



Beyond Bias

Literature Review and Expert Interviews on Provider Bias in the Provision of Youth
Contraceptive Services:

Research Summary and Synthesis

Prepared by Summer Starling, Sarah Burgess, Nick Bennette, and Hope Neighbor

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A NOTE ON TERMINOLOGY

The WHO officially defines ‘adolescents’ as 10-19, ‘youth’ as 15-24, and ‘young people’ as 10-24 years of age. In this report, we use the terms ‘adolescent’ and ‘youth’ interchangeably, referring to the 15-24 year old cohort unless specifically noted otherwise.

INTRODUCTION

Clinical points of care are nested within complex social settings and cultural norms, which vary widely throughout the world. Providers and other medical and health professionals, as citizens and community members in these contexts, maintain their own value systems and beliefs informed by their prior experiences, local environments, and social place. Furthermore, the behaviors of these individuals are undeniably shaped by their innate character traits, personal history, knowledge, and a myriad of other factors. As such, expressions of values, informed by social norms, experiences, beliefs, and expectations, are inevitable during clinical care and treatment of all forms. Furthermore, health care providers operate within health systems, which themselves can influence provider actions in the form of policies, workplace norms and working conditions. In many cases, these influences can provoke provider bias, defined as judgmental, non-empathetic, and/or low-quality provider behaviors targeted to a specific client subset, a known problem in the provision of care worldwide that compromises client health outcomes.

Adolescents occupy a unique space in these complex social settings alongside providers. Depending on the social context in which an adolescent lives, they may have limited autonomy, independence, or agency. And, as emerging adults, adolescents have unique healthcare needs. A central need for this population is the ability to control their reproductive futures and reliably fulfill their reproductive desires, as it is for adults, though social norms discouraging sexual activity in adolescents, particularly unmarried young women, are as prevalent as they are diverse worldwide.

To this end, providers of contraceptive services and youth are practically linked, and provider bias around this critical, high-impact interaction warrants special consideration. The purpose of this review is to provide a comprehensive assessment of what is known about provider bias in the provision of reproductive health services to adolescents, with the ultimate aim to inform interventions that improve the demand and delivery of a full range of contraceptive methods.

Provider bias can exist as both attitude and behavior. Biased attitudes and beliefs towards youth can be explicit or implicit. Explicit, or overt, biased attitudes towards youth are often rooted in a belief that, compared to older clients, they are less capable of making their own decisions, less in need of quality services, and/or less worthy of contraceptive access. Implicit, subconscious, beliefs are more complicated and can be influenced by a blend of the social, situational/professional, and biographical factors noted above and described in detail as part of this report. Biased behavior, in contrast, is the clinical manifestation of bias that inappropriately impairs youth access to contraceptive information and methods. Such behavior may include hostile or disrespectful conduct; counseling which limits access to information or use of certain products; violations of privacy; and direct or subtle expressions of judgement.

This work has been conducted by Camber Collective as part of the Beyond Bias Consortium, a team of partners led by Pathfinder International with the explicit focus on establishing a better understanding of and developing interventions to reduce provider bias towards adolescents in real world settings at scale.

APPROACH

This review has four key scoping parameters that reflect the goals of the Beyond Bias consortium and project. First, this review seeks to define and organize types of provider biases and drivers or underlying influencers of bias. We present ways that bias may originate in social, situational, and biographical types of bias.

Second, we characterize adolescents as the objects of provider bias, discussing their unique needs, attributes, and behaviors and their effects on the interpersonal exchanges between youth and providers in clinical settings.

Adolescents have unique developmental characteristics that can have a profound effect on the manifestations and consequences of provider bias; these developmental characteristics are often overlooked in evaluations and/or interventions. We note population-level and interpersonal outcomes or manifestations of provider bias to sketch what impact successful interventions may have.

Third, to add practice-relevant context to bias classifications and types, we present how attitudinal and behavioral bias is detected and measured, including how conclusions were made and in what countries these methods are most relevant. While we recognize that provider bias for adolescent contraceptive services is a worldwide phenomenon, we highlight relevance for findings in Tanzania, Burkina Faso, and Pakistan, the in-country settings in which interventions developed by the Beyond Bias consortium will be developed, tested, and evaluated.

Finally, to build towards solutions, we provide insights into interventions for reducing provider bias. Part of this effort is to explore how different methodological approaches have been employed to study provider bias, noting the important role of qualitative research methods. As part of the solutions-driven aspect of the overall project, this review additionally proposes a set of qualitative provider archetypes. These hypothetical ‘segments’ will ultimately provide a starting point for a statistical segmentation that will be developed and used to facilitate the design and targeting of interventions that specific to the unique needs, attitudes and behaviors of individual provider segments and inherently designed to reduce provider bias at scale.

SUMMARY OF METHODOLOGY

Clear, replicable steps were followed in searching and aggregating findings from the literature on articles relevant to adolescent provider bias for the provision of contraceptive services, as specified in Appendix A: Statement of Methods. Using the defined search parameters, a Boolean keyword search of PubMed and Google Scholar from February 6 to February 16, 2017 was conducted for identifying literature of interest. A publications database on provider bias developed by Pathfinder in early 2016 was additionally included in the review. Search results were included if they specifically addressed healthcare provider bias, the influence of social norms, or key factors in the provision of contraceptive services to adolescents or youth. Evaluation plans, validated survey items, or other quantifiable instruments for measuring provider bias in the provision of contraceptive services for youth were also included. There was an interest in collecting evidence from Tanzania, Burkina Faso, and Pakistan, yet selected literature was not limited to these countries only.

A total of 431 publications were recovered from the PubMed and Google Scholar database searches along with additional 55 publications from the aforementioned prior Pathfinder literature search. Titles and abstracts were first reviewed against our inclusion/exclusion criteria as defined in Appendix A. Full texts were reviewed in instances where more information was needed to assess relevance and duplicate entries were removed. The resulting 63 publications included 44 journal articles, 10 grey literature publications, and reports/presentations, the full text of which was subsequently reviewed in greater detail.

The following information was extracted from each article: Underlying “drivers” of bias discussed or measured (including social norms, situational biases, provider-specific biases, client-specific attributes, and method-specific biases); methodology or bias detection method; characteristics of adolescents discussed in the context of provider bias; outcomes of bias discussed or measured; behavior change interventions or provider bias solutions explored and outcomes of interventions; and country/region of focus.

A searchable matrix in Excel (Summary Tool) was created that contained basic publication information, geographic focus, perceived publication value, and key findings. Relevant segments about each of the main data extraction points noted above were input into the matrix, as well as short summary statements. The Summary Tool was used to

collate and distill which publications investigated drivers, methods for detecting bias, adolescent characteristics, outcomes of bias, and behavior change interventions.

Based on early findings from the literature review and recommendations within the project team, 29 key expert informants were identified and contacted for semi-structured interviews. Experts included adolescent medical providers, global field experts in SRH, academic researchers and thought leaders on adolescent development, and behavioral change experts. An expert interview guide was drafted and iterated with input from the consortium team, shown in Appendix B: Interview Guide. In February and March, 2017, interviews were conducted with one lead interviewer and one observer on Skype calls, typically lasting between 45 and 60 minutes. All respondents agreed to have their interviews recorded and used by the Beyond Bias consortium.

After each expert interview, interviewers and observers detailed their field observations in a shared Analytic Memo. The Analytic Memo contained summaries of interviews across 4 major categories: general notes and respondent background; perceptions on adolescent / young adult contraception use; perceptions on the role of providers; perspectives on bias influencers; perspectives on behavior change.

To analyze both the literature review findings and expert interview data, MaxQDA (version 12.3.1) was used to organize and code data. The Analytic Memo, interviewer field notes, and article summaries from the literature review were uploaded and thematically coded according to the main fields of interest for this project. Coded segments were extracted and analyzed. Discussions on preliminary findings across the consortium team further clarified key findings.

GENERAL SUMMARY

In **Section 1: Drivers of Provider Bias in the Provision of Quality AYSRH Services**, we set out to build a topical classification of drivers of bias that influence provider behavior in the clinical care exchange, both those specific to providers and youth clients as well as situational factors and broader social or cultural effects. Unsurprisingly, social norms play a formidable role in the universe discussion on bias drivers, as they are so important to shaping adolescent-provider interactions. The most pervasive social norm was the significance of sexual abstinence before marriage. This had iterative expressions and manifestations for both clients and providers. We see this value play out in individual provider negative attitudes, and influence the degree to which clients experience discrimination based on age, marital status, and parity. Both cultural and professional norms, however, form the broadest base of behavioral drivers that all providers are exposed to in a given region. Situational drivers of bias, including the working conditions and incentives of the health system in which the provider operates, form a compelling, somewhat narrower subset of factors, specific to their working environment though equally present for all other providers at a given site. The most specific category of bias drivers those unique to the biography of individual provider, namely their experience, knowledge, ability to improvise, and willingness to adapt/change, which can play significant roles in the form and severity of an individual provider's biased behavior towards youth. These three distinct subsets of provider biases can be triggered, exacerbated, or lessened by specific adolescent traits, both demographic and behavioral.

In **Section 2: Manifestations and Outcomes of Bias Towards Youth**, our objective was to characterize the specific youth traits and behaviors that play into biased interactions with providers and subsequently elaborate on the specific ways in which provider bias towards youth manifests. As expected, the main adolescent attribute to take into consideration in the provision of contraceptive services to youth was the need for privacy. However, we were surprised this was rarely described as a developmental characteristic, and more a general preference of both youth and adults alike. A need for privacy, however, was only one of many adolescent characteristics highlighted in our

expert discussions that should significantly influence interactions with providers and overall AYSRH. Expert interviews described adolescents' propensity to both take and misjudge the consequences of risk, their need to establish independence balanced by their intermittent desire to involve adult authority figures in critical decision-making, their lack of familiarity with the health care system generally, and their communication gap with adults. These factors all contribute to how youth approach the need for and seeking of FP services as well as their clinical interactions with providers.

With an understanding of relevant unique adolescent client attributes, we attempted to dig deeper into what specific outcomes, both in individual client wellbeing and population health in aggregate, result from provider bias. Somewhat surprisingly, more than half of the publications reviewed left outcomes of provider bias up to reader interpretation or speculation. We posit that this lack of specificity for noting or measuring outcomes of bias may be due to a common assumption of consequences. In addition, this lack of specificity may stem from the methodological challenges for collecting and analyzing population-level health data and private provider-client exchanges where bias may be present. Notably, bias exists along a spectrum, from condescending or parental attitudes to inappropriate direction or denial of services to outright hostility and even violence, though outcomes of bias are seldom ranked in terms of type or severity. There is a clear opportunity to be more precise in how we think about bias manifestations, outcomes, and consequences. In the conclusion of this section, we propose a hypothetical segmentation of providers based on the most pronounced drivers and manifestations of provider bias as elucidated from the literature and expert interviews, establishing a base set of provider archetypes to help guide future statistical segmentation of provider bias.

In Section 3: Methods for Detecting and Measuring Bias, we intended to quantify the scope of types of methodological approaches used to detect bias. Bias measurement is an emerging science, with noted difficulties for detecting and pinpointing in individuals. Specifically, very limited efforts have been made to measure unconscious, or implicit, bias towards adolescents, with most research covering either explicit attitudes expressed by providers or behavioral manifestations in the clinic environment. Well-established methodologies for measuring implicit bias exist, most notably the Implicit Association Test (IAT)¹, and have been applied to other targets of provider bias, most commonly race. Such methods could offer significant value to the study of provider bias towards adolescents in their ability to shed light on the presence bias as well as the impact of behavioral change interventions on unconscious bias. However, their reliance on computer-based administration presents a challenge for resource-limited settings. We were not surprised to see a reliance on qualitative methods to assess perceptions of bias among both providers and clients. Qualitative methods are well-suited for capturing direct, "felt" experiences, and pair well with objectives to assess attitudinal biases. Modern qualitative methods with particular relevance to investigating manifestations of provider bias, including mystery clients, client exit interviews, and field observations of provider-client interactions, offer significant advantages in their ability to accurately assess biased behavior in practice. Literature on provider bias evaluation outside the AYSRH field promoted using hypothetical clinical vignettes as an effective methodology that can measure bias without activating a defensive response in providers or necessitating individual provider-client interactions. This perspective was reinforced by behavioral change and social norms experts, suggesting vignettes could prove a powerful approach for the Beyond Bias consortium.

In Section 4: Behavioral Change Interventions Aimed at Reducing Provider Bias, we sought to understand how behavior change to mitigate provider bias has been designed, developed, and measured thus far. We expected to see the range of provider training and interventions we observed, though were surprised to note the inclusion of client-

¹ <https://implicit.harvard.edu/implicit/>

focused interventions aimed at reducing provider bias. We observe here strong support for values clarification exercises in open-ended, safe settings along with the tandem application of provider trainings to improve knowledge and skills in AYSRH services. However, and as reiterated by our expert interviews, success in the past has often come from a multi-faceted ‘kitchen sink’ approach that employs as many intervention tools as available, an unscalable approach that has neither sufficiently addressed the underlying drivers of providers’ biases towards youth nor led to interventions that can be systematically deployed at scale. Although we observed various tools designed to improve skills and increase knowledge, we did not observe the use of approaches or tools which enable providers to overcome non-technical bias, e.g. that rooted in attitudes and beliefs, without explicitly saying that they are doing so. A common theme repeated by the experts we spoke with was the need to frame interventions as aides that will a provider’s job easier or simpler without implying they are doing their job poorly, e.g. segment-focused scripts that might reduce the opportunity for bias to manifest and provide positive feedback to the provider, without being oriented on the presumption that the provider themselves is biased towards adolescents. The lack of such functional, ‘provider-aide’ interventions in the literature is worth noting. As suggested by the hypothetical segmentation discussed in Section 2, the effectiveness of these approaches will likely depend on the specific provider archetype, namely their motivations and underlying drivers of bias. The opportunity to develop and deliver targeted quality behavior change solutions, of which there are many examples, is therefore highly dependent on the nature and severity of an individual provider’s bias. Lastly, the measurement of the impact of behavior change interventions was generally quite low, and in most cases limited to self-assessments of providers post-training that measured changes in either knowledge or explicit attitudinal biases. There is a clear opportunity for long-term measurement of intervention effectiveness, as well as incorporations of tools like the IAT to assess impact on implicitly held beliefs both immediately and longitudinally following behavioral change efforts.

SECTION 1: DRIVERS OF PROVIDER BIAS IN THE PROVISION OF QUALITY AYSRH SERVICES

MAIN THEMES, CONCLUSIONS & INSIGHTS

Our review supports the conclusion that societal or community attitudes unfavorable to premarital adolescent sexual activity and expectations of young, married women to bear children drive most the documented provider bias and associated manifestations. These two distinct societal attitudes appeared at the root of nearly every type of social bias, often in sequence, as corroborated in publications and described in detail by our experts. Providers may not feel that discouraging contraceptive use in favor of abstinence is a form of discrimination, even though adolescent clients may feel stigmatized by this treatment; stigmatization may result in negative health outcomes for youth. Providers may view this type of interaction as essentially a protective action in which they assume the role of “impromptu parent” or another authority figure to protect clients, which they may feel is an appropriate, even necessary approach. Our experts noted the related tension many providers feel between protecting and serving clients. Situational factors, including workload and training issues, are referred to in the literature, but are not discussed in nearly the same detail as bias emerging from provider-client interpersonal dynamics and underlying social norms.

Prevailing moral beliefs in societies are commonly cited as drivers of provider bias. We observe here that social norms related to religion, youth’s place in the social order, norms about childbearing and families, and legal structures all play a role in driving provider bias. Negative attitudes among providers towards youth, shaped primarily by clients’ age, parity and marital status, were more commonly identified as drivers of provider bias, though these attitudes are similarly rooted in prevailing social attitudes governing youth sexuality.

Among the myriad of bias drivers that surfaced in our expert interviews, three were most consistent. First, experts consistently noted the significance of lack of understanding and poor communication in provider-adolescent interactions. The social and interpersonal gulf between providers and adolescents was continually referenced as a major source of low quality interactions. This includes empathetic parental interactions, which are rooted in a lack of an ability or willingness to understand the client’s situation from the client perspective and instead defaulting to the more familiar and socially proximate ‘impromptu parent’ role. Differences in language, social-economic status, and cultural identity can exacerbate this gulf between providers and youth. Second, for providers, there can be many disincentives to work with adolescents, a challenging client population who require more sensitivity, patience, and communication skills, and correspondingly take more time and energy to serve. Similarly, many providers, particularly in public clinics, do not have an active interest in AYSRH and do not pursue training. Finally, our experts highlighted how providers receive or develop incorrect guidance on the implications and side-effects of contraceptive methods and fear endangering the health and/or fertility of youth, with the latter being a dominant concern. Misinformation amongst providers can be pervasive and difficult to root out, even with training.

Social norms are described mostly in superficial ways in the literature. We posit that reaching anthropological or ethnographic levels of depth about social norms and their role influencing behavior is beyond the scope of most of the publications we reviewed investigating provider bias. However, the expert interviews offered the perspective that social norms are strong, but commonly indirect influencers of provider bias. Experts specified that social norms can be “brought to life” or operationalized in provider-client interactions when there are direct social consequences for violating certain social norms, with one expert going so far to claim that ‘social norms only exist in a social context’. For example, providers may fear judgement or other negative social consequences from husbands, community leaders, or parents, and this dynamic may drive their behavior. Social consequences may also work in positive ways. A small number of our interventions-focused publications noted that providers may be motivated to provide or improve their adolescent-friendly services when trained in group settings with other providers, and a number of experts noted that AYSRH trainings in which biased or untrained providers are paired with strong performers are considerably more effective. These findings suggest that peer pressure might be both an obstacle to overcome as well as a mechanism to recruit in interventions.

In the literature, much of the evidence on negative provider attitudes is assumed to be consistent across regions. Our expert interviews strengthened this perspective, with respondents acknowledging that while social norms themselves vary across regions, both in type and severity, several relevant to youth sexuality appeared consistent and dominant. Three social norms, specifically, were considered to have widespread applicability across country contexts. First, the expectation of premarital abstinence is considered near universal, although it is noted to vary significantly in severity by geography. For example, premarital sexual activity is less taboo in Tanzania than in Pakistan. The importance of immediate fertility upon marriage and the association of contraception with promiscuity were also considered to be widespread across geographies.

Youth must pass through many “gates” (also described as “gateways” or “stages” in a client “journey”) to access SRH services. Our experts described these gates as thresholds or hurdles young people that vary not only by location, but can differentially affect youth depending on their demographics and agency. Provider bias is but one of these gates; youth, for instance, must decide to seek services; find information about where to access services; ensure privacy while traveling to a clinic; have money for transportation and the purchase of products; overcome judgmental behaviors of guards and/or administrative personnel; and/or take other actions to obtain products they need. Awareness, agency, location and structural determinants, cost, clinic staff and providers all represent gates on the path to contraceptive services. Our experts noted that even educated, motivated youth in countries where gates present an impasse may not receive the contraceptive care they seek. Nonetheless, the interaction of youth with a provider represents the most intensely interpersonal “gate” a youth seeking services must pass through, and fear of mistreatment by providers represents a powerful disincentive as well as a real barrier to obtaining quality services.

Age is the most extensively discussed characteristic of an adolescent client that triggers provider bias. Yet provider bias can be compounded with additional biases about an adolescent client’s educational attainment or ambition, marital status, parity, region or origin, and language proficiency. Marital status, specifically, emerged as a more significant influencer and trigger of provider behavior in our expert interviews. As these biases are compounded, some publications noted that bias can escalate to provider refusals for either contraceptive services, or any services at the point of clinical care.

In terms of relevance for segmentation and solution development, interventions may need to be specifically developed for and targeted to providers based not only on their underlying drivers of biased attitudes or beliefs, but also on the hierarchy of these characteristics as triggers. Specifically, the attitudinal biases providers hold towards youth clients are triggered not only by age, but by parity, marital status, and other demographic or specific behavioral client attributes, and understanding the extent to which these individual attributes play a role for a specific subset of providers can help refine solutions intended to reduce bias. It is additionally likely that the length of time a provider has been providing contraceptive services is likely to affect the specific client triggers that influence bias, both due to personal experience and the larger generational gap with youth clients.

Lastly, it appears that personal and situational factors influence how providers allow underlying social constructs or belief structures to influence their behavior. Specifically, and as highlighted in Sections 1.B. and 1.C., excessive workload and other health system factors, ability and willingness to improvise, affinity for social and power hierarchies, and egotism or arrogance, can all greatly influence if and how a given provider might look to or ‘fall back on’ social norms on AYSRH to govern their behavior. This suggests that some drivers of bias are effectively indirect, effectively amplifying the role social norms play in behavior rather than directly promoting negative attitudes toward youth.

1.A. SOCIETAL FACTORS AND SOCIAL NORMS

Chung and Rimal (2016) describe social norms as “unwritten codes of conduct that are socially negotiated and understood through social interaction.” We use this broad definition in this document, though other literature on social norms has dissected different types of norms, and their different types of behavioral outcomes (Lapinski and Rimal 2005).

Unsurprisingly, prevailing moral beliefs in societies are commonly cited as drivers of provider bias. We observe here that social norms related to religion, young people’s place in the social order, norms about childbearing and families, and legal structures certainly play a role in driving provider bias. We view social norms as value and belief systems which are consistent throughout a community, and therefore not unique to specific working environments, providers, or the clients they serve. It is worth noting that the universality of social norms across a given geography should not infer that they affect all providers in the same manner or magnitude. Situational, biographical, and client-centric drivers of bias are discussed at length in subsequent sections (See 1.B. *Situational factors* and 1.C. *Provider attitudes and behaviors*).

Certain prevailing social norms, most notably racism, have been investigated at length as to their impact on implicit (unconscious) and explicit (intentional) bias amongst providers (Blair, 2001; Chapman, 2013; Paradies, 2014; Sabin, 2008; Sabin, 2015, Seybold, 2014). These studies often establish and subsequently associate levels of implicit and/or explicit levels of bias in providers with disparate treatment outcomes for patients. In contrast, studies that look at provider bias towards or having a disproportionate impact on youth tend to take a more general approach. Rather than attempting to identify discreet outcomes of bias for adolescent patients, much of this research assumes that prevailing societal norms explain biased interactions with youth and fail to elaborate more specifically. Empirical research on social norms and their influence on behavior has traditionally been the realm of sociologists and anthropologists. We observe from the literature that much of the research available on provider bias towards adolescents maintains a general discussion of social norms that lacks specificity.

ATTITUDES ABOUT SEXUAL ACTIVITY BEFORE MARRIAGE

Overarching disapproving attitudes about adolescent sexual activity permeated several more specific provider biases, including biases about client age and marital status. The belief that sexual activity was not culturally sanctioned for young people before marriage appears to drive bias on a number of levels, and feeds into gender and age bias (See 1.E. *Influence of independent client attributes on provider bias*). In nearly every instance where provider discrimination was associated with age or marital status, disapproval of youth sexual expression and activity is the driving belief, particularly for unmarried youth. Sexual expression in unmarried youth is generally discouraged across the cultures and geographies examined here, though the magnitude to which this reaches a true “taboo” varies significantly (Hamid & Stephenson, 2006). For example, Biddlecom, Munthali, Singh and Woog (2007) note that provider bias itself can contribute to and exacerbate the effects of existing stigmas, encouraging young people to be ashamed for seeking contraceptive services in Malawi, Burkina Faso, and Uganda, and Ghana. Virginity may also be thought to be a highly-valued asset for young women.

In some cases, a provider’s religion emerged as a reinforcing norm that explicitly supported providers to restrict, dissuade, or otherwise discourage youth access to contraceptive services, though direct influence here is unclear. Religious beliefs that are disapproving of youth sexual activity seem to be consistent for youth of all ages, and sometimes vary depending on whether a young person has a child. General discomfort with sex and sexuality was noted in our expert interviews as connected to the idea that contraception “goes against God.” Social norms, however, which are themselves influenced by prevailing interpretations of religion, appear to be the dominate moral

influencer of bias for providers. Of additional interest, religion was only ever discussed, both in the literature and our expert interviews, in the context of the religion of the provider. Providers, however, can bias their provision of services based on the religion of the youth client and their associated needs or restrictions. This is discussed in greater detail in Section 1.E. *Influence of client attributes on provider bias.*

In addition to religious beliefs mediating social norms about sexual activity among youth, norms related to female sexual expression and sexual freedom were noted as a factor influencing provider bias. Adongo (1997) notes the belief among providers that contraception will enable women to conceal extramarital activity and lead to spousal mistrust, which could erode social fabrics as well as gender roles and relations. We also observe a link between social norms restricting female autonomy in health decision-making and provider behaviors to maintain community reputations. Providers fear that by providing women with contraceptive services, they will receive “blow back” from angry male partners, in-laws, or other community members, which threatens their professional reputation. Reputational fears may be exaggerated for providers that only occasionally provide contraceptive services, and mostly service communities for basic health care. Providers are influenced heavily by societal norms about women’s power and place in society (Calhoun et al., 2013) and their expected levels of autonomy for decision-making, and act according to these norms in the protection of their reputations (Hamid & Stephenson, 2006; Mugisha & Reynolds, 2008; Schuler & Hossain, 1998).

RESTRICTIVE LEGAL NORMS

National policies that restrict adolescent access to contraception were noted in four publications as societal factors influencing official service protocol and quality of service, including national policies in Malawi (Bankole & Malarcher, 2010), South Africa (Hoopes et al., 2015), and Zambia (Mmari & Magnani, 2003), in addition to this as a global observation (Tavrow, 2010). More details on policies were generally not provided, yet these policies typically take the form of age restrictions on long-acting methods or parental or spousal consent requirements. While this might be construed as a provider simply ‘following the rules’, such legal structures may be considered a more formalized form of social norms and affect providers similarly. Providers committed to offering quality AYSRH services may bend or break the rules, depending on the severity of the consequences. The significant distinction between legal and social norms comes in the simplicity of changing the former through policy, though such laws often reflect prevailing social attitudes and policy changes might have little effect in practice.

Our experts repeatedly expressed the contrast between national policies in support of adolescent reductions in unintended pregnancies, including expanded access to contraception, and ways that guidelines are enforced, interpreted, or considered relevant by providers working on the ground with youth. Though guidelines or laws guaranteeing access to contraception may exist, providers may feel more accountable to locally enforced rules or customs which govern sexuality and access to contraception.

IMPORTANCE OF CHILDBEARING AND PARITY NORMS

Cultural expectations that women bear children soon after marriage affect how providers offer contraceptive counseling and services. On this specific social norm relating to parity, reproductive intentions, family size, and number of children, we observe a disconnect between how the literature frames this issue and how it was discussed among our experts. In the literature, childbearing norms and parity was explored in the context of provider bias peripherally, without very much supporting detail or measurement strategies. However, among experts, this was top of mind for how providers treat young women with children versus nulliparous women. Our experts also discussed

that the practice of early marriage can influence provider perceptions about the lower age limit for contraceptives, but early marriage was not mentioned in the literature. For a detailed discussion of provider bias and parity discrimination, see 1.E. *Discrimination for both zero parity and childbearing women*.

1.B. SITUATIONAL FACTORS

As discussed above, situational factors are those influencers of bias that pertain specifically to a providers' care environment and are present for all providers in a given clinical setting. These include workload issues, concerns about clinic community reputations, profitability motivations for contraceptive service provision, restrictive distribution practices, and community status. In the same manner as social norms, situational factors may influence some providers more than others. It is worth noting that situational factors tend not to be the source of bias towards adolescents, but rather they enable or activate existing beliefs and attitudes. Stress, concerns about risk or reputation, and geographic displacement tend to allow underlying personal or societal attitudes towards youth to manifest.

Exceptions come in the form of workload, which biases adolescents as a group that tends to require more individual time per client, and workplace norms, which can act like proximate social norms to influence the provision of specific methods based on a client's age, parity, and/or marital status. Structural factors related to healthcare system constraints beyond workload issues are well known among field practitioners and experts. However, in the literature reviewed here, few explicit connections were drawn between provider-biased attitudes or behaviors and issues related to training shortages or lack of contraceptive supplies and commodities. These issues were noted in the literature to affect providers' ability to deliver quality care (Mugisha & Reynolds, 2008; Tavrow, 2010; Vaino, 2008) but were not connected conceptually to provider bias.

Situational factors affecting provider bias were noted in a quarter of publications in this review as having a direct link to provider attitudes or behavior.

HEAVY OR UNSUSTAINABLE WORKLOADS

Workload factors were the most common type of situational bias noted in this review. Workload and working conditions of many providers may exacerbate some of their existing biases toward adolescent clients. Providers have aversion to lengthy counseling sessions in the face of competing time demands, and may get frustrated when adolescent clients, who may need additional counseling, present with service needs beyond the allotted timeframe. Frustration in some instances can lead to the expression of negative attitudes that may already have been present. Tavrow (2010) notes that when providers have overly burdensome extra and unpaid work, they may be intentionally rude to clients, or even cause pain. Nalwadda et al. (2011) notes that certain providers may feel too occupied with tasks that they perceive as more important than youth contraceptive services.

CLINIC COMMUNITY STANDING AND REPUTATION

Providers are aware that their behaviors in private clinical settings can negatively affect their clinic reputation. While not noted as often as workload concerns among situational biases, clinic or personal reputation also plays a part in driving interpersonal biases.

Workload and working conditions relate to clinic structure, conditions, and staffing opportunities. In contrast, concerns about clinic or personal reputation stemmed from how aligned provider behavior and choices are to the societal expectations in the surrounding community. For example, many providers seek consent of husbands or parents before issuing contraception to a young woman, for fear that if they did not, the reputation of their clinic

would suffer (Hebert, 2013; Mugisha & Reynolds, 2008; Nalwadda, Mirembe, Tumwesigye, Byamugisha & Faxelid, 2011; Stanback & Twum-Baah, 2001). Obtaining spousal and parental consent were the most common actions providers took in an effort to maintain their reputation and standing in the community.

PROFITABILITY OF CONTRACEPTIVE SERVICE PROVISION

Profitability of certain methods or services may motivate some providers to persuade or push clients towards specific methods choices, but this was not widely noted in the literature. This may be more of a factor in private settings than in public settings, as many methods are free within the public sector. Our expert interviews reinforced this perspective, with several respondents going as far as to say that to insinuate financial considerations were a significant driver might offend a majority of providers. Nonetheless and even within public clinics, a small number of providers may be receiving informal ‘kick-backs’ for provisioning certain methods.

GEOGRAPHIC DISPLACEMENT AND RESTRICTIVE DISTRIBUTION PRACTICES

A provider’s geographic displacement, e.g. operating outside familiar environments, and restrictive distribution practices were two types of situational biases we expected to see addressed in the literature, but were not. Expert interviews, however, revealed that geographic displacement may play an important role in bias. Providers dispatched to areas where they are unfamiliar with the language and culture may have a difficult time connecting with and building trust in communities; this dynamic may exacerbate their capacity to connect with adolescent clients.

BACKGROUND SRH RISKS, PARTICULARLY HIV

Community and provider concern about youth unintended pregnancy and HIV or sexually transmitted infections (STIs) varies by region. Providers in certain contexts may view youth unintended pregnancies as a significantly less negative outcome than HIV/STI infection, which can influence providers to push for abstinence and condoms over any other method. Alli et al. (2013) notes that young people generally view family planning and HIV/STI preventive care as equally important, yet clinic settings that integrate contraceptive services with HIV testing or other forms of HIV/STI testing and counseling can be rare. Providers may also restrict contraceptive services for HIV-positive women based on medically unsubstantiated beliefs that certain contraceptive methods, such as the IUD, are not suitable for HIV-positive women (Fiato, 2012). Finally, there is some emerging evidence to suggest that clinic settings integrating family planning and HIV counseling may not perform any better on contraceptive service measure than non-integrated settings (Baumgartner et al., 2012).

PROFESSIONAL OR WORKPLACE NORMS

While absent from the literature, several experts commented on the significance of prevailing attitudes in the workplace as an influencer of provider behavior, most commonly in enabling providers to revert back to prior negative behaviors following interventions that do not sufficiently address the clinic environment holistically. These workplace norms might reflect prevailing social norms, or they may be specific to the particular clinical environment or professional cadre. For example, a provider might receive training on hormonal contraceptives, then return to a working environment in which bias against such methods is high amongst providers, ultimately encouraging them to bias their counseling of youth towards non-hormonal methods.

1.C. BIOGRAPHIC FACTORS

In addition to social drivers of bias that apply across a culture and situational factors that stem from a given clinical environment, we characterize a third subset of biographic bias drivers as those inherent or unique to individual providers based on their personal histories, characteristics, education, experiences, or other identifiable personal traits. Similar to situational drivers, biographic factors can either serve as direct contributors to a negative or biased attitude towards youth, e.g. a negative past experience with youth or insufficient education on AYSRH, or they can operate as enablers to permit social norms to manifest, e.g. impatience or poor communication skills.

Biographic drivers of bias fall into one of four major categories; experience, talent or ability, knowledge, and attitudes. Note that the final category here refers to general attitudes, including fears, motivation, arrogance, power dynamics, and sexuality. Negative attitudes specific towards youth and youth sexuality are considered a proximate outcome of biographic, social, and situational drivers of bias, and are addressed in section 2.A. *Negative Provider Attitudes*.

PAST PROVIDER EXPERIENCES

Discussion of a providers' past interactions with youth or personal history is effectively absent from the literature reviewed here. A number of experts, however, suggested that a provider's past can play a strong if not dominate role in how they provision services to youth. Specifically, two scenarios were described; in the first, a provider has several recurring negative interactions with young people that reinforce a stereotype of young people as irrational and/or irresponsible, with these interactions occurring as either within or outside the workplace. The provider subsequently biases their service towards youth, eliciting negative reactions from young clients that can perpetuate this history of poor interactions with and impressions by youth. The second scenario was one in which a provider personally knows a young person who has suffered due to poor contraceptive access, either forced to have a premarital child or potentially dying due to an attempted abortion, which effectively converts them into a powerful advocate for quality AYSRH access. One expert detailed a provider they met who described herself as both devoutly religious and a 'soldier' in the battle to help young girls freely access contraception with an eye on the greater good.

LIMITED OR INSUFFICIENT PROVIDER KNOWLEDGE

Another well-noted individualistic driver of biased service provision and counseling was limited knowledge or training, and relatedly, providers acting on outdated medical guidance. Limited knowledge, training, and guidance capacities are biases of proficiency in administering contraceptive services to their full extent. An operating assumption in the literature about knowledge-based provider biases was that providers were not intentionally exercising bias based on prejudice or malevolence, but constrained by outside circumstances. Examples of limitations on training or knowledge include inadequate skills training or little opportunities for skills refreshers (Abt Associates, 2014; Bradley et al., 2014), incorrect assumptions or beliefs about appropriateness of methods for adolescents (Burgess et al., 2007), inappropriate prescribing patterns (Fiato, 2012; Hulme et al., 2015), or incorrect or outdated beliefs about method side effects (Tyler et al., 2012) (See 1.D. *Methods-specific biases*). Additionally, lack of or misinformation can exacerbate other bias drivers, most notably in preventing providers from developing an accurate weighting of the benefits and harm of individual contraceptive methods.

We observe two important features of biases surrounding limited knowledge and medical guidance. First, the provision of LARCs is especially impacted by providers' lack of knowledge and training. Evidence-based guidelines on LARCs, particularly for young women, have evolved at a rapid pace over the last decade, with newer research on hormonal LARCs suitability for younger women relatively recently becoming accepted as a best practice (Higgins et

al., 2016). Second, the literature notes an adverse “spill over” effect knowledge biases can have on subconscious forms of provider biases. By operating over time with little current knowledge of certain methods or guidelines, providers may start to subconsciously avoid discussing certain modern methods, or exhibit other forms of avoidance in interactions with adolescent clients. This avoidance in combination with prejudice or discriminatory beliefs may severely limit clients access to their desired contraceptive services (Greenberg, Blumoff, Makino & Coles, 2013).

FEAR OF DOING HARM, PARTICULARLY HARMING CLIENT FERTILITY

Providers are usually well-intentioned when interacting with adolescents. The literature includes examples of provider self-assessments and provider surveys that overwhelmingly show that providers want to do no harm to their young clients and have their best interest at heart. Provider assessments also show that in addition to medical outcomes, providers often consider “health” implications that include from the consequences of sexual promiscuity or community stigmatization that they infer could result from contraceptive use (Bradley et al., 2014; Carlough & Jacobstein, 2015; Chandra-Mouli et al., 2014).

Foremost among the fear of medical harm among providers is the concern that use of hormonal contraceptives, including hormonal IUDs can delay or threaten future pregnancies. While not observed in the literature, our experts noted that providers may also have heard that non-hormonal IUDs can also cause infertility.

It is possible that fear of doing harm to client fertility may be a type of emotional bias stemming from incorrect or inadequate training on modern, and especially hormonal, contraception. In our experts’ opinion, medical misinformation can drive fears about harm to fertility, and are rooted in fundamental knowledge gaps in how hormonal methods operate biologically (See 1.D. *Medical misinformation about hormonal agents*).

Additionally, experts with deep cultural knowledge in our target geographies (Pakistan, Burkina Faso, and Tanzania) contextualized this fear of doing harm to include much more cultural urgency. In cultures where women’s fertility is highly valued and closely tied into her social worth, some providers may feel that contraception may effectively cause serious social consequences for a woman, if it delays her becoming pregnant immediately after marriage. As suggested above, provider fears are typically rooted in a combination of misinformation or insufficient education and social norms, though the magnitude to which a provider permits fear to govern their action is an innate quality and therefore a biographic attribute in and of itself.

INNATE PROVIDER ABILITIES AND CHARACTERISTICS

The innate abilities of individual providers may also impact provision of adolescent contraceptive services, though these are not discussed in any depth in the literature. A provider’s proactivity, creativity and ability to improvise, may impact the quality of services they provide. For instance, outside of the literature review on adolescent SRH, we observed a growing anthropological literature on dynamics of improvisation in African health care settings. This literature highlights that in many African settings, protocol is unclear and resources are scarce, and that health workers must be creative, proactive and inventive in order to provide care. Livingston (2012) describes dynamics of improvisation in a Botswana oncology ward, where health workers keep up with the latest technologies in cancer treatment but don’t have the resources to implement them; where they creatively explain the biology of cancer to patients with limited education. Burgess (2016) describes similar dynamics in a maternity ward in Niamey, Niger, where staff need to improvise while working with Fulani women, who have particular care needs to due to language and culture. In both settings, providers are proactive about going to extra efforts to make care work with what they have; yet this dynamic can also lead to inequity for patients.

Within the scope of this literature review on adolescent SRH, we did find literature which delves into the cognitive factors which shape care, and argues that under stress and workload, motivated providers tend to behave with more

bias than they might otherwise (Burgess, van Ryn, Dovidio & Saha, 2007). Literature also examined the impact of heavy workload on provider behavior (See 1.B. *Situational factors*). However, within the scope of this lit review, we did not find literature such as Livingston (2006) which analyzes improvisational dynamics, discussing factors such as staff creativity and flexibility, which are often necessary for success in low-resource environments. Here, biographic factors, in particular the ability to manage stress and unexpected or unusual circumstances, play a role in shaping how other underlying drivers of bias ultimately influence provider attitudes as well as behaviors, discussed in more detail in *Section 2.A. Negative provider attitudes*.

Improvisation and provider qualities such as pro-activeness and ingenuity may indeed impact adolescent contraceptive services, especially in centers where protocol is unclear to health workers and resources needed to teach clients about reproductive health and offer services are unavailable. Strong improvisational qualities can allow providers to succeed in delivering quality service, even when circumstances for care are poor. However, improvisation can lead to behavior outside the guidelines for quality care, unequal or uneven treatment among patients, and/or inappropriate expression of biases.

1.D. METHOD-SPECIFIC BIASES

Biases targeted to specific methods were one of the least observed types of provider bias in the literature. Concerns about side effects were the most common expression of method-specific biases, and were closely intertwined conceptually with provider fears about how severe side effects of certain methods may negatively impact fertility. Medical misconceptions about how contraception works in the body or affects a return to fertility were noted in the literature. For instance, Creel (2002) observed how women believed that it was healthy to menstruate and therefore refused to use injectables or other contraceptives that result in episodic or sporadic bleeding. Ultimately, provider fears concerning a client's return to fertility do affect hormonal methods, specifically, and thus bias against hormonal contraception resulting from misinformation and fear are an indirect means of method-specific bias.

MEDICAL MISINFORMATION ABOUT HORMONAL AGENTS

Providers sometimes have negative views or misconceptions about hormonal methods. While method-specific biases involve a degree of misinformation as well as valid impressions about side effects or specific method drawbacks, a disproportionate degree of bias here is rooted in misconceptions about impacts on fertility. Our experts conjecture that at the root of medical misinformation about modern contraceptives are fundamental knowledge gaps about how hormonal methods affect regular body functions. They noted fears among providers that a woman's use of hormonal methods before having children would permanently damage her reproductive system, atrophy ovaries, cause the endometrium to harden and fall off, and other exaggerations of very uncommon possible side effects of hormonal contraceptives. (See 1.C. *Fear of doing harm, particularly harming client fertility*).

1.E. INFLUENCE OF CLIENT ATTRIBUTES ON PROVIDER BIAS

The literature notes that in addition to being subjected to provider bias on the basis of age, youth may be subject to additional or auxiliary provider biases if they are female, unmarried, nulliparous, poor, religious, from specific ethnic groups or geographies, or have specific method preferences. All of these factors were not present in the literature or expert interviews; rather, age, gender, educational level, marital and parity status, and class surfaced as client attributes that triggered or exacerbated provider bias. One notable exemption was the religion of clients, which was not discussed during expert interviews but is emerging in early Beyond Bias qualitative research as a

factor shaping provider behavior, specifically in recommending services they view as most appropriate or in-line with a client's religion.

Provider biases and held beliefs about sexual promiscuity and the appropriateness of contraception for single women may disproportionately impact younger, unmarried female clients. Parity discrimination affects nulliparous women most acutely, and stems primarily from social norms and beliefs about the value of young women proving their fertility. Discrimination against clients based on class, race, or ethnicity, in contrast to those rooted in beliefs about childbearing or fertility, is likely to be rooted in deep-seeded prejudices. Critically, these biases are often compounded, along with additional biases towards educational attainment or ambition, region or origin, and language proficiency, which can exacerbate the severity of bias along a spectrum of behavior. Additionally, certain adolescent traits differentially activate the specific underlying drivers of provider bias discussed above, highlighting a need to target interventions to the combined provider/client pair and design provider interventions that both address their most severe biases and leverage their specific spectrum of bias towards youth. For instance, interventions could begin with scenarios that involve mildly biased subsets of youth linked to specific provider archetypes and move towards subsets for which a specific provider archetype has the greatest bias (*See Section 2.E. Hypothetical segmentation of provider archetypes*).

AGE

Providers may show bias to clients based on their age, an extensively discussed type of bias. Expert interviews suggested that younger adolescents (age 15-19) face significantly greater barriers, including provider bias, than youth clients age 20-24. Because age is commonly used indicator of where a young person is on their developmental trajectory into adulthood, age bias may manifest as a reaction to some of the developmental characteristics adolescents are likely to display, including heightened sensitivities, an increased need for privacy, or increased peer influence. The extent to which adolescent attributes like a need for privacy help define how provider bias takes form is discussed at length in *2.B. Adolescent attributes and their influence on the manifestation of bias*.

GENDER

Prevailing social norms in many places disapprove of female sexual autonomy or activity outside of marriage as well as sexual autonomy within marriage. Gender bias against female clients was noted in roughly a third of these publications. However, gender bias also applies to how young men are treated. Char (2011) notes how young men's interest in contraceptive services are often overlooked or not taken seriously.

EDUCATIONAL LEVEL

Less educated women were likely to receive lower quality care by providers, or be subjected to patronizing or inappropriate behavior when seeking contraceptive services (Hamid & Stephenson, 2006; Tavrow, 2010). Lower client educational attainment and disparate care was noted in the literature to be rooted in power differentials between educated providers and lesser educated clients. For example, Schuler & Hossain (1998) observed that providers expected social deference from poorer, lesser educated clients in conversations about contraceptive options.

MARITAL STATUS

Disapproving attitudes among providers about sexual activity outside of marriage intersects with gender-based biases and biases against contraceptive provision to younger adolescent clients. For younger, unmarried women it is more likely that disapproving attitudes about sexual activity will result in more severe or punishing provider

behaviors, including restricting access to long-acting or hormonal methods, than for sexually active young men or for unmarried women (Calhoun et al., 2013; Digitale et al., 2016; Stanback & Twum-Baah, 2001; Tumlinson, Okigbo & Speizer, 2015).

Marital status and parity discrimination intersect. A commonly noted form of bias observed among our experts was providers refusing or discouraging contraceptive use among married young women because they must first prove their fertility. For women with one or more children, some providers believe they must finish childbearing before contraceptive use is appropriate. We discuss parity discrimination specifically below as applicable for both women with and without children (See 1.E. *Discrimination for both nulliparous and childbearing women.*) Yet it is worth noting here that marital status affects how parity discrimination may influence provider decisions and behaviors.

DISCRIMINATION FOR BOTH NULLIPAROUS AND CHILDBEARING WOMEN

Parity discrimination is also widely noted as a factor affecting adolescents seeking contraceptive services. Nulliparous women faced the most scrutinizing provider biases. Unmarried, nulliparous women seeking contraceptives were often thought to be promiscuous, echoing the social expectation that sexual activity should not occur outside of marriage (Jansen, 2004, Nalwadda et al., 2011a). Married, nulliparous women may face discrimination during contraceptive counseling stemming from the cultural expectation that women need to prove their fertility early on in marriage (Digitale et al., 2016; Jansen, 2004, Tumlinson et al., 2015). Married women with children may also be subjected to parity discrimination if providers feel they have too few children, or are spacing children too far apart (Tavrow, 2010). It is interesting to note here that parity discrimination can affect not only nulliparous women but women with multiple children as well.

CLASS AND RACIAL BIAS

Although not mentioned widely in the literature reviewed here, level of poverty, perceived class standing, and race or ethnicity also contribute to provider bias. Providers may discount poorer client desires or preferences because they assume her to be uneducated and therefore limited in her decision-making capacities (Creel et al., 2002; Hoopes et al., 2015). Disrespectful treatment for poorer clients was noted across very different country contexts, including Sub-Saharan African countries and the U.S. (Burgess et al., 2007; Hoopes et al., 2015; Hulme et al., 2015). Bias in service provision towards poor clients can be particularly harmful in that early onset of childbearing and high parity are typically associated with lower socioeconomic status.

COMPOUNDING AND INTERSECTING EFFECTS OF BIAS

Young clients may face a “layering effect” of bias that adult clients are not subjected to (See 1.A. *Societal attitudes and social norms*). Adolescent clients may be exposed to worse treatment if they present with more than one attribute (female, nulliparous, unmarried, etc.). Clients holding class or ethnic identity, particular educational attainment, perceived ambition, language proficiency may face additional barriers and biases. As these biases are compounded, some publications noted that bias can escalate to provider refusals for either contraceptive services, or any services at the point of clinical care (Hulme et al., 2015). These biases around identity also layer on and interplay with other underlying drivers of bias. See 1.C. *Spectrum of negative provider attitudes and behaviors.*

There is wide consensus in the literature on the presence of age, gender, marital status, parity, and other biases discussed above across diverse country contexts. However, lacking in the literature are observations about how compounded biases may intersect, in what circumstances biases interact, and how outcomes in provider-client exchanges may be impacted by layered biases.

Interviewed experts did have the consensus view that in a client journey to receive contraceptive care, married young women who already have children accompanied by their husband or parent fared the best for navigating provider bias. While highly variable and compounded by youth behavioral traits discussed in Section 2.B. *Adolescent attributes and the manifestation of bias*, there appears general hierarchy in terms of the breadth of products offered to youth, with the options tending to decrease along the following spectrum (which in and of itself may shift based on the local context):

- Those who have had several children and are considering limiting
- Those who have had at least one child and are considering spacing
- Married adolescents
- Unmarried older adolescents in school
- Unmarried older adolescents
- Unmarried young adolescents.

SECTION 2: MANIFESTATIONS AND OUTCOMES OF BIAS TOWARDS ADOLESCENTS

SUMMARY

As described in the General Summary, provider bias towards youth exists in three forms; implicit or subconscious beliefs, explicit attitudes, and behavioral actions that compromises quality of service. In this Section, we focus on the latter, which itself can manifest in several ways, specifically; hostile or non-welcoming behavior, limiting the family planning options presented, promoting or discouraging certain methods, restricting access to certain methods entirely, requiring parental or partner consent, violating privacy, and/or issuing judgement, either overt or subtle.

In Section 1, we described the factors that can influence a provider's *beliefs* and *attitudes* towards youth and the provisioning of AYSRH services, which may or may not result in *behaviors* that lead to the biased provision of services to youth. Drivers of bias can shape behavioral bias both directly, as is the case when excessive workload causes providers to rush through time-intensive adolescent clients, and indirectly, exemplified by the set of drivers which contribute to the overall attitudes providers develop towards youth, which in turn guide their behavior.

In Section 2.A. *Negative provider attitudes*, we address the primary mechanism by which attitudes or beliefs lead to poor quality AYSRH service, namely through the development of negative provider attitudes. This is not, however, the sole pathway through which provider bias affects youth clients; drivers of bias can result in parental, protective, or otherwise non-negative attitudes which can also lead to low-quality service.

In Section 1.E. above, we discuss independent variables or qualities of individual adolescents – their age, gender, marital status, etc. – that serve as targets of and triggers for provider biases. In Section 2.B. *Adolescent attributes and the manifestation of bias*, we focus on adolescents and their unique developmental characteristics and needs in understanding their influence on the *manifestation* of provider bias in the clinical setting. Adolescents have developmental needs for privacy and a special relationship to risk-taking. When privacy or confidentiality is compromised in clinical care situations, the effects may be particularly harmful or long-lasting for adolescent clients, and could discourage clinic visits or contraceptive use into their early adult lives. Privacy and risk are discussed below along with these specific anticipated manifestations of bias for adolescents.

With this understanding of how adolescent characteristics and needs influence the immediate behavioral manifestations of provider bias, we then present a perspective on its longer-term effects in Section 2.C. *General outcomes of provider bias*. Delays in contraceptive access, discouragement for future contraceptive care, and limits placed on contraceptive decision-making power or authority are the three prominent outcomes evidenced in the literature reviewed here.

Finally, we integrate the drivers of bias, provider attitudes, and clinical manifestations in Section 2.D. *Hypothetical segmentation of provider archetypes*, which proposes a set of qualitative provider archetypes based on the literature and expert perspectives. In addition to serving as a base for the subsequent statistical segmentation of providers to be conducted as part of the Beyond Bias project, such qualitative archetypes can help shape the thinking on successful interventions for reducing provider bias, as discussed in Section 4. *Behavior change interventions aimed at reducing provider bias*.

2.A. NEGATIVE PROVIDER ATTITUDES

Ultimately, it is personality of an individual provider that determines the nature and extent to which social, situational, and biographic factors result in biased attitudes toward youth, as well as how such attitudes ultimately translate into clinical behavior. As discussed above, the publications reviewed here seldom surfaced underlying drivers of bias, with 90% of reviewed publications citing providers' negative attitudes as the cause of biased service

provision. In the model we have presented, negative attitudes are not a driver themselves, but rather an outcome of the underlying social, situational, and biographic drivers of bias. Given the extent to which ‘negative attitudes’ are discussed in the literature as well as the key role they play in linking many drivers of bias with behavioral outcomes, and the role biographic factors play in determining if and how negative attitudes manifest, we have addressed them explicitly in this section.

Furthermore, a combination of situational factors and personal provider attributes or characteristics can make individual providers more or less prone to develop negative attitudes that often fall back on, look to, or perpetuate existing social norms. The underlying cases here can be stress, e.g. too high a workload, arrogance, or personal adherence to social power structures, e.g. not needing to listen to or empathize with young clients, and/or the interpersonal or intergenerational gap with adolescents that inhibit communication and understanding. When in play, these factors open up the likelihood a provider might rely upon socially engrained attitudes to guide their actions. This mechanism is described in greater detail below in 2.A. *Social norms engender negative attitudes in providers.*

DEFINING NEGATIVE ATTITUDES

The phrase “negative attitudes” was the most common moniker for illustrating the way providers may color interpersonal provider-client interactions unfavorably for contraceptive provision. Few publications delved into specific psychological constructs, beliefs, or other ways of defining “negative attitudes” that bias providers with adolescent clients; in fact, many publications reviewed here simply stated negative provider attitudes as their phenomenon of interest without added context or detail. Furthermore, much of the evidence around negative provider attitudes is assumed to be consistent across different country contexts. This suggests that there is a persistent gap in how negative attitudes are defined and understood in the literature. Nonetheless, specific examples of negative attitudes, and more specifically the negative behaviors that result, emerged from both the literature and expert interviews, which are detailed below.

SOCIAL NORMS ENGENDER NEGATIVE ATTITUDES IN PROVIDERS

Social norms, specifically, were noted to play the strongest role in shaping provider attitudes, with experts offering consensus view that that the latter is so often a direct outcome of the former. While delineating the other factors that lead to negative attitudes would be extremely difficult, several experts noted the role that the clinic or professional environment and personal provider attributes play in influencing provider attitudes, suggesting all three subsets of drivers – social, situational, biographic – can contribute significantly.

In absence of a common definition of negative attitudes in the literature, expert opinions defined negative attitudes to be primarily an expression that arises when young clients challenge social norms. For instance, providers may not carry around with them in their everyday lives negative feelings towards youth, but if an unmarried young woman comes in for contraceptive care, it could engender a negative attitude because he believes that sexual activity before marriage is inappropriate. Experts consistently teased apart this link between a social norm that exists in the general cultural milieu that triggers a provider to have a negative expression with clients in the context of contraceptive care. There was little discussion of this phenomenon in the literature.

NEGATIVE ATTITUDES VERSUS HARMFUL BEHAVIORS

Provider attitudes can manifest as essentially positive behaviors (supportive, listening, attentive, etc.) or negative behaviors (limiting options, making judgmental comments, being dismissive, etc.). How these attitudes are expressed depends on the social norm being tapped motivationally. From the literature, we observe a distinction between provider negative attitudes and negative or harmful provider behaviors. As discussed above, the literature

does not adequately delve into what constitutes “negative attitudes,” despite this phrase appearing most often to describe biased provider attitudes. Rather, the literature more often describes specific things provider say and do that are the behavioral results of biased attitudes. A range or spectrum of negative provider attitudes and behaviors is presented below to help frame our discussion.

SPECTRUM OF NEGATIVE PROVIDER ATTITUDES AND BEHAVIORS

The observed spectrum of provider attitudes and behaviors from the literature on one end includes relatively benign negative attitudes, which can result in absence of social engagement (Levy, Minnis, Lahiff, Schmittiel & Dehlendorf, 2015), unwillingness to communicate with clients directly (Brugge, Edgar, Kelly, Heung & Laws, 2009; Chakraborty, Murphy, Paudel & Sharma, 2015; Hulme et al., 2015), a “discouraging aura” that can include negative commenting (Ahanonu, 2014; Alli, Maharaj & Vawda, 2013); Mchome et al., 2015), cognitive disassociation (Burgess, van Ryn, Dovidio & Saha, 2007; Burgess, Fu & van Ryn, 2004; Shelton, 2001), or treating clients like children (Creel, Sass & Yinger, 2002) (See 1.C. *The impromptu parent, or paternalistic provider attitudes*), which itself can have positive attitudinal elements of caring and concern.

At the more consequential and sever end of the spectrum are significantly stronger negative attitudes than manifest in behaviors, including being unwelcoming, rude, moralistic, or abrupt (Bankole & Malarcher, 2010; Biddlecom et al., 2007; Char, Saavala & Kulmala, 2011; Mmari & Magnani, 2003; Nalwadda et al., 2011a; Tavrow, 2010), openly devaluing client opinions or preferences (Higgins, Kramer & Ryder, 2016), yielding social power to intimidate or dissuade clients from their care choices (Calhoun et al., 2013; Decker & Constantine, 2011), intimidation, shaming, or berating (Hamid & Stephenson, 2006; Rominski, Morhe, Emmanuel & Lori, 2015) and refusing to serve young clients. Provider restrictions and refusals on contraceptive services were observed in a small number of studies investigating effects of provider bias (Calhoun et al., 2013; Chandra-Mouli et al., 2014; Hulme et al., 2015; Nalwadda et al., 2011a).

THE *IMPROMPTU PARENT*, OR PATERNALISTIC PROVIDER ATTITUDES

One clear provider attitude and subsequent behavior that emerged both in the literature and in expert interviews was that of providers engaging with young clients from a parental perspective. In addition to the belief that they are in a better, more informed position to make decisions for clients than the clients themselves, this *impromptu parent* attitude also includes an empathetic and relational element. Despite being rooted in genuine concern, this attitude and the resulting behavior can run in direct contrast to adolescents’ need to assert independent decision-making abilities (See 2.A. *Adolescent group attributes in focus*).

As noted, this *impromptu parent* attitude is not inherently negative, though evidence suggests it can be widely variable and interpreted. Studies using mystery client or client exit interview methodologies (See Section 3. *Methods for detecting and measuring bias*) generally described providers acting as parents to be a distinctly negative experience. A parental form of guidance in clinical care settings felt shaming or overbearing to adolescent clients (Leon & Lundgren, 2008) and affected their ability to stand strong in their reasons for seeking contraception or method choices.

In contrast, many of our experts noted that the *impromptu parent* originates from a place of caring and empathy for young clients. A caring paternalistic attitude can also be rooted in wanting to protect young clients not only from negative health outcomes, but from the social stigma associated with contraceptive use. Further complicating this interaction is the fact that adolescents often want adults, including their parents, to participate in critical decisions, and the *impromptu parent* behavior can meet this want for a trusted adult counselor. This observed interplay between good intentions from a parenting perspective and potentially stigmatizing social norms rooted in objection to sexual activity or perceived promiscuity is an important dynamic for understanding provider bias. The *impromptu*

parent can have elements of empathetic behavior, as a parent is concerned about the wellbeing of their children, but also lack of understanding and genuine empathy about youth experience.

Provider attitudes may be more effectively surveyed or assessed for change if they are narrowed into discreet psychosocial measures, such as paternalism. This is a gap in the measurement tools seen in this review and warrants consideration.

2.B. ADOLESCENT ATTRIBUTES AND THE MANIFESTATION OF BIAS

Adolescent clients are a special population and as a group exhibit characteristics and attributes that reflect their unique developmental stage. These attributes in turn affect how adolescents and providers both approach and interact with one another in clinical settings. The adolescent characteristics that activate bias are discussed in Section 1.E., with age the most extensively noted in the literature, while marital status and parity emerged as more significant in our Expert Interviews. This Section, in contrast to Section 1.E., aims to describe how the unique adolescent characteristics and needs help define the manifestation and outcomes of provider bias.

Several adolescent attributes, specifically, can contribute to and/or exacerbate biased interactions with providers. First, and most simply, adolescents are in their prime, physically, and in many settings have very little interaction with health care providers other than for contraceptive services, contributing to the ‘gap’ in familiarity between youth and RSH providers. Additionally, the adolescent need for independence can run directly contrary to the common ‘provider knows best’ attitude often elicited by providers, a component of the *impromptu parent* archetype (see Section 2.E. *Hypothetical segmentation of providers*). The opposition of in these two attitudes can naturally lead to interpersonal conflict and widening the existing gap between youth and providers. Misinformation and fear, which color adolescents’ ingoing perception of providers, also exacerbates this gap, and if youth are inclined to expect mistreatment or bias, expectations that tend to originate from real peer experiences, their attitudes towards providers may encourage, or perhaps in the eye of the provider, justify their biased behavior. Finally, adolescents’ natural proclivity to take risks runs in opposition to a provider’s commitment to reduce their health risks, a conflict that can additionally contribute to the gap in understanding between a provider and their youth clients.

Lack of privacy and confidentiality were commonly noted as particularly significant problems for adolescents, however, very few publications make any direct link to these as specific and powerful adolescent developmental characteristics. In our sample, 14 publications mentioned the importance of ensuring privacy and confidentiality in service experience for contraceptive counseling and provision. Breaches in confidentiality or privacy during the clinical point of care was likewise a commonly mentioned outcome of provider bias. However, evidence from this review showcases how seldom an elevated need for privacy or confidentiality is described as a characteristic unique to youth: of the 14 publications that note the importance of privacy, 8 specifically mention this as a defining characteristic of adolescence (Alli et al., 2013; Bankole & Malarcher, 2010; Biddlecom et al., 2007; Mchome et al., 2015; Mmari & Magnani, 2003; Tavrow, 2010; Williamson, 2014; Woog, Singh, Browne & Philipin, 2016), and only 1 publication notes this as a specific adolescent development need (Hulme et al., 2015). To a much lesser extent, adolescents were also observed to require sensitive and positive provider-client interactions (Alli et al., 2013; Bankole & Malarcher, 2010) although the origins of these needs were not explained.

Outside the literature review, significant additional insight was gleaned from our expert interviews. Specifically, the perception that adolescent behavior and self-perceptions can influence and potentially exacerbate low-quality SRH interactions with providers in several ways, specifically:

- Adolescents’ common hard-wired need for independence runs directly against the *impromptu parent* behavior that many providers exhibit

- Yet despite the general predisposition to establish independence, adolescents often actively engage adults, including their parents, for guidance on critical decisions. Adolescents may want these ‘counselors’ to be part of the decision-making process, complicating the provider role.
- Adolescent sensitivity around being seen and a need for privacy is directly undermined by providers who ‘shame’ them for wanting access to FP services.
- Many sexually active adolescents have intercourse infrequently (e.g. once per month) and, in their minds, do not associate themselves as ‘sexually active’.
- Youth often perpetuate misinformation and fear through their own social channels, biasing their ingoing perceptions of clinics, providers, and methods.
- Adolescents are in their prime, physically, and do not often interact with providers for any other purpose than SRH.
- Adolescents may have aversion to near-term sacrifice, even for long-term outcomes (Reyna, 2006)
- Youth are by nature often more willing to take risks and change behavior, which can be a significant positive factor that behavior change programs can leverage. While more risk-prone, it is worth noting that youth are not skilled at estimating outcomes of their behavior. Consequently, youth face heightened risk as they both misestimate the risks of engaging in sexual activity while not seeking FP services

THE ADOLESCENT NEED FOR PRIVACY

The most notable finding from our literature review was the need for private, confidential service experiences as developmental imperative. Adolescence is a developmental period characterized by heightened awareness and sensitivities around social roles, particularly how their own behavior compares to that of their peers (Christie, 2005), and a lack of privacy enables these drivers to play a strong role in adolescent behavior. Privacy and confidentiality were typically portrayed as basic requirements for all clients; modules or other training elements for providers on privacy considerations are considered to be a field standard. Yet when privacy is compromised in clinical settings, adolescents may be actively dissuaded from receiving or complying with contraceptive care requirements, or proactively decline services. See 2.A. *Manifestations of privacy fears and violations on adolescent behavior.*

In a mystery client evaluation of adolescent SRH services in Tanzania (Mchome et al., 2015), young clients observed consultation room windows left open and facing waiting rooms; providers attending to multiple patients in one room; consultation rooms located adjacent and within earshot of waiting rooms; and overheard conversations between providers and other patients. Other examples from the literature include young clients being asked in a loud voice by the receptionist to state the reason for their visit, or being asked to pay for contraceptive services in front of other patients. These specific observations highlight how structural aspects of clinics serving adolescents play a role in activating and violating privacy concerns among young clients.

Our experts also provided vivid depictions of what breaches of privacy look like in clinical settings, and how they impact young clients. They underscored the importance of visual, spatial, and auditory privacy throughout the entirety of a young person’s visit to the clinic or provider. Waiting rooms that were styled to be comfortable places for young people to hang out, as common with youth-friendly clinic designs and make-overs, can sometimes jeopardize confidentiality if peers are seen together in these rooms. Long hallways that take several moments to travel down can increase the likelihood of being seen, and other examples of how physical clinic space plays into privacy were noted.

PERCEPTION OF AND PROPENSITY FOR RISK

In addition to privacy, risk plays a major, typically under-considered role, in adolescent cognition and behavior relative to their sexual and reproductive health. Specifically, it has been well-established that the propensity to take risk increases to a maximum during adolescence (Steinberg, 2008), which influences both adolescents' behavior, e.g. engaging in sexual activity without contraception, as well as providers' perception of youth as risky and need to discourage such behavior, e.g. by not providing contraceptive options. Yet this willingness to take risk is also colored by a developmental bias towards short over long-term benefits (Reyna, 2006); adolescents are seldom described as risk-takers when it comes to seeking family planning services, which often requires the risk of being seen, judged, rejected, or punished, in part due to the lack of any immediate reward for taking these risks.

Beyond a heightened willingness to take risks, particularly for near-term gratification, several experts on adolescent development emphasized that adolescents are simply very poor at judging the long-term consequences of their actions. This is often not a consequence of haste, as decisions are often made with careful consideration of the potential outcomes, but a misestimation of the likelihood of negative events. This observation plays a critical role in how youth might be counseled on why to seek FP services and how to engage with providers, namely not to stress the need for thoughtful decision making, but rather to help youth evaluate the consequences of their actions. Furthermore, the misunderstanding of and poor ability to factor in risk to decision making provides an additional gulf between providers and youth clients, as they may arrive at fundamentally different conclusions as to appropriate behavior given the same information. Providers may take this difference in opinion as a sign of risk-seeking behavior and mistakenly treat clients accordingly.

MANIFESTATIONS OF PRIVACY FEARS AND VIOLATIONS ON ADOLESCENT BEHAVIOR

Two possible outcomes of adolescents either fearing or experiencing privacy violations were noted in publications reviewed here. First, as discussed by Vaino (2008) and Woog et al. (2016), fears about privacy violations or direct experiences with breaches of privacy while receiving contraceptive service dissuade young clients from seeking subsequent care. Effectiveness of contraceptive methods which require regular clinical check-ups or prescription refills may be reduced for adolescent clients if they are dissuaded from coming back due to violations of privacy. Second, adolescents who experience direct privacy violations may be reluctant or unwilling to consent to necessary physical examinations for contraceptive provision (Bankole & Malarcher, 2010).

Additionally, we expected sexual inexperience to be an adolescent characteristic that may be noted in the literature to cause discomfort or embarrassment for seeking contraceptive services, but no mention of this was observed. One reason for this may be because it is not common for young people to seek contraceptive care before becoming sexually active, or studies on provider bias tend to focus more on youth who are already sexually active.

UTILIZING ADOLESCENT DEVELOPMENT CHARACTERISTICS TO REDUCE BIAS

Adolescent group attributes described above are almost always framed as inhibitors to quality AYSRH to be addressed and overcome, rather than positive attributes that might play a role in promoting reproductive health and well-being. We posit that these specific attributes – need for privacy and special relationship to risk – may be leveraged in interventions to combat provider bias.

Specifically, the need for privacy has clear, measurable attributes (spatial, visual, auditory) that can be easily measured. Adolescent propensity for risk, if coupled with approaches to help adolescents better evaluate the consequences and their likelihood of reproductive health choices, can be recruited to help adolescents overcome the ‘gates’ to contraceptive access. Furthermore, youth willingness to change behavior is a strong positive factor to be leveraged in behavior change programs, which can be more effective with adolescents than adults. And finally, much of the barriers to youth consideration of seeking FP services is driven by fear and misinformation, which can be directly countered by youth propensity to seek and absorb knowledge, as well as by the same social and peer influences noted above. The potential of these adolescent traits to help improve the effectiveness of bias reduction interventions is described in more detail in the *Keys to success: successful interventions to reduce bias* Section at the end of this report.

2.C. GENERAL OUTCOMES OF PROVIDER BIAS

As noted above, when adolescents are confronted with biased providers, associated outcomes may be a consequence of specific developmental needs not being met. Our review supports the idea that other health and personal outcomes of provider bias however are likely to be present regardless of whether they represent a violation of adolescents’ group developmental needs.

Provider bias may result in either the delay of access to contraceptive services, the provision of inappropriate or inadequate services to meet contraception objectives, discouragement and/or discontinuity of care, limited client decision-making power (especially in limiting information about available contraceptive methods), and breaches of confidentiality. Provider bias may also manifest itself in a spectrum from condescending or parental attitudes, to denial of specific methods or services, to openly hostile or violent behaviors. The proximate effects of bias are described in Section 2, and are best characterized by Mystery Client or Client Exit interviews that detail specific provider behaviors.

Longer term, publications reviewed here were nearly split between explicitly linking how provider bias may affect health outcomes, such as increases in unintended pregnancy, and relying on reader assumptions about the outcomes of provider bias. More than half (59%) of publications did not discuss either manifestations or outcomes of bias, but noted provider bias as an ongoing problem in healthcare. The link between provider bias and outcomes of bias was consistently framed the following way: bias affects quality of care, and quality of care affects either direct SRH outcomes or the socio-cultural context of SRH outcomes. The two most common outcomes of bias discussed were delays in accessing contraceptive care and unintended pregnancy.

Critically, the publications assessed as part of this review make no direct, longitudinal link between provider bias (attitudinal or behavioral) and the health outcomes of adolescent clients. The current Measurement and Evaluation focus of the Beyond Bias project is first, the changes in contraceptive use by method and age as reported in health systems data, and second, reductions in implicit or explicit attitudinal bias and hypothetical behaviors amongst providers as measure by a quantitative provider survey instrument. Additional qualitative evaluations employing mystery client and/or client exit interviews will be employed to assess provider behavioral change at target clinics. The Beyond Bias work, therefore, presents a unique opportunity to assessing the correlation of long-term adolescent health outcomes with the effectiveness of behavior change interventions developed as part of this work, a longitudinal assessment that will be a unique addition to the literature.

DELAYS IN CONTRACEPTIVE ACCESS

Access delays were defined in the literature as delays in obtaining, using, or deciding on a contraceptive method, all of which disproportionately affect youth (Mmari & Magnani, 2003; Tavrow, 2010; Yinger, 2002). Despite delays in contraceptive care to be the most frequented outcome of provider bias discussed, no publications defined or attempted to measure the duration of a delay in care, or how delays in care may have more significance depending on method and timeframe for administering different methods appropriately, representing a gap in the literature.

DISCOURAGE OR DISPARAGEMENT FOR FUTURE CARE

A closely related outcome to delay is discouragement for future care, which appeared in the literature as a separate potential outcome of provider bias to a lesser degree (Beguy et al., 2014; Oye-Adeniran et al., 2005; Vaino, 2008). Provider attitudes that discouraged clients from receiving future care were described as perpetuating of stigma through their actions or demeanor (See 1.C. *Negative attitudes are foremost expressions of provide-centric bias*). Stigma was usually framed in the literature as a cumulative, harmful effect of repeated exposure to biased providers or substandard care that manifests at a societal level. Stigma affects the acceptance of contraception globally, and it may also be felt by an individual client when a biased provider is discouraging or dissuading them from using contraception.

LIMITED DECISION-MAKING POWER

In contrast, limited contraceptive decision-making capacity was an outcome of provider bias that plays out during provider-client interactions with direct effects to the individual client. Providers omitting certain methods from conversations was one way providers may exhibit bias leading to limited decision-making capacities of clients (Hoopes et al., 2015). Client trainings and interventions that improve knowledge about all contraceptive options were often noted as a way to mitigate this particular form of provider bias and maximize decision-making capacity (See 4.A. *Key differences of intervention targets*).

Breaches in confidentiality and STIs or other non-pregnancy SRH health outcomes were two outcomes of provider bias noted the least. STIs or other non-pregnancy SRH health outcomes were always described as an associated comorbidity to unintended pregnancy. Similarly, breaches in confidentiality were always noted as an outcome of provider actions or clinic environments that threaten or violate privacy.

2.D. CHALLENGES MEASURING OUTCOMES OF PROVIDER BIAS

Three of the seven outcomes of provider bias discussed or measured here are SRH health outcomes that can be measured on a population level, including changes to rates of unintended pregnancy, STIs, or other non-pregnancy SRH health outcomes. Yet no studies attempted to empirically link client experiences with provider bias to reproductive health outcomes over time.

The remaining four outcomes discussed – discouragement, limited decision-making capacity, breach of confidentiality, and perpetuation of harmful social norms – are manifestations of provider bias that exist in the social environment and are difficult to measure reliably. These socio-contextual outcomes may be measured in adolescent perceptions or self-reporting from their clinical experiences, or lived experiences in their communities for how bias may have lasting effects for how contraception is considered and sought.

2.E. HYPOTHETICAL SEGMENTATION OF PROVIDER ARCHETYPES

Incorporating the major drivers of bias identified and discussed above, we conducted an initial qualitative segmentation of providers relative to their service of adolescent clients. Mapping of provider attitudes and behavior was conducted across a number of ‘paths’ (See Appendix D.). The resulting 7-segment model produced the following provider archetypes, which will serve as a base to help inform the outcomes of the future quantitative segmentation analysis. This list is an initial hypothesis of possible segmentation, based on insights derived from this literature review. Quantitative analysis from the Beyond Bias survey along with additional insights from in-country Design Research efforts will provide a finalized and representative segmentation model.

- **Empathic Counselor.** Providers who empathize with adolescents, see them as complete and complex people, and treat them with compassion and without judgment. ‘Ideal’ providers from an interpersonal standpoint, though bias may exist in their product knowledge and/or availability.
- **Impromptu Parent.** Providers who are sympathetic towards youth, but who adopt a parental approach. Lacks the ability or willingness to take a youth perspective. May additionally suffer from an inability to communicate effectively with youth during counseling. Their protective attitude that may run against some adolescents’ need for decision making authority, resulting in alienation or limited choice for some clients. However, certain clients might appreciate or expect a parental or paternalistic approach.
- **Good Citizen.** Advices adolescent client with a strong bias towards upholding social norms, with a primary objective of achieving the best overall outcome for the client, though they may also be concerned with their reputation or the reputation of their workplace. Similar to *Norm-ConformerMorally Driven* in terms of adherence to social/religious norms, though motivated from a desire to do best for the adolescent client and thus distinct in terms of influence-ability
- **Norm Conformer.** Religious or morally-driven providers who are fundamentally against elements of adolescent contraception use based on their own beliefs or interpretation of social/religious norms. Primarily orientation is around upholding values, rather than helping the individual client. Often dogmatic in adherence to rules and thus susceptible to rules/professional obligations
- **Resource Manager.** Overworked, tired and/or under supported providers who are doing the best they can with what they have, which may include limited time, limited supplies, insufficient facilities, and questionable conditions for performing certain procedures. May be juggling multiple priorities, optimizing for doing the greatest good across all clients with current skills and resources.
- **Clock-Puncher.** “Checked-out” providers disinterested in providing quality service due to low professional incentives and opportunities, including low pay. May disregard posted service policies/hours and, quite literally, ‘don’t want to be there’. Capable of providing FP services, but easily inhibited by ‘challenging’ clients (e.g. adolescents).
- **Detached clinician.** Providers who are neither strongly driven by social norms nor influence by professional constraints, but who lack a connection with or interest in associating with youth. May be fearful of getting too close to clients or simply misunderstand adolescents and view them in a negative way. Not necessarily adverse to providing FP services to youth in principle.

Providers from different segments might behave differently towards different client archetypes. For instance, a provider in one segment could tend to be open to providing contraceptives to married youth, but not to unmarried youth. More details about how different kinds of segments engage with different kinds of clients will come out in analysis of the quantitative provider segmentation. Insights on different segments’ knowledge levels, their approach to managing client risk, and their understanding around myths and misconceptions will also come out in later analysis.

See Appendix D for additional detail on the drivers, environments, client triggers, and projected opportunity for these proposed segments.

SECTION 3: METHODS FOR DETECTING AND MEASURING BIAS

SUMMARY

Evaluations of provider bias can include both intrinsic provider *attitudes*, which themselves can involve both implicit and explicit biased perspectives of adolescents, as well as provider *behaviors*, which assesses the nature and magnitude of bias present in the provision of services to clients. Notably, while measurements of *attitudinal* bias help elucidate drivers and triggers of bias, they have been shown to correlate weakly with negative patient outcomes in studies investigating other drivers of bias, particularly race (Sabin, 2008). These studies, however, did not measure the outcomes of attitudinal changes on behavioral and ultimately health outcomes, but rather concluded that implicitly racist attitudes did not result in significantly lower quality of care. The longitudinal evaluation of Beyond Bias interventions will assess both changes in providers' attitudes and beliefs as well as the quality of their clinical interactions, providing a novel opportunity to correlate attitudinal and behavioral biases.

We observe a wide range of social scientific methodological approaches employed to detect bias among both individual and cohorts of providers. Of the 63 publications reviewed here, 36 were designed to detect bias or revealed the presence of provider bias in their results on associated measures. Within these 36 studies, we observe 11 methodological techniques used in both empirical and non-empirical studies. By classifying what types of methods were employed across this subset of publications, methods can be organized into three groups²:

- 1) Qualitative, quantitative, and mixed method approaches in empirical studies for measuring provider bias or related psychosocial phenomenon, including provider-client interpersonal exchanges or communication, and provider behaviors or restrictions based on attitudes (n=18);
- 2) Qualitative and quantitative approaches for measuring outcomes with strong implications for uncovering or understanding providers bias, including provider knowledge, client experiences, service quality, and other measures (n=24); and
- 3) Non-empirical approaches to measure provider bias, including literature reviews and policy briefs (n=7)

Qualitative methods were the majority approach in each of these groups, which speaks to the current approach of measuring bias in rich, detailed accounts of lived experiences of both providers and adolescents in clinical settings.

It is worth noting that no studies considered as part of this review measured or attempted to measure sub-conscious, implicit bias, which may play a significant role in driving provider behavior given the professional norms that support, or at least should support, unbiased service for adolescent clients. As noted above, however, implicit bias is not necessarily well-correlated with biased behavior, and thus may be of less interest when focused on clinical outcomes of bias. Additionally, no studies in this review offered any longitudinal measurement of a change in either attitudes or behaviors towards adolescents following a provider behavioral change intervention

In terms of relevance for future studies aimed at measuring provider bias, including those to be undertaken by the Beyond Bias consortium:

- Behavior change interventions aimed at reducing provider bias towards adolescents should first establish if and how individual providers are biased (or are likely to be biased) in their provision of services, and subsequently offer interventions linked to their specific subconscious or overtly biased attitudes or beliefs.

² The unit of analysis in this section is types of methodological approaches (i.e. provider surveys, client focus groups, etc.). Multiple methods may have been employed within one publication.

- Methodologies incorporating direct provider observation in which the provider is aware of the assessment are fundamentally challenged by the propensity for providers to alter their behavior in the presence of a known observer and should be avoided
- Blinded direct observations, namely ‘mystery client’ and client exit interview approaches, can offer a wealth of qualitative data, can be normalized to quantify the dimensions and magnitude of bias (Bastos, 2010), and are the preferred approach for clinical assessment of bias
- Client feedback mechanisms taking place after service provision, e.g. via text, app, or phone/in-person interview offer promise in reaching clients in a safe, private environment, though timing of these exit surveys/interviews can be critical to limit loss in the clarity of recalling the clinical interaction
- In addition to assessing behavioral and attitudinal bias, provider surveys can estimate behavioral bias through carefully designed clinical vignettes

OVERVIEW OF EMPIRICAL STUDIES MEASURING BIAS

Qualitative methods are heavily represented for empirical studies measuring provider bias in this review (n=15) and focused on direct or indirect observations of biased behavior. Of the fifteen qualitative empirical studies captured here for measuring bias, almost half (n=7) did so by elucidating client perceptions, observations, or attitudes about provider bias, either through client interviews including “exit” interviews (Alli et al., 2013; Higgins et al., 2016; Levy et al., 2015; Schuler & Hossain, 1998), focus groups with client respondents (Brugge et al., 2009; Higgins et al., 2016), or mystery client methods (Leon & Lundgren, 2008; Mchome et al., 2015). Empirical studies to a lesser degree relied on provider self-reports for measuring their own biases, including focus groups with providers (Mugisha & Reynolds, 2008), provider surveys or questionnaires about their attitudes (Ahanonu, 2014), or mixed methodological approaches combining surveys and follow-up interviews with providers (Calhoun et al., 2013), all of which measure explicit attitudinal bias in providers. In one example, clinic observations were conducted to measure degree of provider bias evidenced in direct client interactions (Schuler & Hossain, 1998).

OVERVIEW OF EMPIRICAL STUDIES MEASURING RELATED OUTCOMES

An equal number of qualitative (n=12) and quantitative (n=12) empirical methods were used to measure outcomes with strong implications for uncovering or understanding providers bias, including provider knowledge, client experiences, service quality, and other measures. Quantitative provider surveys or questionnaires (n=9) were commonly used to measure knowledge about specific methods or services, including LARCs (Greenberg et al., 2013), IUDs (Chakraborty et al., 2015, Tyler et al., 2012), emergency contraception (Judge, Peterman & Keesbury, 2011), medical abortion (Patel et al., 2009), adolescent preferences for SHR services (Biddlecom et al., 2007), and contraception service provision generally (Dehlendorf, Levy, Ruskin & Steinauer, 2010; Hamid & Stephenson, 2006, Yinger, 2002). Two studies surveyed clinics about activities and how “youth-friendly” clinic atmospheres were (Hamid & Stephenson, 2006; Mmari & Magnani, 2003), and one study surveyed clients to understand reproductive intentions (Beguy, Mumah & Gottschalk, 2014). See 4.B. *Mixed perceptions of Youth-Friendly Centers and service training.*

While quantitative studies not expressly focused on provider bias may seem peripheral, these studies help uncover provider biases that are go beyond simple lack of knowledge about certain methods or adolescent need for contraceptive services. Low knowledge remains a barrier for some providers, but does not account for underlying cognitive processes that drive reasoning and motivation for restricting certain methods, noted in some of the qualitative studies investigating bias.

OVERVIEW OF NON-EMPIRICAL PUBLICATIONS MEASURING BIAS

Articles that reviewed other primary data sources or presented a meta-analysis of provider bias drivers are a valuable compliment to empirical studies. Of the five articles in this category, most focused on advocating for the prioritization of bias measurement (Multiple NGOs, n.d.), or using observational, open-ended interviewing, or mystery client techniques to measure the effectiveness of behavioral campaigns aimed at providers (McBride, 2011; Tumlinson et al., 2015). Because no research or impact evaluation were conducted in these examples, we consider them to be of limited utility for addressing detailed adolescent client experiences or provider experiences, yet offer much of the background information about social and environmental influences on provider biases.

3.A. SCOPE AND LIMITATIONS OF OBSERVED METHODS

Unconscious, or implicit, biases are notoriously difficult to measure reliably because it is often not easy for providers to understand how biased they may be, or where biases originate. Explicit attitudinal biases, which include the self-acknowledged attitudes and beliefs directed towards specific groups, pose their own measurement challenges as well, most commonly in that providers are often aware these attitudes are contrary to their professional standards and are prone to provide professionally-conditioned responses. Manifestations of bias, namely the biased behaviors providers exhibit, are somewhat easier to detect since they can be documented or observed, though these approaches present their own unique difficulties.

CHALLENGES

One widely-recognized standard for detecting unconscious bias is the Implicit Association Test (IAT), which while most often applied to race and gender, could be applied to measure providers' implicit attitudes about youth. However, this test, which entails a somewhat complex questionnaire administered using a computer program, might be difficult to administer cross-culturally and in low-resource field settings. Yet, given the poor correlation observed between both implicit and explicit racial bias and treatment (Paradies, 2014; Sabin, 2008), direct observations of provider actions during or after clinical care, or assessing providers' likely actions in different scenarios, may be required to accurately detect biased-behavior. That said, detection of implicit and/or explicit attitudes towards specific groups can greatly inform the underlying drivers of bias.

Given these challenges, it is important to note that while this review collected a diverse sample of methodological approaches and outcomes measures used to detect provider bias, there are notable limitations. First, reliable quantitative scales and instruments to measure provider bias are lacking, which may explain why the majority of methods used to empirically measure bias are qualitative (15 techniques of a total of 18). Perhaps because of formidable challenges in assessing levels of bias from target providers, most publications that surveyed providers measured knowledge rather than attitudinal measures, including provider training performance on improved knowledge (Hamid & Stephenson, 2006; Patel et al., 2009; Yinger, 2002) or method-specific knowledge (Chakraborty et al., 2015; Dehlendorf et al., 2010; Greenberg et al., 2013; Judge et al., 2011; Tyler et al., 2012). As noted above, reliable scales development on attitudinal measures that can be administered to providers is a clear area for future research.

We also observe here key limitations of interviews for measuring bias with providers. In-depth and structured interviews were a common approach to working with providers to understand how they modify behavior based on attitudinal changes (Alli et al., 2013; Char et al., 2011; Mugisha & Reynolds, 2008; Stanback & Twum-Baah, 2001;

Tumlinson et al., 2015), yet none of these studies offered any longitudinal measurement of reduction in biased treatment behaviors over time. Even in carefully controlled interview settings, providers may be likely to minimize their own biases (Chapman, 2013), a known limitation of techniques that use self-reporting or self-elicitation as the mechanism for data collection.

Client-experience based research methodologies for measuring bias were almost always qualitative in nature, relying on structured or semi-structured interviews to gauge provider-client interpersonal dynamics (Alli et al., 2013), client impressions of LARC service delivery and quality (Eber, 2014; Higgins et al., 2016), or general client experiences seeking contraceptive services (Baumgartner et al., 2012; Rominski et al., 2015; Schuler & Hossain, 1998; Yinger, 2002). Focus groups were used to a lesser extent to learn about contraceptive preferences (Adongo et al., 1997; Oye-Adeniran et al., 2005), provider-client communication (Brugge et al., 2009), and LARC provision and service (Higgins et al., 2016). In these instances, qualitative methods are perhaps better suited to gauge client direct experiences with interpersonal interactions and quality of care for contraceptive services, but still may be subjected to response or self-selection biases during study participation. Specific types of promising client-experience methods, and a brief discussion of their merits and drawbacks, are presented below.

3.B. PROMISING APPROACHES FOR MEASURING BIAS

There is an important distinction between *measurement* techniques to detect the presence of bias among providers and *evaluation* designs aimed at measuring the impact of bias reduction campaigns, for which provider perspectives are essential. Based on the limitations and observations from the literature to detect bias through both provider and client channels, we posit that the most reliable method for measuring provider bias in the context of contraceptive service provision to youth may be through client experiences. Once bias can be detected and identified, evaluation and intervention strategies that involve both providers, adolescents, and stakeholders are critical. Promising approaches for measuring bias from client experience perspectives include exit interviews (used in 4 studies), mystery shopper or secret client approaches (used in 3 studies), and direct observations of provider-client interactions (used in 2 studies). While not employed in the any of the studies on biased provision of care to adolescents, clinical vignettes have been used extensively in the study of the influence of racial bias (Paradies, 2014; Sabin, 2008; Chapman, 2013).

CLIENT EXIT INTERVIEWS

Exit interviews allow real clients to comment on their quality of care and provider interactions after a clinical encounter. Exit respondents are not likely to have a form of participation bias since they are not aware in some cases of the study until after they have received contraceptive counseling. Our expert interviews highlighted the value of exit interviews for assessing providers who had recently been trained in adolescent health services.

The term “exit” in the literature implies only that an interview is conducted post-clinical point of care; clients may be interviewed or their experiences assessed immediately after departing clinics (Alli et al., 2013) or up to three months after interacting with providers (Baumgartner et al., 2012; Yinger, 2002). As such, client exit interviews are subject to recall bias depending on how the interviews are timed. Client exit interviews can also be resource-intensive on clinic staff, or difficult to conduct onsite while maintaining client confidentiality. Other methods for conducting client exit interviews that rely on SMS or app-based feedback portals show promise for issuing direct, timely feedback about provider interactions post-care on a private platform.

MYSTERY CLIENTS

Mystery client, also known as ‘mystery shopper’ or ‘secret client’ approaches, accomplish a similar objective. Secret client assessment intervention styles most often uncovered direct outcomes of provider bias that influenced adolescent experiences. This method of bias detection prioritizes the experiences of clients in real-time care settings. All the mystery client studies in this review detailed the ways adolescents perceived barriers in the experience of seeking contraceptive care, an effect that may not be detectable with other methods. For example, explicitly determining how confidentiality was violated (having to tell clinic staff the purposes of their visit, repeat themselves in the presence of other patients, being examined in a room where people are coming in and out of, etc.).

Mystery client models reinforce our experts’ view that only by identifying “gates” that adolescents must pass through to receive contraception can we successfully intervene, with these rich accounts able to elucidate the specific barriers youth encounter during the provider/client interaction. Some experts also noted potential limitations of measuring bias with mystery client models, particularly if mystery clients are not prepared to or incapable of receiving the advised contraceptive service the provider recommends. Mystery clients are sometimes limited to reporting on their experiences only with provider counseling, and may be subject to provider anger if they are “discovered.” Despite these potential pitfalls, mystery client models were upheld by many experts as a good way to discern which providers are “serious” about providing youth-friendly services, and which were offering “lip service” to this effect but had no intentions of changing their clinical demeanor or behaviors.

PROVIDER OBSERVATIONS

Provider-client observations are a third promising approach for detecting bias in care settings, yet are difficult to execute. Providers may be professionally conditioned to respond in certain ways to minimize social desirability bias. Social desirability bias in observational studies are underscored by the fact that they are often conducted by family planning funders and international aid organizations. Experts offered a consensus view that observer bias in such situations was very difficult to either remove or control for, though did emphasize the value of having expert observers, e.g. researchers able to observe behavior directly

VIGNETTES

Lastly, and as noted above, while clinical vignettes were not included within the reviewed AYSRH literature, they have been commonly employed to detect provider bias towards other groups. Our expert interviews reiterated the value of situational vignettes that describe different client characteristics and allow providers to detail how they would provision care. Two important features of this approach were identified that help ensure hypothetical biases are accurately captured: first, an emphasis on “how would” vs, “what did” enables providers to liberate themselves from considering the consequences or evaluation of actual clinical interactions; and two, offering a range of client characteristics beyond the target group can be essential in disguising the focus of the vignettes and keep providers from activating conditioned responses. However, like provider observations, vignette responses may be subject to social desirability bias (SDB). Our experts noted that when international NGOs, in particular foreigners of perceived importance, lead the hypothetical questioning, SDB is more likely to occur as providers propose how they would interact with adolescent clients. Nevertheless, vignettes still offer proxies for actual provider bias and, in particular, the comparison of hypothetical actions with client-integrated models like mystery clients for individual providers could be a valuable addition to this body of work.

SECTION 4: BEHAVIORAL CHANGE INTERVENTIONS AIMED AT REDUCING PROVIDER BIAS

SUMMARY

Solutions for reducing provider bias can take multiple forms. We observed a trend both in the literature and in our expert interviews around the value of youth- or adolescent-friendly services (YFS), and to a lesser, mixed degree, standalone clinic settings dedicated to providing SRH services specifically for adolescent clients. These specialty clinics were noted as “youth centers” or “youth clinics.” However, the benefit of YFS was most often described in the literature as a multi-pronged approach for increasing access to contraceptive services for youth writ large, and not necessarily a training opportunity for reducing provider bias (Decker & Constantine, 2011; Gottschalk et al., 2014; Hoopes et al., 2015). YFS were sometimes discussed a way to affect provider bias by reducing discomfort for serving adolescents, or improving communications skills for working with individuals in this age group; but many also described YFS as a way to reduce economic barriers, improve clinic structures, or offer services as a reduced cost. Provider training to reduce bias is a component of an overall effort to create a YFS environment, which includes increasing client services, improving facilities of a YFS approach for reducing provider bias is discussed below.

In this section, we detail studies and interventions with explicit aims to reduce provider bias through behavior change models. Solutions to increase contraception demand or use among youth overall was outside our scope for this review. However, we include discussion of both single intervention behavior change approaches for reducing provider bias and those that have behavior change components as part of a larger YFS delivery effort. The literature detailed behavior change interventions that neatly fall into one of two approaches: trainings for reducing bias aimed at providers, and interventions aimed at clients. Providers were much more often the target of interventions, as opposed to clients.

While training solutions for providers and clients were thought to have promise, no studies offered any longitudinal measurement of a reduction in biased treatment. To help fill in these gaps, experts discussed the merits and challenges facing YFS, as well as mixed opinions on youth centers, and offered their perspectives on how behavior change interventions may be designed for maximum reduction of provider bias.

4.A. KEY DIFFERENCES OF INTERVENTION TARGETS

In terms of education and training, providers were much more often the target of interventions than adolescent clients. Provider trainings were generally considered to be more successful than client-focused trainings for mitigating provider bias because of the assumption that interventions aimed at subjects of bias (providers) may facilitate improvements more directly than objects of bias (clients).

Types of provider trainings most often discussed included those that focused on education and other knowledge improvement trainings, including on-the-job training to address skills gaps in medical practice knowledge, such as IUD insertions (PSI, 2015), medical abortions (Patel et al., 2009); pre-service and in-service education on contraceptive counseling (Calhoun et al., 2013; Multiple NGOs, n.d.); “refresher” trainings for providers who may have already received training on adolescents and contraception (Carlough & Jacobstein, 2015; Chakraborty et al., 2015); mobile-based trainings or SMS “quizzes” for knowledge improvement (Williamson, 2014); national and state guidelines training (Char et al., 2011; Tyler et al., 2012); and roundtable or other informal provider learning opportunities around medical evidence for contraceptive services (Abt Associates, 2014).

Supervisory classes and mentorship training was noted as a way to reduce provider bias through peer influence (Tavrow, 2010). Mentorship and supervision models for provider training could include “provider of the year” competitions, self-assessments, feedback and rewards systems, and non-monetary incentives, including performance-based motivation and quality assurance scores (PSI, 2015). At least one publication mentioned that provider trainings do not have to be resource-intensive to be successful; in fact, minimally demanding provider trainings may be more effective over the long term for reducing discrimination (Burgess et al., 2005). Peer influence models of provider interventions were noted with less frequency in the literature than may be expected by our experts and members of the Beyond Bias consortium.

To a lesser extent, the literature also noted provider trainings that involve communications training or values clarifications as a solution for both improving contraceptive service provision to adolescents and mitigating provider bias (Higgins et al., 2016). Although patient-centered practices such as values clarification and encouraging cultural humility in contraceptive service provision were seldom noted as specific elements of interventions to reduce provider bias in the literature, Beyond Bias consortium members suggest that this is a common element of most YFS/AYSRH provider training and is not always mentioned clearly in publications

In contrast, client trainings put the onus on adolescents to become more informed consumers of SRH information prior to encounters with providers. Confidence, accurate knowledge about method options, and good communication skills for adolescent clients can have a mitigating or softening effect on what biases providers bring to these clinical exchanges, or can equip adolescents with the skills necessary to get through challenging services.

4.B. SERVICE DELIVERY MODELS AND INTERVENTION APPROACHES

Our experts expounded on the perceived merits of youth-friendly services as well as standalone provider trainings, though they did highlight how youth-friendly services may be more aspirational than operational on the ground in many places. Two service delivery styles are discussed below: youth-friendly service models and health centers specifically designed to deliver AYSRH services. In addition, we gained much more nuanced perspective on the relative strengths and weaknesses of different behavior change intervention models in our expert interviews.

MIXED PERCEPTIONS OF YOUTH-FRIENDLY CENTERS AND SERVICE TRAINING

We reference the different ways of describing specialty clinics with a mission to deliver AYSRH services, especially preventive SRH services to youth, as “youth health centers,” although they were referred to by many different names by our experts. Most experts agreed that youth health centers offer limited value in improving youth SRH access and were typically understaffed, undersupplied, and/or undersubscribed. Yet, some respondents suggested YHCs can play an important role in providing adolescent anonymity and a reinforcing environment for providers. Thus, while our research aligns with the general consensus³, it is worth noting that the view that YHCs are ineffective has not been universally acknowledged or accepted.

Similarly, YFS was generally understood in the literature we reviewed and the experts we interviewed as services at health facilities or the community level that have been improved to meet certain standards of quality based on the

³ <https://www.ncbi.nlm.nih.gov/pubmed/23239245>

unique needs of youth. The experts we spoke with ascribed varying degrees of the value of YFS for improving the quality of provider-youth interactions and reducing provider bias, emphasizing the importance of both provider and service delivery environment buy-in to the need, methods, and rationale behind YFS.

Notably, a belief that unsupportive providers and/or clinics simply adapt their perception of what entails YFS (e.g. protecting youth, being nice) was repeatedly aired. While more recent clarification on the design and designation of YFS⁴ can address these concerns, acknowledging the currently mixed perceptions may be essential. Like Youth Centers, however, there is a view that YFS adoption has often been used as a measure of success by external supporters looking to demonstrate impact, yet unlike youth health centers, properly designed and monitored YFS programs clearly offer high AYSRH value. Specifically, there is consensus within the Beyond Bias consortium that when YFS meet high standards, this approach can improve uptake of services, yet may not sufficiently address deeper biases among providers that continue to impact quality of care for adolescents. This final point links to the common expert perspective noted above that YFS has limited value in truly changing deep-seated provider attitudes and behaviors.

KEYS TO SUCCESS: GUIDANCE ON INTERVENTIONS TO REDUCE BIAS

For provider-focused interventions, there is an overarching theme of the need to both enhance motivation to provide high-quality AYSRH services while also lowering the barrier to action by making tools, trainings, and other means to improve provider-youth interactions more appealing to providers. Experts noted that often providers are personally motivated by community circumstances, including a clarification of the implications for youth health outcomes, to improve access to contraceptive services among youth. And while effective trainings that appeal to providers represent one valuable type of behavioral intervention, there are a host of alternate approaches that were seldom discussed in the literature. Specifically, provider job aids, narrative techniques, reflection and action cycles, and behavioral economics approaches represent common behavior change methodologies applied in other contexts, though appear not to have been widely employed previously to reduced provider bias.

We note below several common factors that experts identified as thematic elements that are necessary for successful behavioral change interventions with providers, most commonly applied in context with provider training. These can be considered suggested guidelines to successfully establishing and/or maintaining high-quality provider-client interactions that are empathetic, non-judgmental, and unbiased.

INSTITUTIONAL COMMITMENT TO THE IMPORTANCE OF AYSRH

Top-down clarity on the importance of AYSRH and clear protocols on adolescent care are essential. Interventions such as reinforcement at the regional/clinic level can work to ensure that providers feel protected or institutionally supported in their actions. Providers are typically (though not always) well-versed on regulations, and clear protocols can go a long way. The experts we spoke with emphasize that recidivism following AYSRH training was most commonly due to unsupportive clinical environments and interventions that did not address systematic support for and approaches to ‘lock-in’ behaviors. The clarity on YFS designation is a clear step in helping address this point.

⁴ <http://www.e2aproject.org/publications-tools/pdfs/thinking-outside-the-separate-space-yfs-tool.pdf>

NORMALIZED INTERACTIONS WITH YOUTH

Improved connectivity and normalizing relationships with youth are essential, namely through dialogue-based interactions that raise awareness and comfort of one another. Building a “shared language” among youth and providers can prove a compelling means of bridging the gap. Normalized interactions with youth also build empathy for adolescent clients over time.

In addition, while values clarification exercises and trainings can highlight why youth SRH matters and promote provider empathy, ongoing engagement with youth is essential to maintaining these perspectives and abilities. Nonetheless, it is critical to integrate such trainings early, in initial curricula, to ensure that providers frame their practice through this lens.

PARTICIPATORY PROVIDER EDUCATION

Provider education is critical for building the knowledge to serve adolescents but must also include attitudinal conditioning. Pairing reluctant providers with “champion” providers, who provide quality youth services, can be an effective approach, linked to the value of collaborative learning that leverages peer dynamics. Personalized anecdotes and exercises that force providers to examine the challenges youth face have also shown to be effective.

EMPOWER YOUTH WITH RESONANT MESSAGING

Youth can be empowered in provider interactions with messaging that is more effectively tailored to youth needs, attitudes, and language. This includes targeted, culturally-appropriate messaging about both how and why they should seek services, as well as marketing of the methods themselves in ways that reach youth effectively. Multiple experts noted that characterizing services as “family planning” language led youth to believe services were more appropriate for older, married women, while “contraception” framing holds much more relevance for adolescents. There are also serious gaps that must be addressed through better communication, such as the commonly held belief among youth that ‘sexually active’ connotes an individual having sex regularly, and therefore those only ‘occasionally’ engaging in sex tune out messaging with this terminology.

POSITIVE FRAMING OF YOUTH

Changing perceptions to positive framing of youth can have significant impacts. Even if direct connectivity between youth and providers cannot be improved, indirect campaigns to build provider awareness of the positive aspects of youth and the challenges they face can have a big impact on overcoming perceptions of adolescents as merely promiscuous and rash.

Experts also spoke about the power of providers meeting youth on their terms and spaces. There is an opportunity to utilize existing environments, such as schools, to deliver SRH services to youth, which helps providers view youth in a positive environment and become aware of their kindness, creativity, and potential.

EMPOWER PROVIDERS WITH SUPPORTIVE ENVIRONMENTS

Empowering providers through supportive environments can increase their empathy and confidence in providing high quality contraceptive services to adolescents. Piecemeal training of individual providers is often ineffective without reinforcement and support at their place of work. Interventions should establish “real” YFS conditions and provide opportunities for ongoing certification, evaluation, training and support.

LESSONS ON BEHAVIOR CHANGE OUTSIDE AYSRH

As noted above, our review of the literature and interviewing of expert did not produce mention of a number of types of interventions that were expected. Experts and literature discussed trainings at length, mostly citing those which aimed to increase knowledge and skills, or make services more appealing to adolescent clients. However, there was a lack of discussion of provider job tools, for instance. Tools may help providers have a conversation with adolescent clients, or overcome bias without explicitly saying that they are doing so.

As part of the Beyond Bias effort to develop novel behavioral change interventions, we recommend additional effort to review tools employed outside AYRSH, focused on two sources of potential interventions to adapt: a) methodologies to improve interactions between providers and highly stigmatized populations, specifically sex workers, LGBT populations, and substance abusers and b) approaches to ameliorate implicit provider bias in less stigmatized contexts, specifically race and ethnicity). We reviewed a number of the bias detection methodologies applied in both these contexts during the course of this review, though an assessment of the behavioral change interventions to reduce provide bias against these populations was outside the scope of this review.

FIGURES

Figure 1:

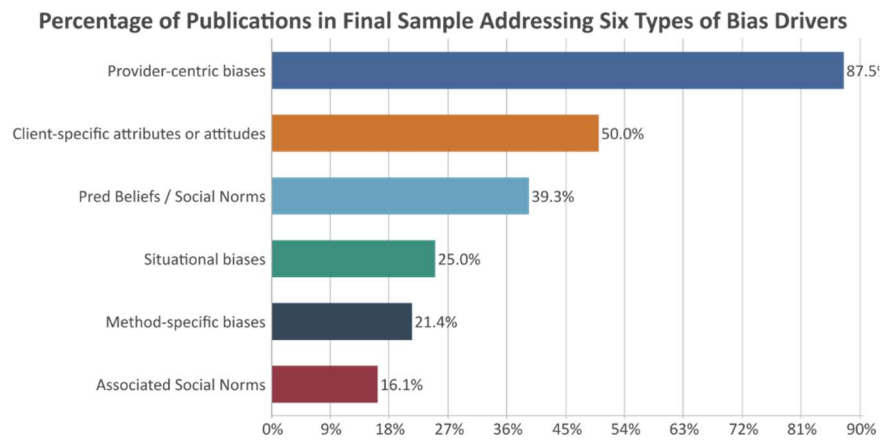


Figure 2:

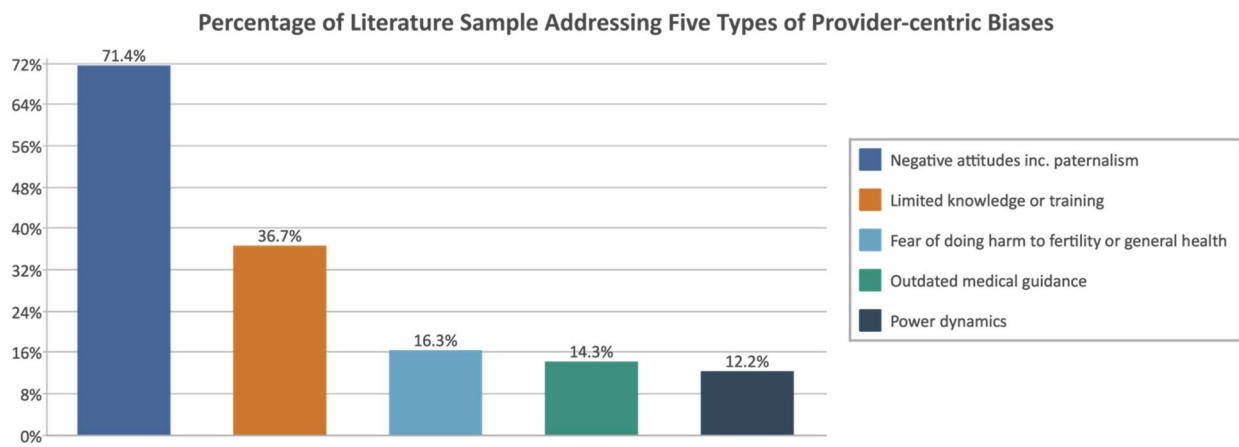
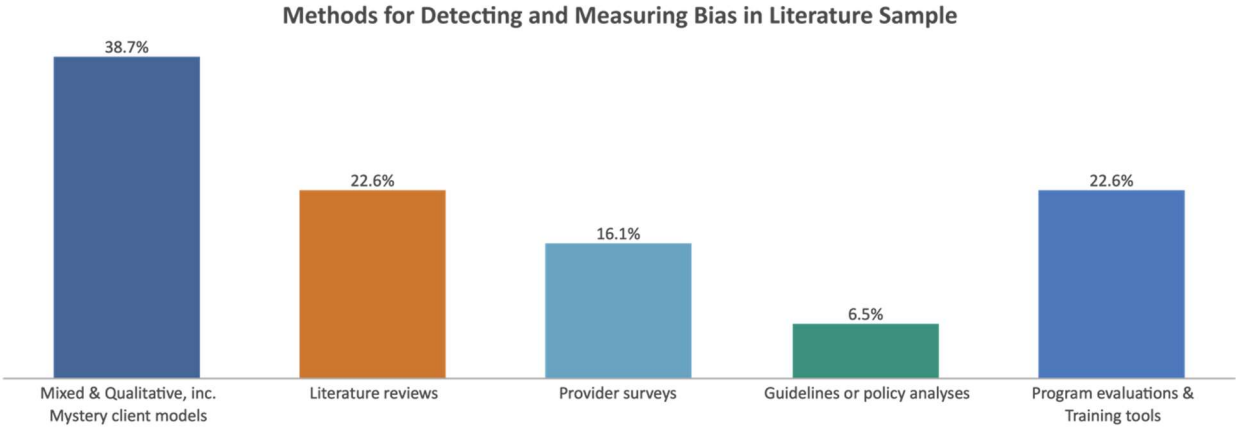


Figure 3:



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Beyond Bias

Statement of Methods

The Literature Review for the Beyond Bias project has 4 objectives:

- **Synthesize** what is currently known about healthcare provider bias in the provision of contraceptive services to adolescents and youth, including how prevailing social norms around adolescent sexuality as well as other external and provider-centric factors (i.e. law, religious practices, personal experience, social hierarchy, education, etc.) may affect bias, especially where evidence exists for Burkina Faso, Tanzania, and Pakistan
- Identify **key factors** that likely drive provider bias in adolescent and youth contraception service delivery both globally and with a specific focus in the three countries, informed by literature, expert interviews, original thinking, and design research
- Identify **gaps** in the research and evidence base
- Identify any previously used **quantitative measures**, including evaluation plans, validated survey items, or other quantifiable instruments for measuring provider bias in the provision of contraceptive services for adolescents or youth or in relevant analogous studies in which bias was measured

To meet these objectives, we conducted a systematic review of literature published in English in February 2017 using the [PRISMA Checklist](#) as a guide, a tool that outlines specific steps and features of systematic reviews. We searched databases Google Scholar, PubMed, and PsychINFO for publications related to provider bias towards adolescent patients for accessing contraceptive services in clinical settings. This review effort defines provision of contraceptive services to include a minimum of one interaction in a clinical setting between an adolescent (defined here as age 15-24) and a provider for provision of or counseling about contraceptive services.

We conducted Boolean searches for entries using combined sets of keyword search terms to narrow our results to the relevant population, problem, context, and setting.

- Keywords used to capture entries for our population of interest included: adolescence; adolescent(s); teen; youth; young adult; late adolescence; late adolescent(s); provider; healthcare provider.
- Keywords used to capture entries that address our problem included: provider bias; unconscious bias; implicit bias; reducing bias; clinical setting.

- Keywords used to capture the specific healthcare context of contraceptive service delivery we are interested in included: sexuality; reproductive health; sexual health; maternal health; family planning; contraceptive; contraception; birth control; HIV services; social services; quality of care; midwife; midwifery; public services.
- Finally, keywords used to scope the review to our settings of interest included: Tanzania; Kenya; Uganda; Burkina Faso; Niger; Mali; Pakistan; Afghanistan; India; Sahel; Anglophone; developing nations; developing countries.

Keyword sets were bundled and used in combined searches. A data log was kept to record dates, commands, and initial results of searches. Search parameters were limited to the abstract level.

We included entries if they met one or more of the following criteria:

- 1) explicitly focused on healthcare provider bias in the provision of contraceptive services to adolescents or youth;
- 2) explicitly focused on social norms in the environment or context of provider bias of contraceptive services to adolescents or youth;
- 3) identified or explored key factors other than social norms contributing to provider bias of contraceptive services to adolescents or youth;
- 4) presented evaluation plans, validated survey items, or other quantifiable instruments for measuring provider bias in the provision of contraceptive services for adolescents or youth
- 5) focused explicitly on provider bias with adolescents or youth in Tanzania, Burkina Faso, or Pakistan.

We excluded entries if they:

- 1) did not have an explicit focus on one or more of the stated inclusion criteria;
- 2) focused on provider bias in the provision on non-clinical contraceptive services (i.e., willingness of providers to distribute condoms in a community setting);
- 3) were published in a language other than English with no official translation available.

We also searched two additional sources of relevant literature. First, we conducted a similar search of gray literature, or practice-relevant literature produced by industry leaders. Second, we reviewed relevant literature provided directly by the Client (Pathfinder International) detailing existing tools and resources for reducing provider bias in clinical settings.

APPENDIX B. EXPERT INTERVIEW GUIDE

Pathfinder Beyond Bias Project

Expert Interview Guide

For the interviewer:

Name of Respondent:	Position and Organization:
Date:	Location / Time:
Expert type (provider, adolescent expert, behavior change interventionist):	

Objectives for Expert Interviews:

- Primary
 - Gain experts' perspectives, specifically in target geographies if applicable, on: the most important factors hindering quality family planning services for adolescents significant drivers of AYSRH provider bias and their underlying sources
 - Assess whether certain behavioral 'break-points' exist, e.g. whether bias towards youth shifts at a given age, social/marital status, etc.
 - Discuss specific drivers of bias identified through our review of the literature and in discussions with other experts and identify additional factors or areas of inquiry
- Secondary
 - Gain insight into possible provider archetypes and segments
 - Gather respondent experience and perspectives on behavior change interventions and applicability in the adolescent-provider context

Interviewer Notes:

This guide may be used for three types of experts: **providers**, **researchers** or subject experts on adolescence, adolescent health, and/or adolescent provider bias, and **behavior change experts** or interventionists. These three types of respondents will help us gain practice, research, and interventionist perspectives on the Beyond Bias project. In some cases, interviewees may have overlapping roles.

Please observe *[Interviewer Notes]* throughout, flagged using the colors indicated above for each type of respondent.

Note the WHO defined parameters on adolescence when speaking with respondents: Older adolescents (15-19 years); youth or young adults (20-24 years); youth broadly (15-24 years).

Question Guide

[Example introduction] Thank you so much for taking the time to talk to us! We've planned for this interview to take about 30 minutes. I'm working with Camber Collective as part of a consortium led by Pathfinder International on a project called Beyond Bias, which aims to develop, iterate, and evaluate innovative solutions to address provider bias towards serving adolescents and youth with contraceptive services. We're interested in learning more about the ways that these adolescents interact with providers in the provision of family planning & contraceptive services.

*[For **Experts** and **BC interventionists**] Specifically, our focus is on better understanding the manifestations, underlying drivers, and keys to successful elimination of provider bias towards adolescents in these settings.*

We're interested in collecting your opinion based on your experiences. General findings from this project will be shared with our project partners. No information that attributes specific comments to individual respondents will be included in our internal report.

To keep things moving along, I may jump in from time to time. I'm joined by my colleague at _____ today who will be observing. At the end, I'll be sure to give you my contact information in case you have any questions after we speak today.

May I record our conversation?

///

1. Opening

Opening Questions for Providers: I understand that you are an adolescent medical practitioner. Please tell me a little bit about your career treating adolescents, and what geographic context you now work.

Opening Questions for Adolescent Experts: I understand that you are an expert in the field of adolescence. Please tell me a little bit about your career and research in this field.

Opening Questions for BC Interventionists: I understand that you are an expert in interventions for behavior change. Please tell me a little bit about your career and any standout projects that come to mind.

Probes: In which communities do you or have you worked closely?

2. Perceptions on adolescent and young adult contraception use

How would you characterize your level of [interaction with / study of] adolescents and young adults as part of your [job / research]?

[Interviewer note: If BC interventionist respondent has very limited experience with adolescents / AYSRH > SKIP TO 5. PERSPECTIVE ON BEHAVIOR CHANGE]

In your experience, how would you describe adolescents' ability to access contraceptive services? Have you observed changes or trends in your [research / career] in how adolescents use contraception? For these questions, I'm interested in hearing about both older adolescents (15-19) and young adults (20-24).

Probes: How would you say that access to and use of family planning services, including contraception, is different for older adolescents (15-19 year olds) vs. youth or young adults (20-24 year olds), if at all? Are there any other key differentiators, aside from age, in how adolescents act or are treated?

In your opinion and experience, what would you say are the top two most important factors that influence access to and use of family planning services among adolescents? I'd like to hear when you first became aware of these factors, and how you've seen them influence your adolescent patients / your field of expertise.

Probe: By "factors," I mean cultural aspects, societal expectations for either you or your patients, systemic and structural issues, etc.

Probe: What geographic contexts would you say these are most prevalent (including where you work)?

Probe: Would you say that adolescents or young adults using or not using contraception is a problem in the communities you work? Why or why not?

Probe: At what point in the care process – specifically the journey for an adolescent from awareness to procurement of contraception – do you believe negative attitudes/beliefs are most harmful or have the greatest impact? When and with whom do these interactions take place?

[Interviewer note: Record factors respondent mentions here for probing in next section.]

3. Perceptions on role of providers

Thank you for sharing your thoughts on these factors. We'll revisit that topic a bit later.

Our project is specifically looking into the role a provider's background and experience may play in influencing their provision of family planning services to adolescents. I'd like to ask you some questions about that area now.

[FOR BC INTERVENTIONIST RESPONDENTS ONLY]: Do you have any experience addressing behavior change among healthcare providers? Or patient-provider interactions?

[IF THEY HAVE SOME PROVIDER EXPERIENCE > PROCEED]

[IF NO PROVIDER EXPERIENCE > SKIP TO 5. PERSPECTIVES ON BEHAVIOR CHANGE]

Firstly, from your experience, are there any clear & distinct groups of providers with respect to how they provide services to adolescents, characterized by background, experience, beliefs, location, etc.? If so, how do these different groups interact with adolescents, what might influence their behavior?

Probe / Clarification: Providers who are trained differently, work in different communities, etc.

From your perspective, how is the way a provider, specific to each/any of these individual groups, serves an adolescent or young adult woman different from the way they may serve:

an older woman?

a young man?

an adolescent seeking non-contraceptive services?

a married adolescent vs unmarried?

[FOR ADOLESCENT EXPERT RESPONDENTS, SKIP NOW TO 4. PERSPECTIVES ON BIAS INFLUENCERS]

[FOR BC INTERVENTIONIST RESPONDENTS, SKIP NOW TO 5. PERSPECTIVES ON BEHAVIOR CHANGE]

[CONTINUE HERE FOR PROVIDER RESPONDENTS]

Would you characterize the differences you just named as a type of bias on the part of providers? Why or why not?

[Interviewer note: Reflect back to respondent a stated definition of "provider bias" if respondent discusses here]

I'd like to hear from you an illustration of where family planning (FP) providers served adolescents with quality service. By "quality," I mean medically accurate, non-judgmental, empathetic, and non-biased.

Probe: Do you have an example from your practice / your interactions with adolescent patients / your field experience that comes to mind?

Probe: What factors enabled this provider to provide quality services?

4. Perspectives on Bias Influencers

[PREFACE FOR PROVIDER RESPONDENTS ONLY]: We have identified some factors which may effect how providers serve adolescents. Some examples include social and cultural norms surrounding female sexual activity, religious beliefs, or beliefs about certain kinds of birth control methods. These factors may be significant “influencers” of how providers interact with adolescent clients in certain regions and contexts and less so in others.

[FOR ADOLESCENT / APB EXPERTS, PROBE AND SPEND MORE TIME ON THIS SECTION]

What **predominant social factors / norms or cultural beliefs** would you say play a role in how providers interact with adolescents seeking contraceptive services?

Probes: How do you see [factors named] play out in your care setting / research setting / practice setting? How might these influencers of bias affect quality of care?

Probe: Do any of these factors differ depending on the contraceptive method in question? For instance, LARCs versus shorter-acting methods.

We often think of social and cultural beliefs to be part of the larger environment of care. Providers' social status, experience, and knowledge all affect the provider-patient interaction on an individual level. What **attributes, beliefs, or attitudes of providers** would you say also influence how adolescents are treated by providers seeking family planning services?

Probe: How might these driver influence care specifically? Please tell me more about these factors and how they may influence services for adolescents.

Probe: Do any of these attitudes or beliefs differ depending on the contraceptive method in question? For instance, LARCs versus shorter-acting methods.

At what point in the care process do you think provider biases may be most harmful, or discouraging for the use of contraceptive services?

In addition to the social/cultural setting and the background of the provider themselves, we also believe the providers' working environment may significantly influence how they work with adolescents, specifically. Some examples of working environment constraints could include amount of time providers have with each client, lack of hygienic materials for IUD or implants, unsupportive management, etc.

Are there any financial, operational, or other professional factors you believe may influence AYSRH services?

Probe: If so, how have these factors affected care, specifically?

Probe: How would service provision to adolescents and young adults be different without these constraints?

5. Perspectives on Behavior Change

[FOR **PROVIDERS** AND **EXPERTS**]: In your career / research, have you had any direct experience working on or with behavior change interventions, or observed their implementation?

[IF NO, SKIP TO 6. WRAP UP]

[IF YES, PROCEED]

In addition to better understanding the types and influencers of bias, we're particularly interested in understanding what may lead to successful behavior change interventions can in reducing implicit bias between medical providers and young people in clinical settings.

What **ways of detecting or measuring bias do you have direct experience with, if any? Have these been used in clinical settings?** An example of a project, intervention or training module designed to determine how patients interact with providers would be helpful.

Could you describe one or two examples of **behavior change techniques or methods employed to reduce bias** in a care setting, if possible.

Probes: How were outcomes determined for these interventions? How was bias measured?

Probe: What would you do or advice be done to reduce bias towards adolescents that isn't currently being done?

More broadly and not specific to biased provision of services, can you describe your experience in behavior change interventions with providers? **In your experience, what does or doesn't work in changing provider behavior?**

We know of two approaches for reducing provider bias: provider-centered and patient-centered approaches. An example of a provider-centered intervention is training providers on how to be empathetic to adolescent patients. A patient-centered approach would be an intervention teaching youth how to be assertive with providers and informed on contraceptive options. A third approach we've seen are systems or structural approaches, such as supervision, mentorship, or management incentives or performance-based incentives.

In your experience, which of these approaches tends to be more successful? Why or why not? Are there other approaches you can share?

6. Wrap Up

We've discussed a lot today. Is there anything else you'd like to share on these topics?

Are there other professionals / providers / researchers you think we should speak with?

[COLLECT CONTACT NAMES]

[CHECK THAT RESPONDENT IS OK WITH US USING THEIR NAME IN OUTREACH]

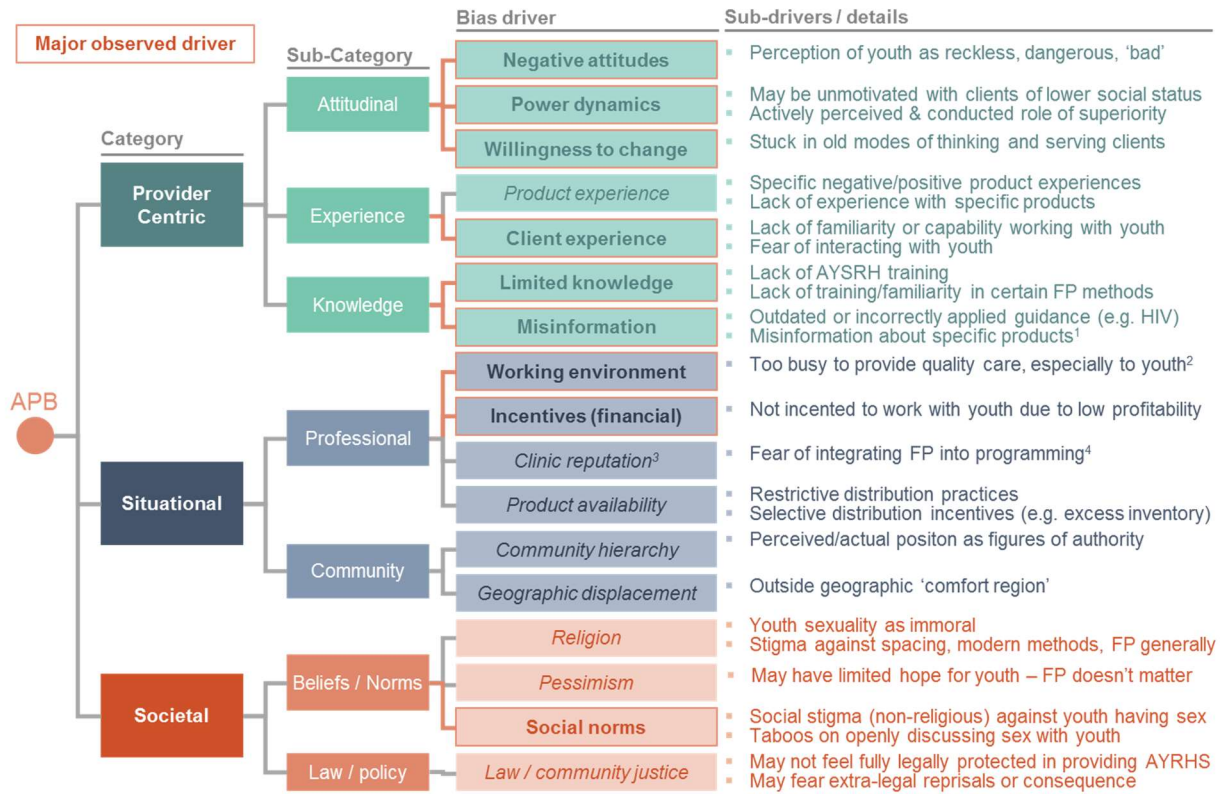
May I follow up via email with any questions from today's interview?

At any time after today, if you have any follow up questions or thoughts to share, I can be reached directly at [name@cambercollective.org] or [phone number].

Thank you very much for your time today.

APPENDIX C. DRIVERS OF PROVIDER BIAS

DRAFT, REVISED

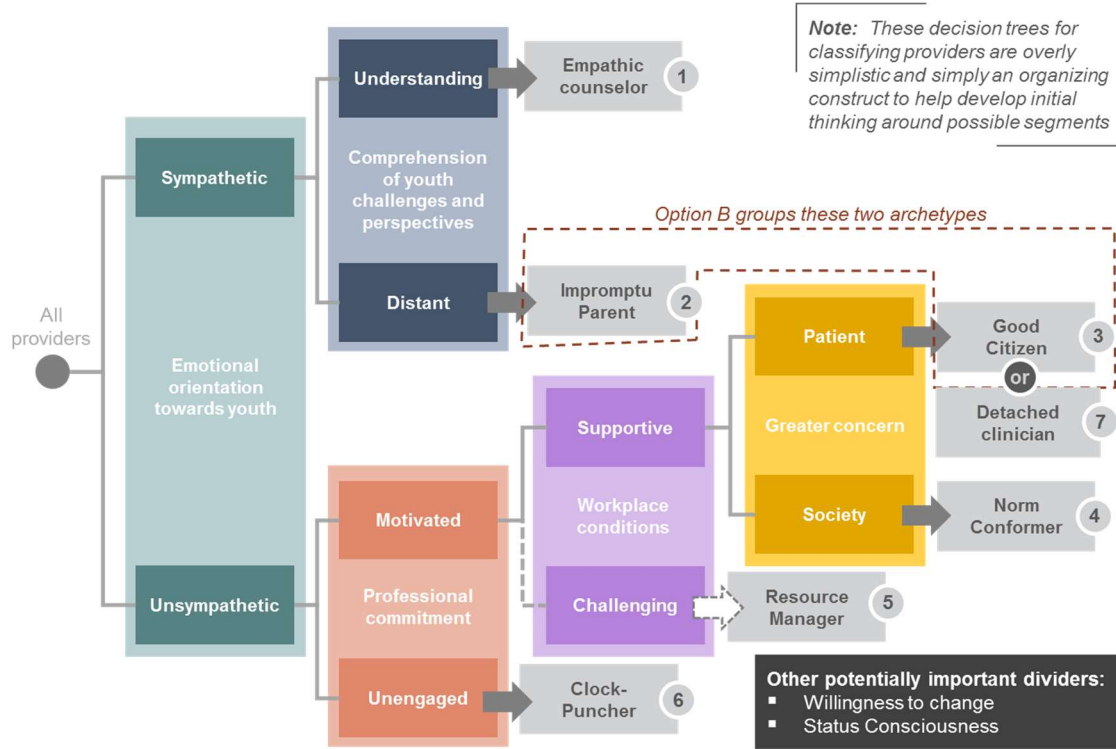


1 including fear of doing harm or impacting fertility
2 Who might require additional efforts and time

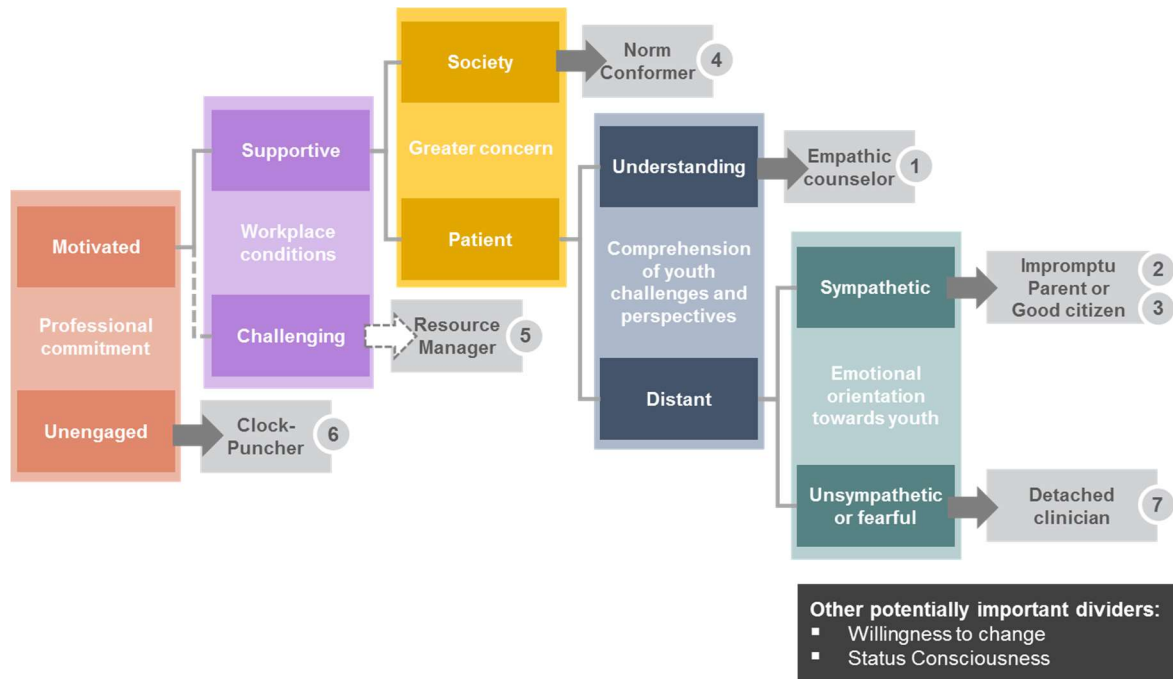
3 E.g. for providers of post-abortion care, immunizations
4. Strongly linked to social norms in most cases

APPENDIX D. HYPOTHETICAL PROVIDER SEGMENTATION

Pathway 1:



Pathway 2:



Additional Segment details:

Hypothetical segment	Overall bias level/severity	Major drivers of bias	Clinical setting	Adolescent triggers	Major BC opportunities	Overall opportunity
1 Empathic counselor	Very low	<ul style="list-style-type: none"> Lack of technical knowledge 	<ul style="list-style-type: none"> Private (NGO) 	<ul style="list-style-type: none"> none 	<ul style="list-style-type: none"> Technical training 	<ul style="list-style-type: none"> Moderate (Low effort, low impact)
2 Impromptu Parent	Moderate	<ul style="list-style-type: none"> Poor understanding of youth Communication gap 	<ul style="list-style-type: none"> Private public 	<ul style="list-style-type: none"> Sex before marriage 	<ul style="list-style-type: none"> Values clarification Youth interactions 	<ul style="list-style-type: none"> High (moderate impact, low effort)
3 Good Citizen	Moderate	<ul style="list-style-type: none"> Social norms Poor understanding of youth 	<ul style="list-style-type: none"> Public 	<ul style="list-style-type: none"> Fear of loss of fertility among adolescents 	<ul style="list-style-type: none"> AYSRH training (e.g. the why) Values clarification 	<ul style="list-style-type: none"> High (moderate impact, low effort)
4 Norm Conformer	High	<ul style="list-style-type: none"> Social and/or religious norms Pessimism 	<ul style="list-style-type: none"> Public Religious NGO 	<ul style="list-style-type: none"> Sex before marriage 	<ul style="list-style-type: none"> Professional ethics versus personal beliefs 	<ul style="list-style-type: none"> Low (moderate impact, high effort)
5 Resource Manager	Moderate-high	<ul style="list-style-type: none"> Workload Clinic environment (privacy, safety) 	<ul style="list-style-type: none"> Public 	<ul style="list-style-type: none"> Adolescent services taking more time 	<ul style="list-style-type: none"> Tools Guidelines More support 	<ul style="list-style-type: none"> Moderate (moderate impact, moderate effort)
6 Clock-Puncher	High	<ul style="list-style-type: none"> Lack of incentives Apathy 	<ul style="list-style-type: none"> Public 	<ul style="list-style-type: none"> Adolescent services taking more time 	<ul style="list-style-type: none"> Financial incentives 	<ul style="list-style-type: none"> Low (Low impact, moderate effort)
7 Detached clinician	Moderate	<ul style="list-style-type: none"> Lack of understanding Fear of youth Pessimism 	<ul style="list-style-type: none"> Public Private 	<ul style="list-style-type: none"> Adolescent behaviors that amplify perceptions 	<ul style="list-style-type: none"> More & better youth interactions 	<ul style="list-style-type: none"> High (moderate impact, low effort)

Combined in Schema B

APPENDIX E. INSTRUMENTATION AND MEASUREMENT OF ATTITUDINAL BIAS AMONG PROVIDERS

Studies or interventions aimed at reducing provider bias were not common in our literature review. Of those that are included, medical knowledge was predominantly assessed. It is noted in the Research Summary and Synthesis that many of the efforts to capture provider attitudinal bias or discrimination rely on self-reports or self-assessments among providers, which are likely to introduce social desirability bias or be otherwise unreliable.

However, four (4) types of specific measurement techniques are used across this sample for measuring attitudinal bias among providers, and are highly relevant the goals of Beyond Bias. Instrumentation and examples is presented where possible.

1. **“Eligibility” measures**
2. **Likert scoring on statements of bias**
3. **Surveying about behaviors as a proxy for attitudes**
4. **Value propositioning**

1. “Eligibility” measures

Provider bias based on client age, parity, marital status or other characteristics is discussed at length in the Research Summary and Synthesis. Three publications (Calhoun et al., 2013; Chakraborty et al., 2015; Char et al., 2011) measure attitudinal bias based on client characteristics within knowledge survey questionnaire items or in interviews. For example, in these three examples, providers are presented with statements about clients with differing characteristics (no children, with children, aged 17, low education, etc.) and they are instructed to score eligibility for contraceptive services based on these client scenarios. These items are phrased as knowledge items, yet they reveal provider attitudes about these individual client characteristics because there are no recognizable medical reasons why an otherwise healthy woman with the characteristics described would not be provided with contraception.

See *Attitudes Toward Demographic Appropriateness* here and in Chakraborty et al., 2015 full text for an example of how they surveyed providers on what appear to be knowledge measures, but also reveal attitudes.

2. Likert scoring on statements of bias

Likert scales were also used when surveying providers to detect biased attitudes (Ahanonu, 2014; Dehlendorf, Levy, Ruskin & Steinauer, 2010; Patel et al., 2009). Validated questionnaires asked providers to assess their degree of acceptance or agreement with statements reflecting client bias using either 5-point or 7-point scale items. For example, providers are presented with the statement, “Providing contraceptives for unmarried adolescents promotes sexual promiscuity,” and providers indicate their agreement score. These items ask providers to self-report bias, but are doing so without asking providers to name exactly how they are biased, just present their feelings on a predetermined statement. Statements may also reflect client scenarios where providers are indicated their degree of permissiveness for providing contraception on a Likert scale according to the client profile in the scenario.

See *Measures* here and in Ahanonu, 2014 full text for an example of how they build Likert scales to measure bias.

3. Surveying about behaviors as a proxy for attitudes

Provider surveys about specific clinical behaviors were also used as a way to detect bias. Tumilson, Okigbo & Speizer (2015) measure how often and under what circumstances providers restrict contraceptive provision to clients based on age, parity, marital status, and whether a client has third-party consent for seven types of contraception. Based on provider responses to binary (presumably yes / no or restrict / provide) items, these authors use the same operating assumption as using knowledge as a proxy for attitudinal measure. For this example the original questionnaire is not given.

4. Value propositioning

Presenting value propositions to providers during qualitative approaches to measure provider bias is a final observed technique. No direct interview protocols are given for this technique, but some example language is provided in two training materials included in this review (Eber, 2014; McBride, 2011 [both produced by Population Services International]). This technique involves identifying specific biases by using open-ended questions about providers' underlying motivations for care provision, and offering alternate value propositions for improving motivation or negative attitudes. This technique was the only qualitative technique noted here.

See *Needs Uncovered* here and in Eber, 2014 full slides for examples about how an interviewer can use a value proposition technique during an interview with a provider about attitudes and motivations.

Examples of Measurement Techniques

1. “Eligibility” measures

ATTITUDES TOWARDS DEMOGRAPHIC APPROPRIATENESS

READ TO PROVIDER:				
<i>I will now describe a brief characteristic about a woman. Assume this woman came to your clinic and wanted you to help her choose a family planning method. She is otherwise healthy. Please tell me if you would recommend the IUD to her as a method, would not recommend the IUD, or don't know/are not sure.</i>				
NO.	QUESTION	RESPONSE		
Q.402		RECOMMEND	NOT RECOMMEND	NOT SURE
	A. A woman who is not married	1	2	98
	B. A woman who has no children (nulliparous)	1	2	98
	C. A woman who is 17 years old	1	2	98
	D. A woman who has more than one sexual partner	1	2	98
	E. A woman who has one child	1	2	98

	F. A woman who is of very small stature (short, tiny, etc.)	1	2	98
	G. A woman who wants to delay her next pregnancy	1	2	98
	H. A woman who is illiterate	1	2	98
	I. A woman who has 4 children	1	2	98
	J. A woman who does not want any more children	1	2	98
	K. A woman whose sexual partner is not monogamous	1	2	98
	L. A woman who does heavy physical labor every day	1	2	98
	M. A woman who is very poor	1	2	98

From: Chakraborty et al., 2015

2. Likert scoring on statements of bias

The attitude of the healthcare providers towards providing contraceptive services for adolescents was assessed using a 5 point Likert scale (strongly agree, agree, undecided, disagree and strongly disagree).

There were six statements altogether; three were negatively worded while the other three were positively worded.

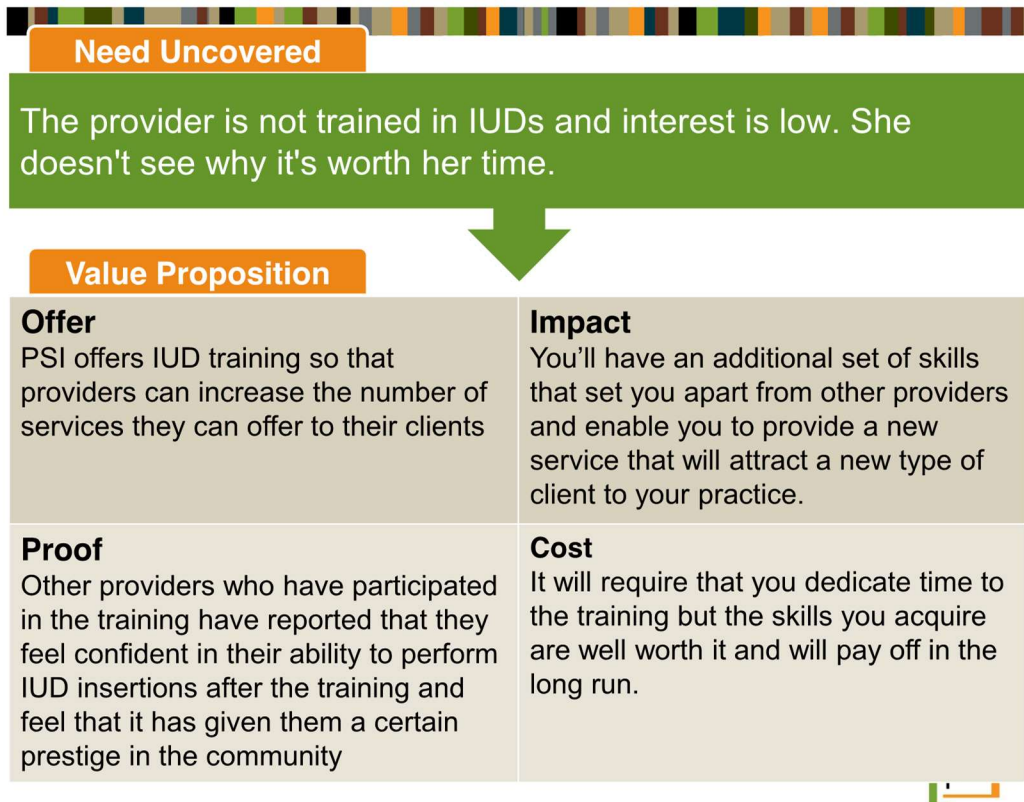
The negatively worded questions were: (1) Providing contraceptives for unmarried adolescents promotes sexual promiscuity (2) Unmarried adolescents should not be provided with contraceptives because the Nigerian culture does not support premarital sex and (3) It is better to tell sexually active unmarried adolescents to abstain from sex when they ask for contraceptives rather than give them contraceptives when they request for it.

The positively worded questions were: (4) Healthcare providers should provide contraceptive services for both married and unmarried clients in the healthcare facilities (5) Adolescents should be given contraceptive counselling

From: Ahanonu, 2014

4 Value Propositioning

This example shows how an interview may uncover motivations and provider needs. In doing so, the interviewer may present an alternative value proposition that may improve provider attitudes.



From: Eber, 2014