Improving the Adolescent Relationship Abuse (ARA) Screening Program at an Urban Teen Clinic: A Mixed-Methods Process Evaluation

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Abstract

Background: Approximately 15% to 40% of adolescents experience relationship abuse (ARA) as victims and/or perpetrators. Visits to reproductive health clinics offer an opportunity for prevention through screening programs, yet few programs exist for adolescents. Teen Services at Grady Memorial Hospital is a reproductive health clinic in Atlanta, which implemented a screening program over 20 years ago.

Objectives: This research project applied a process evaluation methodology to examine how to improve the ARA screening program at Teen Services. To answer the main evaluation question, three sub-questions were developed: (1) how do health care workers (HCWs) currently experience the ARA screening program, (2) what do HCWs need in order to improve ARA screening program, and (3) what ARA screening instrument should be used at Teen Services.

Methods: A literature review of ARA instruments was conducted to develop two new screening instruments, a 'linear' and 'bundled' instrument. Key informant interviews with HCWs (N=5) were used to gather feedback on instruments, assess current experiences with ARA disclosure, identification, and follow up. The linear, bundled, and current instruments were pilot tested in the clinic with patients (N=98). Descriptive and psychometric properties were assessed. An online survey was administered to HCWs (N=8) to assess needs, attitudes, and self-efficacy for ARA screening. Qualitative data was triangulated with quantitative results.

Results: Analysis indicated a distinction between identifying abuse and disclosing abuse among HCWs; some HCWs noticed signs of abuse, without patient disclosure. HCWs responded to abuse disclosure disparately, with many different documenting locations and follow up procedures. HCWs unanimously agreed upon training needs, such as how to initiate conversations about ARA, had supportive attitudes, yet varying comfort levels. The ARA linear and bundled instruments classified more participants than the current screening instrument (48.9%, 32.0%, 12.25%, respectively).

Discussion: This project indicates the utility of a process evaluation methodology. Findings of supportive attitudes among HCWs indicate a window of opportunity to build capacity to enhance the program at Teen Services. The new screening instruments classified more patients than the current instrument. After a period of capacity building and program development, the current instrument should be replaced.

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I. Introduction

While abuse affects people at all developmental stages, adolescents are particularly at risk. Research indicates between 15% and 40% of adolescents have experienced abuse in their romantic relationships (Foshee, Linder, MacDougall, & Bangdiwala, 2002; Lewis & Femouw, 2001; Silverman, Raj, Mucci, & Hathaway, 2001). Epidemiologic studies indicate that for intimate partner violence (IPV), the greatest risk occurs among females in mid to late adolescence, with one in five high school girls reporting physical or sexual IPV victimization (Miller et al., 2010). Futures without Violence, a leading public health institution focusing on violence prevention, defines this behavior as adolescent relationship abuse (ARA), or a pattern of repeated acts in which a person physically, sexually, or emotionally abuses another person whom they are dating or in a relationship with, whether of the same or opposite sex. Other terms such as IPV and teen dating violence (TDV) will also be used to describe the same pattern of abuse in relationships.

Several studies have investigated the association between abusive relationships and negative health outcomes. Research has shown that abuse is associated with sexually transmitted diseases (STDs), high blood pressure, depression, poor diet, substance abuse, unintended pregnancies, low birth weight, and post-traumatic stress disorder, among others (Gazmararian et al., 2000; Hathaway, Zimmer, Willis, & Silverman, 2008; Miller et al., 2010; Silverman et al., 2001). In addition to health effects, ARA has severe societal impact, including gross economic costs. The Centers for Disease Control and Prevention (CDC) reported that the health care costs of IPV including rape, physical

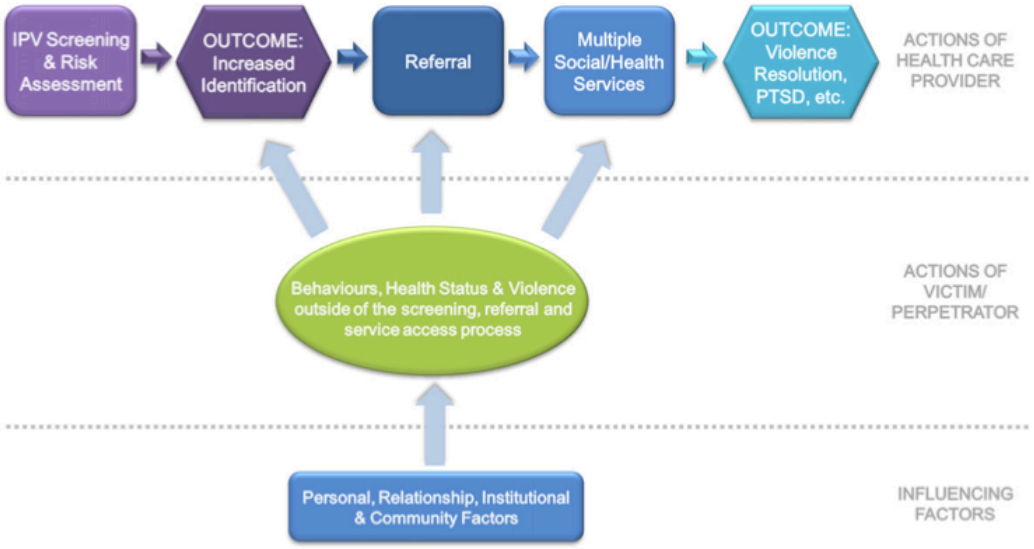
assault, and stalking exceed $5.8 billion each year. Of this, among $4.1 billion is spent directly on medical and mental health care services (Centers for Disease Control, 2003).

Visits to clinics represent an opportunity for health care workers to identify ARA and address potential health consequences stemming from it (Miller et al., 2010). In the U.S., approximately 72% of women ages 15 to 44 receive at least one reproductive health care service annually (Abma, Chandra, Mosher, Peterson, & Piccinino, 1997). For many adolescents, this might be the only contact with health care services. Hence, family planning health centers are strategic locations for abuse prevention and intervention programs. One example of prevention programs involves screening for abuse in relationships. While the U.S. Prevention Services Task Force does not recommend universal screening of abuse among patients (U.S. Prevention Services Task Force, 2004), other professional organizations such as the American Medical Association (AMA), Joint Commission on Accreditation of Healthcare Organizations, American College of Obstetrics and Gynecology (ACOG), and Futures without Violence overwhelmingly support screening patients for violence victimization during health care visits.

Despite these recommendations, challenges remain to implementing screening programs in healthcare settings including factors related to health care workers (HCWs), patients at clinics, and the environment of institutions. O'Campo and colleagues (2011) conducted a systematic review of screening programs in various settings (i.e. emergency rooms, family planning clinics, or primary care physician offices) and identified 17 programs that evaluated IPV screening. Using findings from these studies, the authors modeled the typical process of screening for IPV (Figure 1). The model includes factors

influencing different processes of IPV screening such as the actions of HCWs, actions of the victims or perpetrators, and social ecological factors such as those on the community, institutional, and relationship level (Figure 1). Ultimately, according to research by O'Campo and colleagues (2011), these factors combine to determine the success of IPV screening programs, including, for example, the success of identifying cases and referring patients to services (Figure 1).

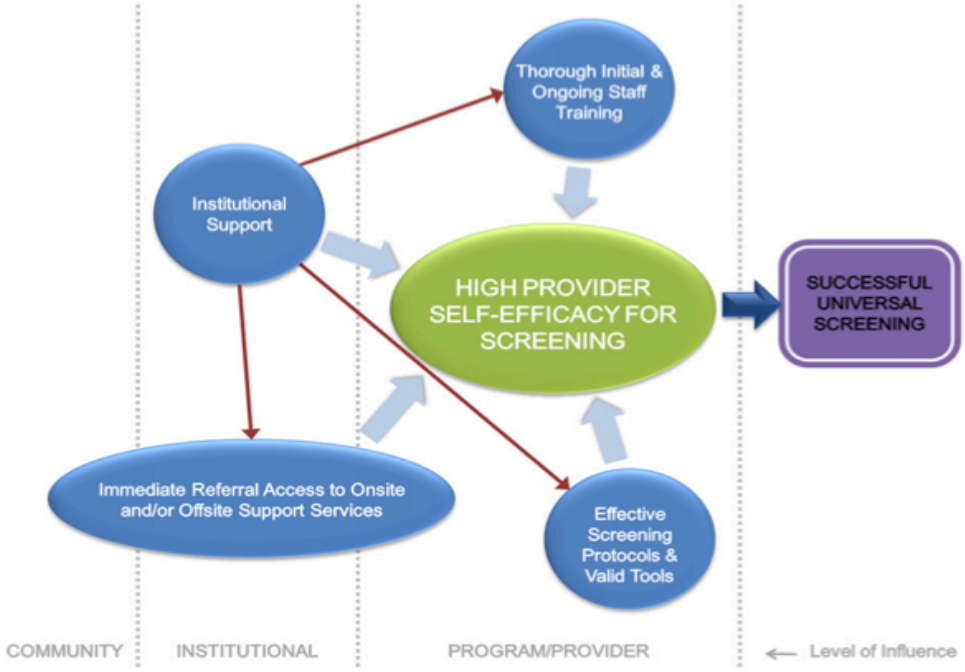
Figure 1: Process Model, Screening Patients for IPV in a Health Care Setting (O'Campo et al., 2011)



In the same review, O'Campo found that screening efforts were more successful when providers (1) accepted the responsibility of intervening with victims of IPV, (2) were comfortable intervening, and (3) had the resources and time to assess and assist the victim. As applied by O'Campo, the social cognitive theory of behavior change can help explain why the interaction between behaviors (i.e., the desired behavior or, in this case, IPV screening behavior), personal factors (i.e., the person's, in this case the HCW's,

beliefs and cognitive competencies), and the environment (i.e., social influences and structures within the environment) is necessary to achieve effective screening (Bandura, 1986). O'Campo proposed a conceptual framework, consistent with the social cognitive theory, in which self-efficacy and environmental factors (i.e., thorough training or institutional support) are used to explain the implementation of ARA screening programs (Figure 2).

Figure 2: Conceptual Model, Screening Patients for IPV in a Health Care Setting (O'Campo et al., 2011)



Given the complex nature of ARA screening interventions, a theoretical framework is important when considering the multiple influences such as self-efficacy and environmental factors. This theoretical perspective will be used to inform a process evaluation of an ARA screening program at Grady Memorial Hospital Teen Services (Teen Services). The primary objective of the process evaluation is to examine how to

improve the ARA screening program at the clinic. Considering the conceptual framework proposed by O'Campo (i.e. the importance of HCW's self-efficacy and using effective screening instruments), this study seeks to answer key questions related to ARA screening.

1. How do HCWs currently experience the ARA screening program at Teen Services?
2. What do HCWs need in order to improve ARA screening program?
3. What ARA screening instrument should be used at Teen Services?

This process evaluation will inform a future comprehensive intervention at Teen Services to implement an appropriate, and evidence-based screening program in the teen clinic.

II. Background and Significance

The magnitude and impact of relationship abuse in America has spawned the need for prevention initiatives, particularly among adolescents. The health care system represents an opportunity for both primary and secondary prevention to 1) stop abuse in relationships before it starts and 2) refer patients to crucial health and social services. This section will trace the historical impetus and political context for relationship abuse prevention. A discussion on differences between adolescent and adult relationship abuse will be provided, as well as a discussion on relationship abuse terminology. Epidemiological findings and health impacts of relationship abuse from clinical research studies and national surveys will be presented. Additionally, policy recommendations about adolescent relationship abuse screening will be discussed within the health care context. Furthermore, research on attitudes toward screening among patients and health care workers will be examined as well as psychometric properties of screening instruments. Lastly, research concerning screening interventions in reproductive health care settings will be examined.

Historical and Contextual Impetus for Violence Prevention in the U.S.

Although relationship abuse and violence is generally accepted today as a salient public health issue, this has not always been true. Beginning in the 1980s, Surgeon General C. Everett Koop raised awareness of violence as a public health problem requiring a multidisciplinary approach by convening the 'Surgeon General's Workshop on Violence and Public Health' in October of 1985 (Koop, 1991). In a controversial article in the Journal of the American Medical Association, he criticized the dominant, legal and enforcement violence prevention paradigm, and called for a new, complex, coordinated public health approach to violence prevention. Specifically, he advocated for physicians and other

HCWs to end violence, which spurred numerous regional, state, and local workshops on the topic (Koop & Lundberg, 1992).

> *"Traditionally, when confronted by the circumstances of violence, the health professions have deferred to the criminal justice system. The professions of medicine, nursing, and the health-related social services must come forward and recognize violence as their issue* (Koop, 1991*).*

Following Koop's efforts, numerous medical institutions released policies echoing this perspective, bringing the responsibility of violence prevention to not only the criminal justice systems, but to systems such as education and health. Recently, violence in relationships among youth has been recognized as an important public health issue by policymakers. In January of 2010, the Senate passed a resolution (S. Res. 373) to designate the month of February as National Teen Dating Violence Awareness and Prevention Month. Along with expanding the previously designated Teen Dating Violence Awareness and Prevention Week to a month, the legislation called for prioritizing efforts to stop teen dating violence (Offenhauer & Buchalter, 2011). Furthermore, Healthy People 2020, a 10-year national plan to establish benchmarks and monitor important health indicators, identified injury prevention, including sexual violence (SV) and intimate partner violence, as important health topics. Data from the National Intimate Partner and Sexual Violence Surveillance Survey (NISVS) supported this policy decision, and guided focal areas of Healthy People 2020. This includes reducing: physical violence, psychological abuse, stalking, and sexual violence including rape and attempted rape, abusive sexual contact, and non-contact sexual abuse by current or former intimate partners (Black et al., 2010). Policy decisions such as the designation of National Teen Dating Violence

Awareness and Prevention Month and the violence prevention focus of Healthy People 2020 send a strong message: there is current momentum and a national priority to prevent abuse in adolescent relationships.

Adolescent Relationship Abuse Discussed and Defined

Though national attention has been drawn to violence in adolescent relationships, institutions, experts, and surveys have adopted different operational definitions for violence in relationships among youth. Policymakers, researchers, and program planners are challenged by a lack of a universal definition for teen dating violence (TDV), adolescent relationship abuse (ARA), intimate partner violence (IPV), and domestic violence (DV), making it difficult to accurately measure the prevalence of violence among adolescents (Chamberlain & Levenson, 2010; Cutter-Wilson & Richmond, 2011; Teten et al. 2009). The World Health Organization (WHO), for example, has adopted a standard definition for sexual violence and intimate partner violence but does not specifically address or define teen dating violence or adolescent relationship abuse (World Health Organization, 2010). In 1999, recognizing the need for consistency, the CDC issued a document detailing uniformed definitions of SV and IPV (Saltzman et al., 1999[1]); while unprecedented and useful, this report also omitted specific definitions for an adolescent population.

Adolescence signifies a time of tremendous growth and development, a life stage originally coined by psychologist G. Stanley Hall in 1904 (Dornbusch, 1989). Over the twentieth century, research and theories helped define adolescence according to various physical, psychological, and economic criteria. Though, today, adolescence is commonly known to represent the time between childhood and adulthood, marked at the onset of

[1]Updated in 2002 by Basile et al. at present but undergoing another round of revisions (personal communication with Basile, K.C. on Feb. 22, 2012).

puberty, and encompassing an age range between 11 and 25 (Burton, Halpern-Felsher, Rankin, Rehm, and Humphreys, 2011).

Although violence in adolescent relationships shares many similarities with adult IPV, there are some significant differences with the potential to influence data collection and prevention initiatives (Cutter-Wilson & Richmond, 2011; Chamberlain and Levenson, 2010; Teten et al. 2009; Kaur & Herbert, 2005). Relationships during adolescence take on particular importance for young people, and adolescents are more likely to use anger, physical aggression, and emotional abuse in conflicts when compared to adults (Levy, 1990). Qualitative research indicates adolescents stay in unhealthy relationships due to peer pressure and their social environment, which yields important implications for ARA surveillance and prevention (Cutter-Wilson & Richmond, 2011). TDV is believed to emerge between ages 15 and 16 (Wekerle & Wolfe, 1999) and during this developmental stage, adolescents lack romantic relationship experiences. Thus, this inexperience can lead to unrealistic expectations and lack of boundaries in intimate relationships. Research has demonstrated that many adolescents accept physical and sexual aggression as normal in their romantic relationships (Henton, Cate, Koval, Lloyd & Christopher, 1983; Levy, 1990) Consequently, they may not perceive physically aggressive behavior as unhealthy, and therefore, it might be more difficult for teens to identify abusive behavior as abuse. Rather, adolescents might perceive physical violence such as pushing and hitting and emotional violence such as acts of jealousy as expressions of love and commitment (Henton et al., 1983; Levy, 1990; Wekerle & Wolfe, 1999). Accordingly, Bethke and Dejoy (1993) found that only about one half of adolescents indicated that they would end a relationship following a violent act.

Given these distinctions between relationship abuse in adults and adolescents, it is important to define and consider adolescent relationship abuse as similar but separate from abuse in adult relationships. Additionally, when considering epidemiologic data, it is important to interpret statistics according to how the researchers operationalize dating violence or relationship abuse. The Youth Risk Behavior Survey (YRBS) uses a very narrow definition of IPV and dating violence while the NISVS used a more expanded definition. When referring to IPV and ARA in this project, the Futures without Violence definitions will be used for consistency purposes (Chamberlain & Levenson, 2010).

Intimate Partner Violence

> *Intimate partner violence is a pattern of assaultive and coercive behaviors that may include inflicted physical injury, psychological abuse, sexual assault, progressive isolation, stalking, deprivation, intimidation, and threats. These behaviors are perpetrated by someone who is, was, or wishes to be involved in an intimate or dating relationship with an adult or adolescent, and are aimed at establishing control by one partner over the other.*

Adolescent Relationship Abuse

> *Adolescent relationship abuse refers to a pattern of repeated acts in which a person physically, sexually, or emotionally abuses another person whom they are dating or in a relationship with, whether of the same or opposite sex, in which one or both partners is a minor. Similar to adult IPV, the emphasis on the repeated controlling and abusive behaviors distinguishes relationship abuse from isolated events (e.g. a single experience of sexual assault occurring at a party where two people did not know each other). Sexual and physical assaults occur in the*

context of relationship abuse, but the defining characteristic is a repetitive pattern of behaviors that aim to maintain power and control in a relationship. For adolescents, such behaviors include monitoring cell phone usage, telling a partner what she/he can wear, controlling whether the partner goes to school that day, as well as manipulating contraceptive use.

Epidemiology of Relationship Abuse

While relationship abuse affects populations of all ages, adolescents are particularly at risk. Findings from National Crime Victimization Survey (NCVS), collected by the Bureau of Justice Statistics, indicated that rates of IPV are highest among 16 to 24 year olds (Bureau of Justice Statistics, 2001; Rennison & Welchans, 2000). A study conducted by the National Institute of Justice and the CDC showed more than half of women who reported forced intercourse indicated this happened before the age of 18 (Tjaden & Thoennes, 1998). Smith et al. (2003) found using a sample of 1,569 women that adolescent victims and perpetrators of abusive relationships were more likely to be in abusive relationships as adults compared with women who were victimized as a child, yielding important implications for intervention during adolescent years.

Due to methodological challenges and ambiguous ARA definitions previously discussed, assessing prevalence of adolescent relationship abuse is difficult. In a systematic review of 15 studies, lifetime prevalence of physical dating violence ranged from 9% to 46% of both males and females involved as victims or perpetrators (Glass et al., 2003). Silverman et al. (2001) used data from the Massachusetts YRBS in 1997 and 1999 and found that approximately one in five female students reported being physically and/or sexually abused by a dating partner. Watson, Cascardi, Avery-Leaf, and O'Leary

(2001) completed a survey of 476 adolescents, examining dating violence in an ethnically and economically diverse urban community. Physical dating violence of a current and/or past partner was reported by 45.5% of participants. A far smaller percentage (9%) of participants reported victimization only, indicating that the majority of participants had been both victims and perpetrators of dating violence. In a recent study in an urban adolescent clinic by Millet et al. (2010), researchers found that two in five (40%) patients had experienced IPV, with 32% reporting physical and 21% reporting sexual victimization. Among IPV survivors, 45% reported abuse in their current or most recent relationship.

African American youth experience a disproportionately high amount of relationship abuse when compared to other racial groups of the same age (Bureau of Justice Statistics Special Report, 2001; Campbell, Sharps, Gary, Campbell, & Lopez, 2002; Wingood, DiClemente, McCree, Harrington, & Davies, 2001). According to the YRBS, rates of physical IPV are higher among Black (13.2%) and Hispanic (10.1%) adolescent females compared to their white counterparts (7.4%) (Centers for Disease Control and Prevention, 2008). Wingood and colleagues (2001) examined dating violence among 522 single African American girls ages 14 to 18 years who sought health care in a family medicine clinic. The investigators found that 18.4% of African American adolescents in the study reported a history of dating violence, and among those experiencing dating violence, 30.2% had been physically assaulted in the past 6 months (Wingood et al., 2001). In a later study examining longitudinal data of the same sample, Raiford, Wingood, and Diclemente (2007) found that 28% of adolescents reported a

history of dating violence at baseline. After one year, the incidence of dating violence was 12%.

Using data from NISVS, lifetime prevalence of IPV was estimated for U.S. states by socio-demographic characteristics. For women in Georgia, the lifetime prevalence of IPV was estimated to be 35.1%, which translates into over a third of women experiencing rape, physical violence, and/or stalking. For men in Georgia, the lifetime prevalence of IPV was recorded at 39.9%, which highlights the need to include prevention measures for both men and women (Black et al., 2010).

Health Impacts Associated with ARA

Several studies have investigated the association between relationship violence and health outcomes. Recently, data from the NISVS indicated that women and men who experienced rape or stalking by any perpetrator or physical violence by an intimate partner in their lifetime were more likely to report frequent headaches, chronic pain, difficulty with sleeping, activity limitations, poor physical health and poor mental health compared with people who did not experience these forms of violence (Black et al., 2010). Numerous other studies and reviews have found that abuse in relationships is associated with head, face, neck, chest, abdomen injuries and trauma; gastrointestinal disorders such as eating disorders and chronic irritable bowel syndrome; lifestyle risk behaviors such as poor diet, risky sexual behaviors, substance abuse, and smoking; STDs, unintended pregnancies, and low birth weight among babies; high blood pressure; and mental health problems such as post-traumatic stress disorder, depression, suicide and suicidal ideation (Campell, J.C., 2002; Coker et al., 2002; Gazmararianet et al., 2006; Golding, J.M., 1999; Hathaway, J.E., 2008; Helfrich et al. 2008; Miller et al., 2010;

Silverman et al., 2001). Using data from the National Violence Against Women Survey (Tjaden & Thoennes, 1998), Coker et al. (2002) found that psychological IPV was equally related as physical IPV to the range of health outcomes, indicating the importance of including psychological as well as physical aspects when measuring relationship abuse.

There are significant sexual and reproductive health impacts of relationship abuse on adolescents. Silverman et al. (2001) showed that partner violence among teenage girls as reported in the Massachusetts YRBS was linked with sexual intercourse before age 15, not using condoms at last sex, unplanned pregnancy, and having three or more partners in the past three month. Also using YRBS data but from 1999 and 2000, Decker et al. (2005) found that girls who reported IPV were three times more likely to have been tested for STDs and 2.6 times more likely to have an STD diagnosis. Silverman et al. (2001) found that teens in abusive relationships were four to 10 times more likely to become pregnant than non-abused teens.

Given the extensive literature detailing the prevalence and health effects of ARA, visits to health clinics represent an opportunity to address the connection between health and relationship violence. Located primarily in low-income communities, adolescent clinics eliminate the barriers to health care such as confidentiality, lack of health insurance, and limited knowledge about the health care system (Miller et al., 2010). For many adolescents, clinic visits might be their only contact with health care services. Hence, clinics specifically serving adolescents could serve as strategic sites for tailored health prevention such as brief ARA screening programs (Miller et al., 2010).

ARA Screening Programs: Controversial Policies

For the purposes of this research, screening is defined as a relatively brief information collection and preventive health care service in which standardized questions are routinely used to identify individuals who might require extra health services, referrals, or special health education materials. For IPV screening, a HCW might deliver screening questions orally, or alternatively, a patient might fill out screening questions using paper and pencil or at a computer kiosk when checking into the clinic.

Though essential for ARA identification, screening for relationship violence is not uniformly agreed upon in the medical and public health community. In 2004, the U.S. Prevention Services Task Force (USPSTF) concluded that there was "insufficient evidence to recommend for or against routine screening of women for IPV (U.S. Prevention Services Task Force, 2004)." This recommendation exposed the limited empirical, IPV screening data available (Rabin et al., 2009). Despite the USPSTF recommendations, many professional organizations recognize the importance of relationship abuse screening for violence prevention. The American Medical Association (AMA), American College of Obstetrics and Gynecology (ACOG), the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) all call for IPV victim identification and then referral to community services. In a similar set of guidelines, Futures without Violence (formally the Family Violence Prevention Fund or FVPF) suggest clinicians inquire about abuse at every encounter, using case identification as a measure of quality of care (Family Violence Prevention Fund, 2004; Family Violence Prevention Fund, 2010). Most recently and perhaps most significantly, the U.S. Department of Health and Human Services (HHS) requested that the Institution of Medicine (IOM) review preventative services for women's health in general and provide

recommendations based on their review. On July 19th, 2011, the IOM released their report with several recommendations that were subsequently covered under the Affordable Care Act (ACA). Of these recommendations, screening and counseling for all women and adolescent girls for interpersonal and domestic violence in a culturally sensitive and supportive manner was included, demonstrating an important step forward for violence prevention (National Research Council, 2011).

Despite such recommendations, more research on the implementation and adoption of IPV screening is needed. There is limited evidence to signify that screening reduces partner violence and longitudinally improves women's health; the effectiveness of interventions utilized by practitioners following a positive screen has not been sufficiently examined (Miller et al., 2011; Ricket, Davidson, and Breitbart, 2009), due in part to methodological challenges. Furthermore, before implementing interventions, practitioners should be aware of the psychometric properties of empirically tested IPV screening instruments (Rabin et al., 2009).

ARA Screening Programs: Experiences of Patients

Although controversy among the medical community persists, studies seem to show adolescents and patients support screening for relationship violence in the health care setting (Battaglia, Finely, & Liebschutz, 2003; Feder et al., 2006; Gielen et al., 2000; Kulkarni et al., 2011; Littleton, Berenson, & Breitkopf, 2007; Zeitler et al., 2006). Battaglia et al. (2003) conducted qualitative research using 27 in-depth interviews with IPV survivors to assess the patient-provider relationship and as well as patient attitudes toward screening. Patients felt screening was positive when provider characteristics included: the ability to communicate a sense of personal concern; open communication;

willingness to negotiate issues of control; confidentiality of medical information; shared decision-making; competency in medical care; careful listening; and taking ample time to address participant concerns (Battaglia, Finely, & Liebschutz, 2003). In a study by Littleton et al. (2007), researchers asked women if they felt comfortable being screened for sexual violence by their HCWs. Results indicated that although few patients were screened for sexual violence (32%), the large majority (95%) would feel comfortable with a provider who screened for SV. Additionally, most of the respondents (95%) felt the information provided by their HCW was helpful to them.

Gielen and colleagues (2000) looked at women's opinions about domestic violence screening within the context of mandatory reporting in a case-control study of 202 abused women and 240 randomly selected non-abused women. Nearly half of the sample thought HCWs should screen patients universally and routinely, though abused women were 1.5 times more likely to agree. Of the women sampled, two thirds would be less likely to tell their provider about abuse under a mandatory reporting policy. This finding has important implications for the adolescent population, in which such reporting is often required.

Zeitler and colleagues (2006) filled a critical gap in the literature by looking at the acceptability of IPV screening among an ethnically and racially diverse sample of urban youth ages 15 to 24 at Planned Parenthood of New York City (PPNYC). Relationship violence was assessed using the Conflict in Adolescent Dating Relationships Inventory (CADRI), which measured both victimization and perpetration of a broad range of violence. Screening attitudes among patients were overwhelmingly positive, with the large majority (90%) saying that they believed universal screening by health providers to

be a "very good" or "somewhat good" idea. However, those who had experienced physical abuse in the past year were less likely to agree, but even still, 80% of this group favored women being asked about screening. In the same study, Zeitler and colleagues asked participants what would make it easier for them to disclose abuse to a HCW. The highest rated responses were "If I was sure that the health care providers wouldn't take any action without my permission" (86%), "If I was sure that what I said would be kept totally confidential" (84%), and "If the environment in the clinic was friendly and understanding" (85%). Other research has been conducted exclusively with adolescents regarding their attitudes toward ARA screening. Rickert et al. (2009) conducted focus groups with young adult and adolescent women to inquire about how they would like to be asked about relationship abuse in a clinical setting. The results indicated that women preferred HCWs not to use slang words, not be "talked down to," and to include at least one question about positive relationships. While these studies showed the apparent support of adolescents, there are important logistical and political challenges to design and tailor programs to meet these needs.

ARA Screening Programs: Experiences of HCWs

Despite extensive patient support for relationship abuse screening, numerous studies have highlighted that health care staff face unique challenges in screening patients for violence. HCWs have an ethical and often legal duty to screen for and address dating violence, and many fail to ask about abuse due to structural and individual barriers (Colarossi et al., 2010; Minsky-Kelly et al., 2005; Nicolaidis et al., 2005; Rodriguez et al, 2001; Sugg & Inui, 1992; Waalen et al., 2000). Common themes that emerged through these studies include: lack of training; lack of effective interventions; lack of perceived

system support, including lack of time; HCW self-efficacy; safety and confidentiality concerns; fear of offending the patient; affective barriers including interest or empathy; personal experience with abuse; lack of referral materials; fears about legal involvement; and HCW age and number of years in practice. The themes are consistent with the research found by O'Campo and colleagues (2011). Lal et al. (1999) studied physicians and obstetricians' attitudes of screening domestic abuse; two thirds of the respondents were able to accurately recount the prevalence of spousal abuse in pregnancy, but only 8.7% screened their patients routinely. Some HCWs do not see the utility in screening patients for relationship abuse. In a systematic review of 2,520 abstracts, of which 20 met inclusion criteria, Ramsay et al. (2002) found that many health professionals did not agree with screening of women in health care settings. Specifically, Friedman et al. (1992) found that only a third of providers thought domestic violence screening questions should be asked of patients and Ellis et al. (1999) found that only 53% of nurses thought that women should be screened domestic violence.

However, interventions and trainings exist to help HCWs overcome these barriers. Twelve studies reviewed by Waalen et al. (2000) evaluated interventions to overcome barriers, and to change provider behaviors related to screening for abuse and assisting abused women. Interventions that combined education with institutional support, such as having a designated staff person to serve as a violence specialist, ensuring an emotionally supportive environment for clinicians in staff meetings, and providing training sessions appeared to have greater chance of changing provider behavior; education alone was not sufficient to ensure proper screening and follow up (Waalen et al., 2000; Nicolaidis et al., 2005).

ARA Screening Programs: Instruments and Interventions

In addition to looking at attitudes toward relationship abuse screening among patients and HCWs, it is important to look at IPV and ARA screening instruments. Much of the literature regarding screening effectiveness has been conducted in emergency departments, obstetric and gynecology offices, pediatric and primary care physician offices, with few studies focusing on adolescents or in reproductive health clinics. Many of these studies were evaluated with small sample sizes, in only one or two settings, with outcome measures only, and used screening instruments with varying sensitivity and specificity (Basile et al., 2007; O'Campo et al., 2011; Parsons et al., 2000; Rabin et al., 2009). In a recent systematic review, Rabin and colleagues (2009) found 33 studies that described the psychometric testing of IPV screening instruments in a health care setting. The most frequently studied instruments were the Hurt, Insult, Threaten, and Scream (HITS, sensitivity 30% to 100%, specificity 86% to 99%); the Woman Abuse Screening Tool (WAST, sensitivity 47%, specificity 96%); the Partner Violence Screen (PVS, sensitivity 35% to 71%, specificity 80% to 94%); and the Abuse Assessment Screen (AAS, sensitivity 93%-94%, specificity 55% to 99%). When determining sensitivity and specificity, various types of 'Gold Standard Instruments' have been used including the Conflict Tactic Scale (CTS), the Revised Conflict Tactic Scale (CTS2), and the Index of Spousal Abuse (ISA). Lack of consensus about the most appropriate comparison measure limits the validity of IPV sensitivity and specificity testing. For example, the National Institute of Justice (NIJ) indicated methodological issues when using the Conflict Tactics Scale (CTS), a survey tool developed in the 1970s. The NIJ reported that the CTS might not be appropriate for IPV research because it fails to measure control

or coercion, important constructs included in relationship abuse. Additionally, it leaves out sexual assault and violence by former partners and fails to determine who initiated the violence (National Institution of Justice, 2010). A more appropriate Gold Standard to measure sensitivity and specificity for an adolescents might be the CADRI, which was designed for young people and measures both victimization and perpetration of various relationship abuse constructs including: physical abuse, threatening behavior, verbal/emotional abuse, sexual abuse, relational aggression (Zeitler et al., 2006). To this author's knowledge, no relationship abuse screening tool has been validated using the CADRI.

In addition to weak psychometric properties, content of the most frequently used instruments may be inappropriate for an adolescent population. The WAST and the AAS operationalized IPV broadly, including physical, emotional, and sexual violence including threats and fear but the WAST makes no differentiation between victimization and perpetration of violence. The HITS included questions about physical abuse, emotional abuse, and threat but excluded sexual abuse. The PVS used a narrower, underlying definition of IPV, asking only about physical violence and safety (Rabin et al., 2009). In 2009, Basile and colleagues at the CDC's National Center for Injury Prevention and Control reviewed intimate partner violence and sexual violence victimization assessment instruments for use in health care settings. In addition to the instruments cited in the Rabin review (2009), over 40 other instruments were included; only one, the Screening Tool for Sexual Assault, was assessed with an adolescent population. Though this instrument was tested among adolescents, it only measured sexual assault and did not ask questions related to relationship abuse in general.

Recently, sexual and reproductive coercion has been included in the definition of IPV and ARA (Miller at al., 2010). Reproductive coercion includes behaviors such as male partners' verbal pressure to get women pregnant and birth control sabotage such as condom manipulation, among others. Miller et al. (2010) evaluated an IPV and reproductive coercion intervention in a family planning clinic using a randomized controlled design to compare changes in: reports of reproductive coercion and IPV, awareness and utilization of IPV-related resources, and relationship status. Those in control clinics (N=2) received standard of care, which involved two violence screening questions on an intake form: "Have you ever been hit, kicked, slapped, or choked by your current or former partner?" and "Have you ever been forced to have sex against your will?" Clinics in the intervention condition (N=2) used an enhanced IPV screening. This focused on informing patients about reproductive coercion and the various types of IPV, how it could affect sexual and reproductive health, and if necessary, assisting the patient to identify harm reduction behavioral strategies to reduce the risk of reproductive coercion and IPV. Lastly, in the intervention condition, HCWs would inform patients about local resources and offer to contact the service providers with the patients in an assisted referral process.

In the trial, female patients ages 16 to 29 seeking care at the clinics were included in the study. Measures were taken at baseline prior to receiving services, at 12 weeks, and again at 24 weeks. Physical and sexual violence were assessed using the CTS2 and the Sexual Experiences Survey; reproductive coercion was assessed with two domains: recent pregnancy coercion and recent birth control sabotage (Appendix A). Most patients included in the study were 24 years or younger (76%) who lived in urban neighborhoods.

The longitudinal data showed that more women in the intervention group ended a relationship during the past 3 months because it was unhealthy or they felt unsafe ($p=0.013$). This important outcome suggests that for young, urban women, exposure to a brief reproductive coercion intervention was associated with a long-term effect of leaving an unhealthy relationship.

Considering many of the participants were adolescents, it might be important to include reproductive coercion in routine screening among this population. However, although promising, applying the brief screening intervention presents practical challenges. A family planning clinic would need available HCWs to deliver the intervention and capacity to collect results. No written or electronic screening instrument was used in the intervention, only verbal questions by HCWs, making it difficult to translate and apply the intervention in another setting.

In addition to sexual coercion, many experts have begun to recognize commercial sexual exploitation of children (CSEC) and sex trafficking as part of relationship violence. Victims of sexual exploitation often identify the exploitative individual as their boyfriend. A few, recent studies have looked at the role of HCWs in screening for victims of sex trafficking (Dovydaitis, T., 2011; McClain & Garrity, 2011), indicating that often, HCWs are the only professionals to interact with victims still in captivity. Though screening for sexual exploitation in health care settings has been explored, to this author's knowledge, it has not yet been integrated into screening for relationship abuse, in general. In family planning clinics, where victims of sexual exploitation often seek care, this could be of particular importance.

As Basile and colleagues note in their review of SV and IPV assessment instruments (2009), ARA screening should only be used if there are resources available to clients for primary prevention, if there are mechanisms in place to refer patients who have been exposed to IPV for appropriate services, and training in place to ensure HCWs have the necessary instruments to ensure proper IPV screening protocol adherence. Thus, ARA screening programs should take a comprehensive approach by ensuring that staff members are prepared and appropriate screening instruments are used. This is consistent with findings from O'Campo (2011) who identified components of successful screening programs, including taking a "comprehensive" approach, which was defined as using effective screening protocols, providing thorough initial and ongoing training, and providing immediate access or referral onsite and/or offsite support services.

III. Methodology

Setting and Context

The Grady Memorial Teen Services Program is a reproductive and sexual health clinic open Monday and Wednesday afternoons, and Saturday mornings and caters specifically to the family planning and sexual health needs of young people in Atlanta, ages 13 to 18. The services at the teen clinic include STD testing and treatment, contraceptive counseling, family planning methods, and annual reproductive health exams, among others. In early 2011, the Medical Director of the Grady Memorial Hospital Teen Services, Dr. Melissa Kottke, wanted to improve the current screening program, particularly as the clinic had recently been a part of a commercial sexual exploitation of children prevention pilot study. Additionally, Teen Services became heavily involved with Start Strong Atlanta, a national prevention intervention to stop teen dating violence. Many of Teen Services' patients started to ask about relationship abuse and CSEC during their visits. As a result, Dr. Kottke realized it would be important to improve the screening procedures and modify the current screening instrument to include CSEC and ARA. Furthermore, in summer of 2011, staff members of the entire hospital at Grady, including those working in Teen Services, underwent an online training to help identify victims of sex trafficking, setting another precedent to employ screening procedures related to a broader conceptualization of relationship abuse.

Stakeholder Identification

Two primary stakeholders with decision-making authority were identified at Teen Services, the Medical Director, Dr. Melissa Kottke and the Senior Health Educator and Project Manager, Ms. Donnie Evans Ray. Dr. Kottke was involved at every step of the

evaluation; Ms. Ray was consulted in the development of the screening instruments and the development of the Online HCW Survey. Dr. Kottke identified a number of primary stakeholders, including staff members in positions such as health educator, nurse practitioner, and discharge nurse who were involved in key informant interviews, including screening instrument development. Secondary stakeholders of the ARA screening program evaluation included patients at Teen Services.

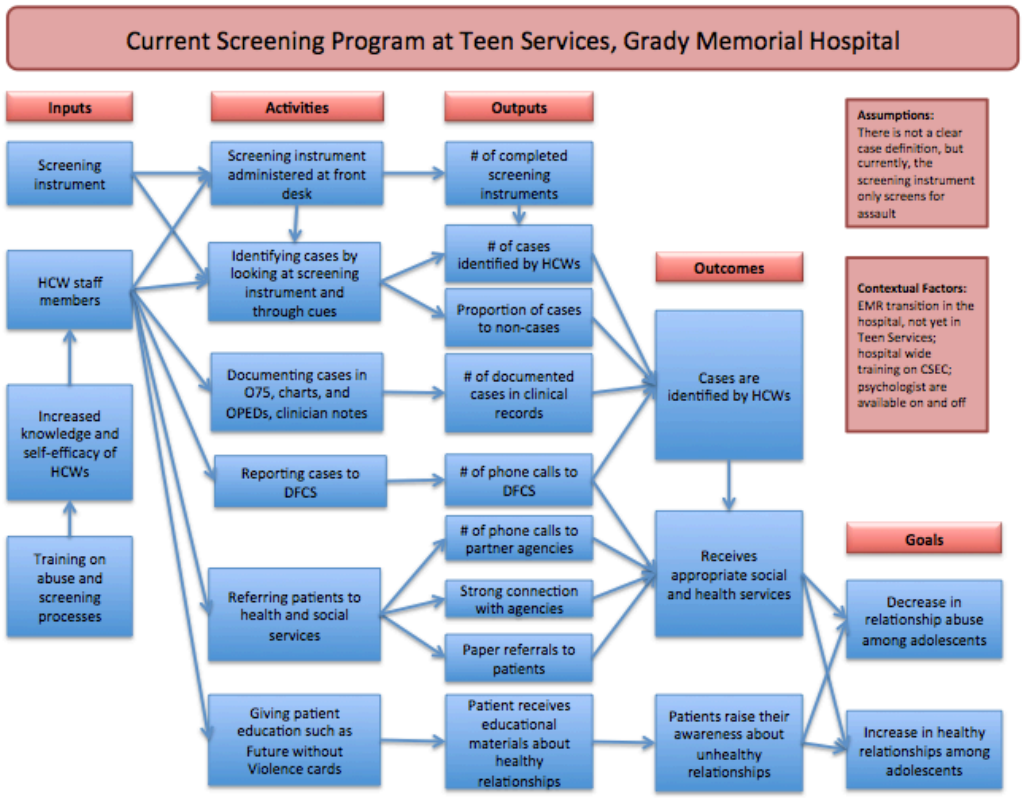
Program Description and Evaluation Questions

Over 20 years ago, Teen Services added five screening questions related to sexual assault and violence history to the non-electronic, paper patient intake forms. These questions (Appendix B) formed the current screening instrument and included: (1) have you ever been sexually assaulted by a stranger; (2) have you ever been sexually assaulted by someone you know; (3) have you ever been hit or abused by a dating partner; (4) have you been hit or abused by a family member; (5) do you want to talk to someone about any of these issues. Currently in the clinic, patients are given this screening instrument to fill out during each visit. Using paper and pencil, patients check yes or no response options to these questions; answers are used by HCWs to identify cases of ARA. After cases have been identified, a series of follow up activities occur including documenting cases, reporting cases, and referring patients to critical health and social services.

Logical models are often used during program evaluations and can be instrumental when designing evaluations and analyzing data (W.K. Kellogg Foundation, 2001). Throughout the beginning stages of the project, the investigator drafted a logic model and used it to inform the creation of evaluation questions. The logic model presented in Figure 3 is an elaborated version of the process model created by O'Campo

and colleagues (2011) (Figure 1). The O'Campo model consisted of activities and outcomes, including IPV screening and risk assessment, increased IPV identification, referrals to multiple social and health services, and violence resolution. The logic model for Teen Services, however, is more traditional and includes inputs, activities, outputs, outcomes, and long-term goals. As the evaluation advanced, the logic model was revised to reflect the current screening program and, moving forward, could be considered a 'living document' (i.e. as the screening program improves, the logic model may be continually updated and edited). In considering the process evaluation and the request of the Medical Director to improve the screening program, evaluation questions focused on inputs and activities. Three sub-questions associated with inputs and activities were developed to inform the overarching evaluation question: How can Grady Teen Services improve the ARA screening program?

Figure 3: Logic Model of Teen Services Screening Program, Grady Memorial Hospital



These sub-questions included (1) how do HCWs currently experience the ARA screening program at Teen Services, (2) what do HCWs need to improve the ARA screening program, and (3) what ARA screening instrument should be used at Teen Services?

How do HCWs currently experience the ARA screening?

Considering that the screening instrument has been in place for over 20 years but no evaluation has occurred, the first question was designed to understand how the screening program functions at Teen Services, as experienced by the HCWs. Before improving a program, it is important to understand how it functions and how those involved perceive it to function. Thus, this evaluation question focused on the all activities associated with the screening program including screening and identifying cases as well as follow up activities such as documenting, reporting, and referring patients as needed (Figure 3).

What do HCWs need to improve the ARA screening program?

Given that a successful screening program relies on the abilities, comfort, and efforts of HCWs, it is imperative to understand their needs. This question focused on the three of the four inputs (Figure 3), including the training of HCWs, their self-efficacy and comfort related to screening, and general needs as identified by HCWs.

What screening instrument should be used at Teen Services?

The screening instrument serves as a fundamental input, but it was created over 20 years ago and only addresses a narrow definition of ARA (i.e. physical or sexual assault). Accordingly, the process evaluation also focused on revising the clinic's screening instrument to improve the overall screening program. This evaluation question focused on reviewing the literature for appropriate screening instruments,

developing an instrument appropriate for Teen Services, investigating HCWs opinions related to the different screening instruments, and assessing psychometric properties of the different instruments.

New Screening Instrument Development

As evident in the literature, there is no uniformly agreed upon ARA screening instrument (Basile et al., 2007; Rabin et al., 2009). Thus, the investigators developed a new ARA screening instrument from January 2011 to August 2011, before beginning the process evaluation. Given the high levels of both victimization and perpetration of violence in adolescent romantic relationships (Glass et al., 2003; Watson et al., 2001), both constructs were included in the new version. Furthermore, as previously discussed, some literature suggests that young people want healthy relationship items included in a screening program as well as unhealthy relationship dimensions (Rickert et al., 2009). Accordingly, the investigators decided to include healthy relationship questions as well. To ensure the new instrument was comprehensive and appropriate, the initial development was informed by three different methods. First, a literature search of validated IPV screening instruments was conducted. This contributed to the overall development of the new ARA instruments items. Second, a review of literature related to patient's attitudes was conducted to inform the instrument development. Third, feedback on the screening instruments was sought from HCWs at the Teen Clinic, which also included continual feedback from the Medical Director.

During this process, two versions of the same instrument were generated, a linear screening instrument which included a list of individual statements and a bundled screening instrument which contained three groups of the same individual statements

(Appendix B). The screening instruments included three behavioral constructs: (1) a positive, healthy relationship; (2) relationship abuse victimization (being the victim of ARA); and (3) enactment of relationship abuse (being the perpetrator of ARA). The linear screening instrument included a total of 16 statements, with 16 yes or no answer options. The bundled screening instrument included the same 16 statements, but instead, statements were grouped according to the three previously mentioned constructs. The positive, healthy relationship construct included 3 items, the relationship abuse victimization construct included 8 items, and the relationship abuse enactment construct included 5 items, yielding a total of 16 items. However, each bundle only had one yes option (yes, at least one of these statements applies to me) and one no option (no, none of these statements apply to me), yielding a total of 3 responses for the bundled screening instrument (Appendix B). The current, linear, and bundled screening instruments were used during the process evaluation.

The Process Evaluation

The investigator developed various indicators to answer the three sub-questions using three primary data sources (Table 1). To meet the needs of the evaluation questions, three phases of data collection were employed, including semi-structured key informant interviews, a pilot assessment of the screening instruments, and lastly a staff survey assessing knowledge, attitudes, and needs related to ARA screening (Table 2). These methods were selected to answer the evaluation questions, meet time restraints, and ensure prompt Institutional Review Board (IRB) approval of the project. A chart review was considered, but the researchers agreed that charts could be reviewed retrospectively, after the implementation of a comprehensive screening program during

an outcome evaluation. The Emory University IRB determined that this project did not meet the definition of 'research' or 'clinical investigation' as set forth in the Emory policies and procedures.

Table 1: Process Evaluation Questions, Indicators, and Data Sources

Main Research Question How can Grady Teen Services improve the ARA screening program?		
Sub-Questions	**Indicators**	**Data Source(s)**
1. How do HCWs currently experience the ARA screening program?	-Narratives about ARA identification and disclosure	-Key informant interviews
	-Narratives about ARA follow up	-Key informant interviews
	-Number of disclosures experienced by HCWs	-Online HCW Survey
	-Emerging themes	-Key informant interviews
2. What do HCWs need to improve the ARA screening program?	-Utility and type of training needed	-Key informant interviews, Online HCW Survey
	-Frequency of training needed	-Online HCW Survey
	-Attitudes toward ARA screening	-Key informant interviews, Online HCW Survey
	-Comfort with ARA screening	-Online HCW Survey
	-Emerging themes	-Key informant interviews
3. What ARA screening instrument should be used at Teen Services?	-Literature review of validated ARA tools	-Literature Review
	-Preference of HCWs	-Key informant interview
	-ARA disclosure rates of instruments	-Screening instrument pilot data
	-Psychometric properties of instruments	-Screening instrument pilot data

Key Informant Interviews

Before piloting the screening instruments with patients, key informant interviews were conducted with five individuals representing distinct role in the clinics. The interviews lasted 30 to 45 minutes and covered questions

Table 2: Summary of Data Source for the ARA Screening Tool

Data Source	**Time Frame**	**Number**
Key Informant Interviews	August-September, 2011	N=5
Screening Assessment	October – November, 2011	N=98*
Online Staff Survey	November 2011	N=8

*Screening instruments had varying N's due to missing responses

regarding current experiences with relationship abuse disclosure in the clinic, a review of the current screening instrument and screening procedures, and training needs for adolescent relationship abuse. Additionally, HCWs were asked to review the newly developed screening instruments and their feedback was solicited (Appendix C). The key informant interviewees were selected using purposive sampling; they served as primary stakeholders of the process evaluation. Those who were interviewed included the Medical Director, Health Educators (2), a Physicians Assistant, and a Licensed Practical Nurse. Interviews took place in a private conference room or office, located at the Teen Clinic at Grady Hospital 5-C, 80 Jesse Hill Jr. Dive SE Atlanta, GA 30303. One of the interviews took place at the Jane Fonda Research Center located at 1256 Briarcliff Road, Briarcliff Campus, Building A, Atlanta GA 30306.

Though not required by the IRB, subjects were briefly consented and notified they could stop the interview at any point, for any reason. After receiving permission, interviews were recorded using an electronic recording device and then transcribed into a word document which was stored on a password protected hard-drive. Recordings were kept for a month after transcription had been completed and then were destroyed.

Data analysis of the interview transcripts was conducted using MAXQDA software. Transcripts were reviewed by first memoing in MAXQDA. Based on this initial review, deductive themes from the interview questions and inductive themes from the data were identified and accordingly, codes were developed and applied to transcripts (Appendix D). The investigator conducted a thorough systematic exploration of codes both across cases and within cases to develop key findings. These results were then triangulated with results from the quantitative HCW survey.

ARA Screening Instrument Pilot

Information gathered from the key informant interviews was used to revise the screening instruments, which were then pilot tested in the waiting room of the Teen Clinic. Staff members were notified that the investigator would be recruiting patients in the waiting room. Recruitment occurred on consecutive Mondays (12:00pm to 4:00pm), Wednesdays (12:00pm to 4:00pm), and Saturdays (9:00am-12:00pm) between October 1, 2011 and November 7, 2011. Using convenience sampling, the inclusion criteria for the participants included (1) those who could read English, (2) were 18 years or younger, (3) were patients (new or returning) at the Grady Teen Clinic. Participants who met the inclusion criteria and agreed to participate completed the three ARA screening instruments. In addition to the screening instruments, the patients completed questions about mental health, nutrition, and four brief questions to reflect participant demographics. The different instruments were randomized into one of six orders to reduce order effects and potential bias. Due to the sensitivity of the information, patients were asked to sit away from others and return the screening forms into a manila envelope marked confidential. Screening instruments were not only kept confidential, but also anonymous during this pilot assessment. Participants were given a piece of candy to thank them for their time.

The main outcome of interest was a dichotomized variable of ARA disclosure or non-disclosure. For the current screening instrument, disclosure of ARA was operationalized as a yes related to two questions: (1) have you ever been hit or abused by a dating partner and (2) have you ever been sexually assaulted by someone you know. While the sexual assault question could indicate assault by someone other than an

intimate partner, this was included in the operationalization of ARA disclosure because it could potentially include a dating partner. The other questions on the current screening instrument were not related to relationship abuse. For the two new screening instruments, disclosure of ARA was operationalized as one or more yes responses on the victimization and enactment questions or a single or more no responses for the healthy relationship questions. Questions related to the healthy relationship construct such as "My partner treats me how I want to be treated" were recoded from zero to one and from one to 0. Using these operational definitions, dichotomized variables (disclosure or non-disclosure) were created for the three screening instruments.

Data entry and all statistical analyses including univariate analysis and descriptive statistics, internal consistency reliability, and sensitivity, specificity, and positive predictive calculations were conducted using IMB's SPSS Version 19. Univariate analysis was used to look at individual items on all three screening instruments as well as at dichotomized ARA disclosure.

Kuder-Richardson Formula 20 (KR-20) yields a KR-20 coefficient to measure internal consistency reliability of instruments. The KR-20 coefficient is analogous to Cronbach's alpha, except instruments with continuous response options use alpha and those with binary response options use KR-20. The length of an instrument impacts KR-20 coefficients; a short test will yield a smaller KR-20 and a long test will yield a higher KR-20. Additionally, the dimensionality, or heterogeneity, of an instrument can influence internal consistency coefficients; in fact, the KR-20 formula assumes homogeneity, or tau-equivalence, of an instrument. When a KR-20 coefficient is reported for multidimensional measures, Erkus (2003) emphasized that internal

consistency coefficients should be calculated for each sub-dimension. While the three screening instruments measure one latent construct (adolescent relationship abuse), the linear and bundled screening instruments contain three theoretically derived dimensions, contributing to the overarching construct of relationship abuse. Thus, the KR-20 coefficients are reported for the linear screening instrument as a whole and for each sub-dimension (a healthy relationship, relationship abuse victimization, and relationship abuse enactment).

The bundled screening instrument and the current screening instrument were then compared to the linear screening instrument and sensitivity, specificity, and positive predictive value were calculated; this helped to assess criterion validity of the bundled and current screening instruments.

Online ARA Survey for HCWs

The Medical Director sent an email notifying HCWs at the Teen Clinic of a forthcoming online ARA survey. Subsequently, the investigator sent an email on November 18, 2011 to 15 people working in Teen Services with a link to the survey. Survey Gizmo was used in the development of the online ARA survey (Appendix E). HCWs were told that participation in the survey would not affect their job in any way, nor would it be mandatory. They were also told that results would only be presented in aggregate. To help ensure understanding of the research, the first page of the online ARA survey included an informed consent page. Main topics in the survey included: current experiences with patients who disclosed experiences of ARA and CSEC; importance of screening for ARA and including staff training for ARA; attitudes toward screening for ARA (response options included strongly agree, agree, don't agree or

disagree, disagree, and strongly disagree); degree of confidence in ability to explain the screening process to another HCW (response options included very confident, confident, not confident, very not confident); comfort with behaviors related to ARA screening (response options were on a one through 10 scale, where one = very uncomfortable and 10 = very comfortable). Lastly, training needs related to ARA in the clinic were assessed, using useful, somewhat useful, and not useful as response options. The survey also helped to identify individuals interested in participating on an internal ARA prevention advisory committee, to help implement a screening program at Teen Services.

Due to the low sample (N=8) and low response rate (53.3%), simple descriptive analysis of the items was conducted using IBM SPSS version 19. Response items assessing attitudes and comfort related to ARA screening were dichotomized (strongly agree and agree for attitudes and a marking of seven to 10 for comfort) and rates were reported. In addition, a comfort index was generated using the responses to the 9 items assessing comfort with ARA screening (1=very uncomfortable and 10=very comfortable). These results of the online ARA survey were triangulated with the qualitative results of the key informant interviews.

IV. Results

1. How do HCWs experience the current ARA screening program?

Current Experiences of HCWs with ARA Disclosure

The investigator emailed the Online HCW Survey to a total of 15 staff members of Grady Hospital Teen Services, with a response rate of 53.3% (N=8). Half of the respondents were under 40 years old, while the other half were between 41 and 65 years old. Most of the HCWs had been working at Teen Services for over 5 years (n=6), and most of the respondents (n=7) had positions that required continuing education (Table 3). Of the respondents, almost all indicated that at some point while working at Teen Services, a patient had disclosed ARA (n=6). However, the rates of ARA disclosure varied by HCW. Half of respondents from the survey (n=4) indicated that at least once a day they see patients who have experienced ARA; the other half (n=4) indicated that they see patients who have experienced ARA less frequently than once a day. Additionally, the Online HCW Survey asked about the varying types of ARA disclosed to HCWs by patients (Table 4). Most of the HCWs (n=5) reported that patients disclosed physical abuse. A third of HCWs indicated that patients

Table 3: Demographic Information of Online HCW Survey Respondents (N=8)

Age Range	# (%)
26-40 years old	4 (50)
41-65 years old	4 (50)
Years worked at Teen Services	
2-5 years	2 (25)
Over 5 years	6 (75)
Position requires continuing education	
Yes	7 (87.5)
No	1 (12.5)

Table 4: Types of ARA Disclosed to HCWs (N=6)

Survey Item	# (%) Yes
Birth Control Sabotage	3 (50)
Controlling Behavior	4 (66.7)
Physical Abuse	5 (83.3)
Verbal Abuse	4 (66.7)
Mental/Psychological Abuse	3 (50)
Stripping for money, clothing, etc.	4 (66.7)
Having sex for money, clothing, etc.	4 (66.7)
Forced Sex	4 (66.7)

disclosed controlling behavior, verbal abuse, stripping for money or other items, having sex for money or other items, and forced sex. Half of the respondents indicated disclosures of birth control sabotage and mental abuse.

During the key informant interviews, some HCWs frequently identified and addressed ARA, with one interviewee stating, "I have a lot of them. I talk about it with every patient (3.16)." However, many HCWs did not explicitly identify ARA disclosure among patients. For example, another HCW suggested patients encountered family abuse more than relationship abuse, stating that abuse is "not too much of a dating issue." Yet the same HCW continued to describe specific incidents of relationship abuse among patients. In the most severe example, she explained that a patient of Grady Teen Services lost their lives after a romantic partner shot them in the head. Though this patient never explicitly disclosed relationship abuse at Teen Services, the HCW astutely noticed, "it was just hard to get her to use condoms; that could've been something that was controlling in their relationship (1.28)." Another HCW stated that she had not seen much ARA among patients, but then later described how "you just see them talking with their boyfriends in the hallways and they're talking all nasty (4.15)." In both of these examples, the HCW did not recognize ARA among their patients but continued to describe reproductive coercion and verbal abuse, both cases of adolescent relationship abuse.

In addition to varying ARA experiences, HCWs encountered differing CSEC experiences. For example, one HCW stated, "I don't feel like they're [CSEC victims] coming here. Either that, or they're hiding it (2.64)" while another HCW revealed that she recently provided services to a patient who worked as a stripper and to another who

worked as an escort (5.6). Data from the Online HCW Survey further showed that patients experience CSEC, with 75% of respondents indicating they have had a patient disclosed they stripped or had sex in exchange for money or other goods. Of those who responded (N=8), two HCWs indicated they see patients who have experienced CSEC once a month or more frequently.

A distinction between identifying abuse and disclosing abuse emerged through the qualitative data, as some HCWs would pick up on the signs of abuse, without having patients disclose anything verbally. For example, one HCW mentioned that "you see 10 girls an afternoon, you see 60 girls a month. You get the patterns of what is normal. For the girls who respond [to questions], even their body language, their eye contact is different (3.38)." Despite some of these nonverbal signals of ARA, the Online HCW Survey showed that all of the disclosures happened in private and most disclosures happened verbally, from the patient (83.3%). Another HCW brought up the continuum of abuse and the fact that some disclosure is not reportable, and that the reportable disclosure is not frequent. "We don't really have that many *reportable* I feel like incidences of abuse. I think we deal with the consequences from past situations that are affecting their behavior (2.237)." The

Table 5: Follow up by HCWs to ARA Disclosure (N=6) from the Online Survey

Survey Item	# (%) Yes
Used the screening instrument to assess abuse	3 (50)
Wrote incident on the current instrument	3 (50)
Called the police	2 (33.3)
Called the Division of Family and Child Services	2 (33.3)
Made an assisted referral	4 (66.7)
Gave the patient a paper referral	4 (66.7)
Gave the patients a flyer or hand out	3 (50)
Looked up the information on the internet	3 (50)
Used previously provided training materials	3 (50)
Other	1 (16.7)

Online HCW Survey, however, indicated that of those HCWs experiencing ARA disclosures (N=6), the number of disclosures range from 10 times to 30 times.

Current experiences with ARA Follow Up

Follow up to ARA disclosures among patients varied with great extent as well, with different documenting, reporting, and referring experiences. As indicated from the Online HCW Survey (Table 5), about half of the HCWs used the current screening instrument to assess abuse, a third of respondents made reports to the police and the Department of Family and Child Services (DFCS), and two-third gave the patient paper referrals or made assisted referrals with the patient. Half of the respondents looked information up on the Internet and gave patients educational material. Under the "other" response option, one respondent indicated the patient was referred to the staff psychologist at Teen Services.

Documenting

On the current screening instrument, there is a place to write about the incident of assault and create a safety plan. As evident from the Online HCW Survey, only half of the respondents used this form to write down incidents of assault. Moreover, during a key informant interview, one HCW stated, "yeah, I've hardly documented on the current screener, probably once or twice (4.42)." In addition to documenting on the current screening instrument, the key informants explained that they document incidents of ARA on the O75 forms, patient's medical charts, on clinic notes, or on the OPED. While some indicated, "it's not a big challenge as far as just recording (1.72)," others disagreed and thought that "absolutely this [documenting system] needs to change and be improved (3.93)."

In addition to the physical location of documenting, key informants discussed other crucial factors related to documenting ARA. Teen Services will soon transition to electronic medical records (EMR), which has implications for not only ARA documentation but also for ARA screening. One HCW mentioned, "at some point, this process will be electronic. There are opportunities there. EPIC [the EMR system] does have different things where you can track better from visit to visit to visit (3.93)." Another HCW talked about the follow up to documenting, stating that "it's a good point to record but what is gonna be done about the situation. We need to go further. How is the person going to be when they go home, you know (1.72)?" It is evident that HCWs need to find a consistent location to document ARA and incorporate ARA documentation into the EMR changes.

Reporting

Throughout the interviews, key informants also discussed the challenges of reporting and finding the right window of opportunity to intervene. For example, a HCW explained that a patient might say an incident was already reported, but might not be telling the truth. Furthermore, some interviewees discussed the notion of "bolting," when a patient runs out of a HCW's office, as a HCW stated "I don't want them to shoot out of my office if I say, oh let's make this call (5.267)." Another HCW expressed a similar concern, in which the patient lacked trust in DFCS.

> *They'd already gotten DFCS involved, but they didn't trust 'em, because DFCS kept putting her back in the home. So that was one incident that was like oh, how's that gonna be with the other patients, like are they going to be frightening by this or, you know? (1.165)*

Given some of these challenges, interviewees expressed confusion and hesitation about calling DFCS and the police. One HCW explained that "it's difficult; I don't know should I call 911, ya know, should I go ahead and report it to DFCS, or what role should I play in this (1.15)?" Another HCW mentioned that most of her assault cases had previously been reported, but she explained:

> *There have been some cases where it hasn't been reported and that's when I get stuck and I'm like okay, should this, I mean, I know the patient will say this person is no longer around, but you're still in danger, but do you report it? Do you get DFCS involved (2.63)?*

One key informant discussed the distinction between child abuse and 'inappropriate behavior,' noting the continuum of abuse, and stating "when does it go from inappropriate behavior to child abuse?" She continued, explaining that child abuse is what needs to be reported, "but inappropriate behavior, I mean, shoot DFCS can't handle that." Furthermore, the HCW commented on the challenges to intervening, "because as we know, they're all related [abusive behavior], and when is it going to escalate, and where was your opportunity (3.106)." The Online HCW Survey also captured current experiences with reporting, as one respondent wrote, "a large portion of our teens are familiar with the DFCS system, and unfortunately, on many occasions it has failed them. We put so much emphasis on identifying the problem, when the solutions do not work." These current experiences, including majors concerns related to the DFCS system, indicate the need for improved reporting procedures both within Teen Services and in Atlanta's social services system.

Referring

The Online HCW Survey indicated that two-thirds of respondents (N=4) made assisted referrals and gave patients paper referrals (Table 5). One survey respondent mentioned that patients were also referred to a psychologist on staff the Teen Services. During the key informant interviews, HCWs elaborated on the role of the psychologists. One HCW explained that:

> *So, I'd go ahead and assess them and if I see any triggers, or anything that says they have been abused. I'll actually try to refer them to the psychologist, before they leave so at least they get some coping methods (1.82)*

Although useful and convenient, the schedule of the psychologists appeared to be inconsistent and infrequent, making it difficult to rely on them for referrals. An interviewee pointed out that "the problem is when we only have someone once a week, it's like okay its Monday you gonna come back on *Wednesday* to talk about it (2.82)?" The HCW continued to explain that at one point, Teen Services did not have psychologists on staff at all, at which point referrals for mental health, and often for issues of ARA, were "across the street" at Hugh Spaulding, a center at Children's Healthcare of Atlanta Pediatric Hospital (CHOA). A few other HCWs mentioned services at Hugh Spaulding and explained that since they see people who are underage, many referrals are made to them. Furthermore, the rape crisis center at Grady Hospital is only for adults, making the psychologists at the teen clinic and the services at Hugh Spaulding even more crucial. One HCW explained that a 15 year old was assaulted two to three weeks before coming to Teen Services. This patient told her friend's mom, who told her own mother, who then brought her into the clinic. While at the clinic, the HCW made an assisted referral and called Hugh Spaulding's helpline with the mother and daughter. The patient received counseling and family planning while at Teen Services,

and the HCW followed up independently with the patient after she went to Hugh Spaulding (4.12). Many of the interviewees made an extra effort with patients who had been victims of ARA, by giving educational materials, or giving "numbers and resources and having close follow up (3.52)." One HCW joked about the Grady Stationary, saying that sometimes, she would write referral numbers on a piece of paper towel to give to the patient. Key informants were also asked about assisted referrals, which are used to help connect patients to services not available at the clinic. When asked, many HCWs acknowledged that it would be helpful to incorporate assisted referrals, but important to ensure patients were informed about the process.

2. What do HCWs need to improve the ARA screening program?

The needs of HCWs related to ARA disclosure varied with great magnitude, ranging from financial needs for training to fundamental needs such as having the DFCS phone number written down in an easily accessible location. More extremely, a couple of HCWs mentioned the need to overhaul the entire social services system of Atlanta, to better accommodate the needs of youth generally. The focus of this evaluation question, however, relates to identifiable needs that could be changed within the context of Teen Services.

Attitudes and Comfort with ARA Screening

HCWs who took the Online HCW Survey had supporting attitudes toward the ARA screening process. Of those surveyed, 100% thought it was part of the clinic's responsibility to ask patients about their relationships, and 7 out of the 8 respondents thought screening for abuse was a good use of the clinic's resources. Only 1 respondent

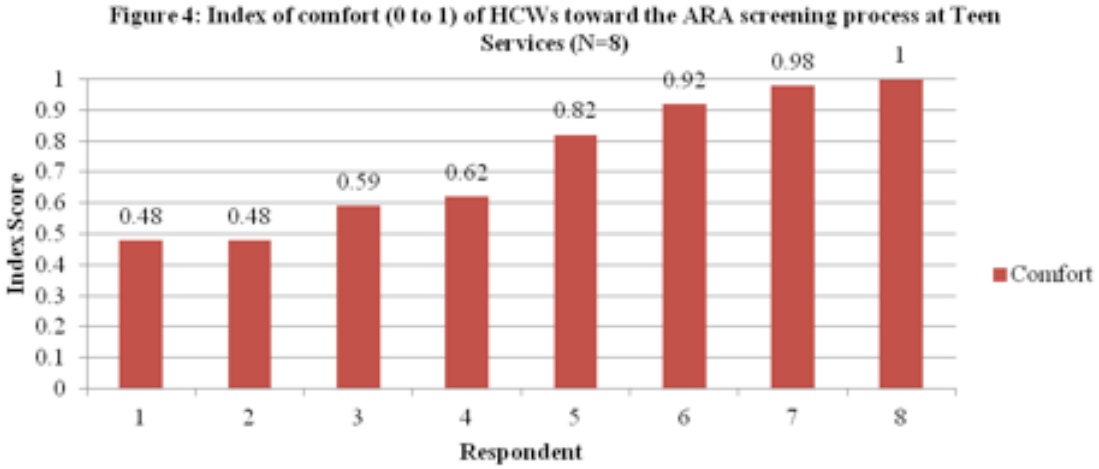
thought the clinic should not ask about violence in relationships and only one HCW thought ARA screening was a poor use of the clinic's time (Table 6).

Despite the supporting attitudes, there were varying levels of comfort with and confidence about the current screening process (Table 6). Of the 8 respondents, 6 felt confident in their ability to explain the current screening process to a colleague. As indicated in Table 6, HCWs were most comfortable with talking to patients about dating safety, talking to patients about birth control sabotage, and using the current screening form in the clinic process. HCWs were least comfortable with talking to patients about CSEC, creating a safety plan, and explaining the mandating reporting laws (Table 6). Respondents had varying levels of comfort with the ARA screening program (Figure 4). Comfort index scores ranged from 0.48 at the lowest end to 0.98 and 1 at the high end. Of the 8 respondents, 4 had high levels of comfort with ARA screening, with index scores of .82, .92, .98, and 1.

ARA Training Needs

In addition to attitudes towards and comfort with ARA screening, HCWs were directly asked about training utility. Every respondent of the Online HCW Survey (N=8) indicated that each training topic listed on the survey would be useful, signifying the utility, in general, for training at Teen Services. Topics related to training covered by the Online HCW Survey included how to make assisted referrals, how to initiate conversations about relationship abuse, how to document cases of abuse, how to identify cases of sexual exploitation of children, how to identify adolescent relationship abuse, and how to identify sexual and reproductive coercion (Appendix E). While HCWs

Table 6: Attitudes and Comfort with ARA Screening Process at Teen Services (N=8)	
Attitudes toward ARA screening	**# (%) Importance**
How important do you think it is to screen all patients for abuse in relationships?	8 (100)
How important do you think it is for all staff members to have training on ARA?	7 (87.5)
How much do you agree or disagree with the following:	**# (%) Agree**
People in this clinic shouldn't directly ask patients about violence in relationships	1 (12.5)
Screening for abuse in relationships is a good use of the clinic's resources	7 (87.5)
It is part of this clinic's responsibility to ask patients about their relationships	8 (100)
Screening for abuse in relationships is not a good use of this clinic's time	1 (12.5)
Comfort with the ARA screening process	**# (%) Confident**
How confident are you that you could explain the current screening assessment process to a colleague?	6 (75)
How comfortable are you with the following:	**# (%) Comfortable**
Talking to a patient about dating safety	7 (87.5)
Talking to a patient about birth control sabotage	7 (87.5)
Talking to a patient about commercial sexual exploitation	3 (37.5)
Creating a safety plan	3 (37.5)
Making an assisted referral with a patient	4 (50)
Documenting an incident of disclosure	5 (62.5)
Explaining the mandating reporting laws to a colleague	4 (50)
Using the current form in the clinical process	6 (75)
Making a mandated report to the appropriate authority	4 (50)



agreed on these topics unanimously, respondents indicated different preferences for training frequency. Of those who answered, four people indicated they would want training related to ARA one time a year, two people wanted training three times a year, and one person wanted training once a year.

Themes from Key Informant Interviews

The key informant interviews elicited different needs than those covered in the Online HCW Survey, helping to give context to the ARA process in Teen Services. For example, although HCWs unanimously identified training, in general, as a need on the Online HCW Survey, information generated from the interviews made it clear that funding for training was an issue, and in turn, a need. "I think we'd need facilitators [for training], and we have zero funding for it," stated one interviewee. Without this infrastructure, it would be hard to formalize training for ARA. She continued to discuss how to best format trainings, explaining that ideally, trainings were be "experiential," allowing for HCWs to practice certain skills (3.99). Another interviewee expressed that she wanted help improving her counseling skills, strengthening the case for experiential, facilitated training sessions. On the other hand, a HCW stated that in-services had been conducted, Power Points had been circulated, and a few training sessions had occurred, but she identified that "it's probably not sufficient." This need was further supported when some interviewees mentioned that they "didn't even have the phone number for DFCS."

As gathered in the key informant interviews, HCWs seemed concerned about a "lack of cohesion," impacting all factors related to ARA needs. As one HCW commented, "it's really hard to get everybody together at the same place at the same

time. It's almost impossible, like I don't think it's every happened (3.99)." Relatedly, another HCW mentioned that "we're not invited to the meetings, to the teen clinic's operational, administrative, everybody type of meetings . . . and so we don't always know if new forms come (2.36)." Toward the end of the HCW Online Survey, respondents were asked if they wanted to be part of an internal abuse prevention advisory committee to work on improving the detection of relationship abuse among patients, as well as to help plan training. Of the 8 respondents, 4 indicated they would be interested and provided their contact information, signifying a commitment to improving ARA screening. Given the general need to improve cohesion in the clinic, this committee could serve as a starting point.

3. Which ARA screening instrument should be used?

Feedback from Key Informant Interviews

Before piloting the three different screening instruments, the key informants (N=5) provided direct feedback to the investigator regarding their preferences for the instruments. Overall, HCWs acknowledged that when compared to the current screening instrument, the two newly developed instruments went more in depth regarding relationship abuse. Interviewees thought it was a good idea to expand the relationship abuse construct, but some worried about the extra time it might take patients. They cited that the patient flow at Teen Services was already slow. HCWs suggested shortening the new screening instruments while keeping the broader definition of ARA. This suggestion was incorporated into the pilot of the new instruments; all questions in the two new screening instruments were reduced in wordage.

The new screening instruments were presented in two different ways, linear and bundled, though each contained the same questions. HCWs gave varying responses when asked which version they preferred. Some interviewees leaned toward the linear screening instrument because "they wanted to see everything" whereas others preferred the bundled screening instrument because they only needed to look at 3 responses. Many identified that the bundled screening instrument, when compared to the linear screening instrument, offered a level of privacy to patients. One HCW detailed:

> *I think that this one [the bundled instrument] allows for privacy such that I don't have to tell you that I got drugs in exchange for sex, I don't have to circle yes, you know, like I don't have to say which one of these it is, but I can still reach out for help, and I think that's the power of this one (3.97).*

While some HCWs agreed with this opinion, others pointed out the fact that if the bundled screening instrument was used, someone would have to identify which specific type of ARA occurred. For example, in the victimization bundle, a patient might have checked "yes, one of these statements applies to me," but subsequently, the HCW would have to figure out exactly what happened to that patient. HCWs explained that could take extra clinic time or that patients might resist providing details about their abusive situation.

Despite the varying opinions regarding the bundled and the linear versions, many HCWs supported the bi-directionality of the new instruments, as both of them asked about ARA victimization and ARA enactment. One HCW candidly indicated, "sometimes they [patients] can be the abusers, and not even realize it" and that "it's not a one sided thing (2.60)." One interviewee suggested adding a place to indicate if the

incident had been reported to the police or DFCS, and another suggested having a completely separate form for documenting ARA, if a patient disclosed it.

ARA Screening Instrument Pilot: Descriptive Statistics and Rates

A total of 98 patients in the waiting room at Teen Services filled out the 3 ARA screening instruments. However a couple of responses were missing on the some of the screening instruments for certain participants. Thus, these responses were excluded from the analysis. A total of 62 patients completed demographic information; this component of the process evaluation was added after data collection had already begun. Participants were between 13 and 18 years of age (mean = 16.3, SD=0.22) and the majority were female (83% female, 17% male). When asked, "Which grade have you most recently finished," about a quarter of participants responded with 11th grade (23.5%) and 20.4% of participants indicated they had most recently finished 12th grade. A smaller percentage of participants had most recently completed 10th grade (8.2%) and the same percentage had most recently completed 9th grade. Only 1% had most recently completed 8th grade and 2% had most recently completed 7th grade.

ARA Screening Instrument Pilot: Current Screening Instrument

Of the 98 patients who filled out the current screening instrument, 3.1% indicated they had been assaulted by a stranger, 9.2% reported they had been sexually assaulted by someone they knew, 4.1% reported they had been hit or abused by a family member, and 6.1% reported they had been hit or abused by a dating partner (Table 7a). A total of 7 patients reported that they wanted to "speak with someone about these issues," but of these 7 patients, 4 patients had not marked a single experience of sexual assault. Using

Table 7a: Percent of ARA disclosure on the current screening instrument from the pilot assessment among participants in the waiting room at Teen Services (N=98)	**# (%) Yes**
Have you ever been sexually assaulted by a stranger?	3 (3.1)
Have you ever been sexually assaulted by someone you know?*	9 (9.2)
Have you been hit or abused by a family member? λ	4 (4.1)
Have you been hit or abused by a dating partner?*	6 (6.1)
Do you want to talk to someone about any of these issues?	7 (7.1)
*Used for the operational definition of ARA on the current screening instrument λ N=97, 1 missing	

the operational definition for ARA disclosure on the current screening instrument, which included responses to (1) Have you ever been sexually assaulted by someone you know and (2) Have you been hit or abused by a dating partner, a total of 12.25% of patients disclosed ARA.

ARA Screening Instrument Pilot: Linear Screening Instrument

Of the 97 patients that completed the linear screening instrument, 97.9% indicated that their partner respected them, 89.7% indicated their partner treated them how they wanted to be treated, and 91.8% reported that they felt safe with their current partner (Table 7b). In other words, 9.2% marked "no" to the statement 'I feel safe with my current partner." When asked in the negative, "I don't feel safe with my partner," the percentage of disclosure more than doubled, with a total of 19.8% of patients (N=96) disclosing ARA (Table 7b). Just over 10% of patients indicated that their partner yells at them or calls them bad names, whereas 22.7% indicated, "I often yell at my partner or call them bad names." When patients were asked if their partner tries to control them, 14.3% indicated yes (N=96) and when asked "I don't let my partner seen their friends," 17.5% indicated yes (N=96).

Comparatively fewer patients disclosed other items, the least of which was "I have tried to get my partner pregnant when they didn't want be," at 2.1% (N=96). However, in response to the statement "my partner has tried to get me pregnant when I didn't want to be," 7.4% of respondents indicated yes (N=96). Almost the same percentage of respondents who indicated if they had been hit or abused by dating partner in the current screening instrument (6.1%) indicated yes to the statement "my partner has physically hurt me" in the linear screening instrument (6.3%). Additionally, a similar percentage (6.1%) indicated, "I have physically hurt my partner" on the linear screening instrument (N=94), speaking to the bi-directionality of behaviors in abusive relationships. More respondents indicated that their partner had messed with their birth control or condoms (5.2%, N=96) compared with the 4.2% who indicated they had messed with

Table 7b: Percent of ARA disclosure on the linear screening instrument from the pilot assessment among participants in the waiting room at Teen Services (N=97)	**# (%) Yes**
My partner respects me	95 (97.9)
My partner treats me how I want to be treated	87 (89.7)
I feel safe with my current partner	89 (91.8)
My partner yells at me often or calls me bad names	10 (10.3)
I often yell at my partner or call them bad names	22 (22.7)
My partner tries to control me λ	14 (14.3)
I don't let my partner see their friends or use their phone	17 (17.5)
My partner has physical hurt me λ	6 (6.3)
I have physically hurt my partner β	6 (6.4)
My partner has messed with my birth control or condoms λ	5 (5.2)
I have messed with my partner's birth control or condoms λ	4 (4.2)
My partner has tried to get my pregnant when I didn't want to be β	7 (7.4)
I have tried to get someone pregnant when they didn't want to be λ	2 (2.1)
I do not feel safe with my partner λ	19 (19.8)
My partner insisted on having sex when I didn't want to λ	5 (5.2)
Someone has given me money, drugs, food, clothes, or a place to stay in exchange for sex λ	5 (5.2)

λ N=96, 1 missing
β N=94, 3 missing

their partner's birth control or condoms. Of those who responded, 5.2% indicated their partner insisted on having sex when they didn't want to (N=96) and the same percent disclosed that someone had given them money, drugs, food, clothes, or a place to stay in exchange for sex (N=96). Using the operational definition of ARA disclosure on the linear screening instrument, 48.9% of patients (N=92) disclosed ARA, more than triple the amount of participants who disclosed ARA using the current screening instrument.

ARA Screening Instrument Pilot: Bundled Screening Instrument

The bundled screening instrument had a total of 97 completed forms. The healthy relationship construct included the same 3 items in the linear screening instrument. Of those who completed the bundled screening instrument, 89.7% indicated that yes, at least one of the statements applied to them. In other words, 10.3% of respondents specified that "no, at least one of these statements applies to me." The ARA victimization construct consisted of 8 items, the same items in the linear screening instrument, and 18.6% of respondents indicated that yes, at least one of the statements applied to them. The same percentage (18.6) disclosed yes when asked about ARA enactment, a section consisting of 5 items (Table 7c). Using the operational definition of ARA disclosure for the bundled screening instrument, 32.0% (N=97) of respondents disclosed ARA.

ARA Screening Instrument Pilot: All Screening Instruments

When using the operational definitions of ARA, more people disclosed ARA with the linear screening as compared to the bundled screening (48.9% and 32.0%, respectively). However, individual items on the two screening options elicited similar rates. For example, 18.6% of respondents indicated ARA victimization and ARA enactment on the bundled screening instrument. On the linear instrument, the highest

Table 7c: Number and percent of disclosure on the bundled screening instrument from the pilot assessment among participants in the waiting room at Teen Services (N=97)	**# (%) Yes**
My partner yells at me often or calls me bad names	
My partner tries to control me	
My partner has physical hurt me	
My partner has messed with my birth control or condoms	
My partner has tried to get me pregnant when I didn't want to be	
I don't feel safe with my partner	
My partner insisted on having sex when I didn't want to	
Someone has given me money, drugs, food, clothes, or a place to stay in exchange for sex	
Yes, at least one of these statements applies to me	18 (18.6)
I often yell at my partner or call them bad names	
I don't let my partner see their friends	
I have physically hurt my partner	
I have tried to get someone pregnant when they didn't want to be	
I have messed with my partner's birth control or condoms	
Yes, at least one of these statements applies to me	18 (18.6)
My partner respects me	
My partner treats me how I want to be treat	
I feel safe with my current partner	
Yes, at least one of these statements applies to me	87 (89.7)

rate of ARA disclosure was 22.7%, the respondents who indicated they frequently yell at their partner or call them names. The next highest was 19.8% who said yes to the statement "I don't feel safe with my partner." The third highest rate of ARA disclosure was 14.3%, with the statement "my partner tired to control me."

Psychometric Properties of the Screening Instruments: Internal Reliability Consistency

The current screening instrument had a KR-20 coefficient of 0.521, which falls toward to the lower bound of the moderate reliability range, 0.5 to 0.8. The last item of the current screening instrument did not assess whether someone had been abused, but rather if someone wanted to speak about "any of these issues." If this item was deleted from the analysis, the KR-20 increased to 0.551, which is logical given the

Table 8:ARA Screening instruments and their associated KR-20 coefficients

Screening Instrument	Number of Response Items	N	KR-20
Current Screening Instrument	5	97	0.521
Bundled Screening Instrument	3	97	0.478
Linear Screening Instrument (complete)	16	92	0.780
Linear Screening Instrument (ARA victimization)	8	93	0.716
Linear Screening Instrument (ARA enactment)	5	94	0.581
Linear Screening Instrument (healthy construct)	3	97	0.640

bivariate, descriptive findings; many people who indicated that they wanted to talk about assault did not disclose assault on the current instrument. The bundled screening instrument yielded at KR-20 coefficient of 0.478, indicating low reliability. The linear screening instrument had a higher KR-20 coefficient (0.780), though the value should be interpreted carefully due to the high number of items (16) and the heterogeneity of the instrument (Table 8). However, some moderately high reliability coefficients were found when analyzing the three sub-constructs, individually. The ARA victimization construct had the highest KR-20 at 0.716; the healthy relationship construct also had a relatively high coefficient at 0.64; the ARA enactment construct yielded a reliability coefficient of 0.581.

Psychometric Properties of the Screening Instruments: Sensitivity, Specificity, PPV

To further investigate the validity of the screening instruments, the aggregated, operational ARA disclosure rates were compared among (1) the linear instrument and the current instrument as well as (2) the linear instrument and the bundled instrument. Screening instrument proprieties including sensitivity, specificity, and positive predictive value were included, though these numbers should be interpreted carefully. The linear screening instrument was used as a proxy to the 'Gold Standard' due in part because (1)

no real Gold Standard exists for adolescent relationship abuse, (2) the linear screening instrument incorporated items from validated ARA instruments and then expanded upon the typical ARA definition, (3) the high rates of disclosure on the linear screening instrument are comparable to national epidemiologic data, and (4) the high KR-20 coefficients suggest internal reliability of the instrument further strengthening its psychometric properties.

Table 9a: 2x2 Table of ARA disclosure on the linear screening instrument compared to the current screening instrument

	ARA Disclosure on the Linear Screening # (%)	No ARA Disclosure on the Linear Screening # (%)	Total # **(%)**
ARA Disclosure on the Current Screening Instrument # (%)	7 (7.5)	5 (5.4)	12 (12.9)
No ARA Disclosure on the Current Screening Instrument # (%)	32 (34.4)	49 (52.7)	81 (87.1)
Total **# (%)**	39 (41.9)	54 (58.1)	93

Using the linear screening as the Gold Standard, the current screening instrument correctly classified 7 ARA cases of the identified 39 cases and correctly classified 49 of the 54 patients who did not disclose ARA on the linear screening form (Table 9a). This yielded a low sensitivity of 0.179 but a high specificity of 0.907 (Table 9c). Comparatively, the bundled screening instrument had a much higher sensitivity at 0.529 but a slightly lower specificity at 0.852 (Table 9c). The bundled screening correctly classified 20 of the 38 patients who disclosed ARA on the linear screening and 46 of the 54 patients who did not disclose on the linear instrument (Table 9b). The bundled screening instrument had a high PPV (close to 0.75-1) at 0.714, despite the low sensitivity (0.529), while the current screening only had a PPV of 0.583.

Table 9b: 2x2 Table of ARA disclosure on the linear screening instrument compared to the bundled screening instrument

	Yes ARA Disclosure on the Linear Screening **# (%)**	No ARA Disclosure on the Linear Screening **# (%)**	Total #(%)
Yes ARA Disclosure on the Bundled Screener **# (%)**	20 (21.7)	8 (8.7)	28 (30.4)
No ARA Disclosure on the Bundled Screening Instrument **# (%)**	18 (19.6)	46 (50.0)	64 (69.6)
Total **# (%)**	38 (41.3)	54 (58.7)	92 (100)

Table 9c: Sensitivity, specificity, and positive predictive value of the current and bundled screening instrument compared to the linear screening instrument

	Sensitivity	**Specificity**	**PPV**
Current screening instrument	0.179	0.907	0.583
Bundled screening instrument	0.526	0.852	0.714

V. Conclusion and Discussion

Several studies have evaluated outcomes related to IPV and ARA screening programs, such as a reduction in violence and increases in ARA or IPV case identification (O'Campo et al., 2011). However, given the complexity of the screening programs, the intricacies of adolescent relationship abuse, and the scope of this project, a process evaluation methodology was applied. The purpose of this project was to understand how to improve the ARA screening program at Grady Memorial Hospital's Teen Services and the findings suggest utility of a process evaluation methodology.

This study indicates that of the HCWs surveyed and interviewed, all were aware of the screening program's existence, however HCWs seemed to have disparate experiences related to both screening and identification as well as follow up procedures. The previous screening instrument used sexual assault identification as the basis for screening patients (Appendix B). Especially given its 20 year history, this likely contributed to how HCWs conceptualized and reflected upon the current screening program. Some HCWs thought ARA was "a big issue" while others did not consider ARA to be "much of a dating issue." This was made particularly clear during the key informant interviews when HCWs who previously asserted that ARA was not an issue would then describe disclosure of ARA in a narrative. According to data from the Online HCW Survey, physical abuse was most frequently disclosed by patients when compared to other types of ARA such as emotional abuse, verbal abuse, or sexual exploitation. However, according to the pilot assessment of the screening instruments, patients at Teen Services experienced verbal abuse more frequently compared with physical abuse (10.3% versus 6.1%, respectively). These conflicting reports might also indicate that HCWs

perceive physical abuse to be more associated with ARA than other types of abuse such as verbal abuse or sexual exploitation. This is particularly of interest given that psychological IPV, including verbal abuse, has been found to have similar negative health outcomes as physical abuse (Coker et al., 2002). Just as policymakers, researchers, and program planners are challenged by a lack of a universal definition for ARA (Chamberlain & Levenson, 2010; Cutter-Wilson & Richmond, 2011; Teten et al. 2009), HCWs were challenged too. In moving forward, it will be extremely important to determine a case definition for Teen Services and incorporate this information into a screening program.

A distinction between identifying abuse and disclosing abuse emerged through the interviews, suggesting that some HCWs identified ARA without the screening instrument, questioning patients for information. Interestingly, others waited for a verbal disclosure or paper disclosure from the screening instrument. It is possible that those HCWs who identified ARA among patients and then followed up with questioning were more comfortable discussing ARA, in general. This would be consistent with findings from the Online HCW Survey. The survey measured comfort levels regarding the screening program; some healthcare workers had high levels of comfort with screening while others were much less comfortable. This has implications for the screening program at Teen Services. It should be determined if cases are identified from the instrument only, or from both the instrument and patient cues.

HCWs also had disparate follow up experiences to abuse disclosure and identification, including different procedures for documenting, reporting, and referring ARA cases. Reporting cases of ARA to authorities such as DFCS seemed to be the most difficult and least frequent action undertaken by HCWs. Of the six HCWs who indicated

ARA disclosure by patients on the Online HCW Survey, only two respondents indicated they made a report to DFCS. This is consistent with findings related to comfort with making reports, as only 50% of respondents indicated they were comfortable making a report to the appropriate authority. Qualitative results also reiterated this finding, as some HCWs were skeptical about the entire DFCS system, others did not have the DFCS number, some HCWs "got stuck" if patients "hadn't already reported it." The low number of HCWs who made reports to DFCS could be a function of clinic role; some HCWs have more authority and responsibility to place calls to DFCSs compared to others. Additionally, it could also be a function of the low number of "reportable cases." However, it was clear from interviews that confusion and concern about reporting acted as a barrier to providing patients with critical service. The literature indicates that for patients, mandatory reporting can also serve as a barrier to disclosing abuse (Gielen et al., 2000; Zeitler et al., 2006). Accordingly, a distinction should be made between cases that need reporting and cases that do not; this should not impede upon HCWs ability to connect a patient with educational material or referrals to social and health services.

Despite findings from Ramsay (2002) who found that many health professionals did not agree with screening, HCWs at Teen Services had supportive attitudes toward ARA screening. However, comfort levels varied and concerns were raised about procedures and processes, suggesting the need to clarify program structure. The general need for training was overwhelmingly agreed upon by HCWs, which is consistent with the conceptual model put forth by O'Campo et al. (2011) to ensure a successful screening program (Figure 2). Particularly given the crucial role of HCWs in a screening program as evidenced by the logic model (Figure 3), the screening program should work to

improve HCWs comfort with all aspects of the screening program. In moving forward, it will be important to build capacity to support a screening program and related training.

The results of the pilot assessment of the screening instrument clearly indicate that the current screening instrument identified fewer cases of ARA compared to the linear instrument and bundled instrument. Using the operational definitions, the linear instrument classified 48.2% of participants as experiencing ARA, the bundled instrument classified 32% of participants, and the current screening instrument classified 12.25% of patients. Using these operational definitions, it is clear that the current screening instrument needs replacement in order to identify more cases of ARA. In addition to the rates of ARA disclosure, sensitivity, specificity, and PPV of the bundled screening instrument were higher when compared to the current screening instrument (0.526, 0.852, 0.714 and 0.179, 0.907, 0.583, respectively). This suggests that the bundled screening instrument, when compared to the current screening instrument, had better predictive validity, though the low sensitivity of the bundled screening raises concerns about it's ability to correctly identify patients who have experienced ARA. However, the sensitivity of the bundled instrument (0.526) is consistent with the sensitivities of the most frequently used abuse screening instruments as reported by Basile et al. (2007). The reported sensitivities range from 0.30 to 1.0 on the HITS, to from 0.47 on the WAST, and 0.35 to 0.71 on the PVS.

There is also support for including bi-directional items on the screening instruments, as rates of disclosure were as high or higher on the "enactment of ARA" dimension; both partners in relationships often initiate and engage in abusive behaviors. Interestingly, when analyzing the disclosures from the current screening instrument, a

number of patients marked that they wanted to "speak with someone about these issues [assault]," but had not marked a single experience of assault. This could perhaps, support a policy to speak with each patient about ARA, even if it hasn't been disclosed.

In assessing the reliability of the screening instruments, the KR-20 coefficient was used to consider the internal reliability consistency. Almost all coefficients of the screening instruments fell within the moderate range (0.5 to 0.8) except for the bundled screening instrument, which had a KR-20 coefficient of (0.478). However, this instrument measured three separate, but related constructs, and thus it is not tau-equivalent, i.e. it is not homogeneous. Accordingly, the coefficient is a lower bound measure of internal consistency reliability. Furthermore, since the length of the instrument was short (3 items), the value of KR-20 would statistically be small. Other dimension of reliability would be useful to measure in the future, particularly test-retest reliability; some of the psychometric properties of instruments included in the review by Basile et al. (2007) included studies that reported test-retest reliability.

No clear preference for screening instrument was consistently identified by the key stakeholder interviews, though there was consistent agreement that a new system needed to be developed and consistent supported for the bi-directionality of assessing abuse. In considering evidence that shows mandatory report to be a barrier for both HCWs and patients, the bundled screening instrument could offer patients a level of privacy that might help overcome this barrier. Given its relative effectiveness compared to the current screening instrument, this would further help identify more cases.

Moreover, there is an empirical assumption that adolescents need a different screening program compared to adults, one that expands screening for assault and

instead, screens for assault and other dimensions of adolescent relationship abuse. This paradigm shift, from assault screening to ARA screening should be considered in moving forward with the screening program development, as it has implications for program activities.

Strength and Limitations

There are several limitations to consider with this study. Patients completed the screening instruments in the waiting room of a clinic, not as they checked into the clinic. This potentially threatens external validity because patients knew they were part of a study. It might be beneficial to conduct an assessment in which patients complete instruments as part of their routine check-in to allow for a retrospective chart review. However, it is important to pilot test instruments before implementing them into practice, which was accomplished in this study. The results also must be interpreted with caution, as they were self-reported from the patients and could have been affected by reporting bias, such a stigma or being with someone while completing the forms. However, this study design allowed the investigator to compare rates of disclosure across instruments, one of the primary objectives. It is interesting, however, that the range of disclosure among patients found using the screening instruments (12.25% to 48.9%) is similar to range reported in the literature (15% to 40%). Reliability for all instruments were assessed using internal consistency, which is a measure to determine to degree to which all items in a scale measure a latent construct. The KR-20 assumes homogeneity or tau-equivalence, which these instruments did not have. While the KR-20 coefficient is useful, it does not necessarily equate to a reliable measure. Thus, an alternative form of

reliability assessment might be beneficial such as a test-retest reliability, which is used to assess the consistency of a measure from one time to another.

Another potential limitation was that the linear screening instrument was used as an approximation to the Gold Standard to develop criterion-related validity measures for the bundled instrument and current instrument. This provided the investigator with useful insight, however, it makes the assumption that the linear screening instrument is, in fact, a close approximation a Gold Standard measuring ARA. Although the linear screening instrument was checked against other measures (Basile et al., 2009; Miller et al., 2010) to establish content validity, it would be important to also establish criterion-related validity of the linear screening instrument, perhaps using the CADRI. In all three measures (the Screening Instruments, Online HCW Survey, and Key Informant Interviews), there were possibilities for social desirability bias, particularly given that these methods required self-reports. The evaluation might have benefited from using methods less reliant of self-reports such as a document review or structured observation. The small sample size of the Online HCW Survey also limited the ability to generalize results to the entire clinic; however, the results provided useful information for answering the evaluation questions.

Public Health Significance and Future Directions

Screening for ARA will continue to be an important public issue for primary and secondary prevention. This project contributes to the knowledge about screening programs by applying a process evaluation methodology, as evaluations of screening programs usually focus on outputs and outcomes. Of screening program evaluations, few have been conducted in an adolescent clinic. The project also raises larger questions

about policies for adolescents when compared to adults, as their needs and experiences differ. Ultimately, however, the project seeks to provide concrete steps to make lasting improvement at Teen Services, helping patients receive the services and education they need.

In thinking about research for the future, given the results of this project and the potential utility of the bundled screening instrument, it would be interesting to evaluate its psychometric properties against a different Gold Standard, such as the CADRI as well as assess the bundled screening instrument in practice. While qualitative research methodology was used to assess the opinions of HCWs regarding the screening instruments, it would be beneficial to apply qualitative research methodology such as cognitive interviews to further explore the utility of the bundled screening instrument among patients.

As the research indicates, mandatory reporting can serve as a barrier for patients to disclose information to HCWs and for HCWs to ask patients about abuse. This raises larger questions about mandatory reporting as a policy and it would be important to look at mandatory reporting in other settings as a barrier or facilitator for providing key services to patients.

Recommendations

Six specific recommendations will be provided to Teen Services:

1. Screening programs are more successful when there is institutional support. Given this, Teen Services should establish an internal committee as well as an ARA screening champion to work on improving the screening program. The

committee could work within the hospital, drawing on similar work happening elsewhere at Grady, such as in the Emergency Department.

2. Given that traditionally, Teen Services has only screened for cases of assault and the process evaluation clearly showed differing conceptualizations of ARA, it will be important to solidify a case definition. This should include differentiation between what cases need to be reported, what cases need to be referred, and what cased need to be discussed at the clinic. Thus, it is recommended that the committee, along with an ARA expert and decision makers at Teen Services, develop a clear case definition for ARA identification purposes and ARA reporting purposes. It is recommended that given the unique experiences of adolescents in relationships and results from the pilot assessment, that this case definition be multi-dimensional and expanded to include issues other than sexual assault.
3. There are supportive attitudes to screening for ARA at Teen Services, and thus here a window of opportunity to develop organizational capacity. Accordingly, it is recommendation to attempt to secure human and/or financial resources to help build capacity for a comprehensive screening program.
4. Once there is organizational capacity, follow up activities of the screening program should be clarified and the EPIC system should be considered. Activities to be clarified include who documents and where, who is responsible to look at the screening instrument, and where patients are referred. HCWs on the committee should make connections with outside agencies that would be familiar with Teen Services and their patients, particularly because there was concern

about "what happens after" and "not trusting the system." Ideally, there would be a return of the on-site psychologists to whom HCWs could refer patients.

5. The bundled screening instrument classified 32% of patients in the pilot assessment at Teen Services as having experienced ARA. Responding to the bundled screening instrument offered patients a level of privacy. Given relative effectiveness of this instrument, the barriers of disclosing ARA associated with reporting cases, it is recommended that the internal committee work to revise and implement a bundled version. However, the use of this instrument would require specific follow up actions on behalf of the person reviewing it.
6. The current screening instrument asked if people wanted more information about assault. A number of patients checked this item, even if they did not disclose assault. Some HCWs would not look at the screening instrument to assess abuse, instead they used environmental cues. It is recommend that there be someone designated to review the screening instrument for every single patient (probably a health educator) and deliver simple educational materials to every single patient. It could be framed as "abuse is a serious issue in adolescent relationships and we like to talk to all of our patients about it. I see that you have (or have not) indicated that you are experiencing some difficulties in your relationship. I would like to give you this piece of information to take with you and think about." If the patient has experienced or is experiencing ARA, follow up procedures would be established.

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VII. Appendixes

Appendix A Two Domains of Reproductive Coercion (Miller et al., 2010)

Recent (past-3-months) pregnancy coercion

1. In the past 3 months, has someone you were dating or going out with told you not to use any birth control (such as pills, shot, ring, etc.)?
2. In the past 3 months, has someone you were dating or going out with said he would leave you if you did not get pregnant?
3. In the past 3 months, has someone you were dating or going out with told you he would have a baby with someone else if you did not get pregnant?
4. In the past 3 months, has someone you were dating or going out with hurt you physically because you did not agree to get pregnant?

Recent (past-3-months) birth control sabotage

1. In the past 3 months, has someone you were dating or going out with taken off the condom while you were having sex so that you would get pregnant?
2. In the past 3 months, has someone you were dating or going out with put holes in the condom so you would get pregnant?
3. In the past 3 months, has someone you were dating or going out with broken a condom on purpose while you were having sex so you would get pregnant?
4. In the past 3 months, has someone you were dating or going out with taken birth control (such as pills) away from you or kept you from going to the clinic to get birth control so that you would get pregnant?
5. In the past 3 months, has someone you were dating or going out with made you have sex without a condom so you would get pregnant?

Appendix B

Current Screening Instrument

Sexual Assault/Violence History
Text Box

Have you ever been sexually assaulted by a stranger?

Yes ____ No ____

Have you ever been sexually assaulted by someone you know?

Yes ____ No ____

Have you been hit or abused by a family member?

Yes ____ No ____

Have you been hit or abused by a dating partner?

Yes ____ No ____

Do you want to talk to someone about any of these issues?

Yes ____ No ____

Linear Screening Instrument

Please check yes or no for each sentence.	**Yes**	**No**
My partner respects and cares about me	☐	☐
My partner treats me how I want to be treated	☐	☐
I feel safe with my current partner	☐	☐
My partner yells at me often or calls me bad names	☐	☐
I often yell at my partner or call them bad names	☐	☐
My partner tries to control me	☐	☐
I don't let my partner use their phone or see their friends	☐	☐
My partner has physically hurt me	☐	☐
I have physically hurt or injured my partner	☐	☐
My partner has messed with my birth control or condoms	☐	☐
I have messed with my partner's birth control or condoms	☐	☐
My partner has tried to get me pregnant when I didn't want to be	☐	☐
I have tried to get my partner pregnant when they didn't want to be	☐	☐
I do not feel safe with my partner	☐	☐
My partner insisted on having sex when I didn't want to	☐	☐
Someone has given me money, drugs, food, clothes or a place to stay in exchange for sex	☐	☐

Bundled Screening Instrument

If ***any*** of the following things apply to you, check **yes** at the bottom of the list. If **none** of the following things apply to you, check **no** at the bottom of the list.

- I often yell at my partner or call them bad names
- I don't let my partner use their phone or see their friends
- I have physically hurt or injured my partner
- I have tried to get someone pregnant when they didn't want to be
- I have messed with my partners birth control or condoms

☐ Yes, at least one of these things applies to me

☐ No, none of these things apply to me

If ***any*** of the following things apply to you, check **yes** at the bottom of the list. If **none** of the following things apply to you, check **no** at the bottom of the list.

- My partner yells at me often or calls me bad names
- My partner tries to control me
- My partner has physically hurt me
- My partner has messed with my birth control or condoms
- My partner has tried to get me pregnant when I didn't want to be
- I don't feel safe with my partner
- My partner insisted on having sex when I didn't want to
- Someone has given me money, drugs, food, clothes or a place to stay in exchange for sex

☐ Yes, at least one of these things applies to me

☐ No, none of these things apply to me

If **all** of the following things apply to you, check **yes** at the bottom of the list. If **not all** of the following things apply to you, check **no** at the bottom of the list.

- My partner respects and cares about me
- My partner treats me how I want to be treated
- I feel safe with my current partner

☐ Yes, all of these things apply to me

☐ No, not all of these things apply to me

Appendix C

Semi-structured Key Informant Interview Guide

Opening Statement

Hi there. Thank you so much for participating in this interview. My name is Nicole Bennett and I am working with Teen Services to implement a new adolescent relationship abuse assessment system. We will be changing the entire screening, but in this first iteration, will be focusing on ARA. We are really interested in hearing about how you think this system could be improved and the types of staff needs. Your thoughts, opinions, and ideas are really valuable and will help us make improvements! I will be holding similar discussions with other staff members to gain a sense of the clinic's needs in this area.

This will be an interview format, and I have some questions to ask you. Please answer as honestly and openly as possible, there are really no right or wrong answers, as I welcome any ideas. Your participation is completely voluntary and you can choose to not to participate at any time. Everything we talk about will be kept confidential and used only for the purposes of strengthening the abuse assessment system. I will be writing notes to keep track of your responses, but in case I miss something, I also have a tape recorder and would like to record your responses. Is it okay with you if we use the tape recorder?

The interview should be about 30 minutes and if you need to pause to get anything, just let me know. You are also free to stop the interview at any point, for any reason. The snacks are here for you to enjoy. Do you have any questions before we begin?

Interview Guide

Introduction

Question 1: Let's start with the basics. Could you tell me a little bit about your role in the clinic?

Probes: What do you do on a daily basis? What services do you provide to teens?

Current Experiences

Question 2a: In order to improve the abuse assessment system, I'd like to know a little bit about your experience with teens who have disclosed abuse. What has your experience been like?

> Probes: Has someone disclosed something to you? What types of abuse (how do you define the abuse)? How did you feel about this?

Question 2b: What did you do in response to this disclosure?

Probes: Did you document, make a referral, ask someone for help?

Question 2c: How did you feel about that process?

Probes: What would make this process easier for you?

Question 3: Thinking about some of your experiences with individuals reporting abuse, have you been able to discuss some of the details with your patients? When have you been able to do this? When have you not been able to?

Probes: Which barriers have you encountered? (Like time, confusing laws). Have you overcome some of these barriers?

Screening Forms

Question 4: I have examples of three different screening tools. I'd like you to take a look at the first example, which is the current form. Now, please take a look at the next two forms. How do you feel about these three forms?

Probes: What do you like about each? What do you dislike? Are there things missing from them?

Follow Up to Screening Forms

Question 5: As part of this process, we would like to help health care workers document incidents of abuse better. What could we do to help you and your colleagues?

Probes: In the past there has been a spot on the back of the screening form to document. Did you find this useful? Do you have any other ideas about how to best document incidents?

Question 6: When issues of abuse arise, there are certain legal obligations such as confidentiality and mandatory reporting. How can we help you navigate these obligations?

Probes: Stories that have happened in the past about reporting? What about reporting to child advocacy centers?

Question 7: We are looking to implement a strong and unified referral system and make formal partnerships with local organizations. Are you aware of organizations that provide unique services? Do you have any contacts at these organizations that you are willing to share to help us?

[Provide list of organizations and contacts already gathered so as to prevent duplication.]

Training and Future Ideas

Question 8: Part of the revisions to this screening tool will involve training Teen Clinic staff members of what to do with the results. What do you need in terms of training? What do you think other staff members need in terms of training?

Probes: Frequency of training, length of training, topics covered in training such as protocol, legal issues, role-playing disclosure?

How would you prefer to get the training? In person, on-line, in a packet, etc.

Question 9: You may have noticed small cards around the clinic room that say "end abuse" [show cards]. Do you have any ideas of how to integrate these cards into the clinic system?

Probes: How to better integrate into the system? Do you think they should be handed out to everyone? Given to people in their check in packets? Review them with a client?

Conclusion

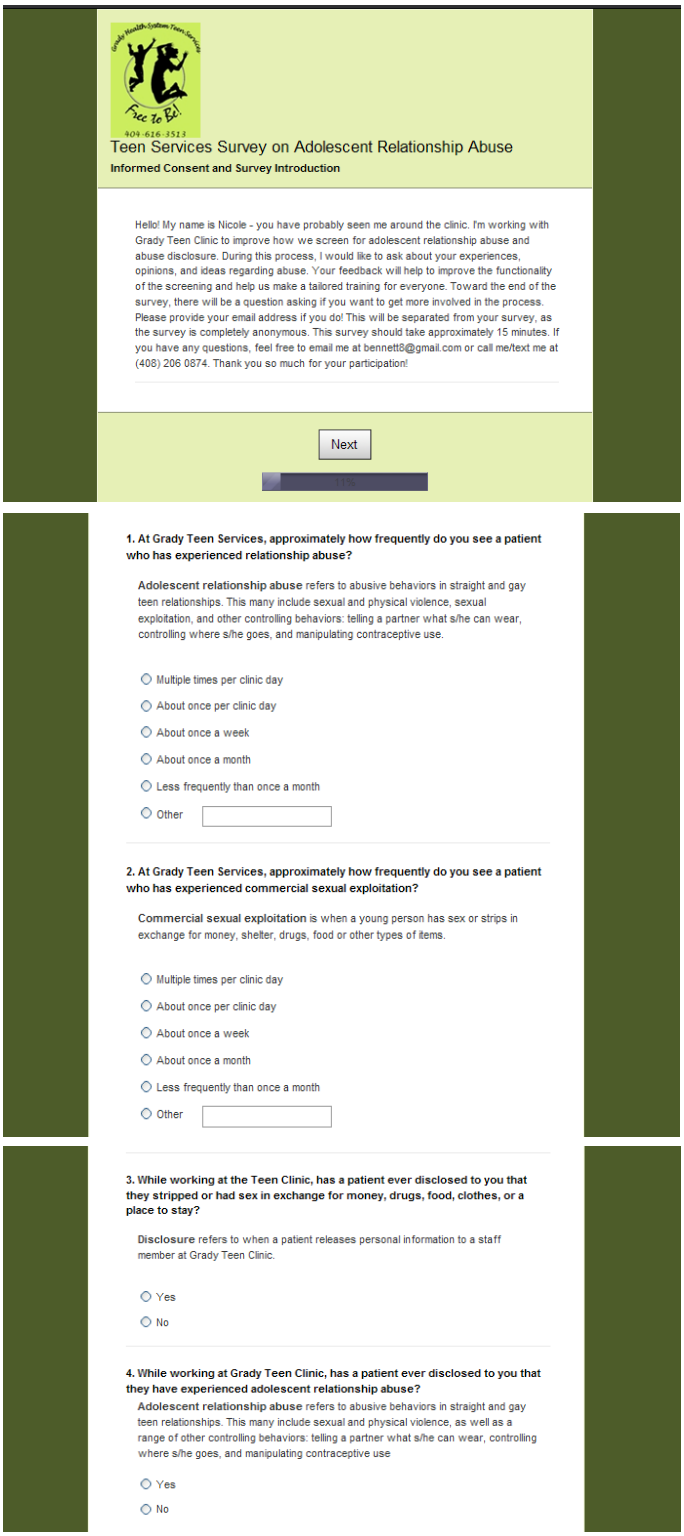
Question 10: Thank you so much for taking the time to speak with me and share your experiences. Do you have any last comments or questions before we conclude?

Appendix D

Coding Scheme for Key Informant Interviews

Code	Code Short Hand	Description
Role of HCW	"Role"	Discussion of specific role in the clinic; discussion of roles in general; issues related to clarification of roles
ARA Disclosure	"Disclosure"	Identification of ARA by HCW from patient cues; identification of ARA using the screening instruments; stories about ARA disclosure and ARA identification
ARA Follow up	"Follow up"	Action or non-action taken after ARA disclosure or identification including documenting, referring to services, reporting to DFCS, sending patient to the on-site psychologist
Feedback to ARA Screening Instruments	"Feedback"	HCWs opinions on current, bundled, and linear screening instruments
Needs Improvement	"Improvement"	General comments about issues in the clinic, structural barriers, personal factors comfort with screening, training needs of HCWs both in general and personal needs
Narratives	"Narratives"	Successful and unsuccessful stories about referrals and connecting to services, stories about disclosure and identification, long narratives in general about clinic processes

Appendix E



Free to Be!
404-616-3513

Teen Services Survey on Adolescent Relationship Abuse

Informed Consent and Survey Introduction

Hello! My name is Nicole - you have probably seen me around the clinic. I'm working with Grady Teen Clinic to improve how we screen for adolescent relationship abuse and abuse disclosure. During this process, I would like to ask about your experiences, opinions, and ideas regarding abuse. Your feedback will help to improve the functionality of the screening and help us make a tailored training for everyone. Toward the end of the survey, there will be a question asking if you want to get more involved in the process. Please provide your email address if you do! This will be separated from your survey, as the survey is completely anonymous. This survey should take approximately 15 minutes. If you have any questions, feel free to email me at bennett8@gmail.com or call me/text me at (408) 206 0874. Thank you so much for your participation!

Next

11%

1. At Grady Teen Services, approximately how frequently do you see a patient who has experienced relationship abuse?

Adolescent relationship abuse refers to abusive behaviors in straight and gay teen relationships. This many include sexual and physical violence, sexual exploitation, and other controlling behaviors: telling a partner what s/he can wear, controlling where s/he goes, and manipulating contraceptive use.

- Multiple times per clinic day
- About once per clinic day
- About once a week
- About once a month
- Less frequently than once a month
- Other

2. At Grady Teen Services, approximately how frequently do you see a patient who has experienced commercial sexual exploitation?

Commercial sexual exploitation is when a young person has sex or strips in exchange for money, shelter, drugs, food or other types of items.

- Multiple times per clinic day
- About once per clinic day
- About once a week
- About once a month
- Less frequently than once a month
- Other

3. While working at the Teen Clinic, has a patient ever disclosed to you that they stripped or had sex in exchange for money, drugs, food, clothes, or a place to stay?

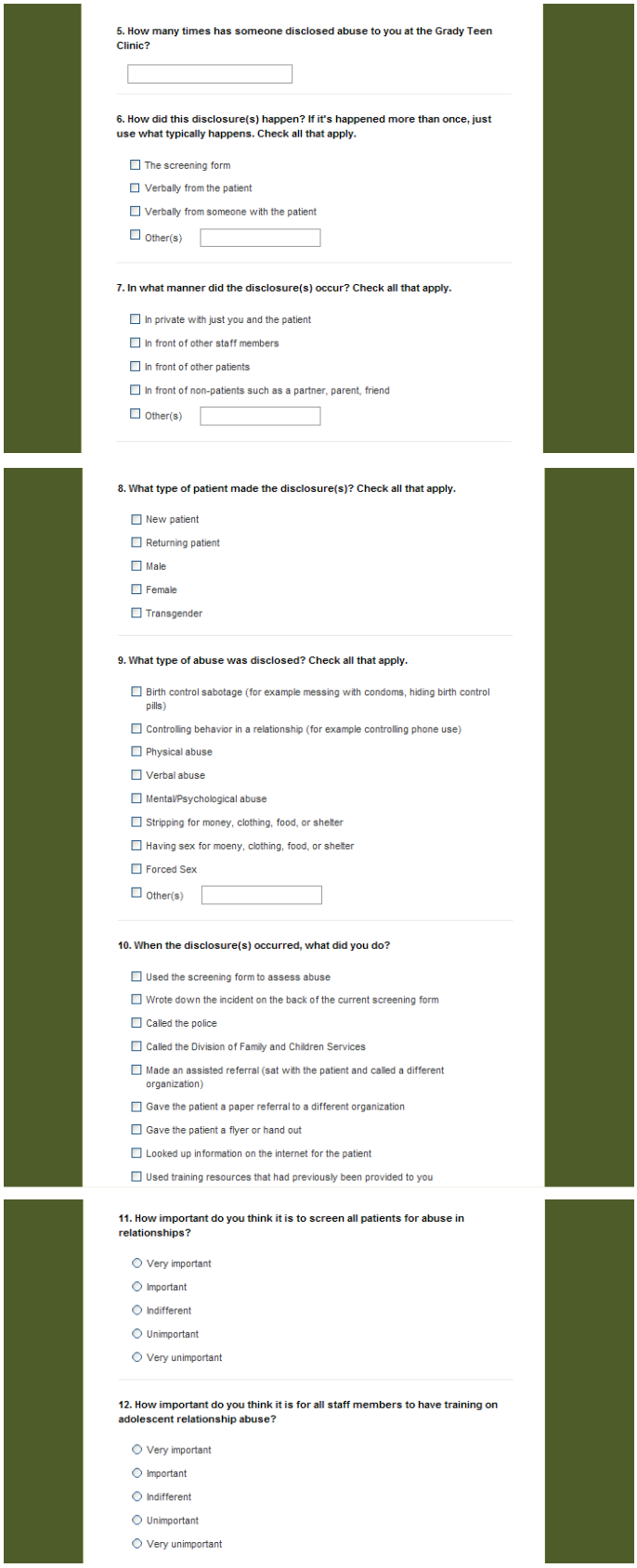
Disclosure refers to when a patient releases personal information to a staff member at Grady Teen Clinic.

- Yes
- No

4. While working at Grady Teen Clinic, has a patient ever disclosed to you that they have experienced adolescent relationship abuse?

Adolescent relationship abuse refers to abusive behaviors in straight and gay teen relationships. This many include sexual and physical violence, as well as a range of other controlling behaviors: telling a partner what s/he can wear, controlling where s/he goes, and manipulating contraceptive use

- Yes
- No



5. How many times has someone disclosed abuse to you at the Grady Teen Clinic?

6. How did this disclosure(s) happen? If it's happened more than once, just use what typically happens. Check all that apply.

- ☐ The screening form
- ☐ Verbally from the patient
- ☐ Verbally from someone with the patient
- ☐ Other(s)

7. In what manner did the disclosure(s) occur? Check all that apply.

- ☐ In private with just you and the patient
- ☐ In front of other staff members
- ☐ In front of other patients
- ☐ In front of non-patients such as a partner, parent, friend
- ☐ Other(s)

8. What type of patient made the disclosure(s)? Check all that apply.

- ☐ New patient
- ☐ Returning patient
- ☐ Male
- ☐ Female
- ☐ Transgender

9. What type of abuse was disclosed? Check all that apply.

- ☐ Birth control sabotage (for example messing with condoms, hiding birth control pills)
- ☐ Controlling behavior in a relationship (for example controlling phone use)
- ☐ Physical abuse
- ☐ Verbal abuse
- ☐ Mental/Psychological abuse
- ☐ Stripping for money, clothing, food, or shelter
- ☐ Having sex for moeny, clothing, food, or shelter
- ☐ Forced Sex
- ☐ Other(s)

10. When the disclosure(s) occurred, what did you do?

- ☐ Used the screening form to assess abuse
- ☐ Wrote down the incident on the back of the current screening form
- ☐ Called the police
- ☐ Called the Division of Family and Children Services
- ☐ Made an assisted referral (sat with the patient and called a different organization)
- ☐ Gave the patient a paper referral to a different organization
- ☐ Gave the patient a flyer or hand out
- ☐ Looked up information on the internet for the patient
- ☐ Used training resources that had previously been provided to you

11. How important do you think it is to screen all patients for abuse in relationships?

- ○ Very important
- ○ Important
- ○ Indifferent
- ○ Unimportant
- ○ Very unimportant

12. How important do you think it is for all staff members to have training on adolescent relationship abuse?

- ○ Very important
- ○ Important
- ○ Indifferent
- ○ Unimportant
- ○ Very unimportant

13. Please indicate if you agree or disagree with the follow:

	Strongly agree	Agree	Don't agree or disagree	Disagree	Strongly disagree
People in this clinic shouldn't directly ask patients about violence in relationships.	○	○	○	○	○
Screening for abuse in relationships is a good use of the clinic's resources.	○	○	○	○	○
It is part of this clinic's responsibility to ask patients about their relationships.	○	○	○	○	○
Screening for abuse in relationships is not a good use of this clinic's time.	○	○	○	○	○

14. How confident are you that you could explain the current dating violence screening and assessment process to a colleague?

- ○ Very confident
- ○ Confident
- ○ Not confident
- ○ Very not confident

15. How comfortable are you with each of the following, where 1 = very uncomfortable and 10 = very comfortable?

	1	2	3	4	5	6	7	8	9	10
Talking to a patient about dating safety.	○	○	○	○	○	○	○	○	○	○
Talking to a patient about birth control sabotage.	○	○	○	○	○	○	○	○	○	○
Talking to a patient about commercial sexual exploitation.	○	○	○	○	○	○	○	○	○	○
Creating a safety plan.	○	○	○	○	○	○	○	○	○	○
Making an assisted referral with a patient.	○	○	○	○	○	○	○	○	○	○
Documenting an incident of disclosure.	○	○	○	○	○	○	○	○	○	○
Explaining the mandating reporting laws to a colleague.	○	○	○	○	○	○	○	○	○	○
Using the current screening form in the clinical process.	○	○	○	○	○	○	○	○	○	○
Making a mandated report to the appropriate authority.	○	○	○	○	○	○	○	○	○	○

16. There are unique challenges for health professionals to discuss relationship abuse. Please indicate if you agree or disagree with the following statements.

	Strongly agree	Agree	Disagree	Strongly disagree
Cultural differences between me and my patients make it too hard to discuss abuse	○	○	○	○
I don't want to discuss abuse because I fear patients might have an emotional response	○	○	○	○
My personal experiences make it too difficult to discuss this topic with my patients	○	○	○	○
I don't have enough time to discuss relationship abuse with my patients	○	○	○	○

17. Please indicate how useful each of the following would be for training purposes.

	Useful	Somewhat useful	Not useful
How to make assisted referrals	☐	☐	☐
How to initiate a conversation about relationship abuse	☐	☐	☐
How to document cases of abuse	☐	☐	☐
How to identify commercial sexual exploitation of children	☐	☐	☐
How to identify adolescent relationship abuse	☐	☐	☐
How to identify sexual coercion	☐	☐	☐
How to identify birth control sabotage	☐	☐	☐

18. Considering information about the connection between adolescent relationship abuse and health outcomes, please indicate how useful each of the following would be for training purposes.

	Useful	Somewhat useful	Not useful
Warning signs of those in relationship abuse	☐	☐	☐
How adolescent relationship abuse affects STD risk	☐	☐	☐
How adolescent relationship abuse affects unintended pregnancy	☐	☐	☐
How adolescent relationship abuse affects contraception use	☐	☐	☐
How adolescent relationship abuse affects condom use	☐	☐	☐

19. How many times a year would you want training on adolescent relationship abuse?

20. Please use this space to identifying other training needs at the clinic.