

## **Adaptation of and Evaluation Plan for *AMP! NC***

### **An Arts-based, Multiple-intervention, Peer-education Sexual Health and HIV/STI Prevention Program for Teens in Chapel Hill-Carrboro City Schools**

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*On our honor, we have neither given nor received unauthorized aid on this assignment.*

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## Acronyms and Public Health Terms

AIDS	Acquired Immune Deficiency Syndrome
<i>AMP!</i>	Arts-based, Multiple-intervention, Peer-education Sexual Health and HIV/STI Prevention Program
<i>AMP! NC</i>	The NC pilot of <i>AMP!</i>
AUM	Abstinent Until Marriage
CDC	Centers for Disease Control and Prevention
FA	Faculty Advisor
HIV	Human Immunodeficiency Virus
HYA	Healthy Youth Act
IRB	Institutional Review Board
LAUSD	Los Angeles Unified School District
MPH	Master of Public Health
NC	North Carolina
NCDHHS	North Carolina Department of Health and Human Services
PLWHA	People living with HIV/AIDS
RHAP	Reducing HIV and AIDS through Prevention
STI	Sexually Transmitted Infection
TAP	Teens for AIDS Prevention
UCLA AGHC	UCLA Art & Global Health Center
UCLA	University of California—Los Angeles
UNC	University of North Carolina at Chapel Hill
YRBS	Youth Risk Behavior Survey

## Executive Summary

The Centers for Disease Control and Prevention (CDC) estimates that 1.2 million adults and adolescents in the United States (US) live with HIV infection (CDC, March 2012). The North Carolina Department of Health and Human Services (NC DHHS) estimates that 35,000 adults and adolescents have HIV, including those unaware of their infection status. In 2010, 1,487 individuals were diagnosed and reported living with HIV in NC. Orange County, NC, home to *AMP! NC's* intervention and comparison sites, ranked 49<sup>th</sup> highest of 100 NC counties, reporting a 2010 HIV incidence rate (the number of new infections per population in one year) of 6.2 per 100,000 population. While the majority of HIV cases are found among adults, the proportion of adolescents (13-24) living with HIV in NC has increased from 15.9% of all reported HIV cases in 2006 to 22.9% in 2010. Youth incidence rates in 2010 were 5% among those aged 15-19, and 17% among those aged 20-24. The sharp increase in incidence at the state level between the 15-19 and 18-24 age groups reflects the national trend. The increasing rates of HIV indicate a need for an increased HIV education and testing options, particularly among high school-aged youth.

*AMP!* is an Arts-based, Multiple intervention, Peer-education program specifically created by the UCLA Art & Global Health Center (UCLA AGHC) to educate youth about sexual health in their communities. The three components of the intervention include 1) a live performance delivered by undergraduate student performers using a near-peer model; 2) In-class presentations delivered by undergraduate students in which HIV-positive individuals speak to students about their experiences; and 3) a condom skills workshop facilitated by college students. *AMP!* is designed to increase teens' level and retention of HIV/AIDS knowledge; inform teens about high-risk behaviors associated with HIV transmission; reduce stigma towards people living with HIV/AIDS; and increase the rate of testing for HIV and other STIs among young people.

In the fall of 2012, UCLA AGHC recruited a Capstone team from the Health Behavior Department of the University of North Carolina (UNC) Gillings School of Global Public Health to adapt the program for implementation in North Carolina. The Capstone team completed a series of deliverables to inform the adaptation, assist with implementation, and guide future iterations of *AMP!*. These include two literature reviews on HIV prevention in schools and the use of interactive theater as a tool for HIV prevention, a summary of how *AMP!* aligns with NC Essential Standards for the state Reproductive Health and Safety Unit, a short-term evaluation plan for *AMP!*, evaluation tools for the NC *AMP!* pilot study, and a long-term evaluation plan for *AMP!* based on the CDC evaluation framework.

From this work, the Capstone team learned how to translate public health research, language, theories, and practices to professionals from different disciplines. The Capstone team also learned how to effectively collaborate with partners in multiple sites. Completing each deliverable allowed the team to hone skills in program planning, stakeholder engagement, quantitative and qualitative research methods, and translating scientific evidence into best practice. UCLA AGHC will use the program evaluation plan and tools to 1) standardize future *AMP!* iterations across sites, 2) measure *AMP!'s* impact, and 3) communicate the empirical evidence to a wider audience, including school district officials, public policy makers, parents, and funders who can provide the crucial support for this work to continue. The Capstone team's work developing a plan for evaluating *AMP!* will provide artists and public health professionals working in HIV/STI prevention among youth with a rigorously evaluated program that can be implemented and adapted in other settings.

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## Introduction

This Capstone Summary Report details the collaborative efforts and deliverables produced as a result of our Capstone team's partnership with the UCLA Art & Global Health Center (UCLA AGHC) during the 2012-2013 academic year. Capstone is a group-based, mentored, evaluated service-learning opportunity for graduate public health students. The deliverables are a substitute for the Master's thesis requirement for the Master of Public Health degree in the Department of Health Behavior at the UNC Gillings School of Global Public Health. The overall goal of our project was to assist UCLA AGHC in adapting, implementing, and evaluating the pilot of *AMP! NC*, an *Arts-based, Multiple-intervention, Peer-education* sexual health and HIV/STI prevention program for 9<sup>th</sup> grade students in Chapel Hill-Carrboro City Schools.

UCLA AGHC seeks to foster a global network of artists and advocates using the performing and visual arts to create and implement health interventions worldwide. In 2011, UCLA AGHC developed *AMP!* in conjunction with the HIV/AIDS Prevention Unit of the Los Angeles Unified School District (LAUSD). *AMP!* is a semester-long program for high school health classes designed to increase teens' knowledge of HIV/AIDS and STIs, increase condom use, reduce stigma towards people living with HIV/AIDS (PLWHA), and increase HIV testing rates among teens. Students receive three core components of the *AMP!* program over the course of one semester: 1) Through Positive Eyes (an online resource that uses photos and personal narratives to educate participants about PLWHA) *or* a panel of HIV/AIDS positive speakers, 2) Condom skills workshops (building communication skills around using condoms with sexual partners), and 3) Interactive theater performances created and performed by undergraduate student performers.

UCLA AGHC has successfully implemented *AMP!* in South and East Los Angeles with youth ages 13-19. The first evaluation of the *AMP!* program in Los Angeles conducted in 2010 showed a 21% increase in self-reported compassion for PLWHA among participants, a 38% increase in knowledge of local HIV testing resources, and a 45% increase in sexually active students who

reported taking an HIV test from pre-test to post-test (UCLA AGHC, 2010). With the success of *AMP!* in LAUSD and the burden of HIV/AIDS in the Southern United States, UCLA AGHC expanded *AMP!* to North Carolina (NC) and Georgia in the 2012/2013 school year. The Capstone team assisted with three primary tasks: 1) training *AMP!*'s UNC undergraduate performers in sexual health basics, including HIV and other STIs, so that they will be well-prepared and knowledgeable educators for high school students; 2) adapting the existing UCLA/LAUSD program materials to be relevant and appropriate for North Carolina public schools; and 3) designing an evaluation plan and instruments to measure the efficacy of the *AMP! NC* program. The logic model (Figure 1) below provides a summary of the project inputs, activities, outputs, outcomes, and impact.

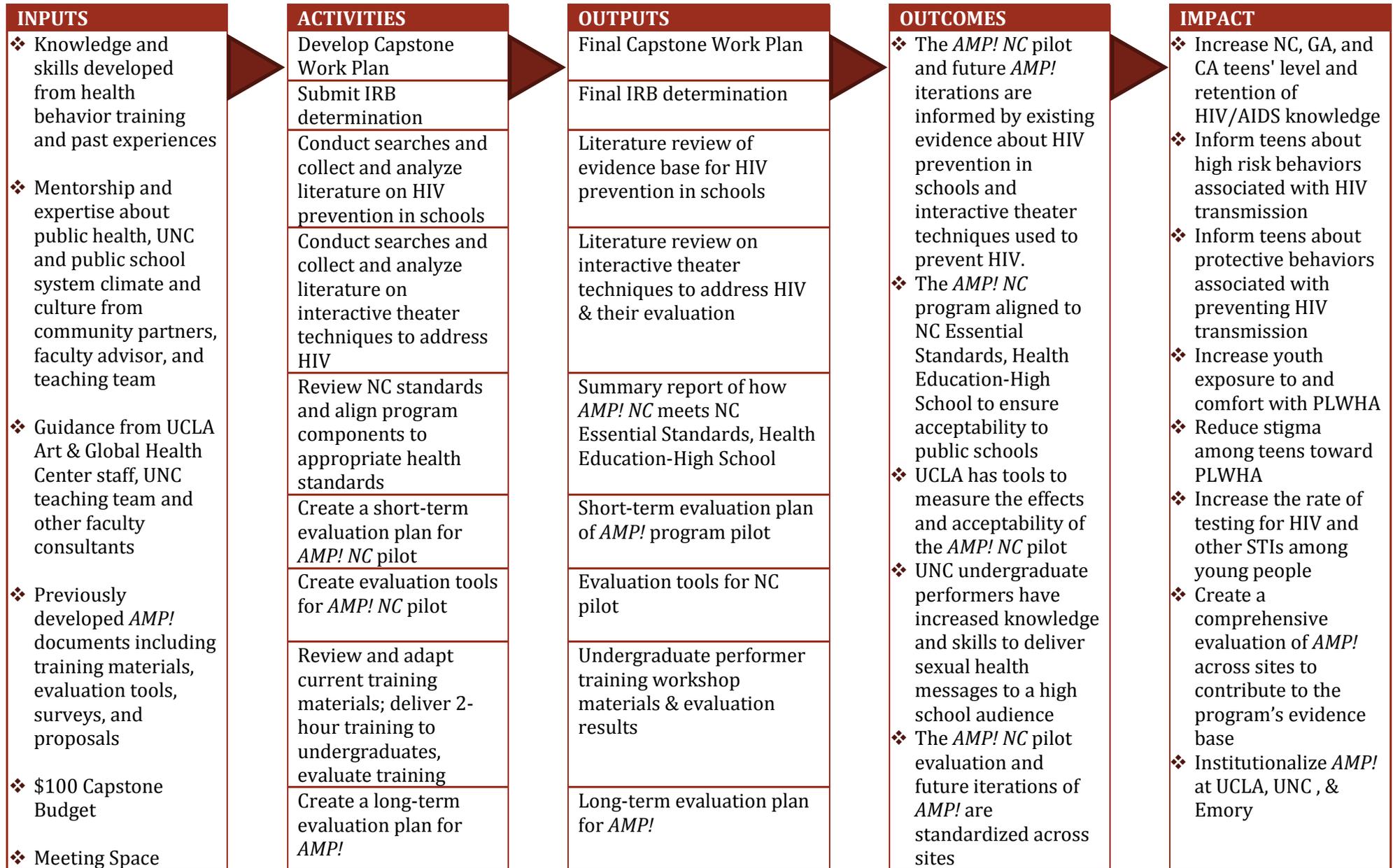
The expertise, support, and mentorship of UCLA AGHC staff and UNC Department of Health Behavior staff combined with the knowledge, skills, and effort of the Capstone team enabled us to develop seven deliverables. First, we completed two literature reviews to summarize the evidence base for HIV prevention interventions in schools and provide an overview of interactive theater techniques used to address HIV. Following this, the Capstone team created a summary report illustrating how *AMP!* aligns with NC Essential Standards and fits within the core NC high school health education curriculum to ensure value of the program to schools. We then created a short-term evaluation plan to guide the *AMP!* pilot programs in Carrboro, NC and Atlanta, GA. The Capstone team created evaluation tools for the *AMP! NC* pilot, including a web-based pre/post-test and focus group guides to assess the acceptability of each program component among high school participants.

During the Spring semester, the Capstone team reviewed and adapted existing materials used to train undergraduate student performers in HIV/AIDS and STIs and facilitated and evaluated the training. Lastly, the team created a long-term evaluation plan for *AMP!* that can be used to evaluate the program's outcomes and impacts at all future *AMP!* intervention sites. Together, these activities and deliverables will increase *AMP!*'s impact and enable the program to inform 9<sup>th</sup> grade

students about risk and protective behaviors associated with HIV/AIDS, increase exposure among youth to PLWHA, decrease stigma associated with PLWHA among youth, and increase youth testing HIV/AIDS rates.

The Capstone Summary Report summarizes our collaboration with UCLA AGHC and begins with a description of the public health burden of HIV/AIDS, state and national policies regarding sex education, evidence-based interventions to address HIV/AIDS in high schools, theater-based public health interventions, and a rationale for the *AMP!* program. Next, we provide a detailed description of our project deliverables. The report culminates with a discussion of stakeholder engagement, lessons learned from the Capstone experience, the impact of our work on UCLA AGHC and field of adolescent sexual health, and recommendations for sustainability.

**Figure 1: UCLA Art & Global Health Center Capstone Team Logic Model**



## Background

### Public Health Burden of HIV/AIDS

The Centers for Disease Control and Prevention (CDC) estimate that 1.2 million adults and adolescents in the United States (US) currently live with HIV infection (CDC, March 2012). The US South, including North Carolina (NC), is disproportionately affected by the HIV/AIDS epidemic. This region has experienced the greatest proportional increases in HIV/AIDS rates each year since 1990 (Whetten, 2006). In 2009, NC ranked 8<sup>th</sup> highest of the 40 states and 5 territories reporting new HIV diagnoses to the CDC (NC DHHS, 2011). The North Carolina Department of Health and Human Services (NC DHHS) estimates the prevalence of HIV infection to include 35,000 adults and adolescents, including those unaware of their status (NC DHHS, 2011). In 2010, 1,487 new individuals were diagnosed and reported living with HIV in NC (NC DHHS, 2011). Orange County, NC, home to *AMP! NC*, ranked 49<sup>th</sup> highest in HIV incidence of 100 NC counties, reporting a 2010 HIV incidence rate of 6.2/100,000 population (NC DHHS, 2011).

While the majority of HIV cases are found among adults, the proportion of adolescents (13-24) living with HIV in NC has increased from 15.9% of all reports in 2006 to 22.9% in 2010 (NC DHHS, 2011). As of 2010, the prevalence (proportion of people in the population with a condition) of HIV infection among NC youth ages 15-19 was 0.7%, and 3.8% among youth ages 20-24 in North Carolina (NC DHHS, 2011). Youth incidence rates (number of new cases in a given time period) in 2010 were 5% among those aged 15-19, and 17% among those aged 20-24 (NC DHHS, 2011). The sharp increase in both prevalence and incidence between the 15-19 and 18-24 age groups reflects the national trend. Further, the increase in HIV indicates a need for an increased focus on HIV education and testing options, particularly among high school-aged youth.

The CDC's National Youth Risk Behavior Survey (YRBS), a nationally representative biennial survey, measures various behavior indicators among students in grades 9-12 (CDC, 2011). Of NC students surveyed in 2011, 49.3% reported having sexual intercourse, compared to 47.4% in the US

(CDC, 2011). In the same sample population in NC, 46.3% reported not using a condom during last sexual intercourse, compared to 39.8% in the US (CDC, 2011). In order to address these issues among youth, it is necessary to first examine the historical and current state and national policies regarding sex education and the impact these policies have on youth sexual risk behaviors.

### **State and National Policies Regarding Sex Education**

Since the 1960's, sex education in schools throughout the United States has been affected by national and state political climates (Irvine, 2002). Nationally, a conservative political agenda regarding sexuality emerged during the mid-1990s and, for the first time, federal funding was made available for "abstinence-only" education grants to states (Bach, 2006). In 1996, NC passed the School Health Education Act requiring schools to teach an abstinence-only-until-marriage curriculum (AUM), permitting comprehensive sex education only after the local board of education conducts a public hearing and review of education materials (N.C. Gen. Stat. § 115C-81, 1995).

However, research has shown that abstinence-only programs are ineffective at reducing sexually transmitted infections (STIs), delaying age at first sex, and reducing teen pregnancy (Kohler et al, 2008 and Trenholm et al, 2007). Studies have also shown that youth who receive comprehensive sex education programs are more likely to use condoms if sexually active and are less likely to experience an unplanned pregnancy (Kirby, 2007 and Kohler et al, 2008). Additionally, a parent opinion poll on youth sex education conducted in NC reported that 91.8% of parents thought comprehensive sex education should be taught in public schools, over 95% felt that transmission and prevention of STIs including HIV/AIDS should be included in the curriculum, and 76.7% believed classroom demonstrations of how to correctly use a condom are important (UNC Survey Research Unit, 2009).

In response to these findings, the Healthy Youth NC Coalition formed to advocate for comprehensive sex education in all public schools and, in 2009, the Healthy Youth Act (HYA) was passed (Preston, 2009). The HYA requires that youth receive both the abstinence-only program and

a comprehensive sex education curriculum (House Bill 88, Healthy Youth Act of 2009). The HYA provides a much broader landscape for sex education and the opportunity for local school boards to include course content without holding a public hearing (House Bill 88, Healthy Youth Act of 2009). Specific topics of instruction include how HIV and other STIs are transmitted, effectiveness and safety of all FDA-approved risk-reduction and contraception methods, available resources for testing and treatment, and HIV/STI infection rates among youth (House Bill 88, Healthy Youth Act of 2009). We address some of the evidence-based interventions developed to provide high school students with a comprehensive sexual health education in the following paragraphs.

### **Evidence-Based Interventions to Address HIV/AIDS in High Schools**

The CDC identifies the following national programs as evidence-based sexual health promotion/HIV prevention interventions for youth in high school settings: *All4You!*, *Cuidate!*, *Draw the Line/Respect the Line*, *My Body: My Voice*, *Project AIM*, *Reducing HIV and AIDS through Prevention (RHAP)*, *Reducing the Risk*, *Safer Choices*, the *State of Georgia AIDS Education Program*, and *Teens for AIDS Prevention (TAP)* (CDC, 2012). These evidence-based interventions commonly deliver four types of activities: traditional pedagogical techniques, skill-based exercises, arts-based exercises, and experiential education. Traditional pedagogical techniques include classroom instruction, group discussions and exercises, and video presentations. Skills-based exercises deliver HIV prevention and sexual health messages through games, condom demonstrations, and role plays. Examples of arts-based program components include arts-making workshops, dance, drama, photography, and music. Finally, experiential education program components use non-traditional methods and real-world experiences such as engaging in community service activities and writing newspaper opinion editorial articles to engage students in learning about HIV/AIDS and sexual health.

Though all of these program components are effective, some are more effective than others at reducing youth sexual risk behaviors. Behavioral theory-based programs, arts-based programs,

and peer education programs are of particular importance in stemming these risk behaviors. Interventions that used theory to address norms and teach skills and those that featured creative intervention activities showed greater reductions in sexual risk behaviors (Coyle, 2006, Coyle, 2004, Campbell, 2009). Creative, arts-based interventions, such as *My Body: My Voice*, resulted in higher self-reported self-efficacy to negotiate condom use, behavioral intention to use condoms, and knowledge of HIV/STIs. In addition, peer education was more effective than traditional teaching methods such as instructor lectures in increasing HIV and sexual health knowledge among students in an urban New Jersey high school (Mahat 2008). Theory and arts-based programs actively engage youth in changing their attitudes, beliefs, and self-efficacy and increasing their knowledge about sexual health. Although several arts-based interventions have been developed for high school youth, greater evaluation of these programs is needed to determine their effects. Interventions that provide theory- and evidence-based approaches to HIV prevention are best equipped to serve youth and affect lasting behavior change.

### **Theater-Based Public Health Interventions**

In addition to the evidence-based programs described above, theater-based interventions are widely used to promote health. These methods evolved from the pioneering work of Brazilian thinkers Augusto Boal, who utilized drama as a platform through which participants could rehearse social change. Boal sought to break down barriers between spectators and the dramatic action of performance through his *Theater of the Oppressed* (Boal, 1979). To do this, he created techniques that empower spectators to play a part in the drama by directing the action, suggesting solutions to conflict, replacing characters in the action, or having dialogue with characters about their motivations (Conrad, 2004; Francis, 2011, Schaedler, 2010). In much the same way, public health interventionists apply these approaches to offer participants a platform through which they can rehearse changes in health behavior.

The bulk of the literature on theater-based interventions focuses on international interventions, with few studies that explore domestic applications of this method (Glik et al, 2002; Kamo et al, 2008; Simons, 2011; Francis, 2010). These interventions have been applied to a wide range of public health problems, including substance abuse and obesity (Guttman et al, 2008; Stephens-Hernandez et al, 2007; Haines & Neumark-Sztainer, 2008). However, the majority of studies focus on theater-based efforts to prevent HIV/AIDS and promote sexual health (Daykin et al, 2008; Joronen et al, 2008; Glik et al, 2002).

Although theater-based interventions are widely and broadly used, few formal evaluations have been conducted to explore their effectiveness. Indeed, several systematic reviews of theater-based interventions to prevent HIV/AIDS consulted emphasized the need for more rigorous evaluation efforts (Simons, 2011; Daykin et al, 2008; Joronen et al, 2008; Glik et al, 2002). Almost all of the studies reviewed reported significant increases in knowledge, positive attitudes, and reported intent to change behaviors (Denman et al, 1995; Harvey et al, 2000; Kamo et al, 2008; Joronen et al, 2008; Daykin et al, 2008). The results of these studies indicate that drama-based HIV/AIDS prevention interventions have the potential to yield positive changes in participants. However, the majority of studies reviewed used only quasi-experimental study designs and most had small sample sizes, making it hard to generalize findings. More rigorous evaluation is needed to increase the evidence supporting theater-based interventions.

### **Capstone Project Rationale**

Epidemiological data on HIV rates among youth in North Carolina reveal a need for more thorough HIV prevention interventions in North Carolina schools. The US South, including NC, is disproportionately affected by HIV/AIDS. Although rates among adults have decreased, incidence is rising among adolescents. State policies are amenable to comprehensive sex education programming and local surveys of parents indicate an interest in such programming for their children. While many evidence-based interventions exist, the literature indicates that theory-based

interventions that are creative, socio-culturally relevant, and that utilize peer education strategies are most effective. The literature on existing evidence-based and theater-based programming further indicates a need for more rigorous evaluation to determine the significant effects of such programs. For these reasons, the Capstone team has decided to adapt and evaluate *AMP! NC*, an Arts-Based, Multiple-Intervention, Peer-Education sexual health and HIV/STI prevention program.

## Deliverables

The Capstone team completed seven deliverables, including two literature reviews on HIV prevention in schools and the use of interactive theater as a tool for HIV prevention, a summary of how *AMP!* aligns with NC Essential Standards for Health Education—High School (the North Carolina standards for high school health curricula), a short-term evaluation plan for *AMP!*, evaluation tools for the NC *AMP!* pilot, an HIV/AIDS training for undergraduate performers, and a long-term evaluation plan for *AMP!* based on the CDC evaluation framework. The Capstone team created a work plan to facilitate the completion of the deliverables in a timely manner, and Capstone mentors (preceptor, faculty advisor, and Capstone teaching team) reviewed drafts and approved final versions of all deliverables.

<b>Deliverable 1: Literature Review on Evidence Base for HIV Prevention in Schools</b>	
Format:	7-page narrative report that includes background, methods, inclusion criteria, and a summary of key findings
Purpose:	UCLA AGHC will use this literature review to understand the existing evidence base for HIV prevention in schools and build on this evidence base to inform future iterations of <i>AMP!</i> .
Activities:	<ul style="list-style-type: none"> <li>• Conducted a literature search of existing HIV prevention programs in schools</li> <li>• Created an evidence table that lists the sources consulted and summarizes key findings. Submitted copies of the evidence table to preceptor weekly to summarize progress.</li> <li>• Drafted a 7-page literature review that summarizes the literature review process and key findings from the literature</li> <li>• Incorporated revisions and finalized literature review</li> <li>• Shared literature review with UCLA AGHC team and used it to inform the theories and constructs contained in the <i>AMP!</i> Conceptual Model for inclusion in Deliverable 7 (Long-Term Evaluation Plan)</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• Health behavior theories provide a framework for HIV prevention programs among youth</li> </ul>

	<ul style="list-style-type: none"> <li>• Knowledge alone of the health consequences of risky sexual practices such as contracting HIV from unprotected sex is not sufficient to change youth sexual behaviors</li> <li>• Focusing intervention activities on attitudes, beliefs, and self-efficacy may aid in the prevention of HIV and STI risk behaviors among youth</li> <li>• Comprehensive sexual health education in schools is a method to reduce HIV risk (decreases number of sexual partners and increases consistent condom use)</li> <li>• Gender and ethnicity play a role in sexual risk behaviors (Hispanic youth showed significant changes in risk behaviors post-intervention; girls, regardless of whether they received an intervention or not, were more confident in their ability to engage in safe sex behaviors than boys)</li> <li>• Interventions that addressed norms, taught skills and features creative intervention activities showed reductions in sexual risk behaviors</li> <li>• Arts-based interventions increased youth self-efficacy to negotiate condom use, behavior intention to use condoms, and more knowledge of HIV/STIs</li> <li>• Peer education was more effective than traditional teaching methods in increasing HIV knowledge and sexual health knowledge among high school students</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• There is a need for current and relevant HIV prevention in high schools that build on theoretical constructs, activities, and approaches that have proven effective at reducing HIV risk behaviors</li> <li>• UCLA AGHC should read current and emerging literature to ensure that <i>AMP!</i> is informed by evidence and maintains cultural relevance</li> </ul>

<b>Deliverable 2:</b> Literature Review on Interactive Theater Techniques to Address HIV and their Evaluation	
Format:	7-page narrative report that includes introduction, methods, inclusion criteria, and a summary of key findings
Purpose:	UCLA AGHC will use this literature review to understand the existing evidence base for Boalian and other interactive theater techniques to address HIV and how those efforts have been evaluated. Additionally, this literature review will enable UCLA to build on this evidence base to inform future iterations of <i>AMP!</i> .
Activities:	<ul style="list-style-type: none"> <li>• Conducted a literature search of existing HIV prevention programs in schools</li> <li>• Created an evidence table that lists the sources consulted and summarizes key findings. Submitted copies of the evidence table to preceptor weekly to summarize progress.</li> <li>• Drafted an 11-page literature review that summarizes the literature review process and key findings from the literature</li> <li>• Incorporated revisions and finalized literature review</li> <li>• Shared literature review with UCLA AGHC team and used it to inform evaluation methods recommended in Deliverable 7 (Long-Term Evaluation Plan)</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• A need exists for more rigorous evaluation of theater-based HIV/AIDS prevention interventions because each study presented possessed limitations that limited one's ability to infer that the intervention caused</li> </ul>

	<p>the changes in knowledge, attitudes, and behavior observed</p> <ul style="list-style-type: none"> <li>• It is difficult to generalize the findings of these studies to other populations or settings because of the lack of formal evaluation</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• Create more detailed descriptions of intervention components, and use both qualitative and quantitative research methods to evaluate the effectiveness of individual intervention components</li> <li>• Use comparative effectiveness studies to compare the effectiveness of different intervention approaches to determine whether theater -based interventions yield larger effects than standard health education offerings</li> <li>• Researchers and practitioners should test theoretical constructs that inform theater-based interventions to better understand causal pathways that lead to intervention effects</li> </ul>

<b>Deliverable 3: Summary of how AMP! Meets North Carolina Essential Standards, Health Education—High School</b>	
Format:	2-page bulleted summary that lists each NC Essential Standard for high school health education and identifies which AMP! program components meet each standard
Purpose:	Chapel Hill/Carrboro Schools will use this summary to determine how the AMP! program components align with North Carolina Essential Standards, Health Education—High School. UCLA AGHC will submit it to administrators at Chapel Hill-Carrboro schools and post it for public review.
Activities:	<ul style="list-style-type: none"> <li>• Reviewed North Carolina Essential Standards for Health Education in High Schools</li> <li>• Assigned program components to appropriate health standards as described in the North Carolina Essential Standards for Health Education in High School document.</li> <li>• Disseminated to high school administrators and health teachers to show how AMP! NC meets Essential Standards</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• AMP! NC aligns with NC Essential Standards, Health Education in the following areas: personal and consumer health, and interpersonal communication and relationships</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• AMP! staff should continue to update the document with any changes made to the program components or health standards on an annual basis to ensure that the program aligns with NC standards over time.</li> </ul>

<b>Deliverable 4: Short-Term Evaluation Plan for AMP! NC Program Pilot</b>	
Format:	2-page narrative that identifies the process for collecting data from high school students, undergraduate performers, and high school health teachers to monitor and evaluate AMP! NC activities
Purpose:	UCLA AGHC will use the evaluation plan to provide structure and guidance for the evaluation of the Spring 2013 AMP! NC program pilot.
Activities:	<ul style="list-style-type: none"> <li>• Reviewed previous AMP! evaluation plan developed by UCLA</li> <li>• Reviewed existing evaluation report</li> <li>• Drafted a 2-page short-term evaluation plan that outlines the sequence of the program and evaluation components</li> <li>• Adapted evaluation tools, quantitative surveys and qualitative interview guides, for use in short-term evaluation through consultation with evaluation experts affiliated with UCLA AGHC</li> </ul>

	<ul style="list-style-type: none"> <li>• Finalized evaluation tools and report</li> <li>• Presented plan to UCLA AGHC staff and distributed copies</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• Project partners at each site, UNC, Emory and UCLA, lacked clarity on the structure and timing of the <i>AMP!</i> data collection evaluation activities</li> <li>• Although aspects of the evaluation (i.e. individual questions on pre-/post-tests) will differ from site to site, the components are the same across sites. As such, this evaluation plan could guide/standardize the structure and timing of evaluation activities at all three sites</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• UCLA AGHC should discuss the evaluation plan proposed by the Capstone team with stakeholders to ensure mutual understanding of evaluation activities for the <i>AMP!</i> NC program pilot</li> <li>• UCLA AGHC should create a timeline and checklist that reflects activities at each site so that project partners and stakeholders have a shared understanding of the project's scope and activities</li> </ul>

<b>Deliverable 5: Evaluation Tools for <i>AMP!</i> NC Program Pilot</b>	
Format:	Pre/posttest surveys and focus group guides to evaluate the acceptability of each component and overall impact of <i>AMP!</i> on high school student participants and undergraduate performers
Purpose:	UCLA AGHC will use these tools to measure <i>AMP!</i> NC pilot process and outcomes, evaluate the pilot, and inform future program iterations.
Activities:	<ul style="list-style-type: none"> <li>• Reviewed and adapted existing <i>AMP!</i> process &amp; outcome evaluation tools to include all dimensions of the NC program pilot</li> <li>• Revised evaluation tools per feedback from mentors and UCLA team</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• It is necessary to keep evaluation tools consistent with previous evaluation tools that have been used to evaluate <i>AMP!</i>, including questions derived from the Youth Risk Behavior Survey (YRBS), as these questions were used in the evaluation of <i>AMP!</i> in Los Angeles</li> <li>• Additional questions are necessary to assess the process and outcomes of <i>AMP!</i> on those participating in and receiving the program as <i>AMP!</i> goals and objectives were revised after the tools were revised</li> <li>• A stigma scale for HIV and adolescents does not exist in the literature and is needed as reducing stigma is a program goal</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• UCLA AGHC and those implementing <i>AMP!</i> should use these tools to obtain pre- and post-test data for evaluation purposes</li> <li>• Research, adapt, and pilot test a stigma scale for HIV and adolescents</li> </ul>

<b>Deliverable 6: HIV Training Workshop Materials</b>	
Format:	2-hour oral presentation with accompanying PowerPoint on HIV basics for undergraduate student performers; 2-page facilitator guide outlining order of presenters, timing of interactive training activities during the presentation, and content to be covered
Purpose:	<p>The Capstone (and other <i>AMP!</i> trainers in the future) will use the training materials to teach undergraduate performers in HIV basics and socio-historical context, to ensure that they are well-prepared and knowledgeable educators/performers for high school students.</p> <p><i>Training materials were informed by:</i> 1) Report of AIDS Ambassador trainings by Karen Hilton, 2) literature reviews, 3) collective public health and training</p>

	knowledge of the Capstone, UCLA, and teaching teams, along with Capstone mentors, 4) UNC Student Health Action Coalition HIV training.
Activities:	<ul style="list-style-type: none"> <li>• Reviewed previous undergraduate HIV training materials from UCLA</li> <li>• Adapted training materials to be relevant and interactive for UNC undergraduate performers, including the use of icebreaker and participant activities about how they first learned about sex and a timeline of HIV/AIDS history; sent to Capstone mentors and UCLA team for feedback</li> <li>• Drafted a facilitator plan outlining activities, order of presenters, and key concepts to be covered; sent to Capstone mentors and UCLA team for feedback</li> <li>• Created an online process evaluation survey for undergraduate performers to complete after training</li> <li>• Delivered a 2-hour training workshop to 10 undergraduates</li> <li>• Disseminated evaluation results to preceptor by providing the link to the online evaluation survey</li> <li>• Made changes to training materials based on participant feedback and submitted to preceptor</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• Addressing all content areas within 2 hours presents a challenge to facilitators</li> <li>• Survey results indicated that undergraduates enjoyed the training but felt that the amount of information covered was overwhelming (especially for the first day of class)</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• Allot more time to adequately cover all topics in the training (2 hour minimum, 2.5 hours more realistically)</li> <li>• If possible, deliver training during the 2<sup>nd</sup> or 3<sup>rd</sup> class meeting (1<sup>st</sup> class meeting requires time to review the course syllabus and make introductions, which takes away from training time; also, some students may add/drop the course during this time)</li> <li>• Ensure that trainers are familiar with HIV/STI basics so as to be able to answer student questions in a timely manner</li> <li>• Deliver training to undergraduate performers at all <i>AMP!</i> sites to prepare them for creating HIV and sexual health performances and delivering these performances at high schools</li> </ul>

<b>Deliverable 7: Long-Term Evaluation Plan for <i>AMP!</i></b>	
Format:	38-page evaluation plan based on the Centers for Disease Control and Prevention evaluation plan model
Purpose:	UCLA AGHC will use the evaluation plan to provide structure and guidance for the evaluation of <i>AMP!</i> in all sites and future iterations of the program
Activities:	<ul style="list-style-type: none"> <li>• Requested and reviewed previous evaluation plan developed by UCLA</li> <li>• Requested and reviewed existing evaluation reports</li> <li>• Drafted goals and objectives for <i>AMP!</i> evaluation plan</li> <li>• Drafted intended use and users section: clarifying stakeholders and the purpose(s) of the evaluation</li> <li>• Drafted program description section: provided a narrative description of the program, explained the theory driving the program, included a logic model for the project</li> </ul>

	<ul style="list-style-type: none"> <li>• Drafted evaluation focus: explained what the evaluation will focus on, delineated the criteria for evaluation prioritization, and included a discussion of feasibility and efficiency</li> <li>• Drafted methods section: identified evaluation indicators and performance measures, data sources and methods, as well as roles and responsibilities</li> <li>• Drafted analysis and interpretation plan: clarified how information will be analyzed and described the process for interpreting the results</li> <li>• Drafted use, dissemination, and sharing plan: described plans for use of evaluation results and dissemination of evaluation findings</li> <li>• Incorporated feedback and submitted a final draft of evaluation plan to Capstone mentors and UCLA team to review</li> <li>• Submitted final evaluation plan to UCLA team</li> </ul>
Key Findings:	<ul style="list-style-type: none"> <li>• Stated goals and objectives for previous iterations of <i>AMP!</i> varied widely, which made identifying and prioritizing goals challenging</li> <li>• Additional discussions with UCLA AGHC while developing the evaluation plan may have resulted in a better tailored plan</li> </ul>
Recommendations:	<ul style="list-style-type: none"> <li>• UCLA AGHC should share the evaluation plan with research staff at all future <i>AMP!</i> implementation sites to ensure mutual understanding of evaluation activities and process and outcome data needed to evaluate <i>AMP!</i></li> <li>• UCLA AGHC should use the evaluation plan to evaluate <i>AMP!</i> at all sites</li> <li>• Specific behavior and knowledge change targets need to be set by UCLA AGHC to make the objectives SMART</li> <li>• The evaluation plan is a working document that UCLA AGHC should continuously revise to suit their needs</li> </ul>

**Discussion**

**Strengths and Limitations of Stakeholder Engagement**

One of the most exciting aspects of this Capstone experience was the opportunity to collaborate with public health practitioners and artists located throughout the nation. From our graduate student counterparts at Emory to the entire UCLA AGHC team, we benefitted from a diversity of backgrounds and perspectives. We consider our collaboration a great success. We worked diligently with our preceptor to complete each of the deliverables. We strived to keep all project partners engaged through weekly updates, sending documents for review, and submitting all final deliverables to them on time, as specified in the work plan. Additionally, we sought the expertise of partners at Emory and UCLA in completing Capstone activities and drafting

deliverables. These partners included Ian Holloway, an evaluation expert from UCLA, and Dawn Comeau, an evaluation planning instructor at Emory. They assisted us with revising the evaluation tools and research design strategies. Early in the project, when the collaboration was still new, we used technology thoughtfully to engage more richly with stakeholders. Using tools such as Skype enabled us to see our project partners, put faces to names, and connect on a deeper level. Throughout this process, we benefitted from the UCLA team's willingness to meet with us, both in person and virtually, review drafts, and engage in dialogue about the goals of the project and their vision for its future.

This ongoing dialogue enabled us to meet expectations for deliverables and to create documents that UCLA AGHC can use in future iterations of *AMP!*. This dialogue also motivated us to invest more deeply in the project and increased our willingness to assist with tasks beyond those set forth in our work plan. Additional tasks included assisting with the facilitation of a focus group with undergraduate student performers, meeting with undergraduate course instructors, administering pre-tests to 9<sup>th</sup> grade student participants, and collaborating on a series of abstracts for the American Public Health Association's annual meeting. We believe that the Capstone team helped forged a meaningful, sustainable partnership between UNC and UCLA, including groups such as the Health Behavior department at the UNC Gillings School of Global Public Health, Interactive Theater Carolina, the Communications Studies department, and the Carolina Center for Public Service, which oversee the APPLES service learning course for *AMP!* NC.

Despite the many strengths of our project, we did experience some limitations, mostly due to time constraints. While we consider multi-site collaboration to be one of our project's most unique and valuable aspects, the geographical distance and differences in institutional culture between these sites made it difficult to establish rapport quickly. Because collaborators came from different disciplines, much of the early work of the project was spent translating each team's ideas and terminology from their field of expertise to the group. The Capstone team shared information

about the practices and philosophies that guide public health while the UCLA AGHC team shared information about those that guide theater and arts-based education. Although we worked very hard to create deliverables that honor and represent both disciplines, our project could have benefitted from more time to explore the differences and commonalities of our respective fields, and to come to a shared understanding of how to best apply this to *AMP!*

## **Lessons Learned**

Through this project, the UCLA AGHC Capstone team developed many valuable skills that we will use throughout our future careers as public health practitioners. Every facet of the project offered opportunities to practice skills learned in our MPH program and to learn new skills. The two most impactful skills we learned include: how to translate public health research, language, theories and practices to professionals from different disciplines; and how to collaborate effectively with partners in multiple sites. From its inception, this project challenged us to articulate the core values of our field in a way that was relatable to a broad group of stakeholders. It also taught us the value of communication and transparency when collaborating across distances, especially in the beginning stages of a project when trying to establish rapport and clarify the scope of work. Communicating clearly, asking questions, and sharing our thought process enabled us to unite the highly structured nature of the Capstone project with the relatively unstructured and creative nature of *AMP!* Best practices for our group in communicating with a community partner on the other side of the country included scheduling conference calls or Skype sessions with individuals or small groups rather than large groups, circulating an agenda for meetings several days in advance so that all attendees could contribute or suggest areas for discussion, and providing drafts of deliverables that were as complete as possible in order to get the most helpful feedback.

In addition to these broader lessons learned, completing each of our seven deliverables added to our skill sets. The two literature reviews strengthened our knowledge about HIV and the interventions that have been used to prevent it. They also enabled us to hone our skills at searching

the literature and synthesizing an array of findings to inform the development of an intervention. Aligning the intervention components to core competencies required by high schools gave us knowledge about school health education priorities and the importance of creating programs that achieve these standards to obtain support from schools. Creating the evaluation tools enabled us to apply quantitative and qualitative methods learned through core MPH courses. In sharing and revising drafts of the tools, we learned how to work effectively with a diverse group of stakeholders to create tools capable of capturing and measuring project impacts such as change in HIV/STI knowledge, condom use and HIV/STI testing among youth. Lack of time detracted from our ability to pilot test the short term evaluation tools we created, including the pre/post-tests and focus group guides. These tools could have benefitted from insights gained through pilot testing, but this was not possible given the project timeline. However, we think that the strengths of this project outweigh its limitations. Developing the undergraduate training further strengthened our ability to translate sometimes complicated scientific concepts for a non-public health audience. Our final evaluation plan, we taught us how to apply the CDC's evaluation framework to an innovative, arts-based intervention.

Across these deliverables, we learned how to incorporate feedback from a variety of stakeholders into a cohesive final product. We also refined our program planning skills, including how to provide structure to an unconventional intervention. One of the most exciting aspects of *AMP!* is the performance given by undergraduate performers. Different groups of performers band together for each iteration of the project and develop a performance that represents their histories and perspectives, ensuring that no two performances are exactly the same. The fact that the content of the performances evolves with each group contributes to its cultural relevance and the success of the near-peer model on which it's based. As a Capstone team, we honored the inherent flexibility of the intervention and simultaneously created short-term and long-term evaluation plans to add structure and ensure continuity across sites. We will continue to develop evaluation planning skills,

including stakeholder engagement, identifying appropriate research methods, and selecting quality indicators to measure program effectiveness as we move forward in our careers.

### **Impact of Capstone Work on UCLA AGHC**

The Capstone team's partnership with UCLA AGHC has already impacted the way *AMP!* is implemented and evaluated in its current format and will affect the way the organization approaches the evaluation of *AMP!* in the future. The Capstone team created practical tools, including surveys and focus group guides, that UCLA AGHC can use to standardize the intervention in future iterations across sites where *AMP!* is implemented. UCLA AGHC can use these evaluation tools to ensure that process and outcome data are comparable across sites. Additionally, UCLA AGHC can use the HIV 101 undergraduate training we developed to ensure that undergraduate performers receive the same knowledge and skills related to HIV prevention across sites. The long-term evaluation plan will be used to standardize outcome and impact assessments across sites building a strong national evidence base for *AMP!'s* effectiveness. The literature reviews can also be used to justify UCLA AGHC's process and to inform future intervention adaptations as the program expands to new locations. All deliverables also play an important role in dissemination, as the UCLA AGHC increases their efforts to share findings and couch these findings within the fields of HIV prevention and theater-based interventions.

Through the translational work of the Capstone team, UCLA has a better understanding of public health practices and processes that may help them to standardize *AMP!* and use *AMP!* evaluation findings to seek funding from a more diverse array of funders such as from the public health field. The Capstone team helped to initiate a partnership between UNC and UCLA that may be sustained through future student projects and field experiences.

## **Impact of Capstone Work on HIV Prevention Using Interactive Theater in High Schools**

In addition to the contributions the Capstone team has made to UAGHC's organizational mission, the Capstone team's work will also contribute to the body of evidence supporting theater-based approaches to preventing HIV/AIDS and school-based HIV prevention. Information provided in the literature reviews on interactive theater programs and high school programs that have focused on HIV prevention show that there is a need for more up to date programs in schools and rigorous evaluations for theater-based programs. Building on the needs discussed in the literature reviews, *AMP!* can help bridge the fields of theater and public health by contributing to the body of evidence for theater-based HIV prevention program. Utilizing the evaluation design laid out in the long-term evaluation plan will aid UCLA AGHC in determining which of the core components and key characteristics of the intervention are most effective. Additionally, evaluation of *AMP!*'s novel, arts-based approach will add to the existing evidence base for comprehensive adolescent sexual health education, particularly in a region that has traditionally supported abstinence only education (the U.S. South). Finally, our hope is that *AMP!* will achieve its impact goal of decreasing HIV and STI in the community.

## **Recommendations for Next Steps and Considerations for Sustainability**

Based on the Capstone team's work this year, we offer the following recommendations to aid UCLA AGHC in evaluating and sustaining *AMP!* long-term, including developing a strategic plan for *AMP!*, utilizing the long-term evaluation plan created by this Capstone team, and potential work for future Capstone teams or Practicum students.

### **Strategic Plan for *AMP!***

The Capstone team recommends that UCLA AGHC establish a shared vision for the future of *AMP!*, including intervention sites. To do this, we suggest that UCLA AGHC create a list of priority goals and objectives for the *AMP!* program and ensure that all members of the *AMP!* staff have a

clear understanding of both short-term and long-term goals. We recommend that UCLA AGHC create a conceptual model for *AMP!* to explain the program to new and returning project staff and to ensure that there is agreement on the desired outcomes and impacts of *AMP!*. The conceptual model will diagram the intended pathway of behavior change to reach *AMP!*'s short and long term goals and objectives.

To clarify and better integrate the work currently being done at each of the project sites (California-UCLA, Georgia-Emory University, and North Carolina-UNC), we recommend that UCLA AGHC utilize the logic model created by the Capstone team for the North Carolina *AMP!* pilot study to create logic models for the *AMP!* program generally and one for each of the other project sites (Georgia and California).

### **Utilizing the Long-term Evaluation Plan**

In addition to the recommendations about creating a shared vision, we recommend that the UCLA AGHC use the long-term evaluation plan developed by the Capstone team to conduct evaluations of *AMP!* at each of the project sites. UCLA AGHC should use the evaluation plan to guide each of the evaluations at each site in order to be able to compare results across sites. Using the same evaluation design and tools across sites will allow for more robust interpretation of data. Once the evaluation has been conducted, UCLA AGHC should analyze the process and outcome data and disseminate the results to all project stakeholders via a final evaluation report. Also, UCLA AGHC should utilize the findings to adapt *AMP!* and improve the program, as necessary.

### **Potential Work for Future Capstone Teams or Practicum Students**

Finally, we suggest that the UCLA AGHC consider the following areas as work for future Capstone teams or Practicum students if those resources are available. We recommend that UCLA conduct a literature review of stigma associated with HIV/AIDS to better understand its dimensions and the pathways that *AMP!* should target in order to effectively reduce stigma. Students and staff who work on this program in the future may need to develop and validate a tool to measure stigma

HIV stigma among youth, as we were unable to find a tool for measuring stigma in that particular population.

Also, we recommend that UCLA create a curriculum for *AMP!* that can be disseminated to future project partners who wish to replicate the intervention. This curriculum should include the goals and objectives for each *AMP!* component (Sex-Ed Squad performance, condom skills workshop and HIV positive speakers), and outline the information, methodology, and resources needed to reach objectives. This curriculum will help standardize the delivery of the intervention so that program implementer bias is limited while also allowing for creativity of *AMP!* staff and student performers.

## **Conclusion**

We believe that the work we have completed in this Capstone project will help UCLA AGHC to further develop an adaptable and rigorously evaluated program that effectively addresses issues surrounding HIV/AIDS among youth. It is our hope that we have made a significant positive impact on the *AMP!* program and UCLA AGHC. We have great faith in the transformative impact of *AMP!* on the HIV/AIDS epidemic among youth in our community and across the country. Once again, the UNC Capstone team offers deepest gratitude to everyone who helped us complete this important step in our graduate education.

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