking to a provider about sexual health and 5) preparing for appointments and medical emergencies.

Some of you might not feel comfortable teaching certain topics. Others simply might not believe that it is your role to teach outside your content area. However, research has shown that health efforts that take place in a school can have incredibly powerful implications for the wellbeing of our society. These lessons were especially designed to teach students to ask questions and to seek out help on their own. The goal of this curriculum is to prepare students to advocate for their health and to take care of their health with high fidelity. You will notice that lesson four does not ask that the teacher prescribe any ideology to students regarding physical intimacy. Rather, the goal of all lessons is to emphasize to students the importance of being honest with their provider about their physical activities and their current mental and physical health.

I hope that you will take the time to read through this curriculum and that you will see not only that it was created to require minimal work from you, but that it was also created because there is great need for this information to be delivered. Though, unfortunately, additional training is not currently provided to you on how to teach these topics, I hope that you will use resources available at your school – such as a school nurse, counselor, science or health teacher – to help you. This topic is very dear to me because, as a future doctor, I know that I will not be able to help patients who do not come to see me, or to adequately help patients who do not share all their concerns or questions with me.

I hope you enjoy these lessons and activities and I thank you in advance for all that you do as teachers and for the love you show all your students.

Sincerely,

Anya Dmytrenko
Administrator Letter

Dear School or District Administrator,

The purpose of this letter is to provide you with a brief summary of the unit I created on improving high school students’ health literacy through advisory class lessons. I was a classroom teacher for four years and taught at three different schools, all of which had built in a daily advisory period. I taught math and because of my workload, I struggled to fill advisory time with meaningful activities for my students. Throughout my teaching years, I was often shocked by some students’ lack of knowledge about important healthcare topics. As I transition to a career in healthcare, I developed a unit that I hope you will use in your advisory classes to prepare students to become better consumers of healthcare. The unit covers five topics, all of which are supported by research as topics that contain essential knowledge that our students often lack. It also includes two lessons that serve to introduce and conclude the unit. All information and handouts that you need are included in the curriculum. The topics covered are 1) mental health and services, 2) resources for emergent and nonemergent medical needs, 3) taking medication correctly, 4) talking to a provider about sexual health and 5) preparing for appointments and medical emergencies.

As a school administrator, you are likely concerned about the reaction some parents might have about their child learning these topics. Should you choose to use this short curriculum, I have several suggestions for remediating any concerns. I already created a letter that parents would read and a permission form for them to fill out and return to the school. Should parents worry about the content in lesson four on sexual health, I suggest that you share the lesson plan with them so that they may see that the curriculum neither prescribes one ideology over another in regards to intercourse, nor does it encourage students to become sexually active. It merely goes along with the theme that students should be open and honest with their provider and should take great care to be careful with their health. I also suggest that you let concerned parents know that these topics do not go beyond the scope of a traditional health education class and that they instead supplement what students learn in their science and health classes. Lastly, it would be beneficial to remind parents that advisory periods are intended to help prepare all students for adulthood and that this curriculum could be one effective way to do this. An additional concern of yours might be teacher’s comfort level with these topics. Unfortunately, I do not know of local health service centers in your area, but I believe that many would have terrific resources for helping your staff become more comfortable with these topics. In fact, some hospitals are able to send representatives to assist with health education. Unfortunately, as the curriculum is currently written and planned, it does not include training for you to provide to teachers. I do believe, however, that the lessons are very straightforward and within each I included recommendations for possible modifications and additional resources for pre-reading. I sincerely hope that you and your staff find this curriculum to be beneficial for your students. As you know, though some advisory periods are extremely effective, others unfortunately sometimes fail to fill those precious minutes with relevant and beneficial learning experiences for students.

Sincerely,

Anya Dmytrenko
Parent/Guardian Letter

Dear Parent/Guardian,

As you know, I am your child’s advisory teacher. An important part of any advisory is preparing the child to become a responsible, independent adult. The purpose of this letter is to obtain your permission for your high school student to participate in a series of lessons on health literacy.

The purpose of these lessons is to increase high school students’ knowledge of the healthcare system and of the ways to be a successful healthcare consumer. This health curriculum will include lessons on mental health, medication dosage, preparing for doctor’s appointments, resources for emergent and nonemergent healthcare needs, and talking to the doctor about sexual health. It will include a series of strategies to help your student feel more comfortable discussing health concerns with healthcare providers. This could have potentially lifesaving implications for your child.

Your child’s participation will consist of ordinary classroom activities such as individual writing tasks, note taking, discussion with classmates in pairs and small groups, and whole-class discussions. Your child will not be asked to share any personal information. All classroom activities will be based solely on the child’s reflection of the content covered in class.

There will be one additional homework assignment in this unit, which is a health questionnaire that your student will bring home. The purpose of this questionnaire is for your child to become more familiar with their family health history and to practice filling out forms that are often quite confusing. Your child should not return this form to school because it is private health information. However, it is encouraged that you and your child do this particular activity together. Your child’s identity will be kept entire confidential. The lesson on discussing sexual health with the medical provider will focus solely on being open with a healthcare provider should a need arise for your child to seek medical care. Because information about abstinence, STIs, and protecting against pregnancy is delivered in a traditional health class, it will not be covered in this unit. Rather, students will read a number of scenarios and discuss what hypothetical patients should do and tell their provider.

The goal of this unit is to help your child feel more prepared to navigate the complex world of healthcare and also to become an advocate of his or her personal health. Please return the attached form to indicate your permission for your child to participate in this curriculum. You also have the option to opt your child out of this unit’s activities. If you have any questions or concerns, please feel free to contact me by phone or email. Thank you for your cooperation and support.

Sincerely,

(Advisor’s Name)
Advisory Teacher
(Advisor’s Phone)
(Advisor’s Email)
Student Letter

Dear Student,

I hope that you have enjoyed our advisory class and have found this time to be a valuable part of your day. I also hope that you were able to make great friends and that you generally enjoy your advisory period. As you know, advisory is a time for us to check in on your academic progress, help you with any challenges you might experience in school, and prepare you for adulthood.

For the next couple weeks, we are going to be trying out a set of lessons that I think will help you become a lot more familiar with different aspects of the healthcare system. Many adults struggle with various aspects related to their health and over the next several weeks I hope that you will learn something new about medicine, going to the doctor, mental health, sexual health, and emergency room visits. These lessons will be spread out so that we can continue doing some of the other things we need to do, like monitoring your grades and delivering school information.

Our activities will be ordinary activities that will involve some writing tasks, taking notes, discussion with classmates in pairs and small groups, and whole-class discussions. None of the activities and lesson will ask you to disclose any information and all I ask is that you participate in the lessons that I have planned. There will not be additional homework in this unit, other than one medical questionnaire form that you will take home as practice. It will be very similar to what you would expect to see at a doctor’s office. There will be no pressure for you to do anything differently and you can take the knowledge you gained at whatever value you choose.

If you haven’t already taken health class, you will likely have to take it pretty soon. We will not cover the topics you learn in health class about sexual health and protection. Rather, the lesson on sexual health will simply try to help you feel more comfortable talking to your partner and your doctor about issues that are important to your health. We will use hypothetical scenarios and you will not be asked any information about you. The goal of this unit is to help you feel more prepared to take care of your health as you transition to become a completely independent adult. This unit was made because a lot of adults lack some knowledge about healthcare and the author wanted to share what she wished she knew at your age.

As always, your comments and ideas are welcome as long as they are respectful of all classmates and people. You can share as little or as much as you would like, provided that we all engage in the lessons we do together. Please return the attached form to indicate your openness and willingness to fully participate in this unit. You also have the option to opt out of this unit’s activities. If you have any questions or concerns, please feel free to talk to me in person, over the phone, or send me an email. I think that this will be an informative unit and that we will all learn a great deal. Thank you in advance and I look forward to working with you!

Sincerely,

(Advisor’s Name)
(Advisor’s Phone)
(Advisor’s Email)
**Parent/Guardian Consent Form**

Dear Advisory Teacher,

The purpose of this letter is to confirm that I have received and read your recent request. I understand that the purpose of this unit is to increase my child’s health literacy through a series of lessons that includes talking to the doctor about sexual health. The ultimate goal of this unit is to help your child feel more prepared to navigate the complex world of healthcare and also to become an advocate of his or her personal health.

I give my permission for my child, ___________________________________________ (first and last name of student), to participate in this unit’s activities.

Signed,

____________________________  ____________
PARENT/GUARDIAN SIGNATURE              Date

**Student Consent Form**

Dear Advisory Teacher,

The purpose of this letter is to confirm that I have received and read your recent request. I understand that the purpose of this unit is to increase my health literacy through a series of lessons that includes talking to the doctor about sexual health. The ultimate goal of this unit is to help me feel more prepared to navigate the complex world of healthcare and also to become an advocate of my personal health. I understand that I do not have to share any personal information and agree to participate in the lessons of this unit to help me know more about doctors and healthcare.

I, ___________________________________________ (your first and last name), agree to participate in the health literacy unit’s activities.

Signed,

____________________________  ____________
STUDENT SIGNATURE              Date


the human papillomavirus. *Journal of Women’s Health, 20*(8), 1165-1173. doi: 10.1089/jwh.2010.2617


Minnesota Department of Education (2014). *Data for parents and educators*. 


