What drives provider bias: Characterizing provider bias towards youth and adolescents while identifying provider archetypes to develop and target successful behavioral change interventions
SBCC Summit, April 2018
beyond bias
Pathfinder INTERNATIONAL
CAMBER COLLECTIVE
BERI
YLabs

Pathfinder International Pathfinder expands access to contraception, promotes healthy pregnancies, saves women's lives, and stops the spread of new HIV infections, wherever the need is most urgent.

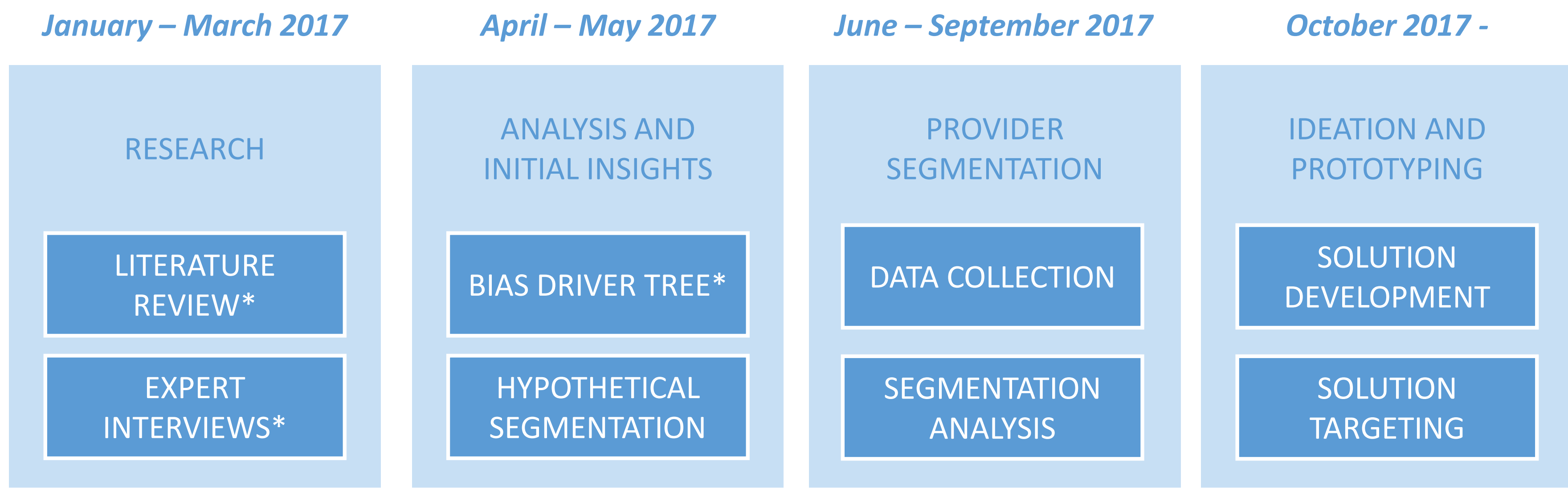
Camber Collective is a strategy consulting firm that helps clients achieve high performance against financial and mission-related goals. Camber has extensive experience supporting foundations and nonprofits in customer insights, demand analysis, landscaping, strategy development, and behavior change innovation.

BERI (Behavioral Economics in Reproductive Health Initiative) was launched In 2013 by the Center for Effective Global Action (CEGA) at UC Berkeley with support from the William and Flora Hewlett Foundation. BERI faculty affiliates (from a network of over 60 academic institutions) use rigorous evaluations, tools from data science, and new measurement technologies to assess the impacts of large-scale social and economic development programs.

YLabs (Youth Development Labs) is a non-profit organization that aims to improve health and livelihoods among disadvantaged young people (10-24 years) by helping governments and local organizations design, evaluate and scale new ways to improve young peoples' health and economic futures.

The Beyond Bias project

Through the three-year, BMGF funded project, Pathfinder and partners will address the different types of provider biases and behaviors that translate – advertently or inadvertently – into barriers for youth who want access to high quality contraceptive counseling and services. This project builds on ongoing Pathfinder projects in Tanzania, Burkina Faso, and Pakistan to implement an innovative four-phase approach to gather insights, generate and test solutions, and support adaptation and scale up.

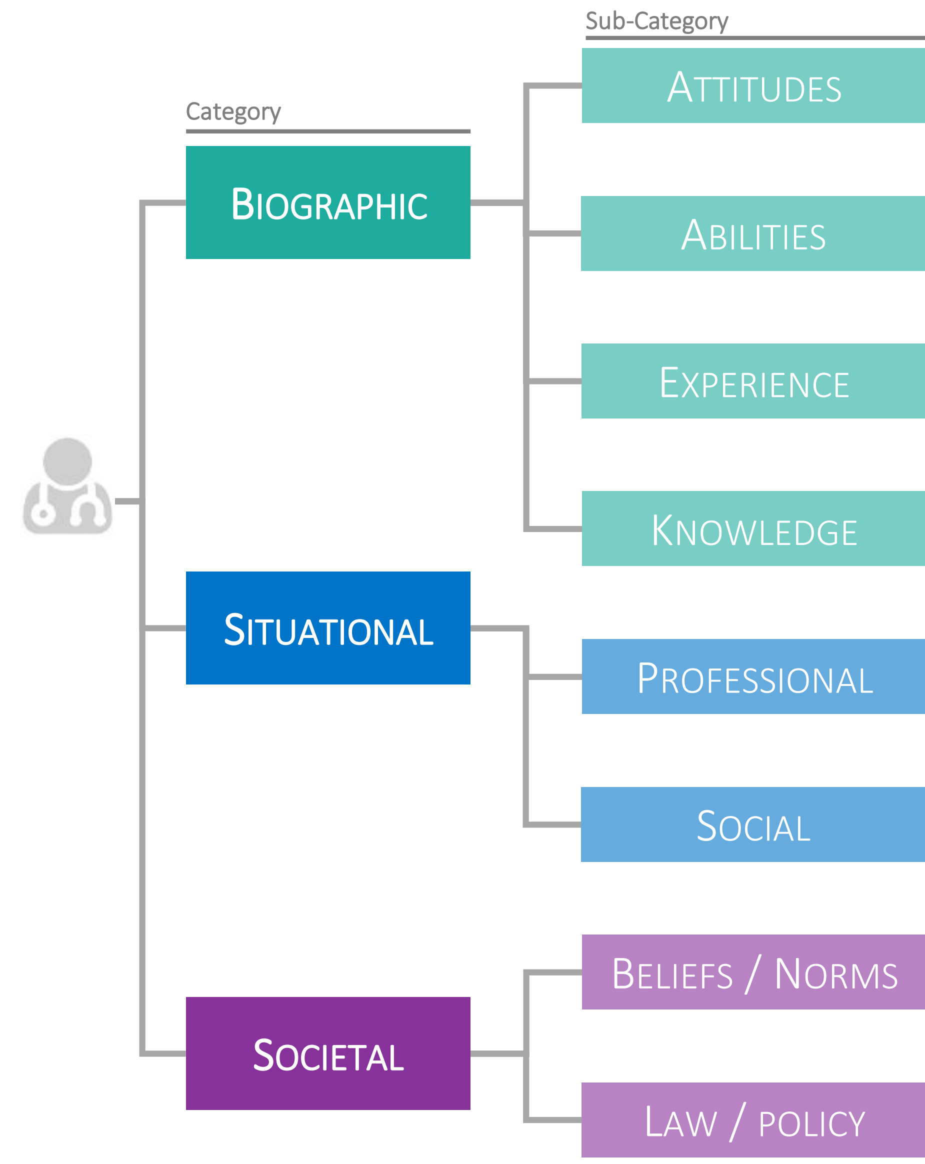


* activities which also supported the Design Research effort, conducted alongside segmentation

The Bias Driver Tree was used to assess causes for provider bias towards adolescents and youth

Bias drivers were identified through the literature review and expert interview process, and classified in a research synthesis process.

The quant research covered each 'branch' of the driver tree, alongside measurements of biased attitudes and behaviors



Overall survey process and timeline

Survey development *(~2 months)* → Survey deployment *(~4-6 weeks)* → Data cleaning and analysis *(~3 weeks)*

Sample:

TANZANIA:
301 providers from the Dar es Salaam area, including 66% nurses, 17% midwives, 7% doctors and 9% other

BURKINA FASO:
310 providers from Pathfinder-supported regions, including 91% midwives, 6% nurses, 2% other

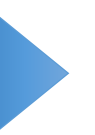
PAKISTAN:
200 providers from Karachi district (half Greenstar, half non-Greenstar), including 47% midwives, 44% doctors, 7% nurses and 3% other

Summary of Opportunities and Challenges

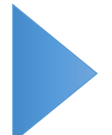
Biographic | Situational | Societal

Opportunities

- 80+% counsel older youth (19-24) at least a few times a week, and half counsel younger clients (15-18) at least as frequently
- More than three quarters agree they enjoy working with young clients in general, with 40% strongly agreeing
- 87% say their administration or boss supports me in providing any and all methods to youth



- More than half (55%) agree sex is a health part of life for young people



- Two thirds do not believe they usually know what a young client needs as soon as they come in

BUT…

Challenges

- Only 50% of providers have participated in a specific training service provision for youth
- Less than half believe they are paid fairly for the work they do

- Two-thirds feel young people have no modesty today when they talk about sex
- More than a third agree that providing unmarried youth contraceptives may make then more promiscuous

- Half believe young people are not capable of choosing the method that is best for them
- Only 40% believe IUDs are appropriate for women without children
- Nearly half do not believe hormonal methods are safe for youth's growing bodies
- 54% (31% strongly) believe that if a client hasn't yet had a child, there are certain methods she should be told to avoid

Conjoint Analysis (1/2)

Approach

- QUESTION: Can a conjoint analysis approach improve measurement of bias, and ability to parse AGE vs other client characteristics?
- Each provider was asked to react to 3 hypothetical clients
  - Would you provide counseling?
  - Which method (if any) would be appropriate?
- Hypothetical client attributes vary by:
  - Age: 15, 20, 25
  - Marital status: Unmarried, married
  - Parity: 0, 1, 2+

Example

Client is 15 years old, unmarried, and has no children. Let us talk about what it might be like if she came in today to ask for services.

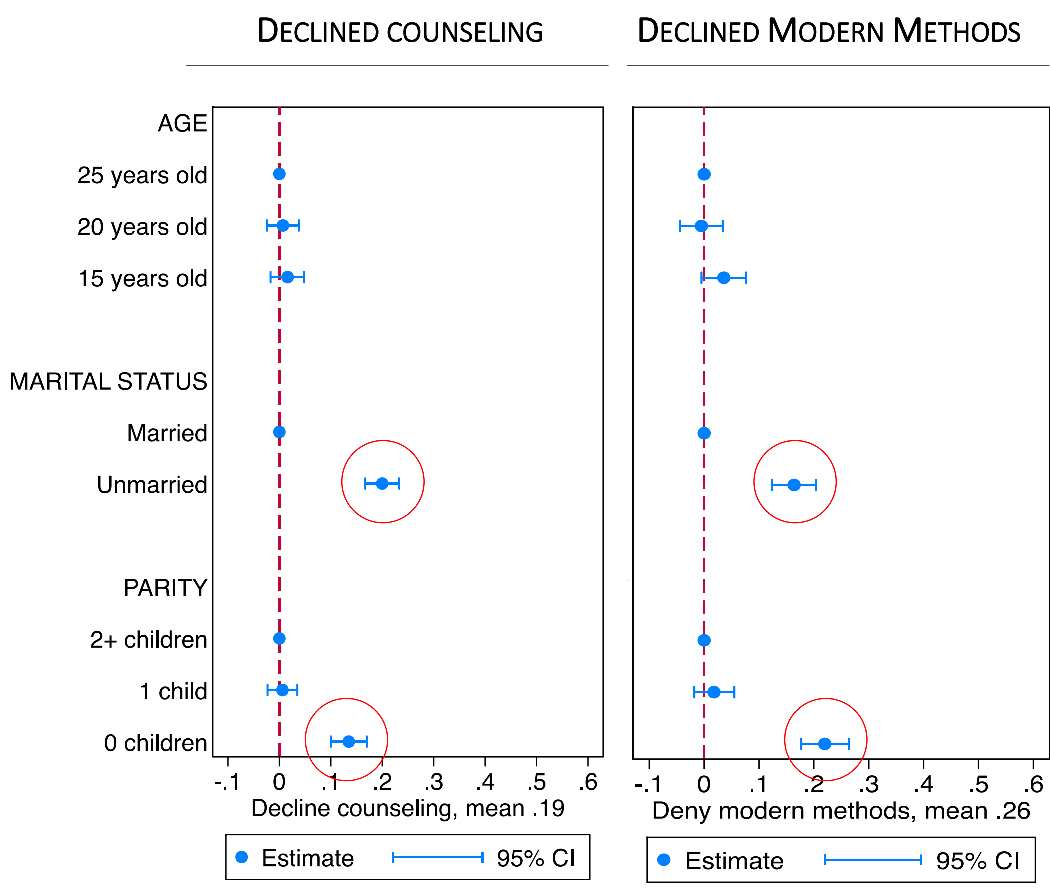
The client is interested in learning more about different FP methods. What is the next step before you begin any FP consultation?

1. *Decline counseling*
2. *Ask questions before agreeing to provide FP counseling*
3. *Offer FP counseling*

Would it be appropriate to provide modern methods of family planning to this client, such as injectables, pill, implant?

1. *Yes*
2. *No*
3. *Need additional information*

Conjoint Analysis (2/2)



Magnitudes are marginal effects on probability of declining counseling, from regression model. Model controls for age, marital status, parity, and country.

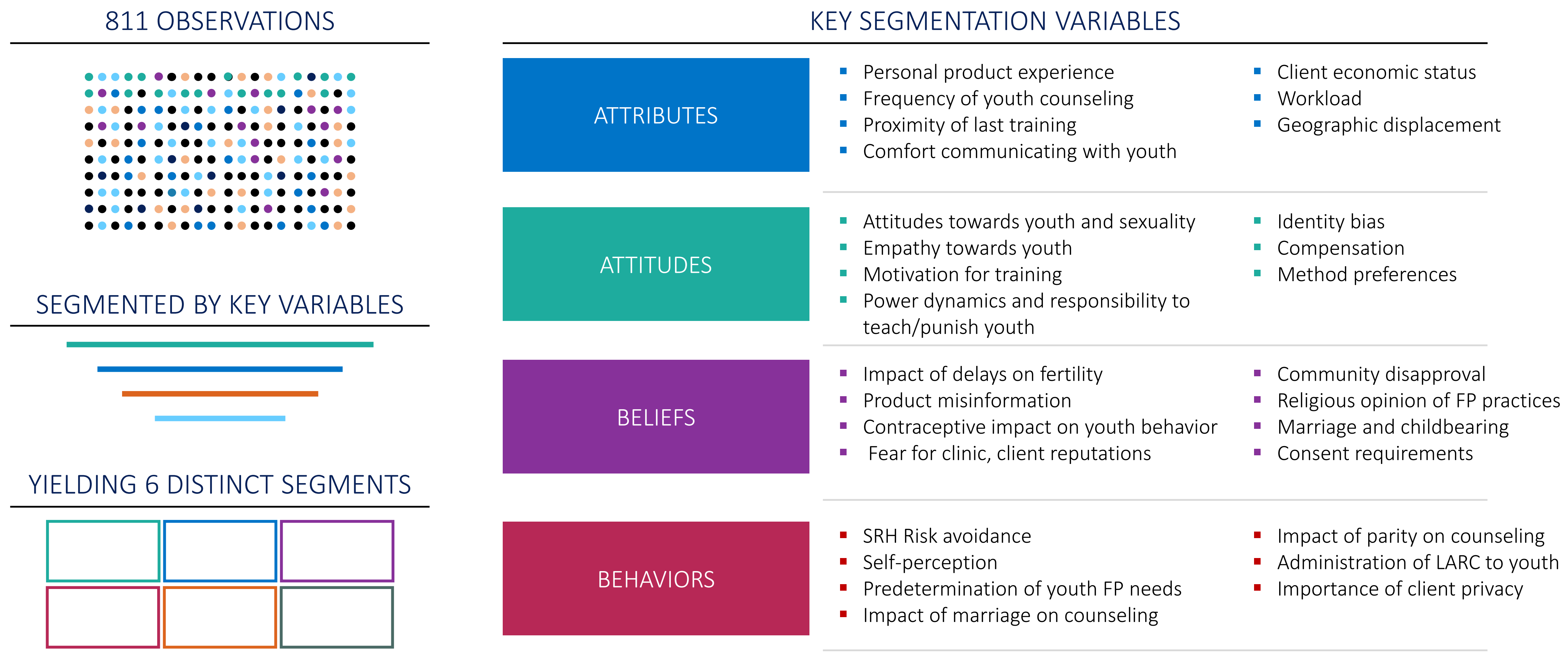
Results: Providers more likely to decline counseling and modern methods for unmarried and nulliparous women. But controlling for marital status and parity, provider stated responses do not vary by patient age.

Implications:

1) In future, research should be designed to better parse age effects vs marital/parity.

2) Focusing on improving “youth bias” alone may be wrong target, we need to attitudes and practices towards unmarried and/or nulliparous women

Highlights of the statistical segmentation approach



Note: variables highly correlated with geography, particularly demographics, were explicitly removed to minimize country influence on segmentation

Segmentation revealed six major sub-groups of providers, with strong geographic influence

DETACHED PROFESSIONAL

Well-trained and generally unbiased, though emotionally disconnected with youth.

AVERAGE PASSIVE

Aware of AYSRH practices, but somewhat biased and relatively unsympathetic for youth

CONTENT CONSERVATIVE

Generally open-minded and youth-friendly, but distrustful of modern methods and independent women

IMPROMPTU SISTER

Most connected with young clients, though also prone to believe they know what's best

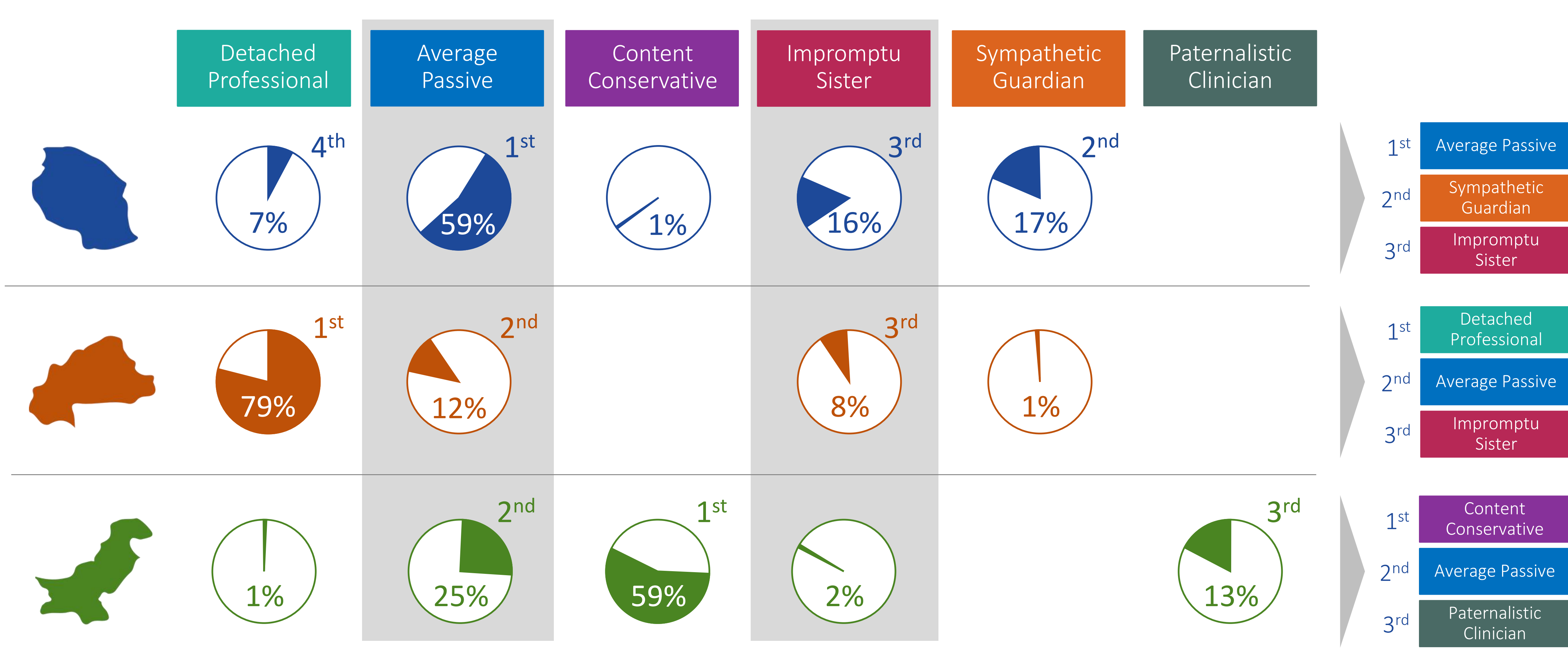
SYMPATHETIC GUARDIAN

Well-intentioned, and though somewhat misinformed, exhibit overall high quality youth service

PATERNALISTIC CLINICIAN

Busy older doctors who, despite some progressive attitudes, show strong marital and parity bias

Segment composition for each target country



Summary of major attitudinal and behavioral manifestations of bias

		Detached Professional	Average Passive	Content Conservative	Impromptu Sister	Sympathetic Guardian	Paternalistic Clinician
Types of Bias	**Biographic:** skills, background	HIGH	MEDIUM	HIGH	LOW	LOW	LOW
	Situational: work environment	HIGH	MEDIUM	MEDIUM	MEDIUM	LOW	LOW
	Societal: social and legal norms	LOW	MEDIUM	HIGH	MEDIUM	LOW	MEDIUM
Behavioral Manifestation of Bias	**Youth:** age 15	MEDIUM	LOW	HIGH	LOW	LOW	HIGH
	Marital Status: unmarried	MEDIUM	LOW	HIGH	LOW	LOW	HIGH
	Parity: nulliparous	LOW	LOW	HIGH	LOW	LOW	HIGH

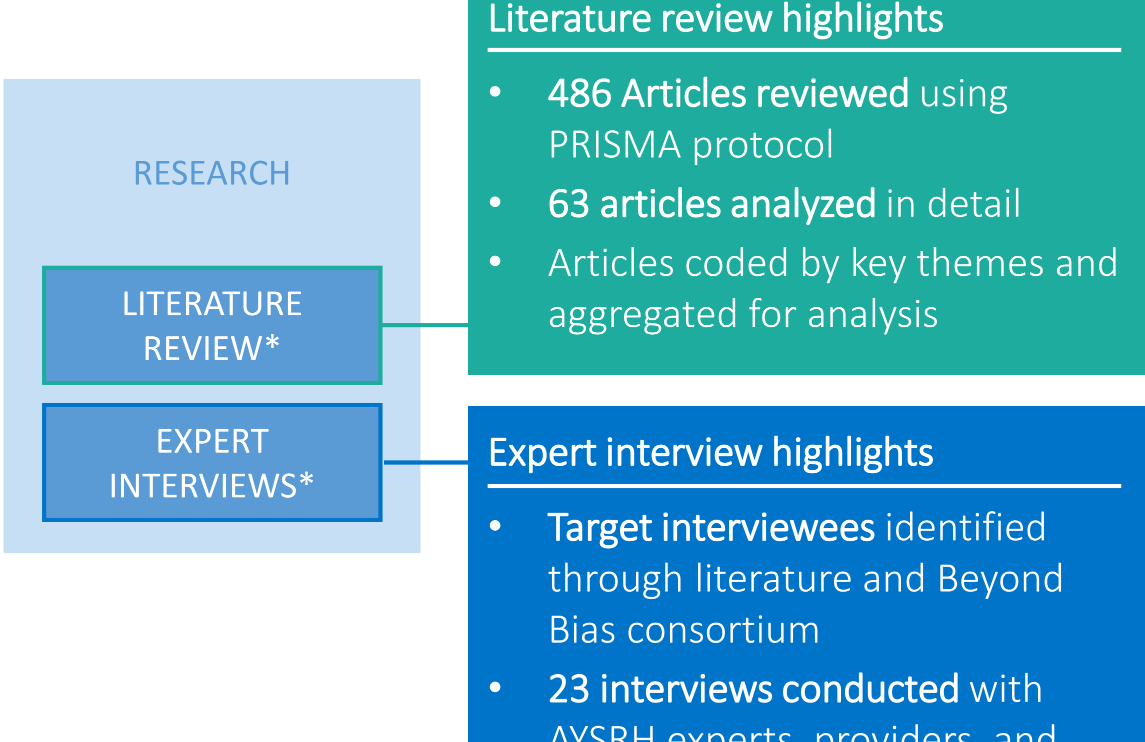
Triangulation with design research and segmentation

we are here

STAGE 1 DESIGN RESEARCH / LIT REVIEW + SEGMENTATION	STAGE 2 SYNTHESIS + IDEATION	STAGE 3 ROUGH PROTOTYPING	STAGE 4 LIVE PROTOTYPING	STAGE 5 IMPLEMENTATION + EVALUATION
DR Insights informed segmentation survey Preliminary segments guide design briefs for ideation	Review of first round ideas to assess if all segments adequately targeted Additional ideation for Detached Professional and Content Conservative segments (Interactive Narratives and Provider Forum)	Content of rough prototypes tailored to segment characteristics Cross-validation of drivers and outcomes of bias in each country Prototypes TOCs matched to segment drivers.	Refine prototypes to target segment drivers Continue to co-leverage quant and qual data to ensure desirability and impact Screening tool for LP participants	

Appendix

Literature review and expert interviews formed the basis for our survey tool



Research synthesis

- Drivers of bias
- Outcomes of bias
- Detecting and measuring bias
- Behavior change interventions

Key inputs for survey design

Overall survey process and timeline

Survey development *(~2 months)*

- Survey developed after key drivers identified during lit review and TZ design research
- Survey underwent rigorous iteration, with input from all partners and the Gates Foundation
- Multiple pre-tests
- In-person interviews were selected over phone interviews
- Ethical review process completed in all study countries
- All participants completed informed consent

Survey deployment *(~4-6 weeks)*

- All data collectors underwent rigorous training
- Survey was too long and condensed in training/pre-testing
- Fielded version took about 45 minutes in all countries
- Sample:

301 providers from the Dar es Salaam area, including 66% nurses, 17% midwives, 7% doctors and 9% other

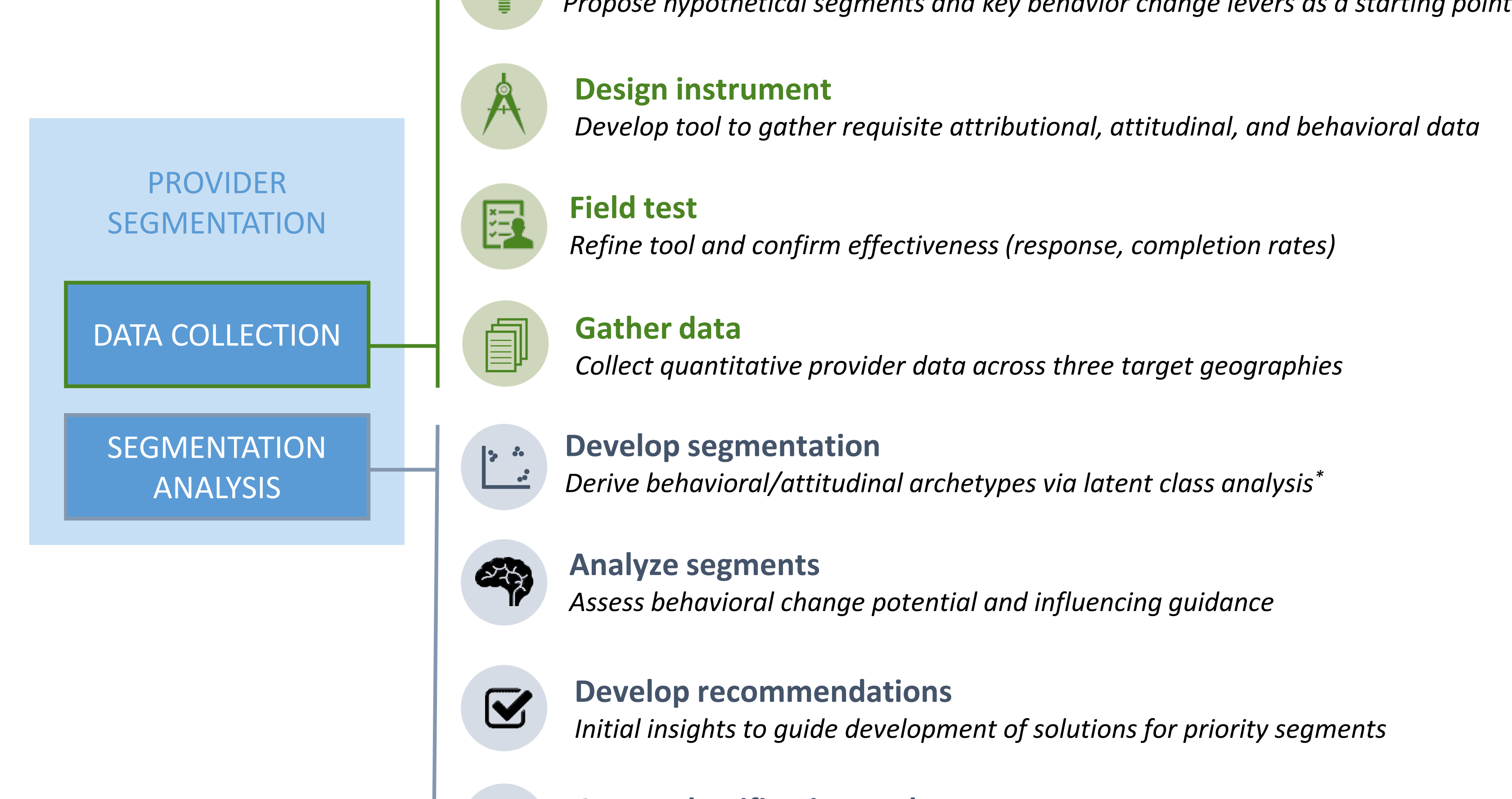
310 providers from Pathfinder-supported regions, including 91% midwives, 6% nurses, 2% other

200 providers from Karachi district (half Greenstar, half non-Greenstar), including 47% midwives, 44% doctors, 7% nurses and 3% other

Data cleaning and analysis *(~3 weeks)*

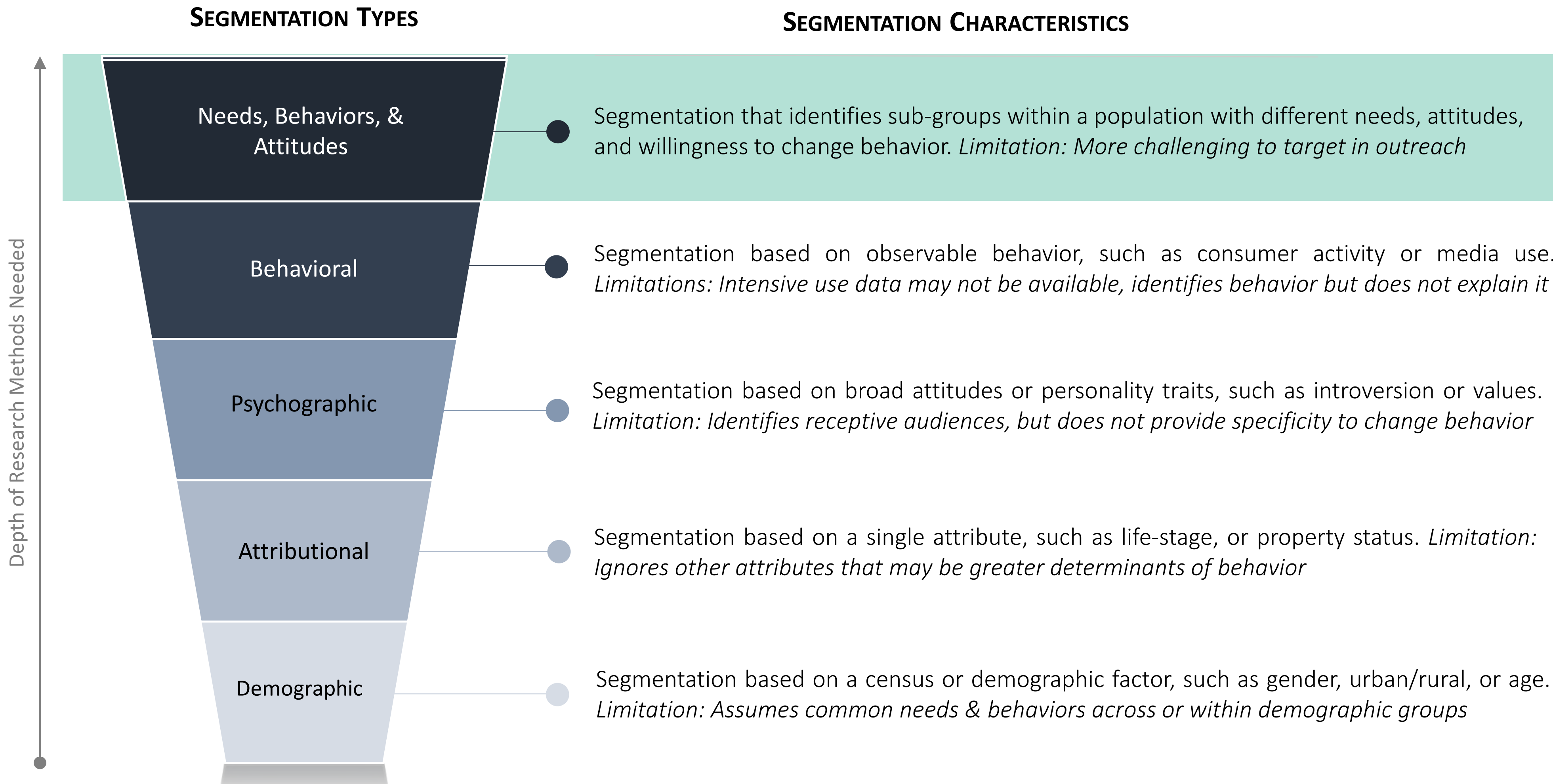
- All data harmonized and integrated into single master dataset
- "Top-down" analyses conducted to elucidate correlation of bias drivers with attitudinal and behavioral bias
- "Bottom-up" segmentation conducted using latent class analysis and multiple rounds of model refinement
- Hypothetical conjoint data added to further elucidate segment behavior

Steps in our development of a statistical segmentation of providers



* See slide 52 for more details on latent class analysis

Segmentation design : a behavioral and attitudinal focus



Why behavioral & attitudinal segmentation?

This approach allows identification of distinct groups within a population that have different **needs, attitudes, and behaviors** around a given topic. These groups—though they may look similar **demographically**—need different behavior change programs

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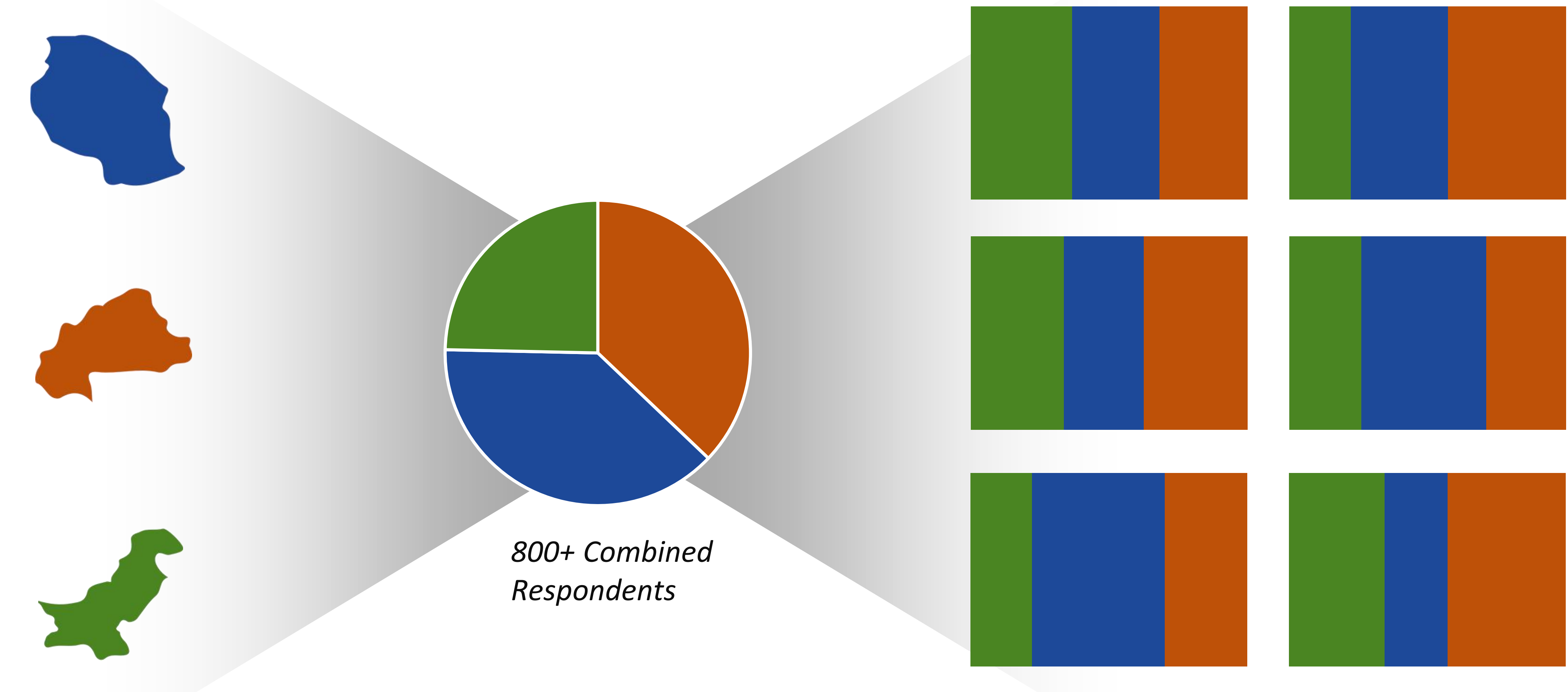
* Credit: Bill & Melinda Gates Foundation

Objective for three-country segmentation



Presence of drivers of bias across segments

Comparison of segments across major demographic and biographic factors

	Detached Professional	Average Passive	Content Conservative	Impromptu Sister	Sympathetic Guardian	Paternalistic Clinician
Share of providers	(33%)	(32%)	(15%)	(10%)	(7%)	(3%)
Geography	Burkina (92%)	Blend	Pakistan (98%)	Blend	Tanzania (94%)	Pakistan (96%)
Occupation	Midwifes	Nurses/ MWs	MFs/ Drs	Nurses/ others	Nurses	Doctors
Religion (* = strongly)	2/3 Christian*	Split	Muslim	2/3 Christian	2/3 Christian	Muslim*
Prior personal FP use	94%	63%	59%	81%	71%	48%
FP Training in last year	73%	36%	38%	58%	48%	73%
Frequency of FP counselling: 15-18	21%	8%	0%	20%	10%	47%
Frequency of FP counselling: 19-24	40%	17%	49%	25%	12%	44%
Believe sex is part of a health life for youth	22%	7%	64%	10%	1%	87%
Enjoy working with youth	13%	32%	58%	92%	68%	87%
Close to an affected young person	23%	27%	80%	69%	47%	100%
Misinformed on hormonal method safety	6%	4%	45%	8%	4%	4%

Latent Class Analysis

Methods for LCA

- Analysis was completed using Latent Gold software
- Variables were determined to be of high salience for inclusion based on insights from the literature review and secondary data analysis.
- For each model ran, a 1 class, 2 class, 3 class, 4 class, 5 class, 6 class, 7 class, 8 class, 9 class, and 10 class model were ran. The optimal fit was determined by comparing the AIC, BIC, p-values, and class error across each class

LCA differences from traditional clustering approach[1]

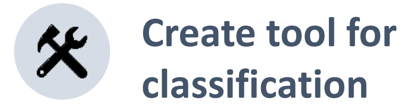
- Instead of using distances to classify cases into segments (i.e. K-Means Approach), LCA uses probabilities
- Can handle nominal, ordinal, and continuous variables (any combination of these)
- Isn't as sensitive to missing data as traditional cluster analysis techniques – easier to classify a respondent into a segment when some of the data is not available
- Statistical tests available to compare different models (AIC, BIC, p-values, etc.)

1. Magidson and Vermunt "Latent class models for clustering: A comparison with K-means", Canadian Journal of Marketing Research, Vol. 20.1, 2002, pp.36-43.

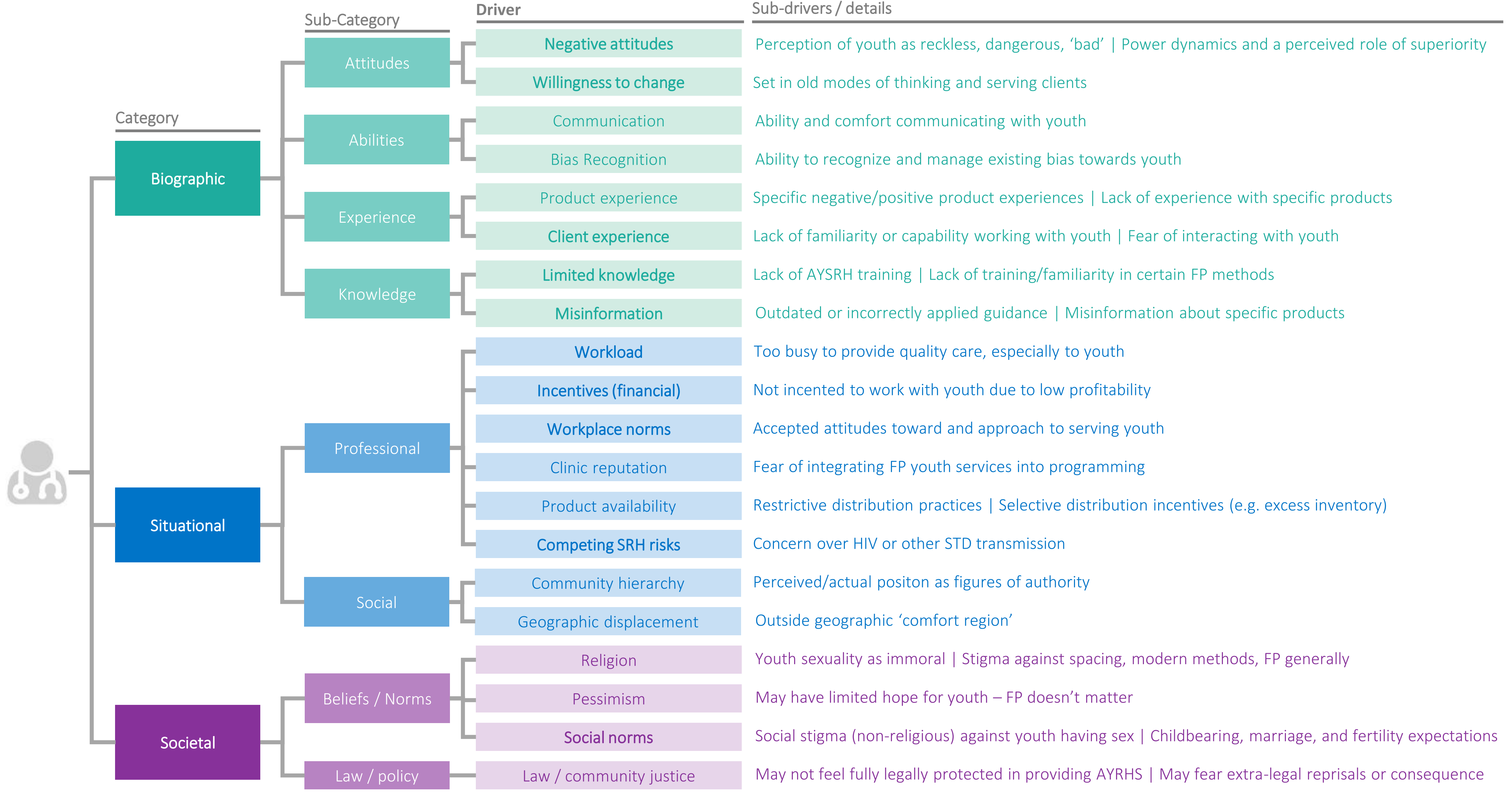
Developing a segmentation via latent class analysis

1	**Review the data**	Assess the full set of variables in the survey, specifically how they map against the predominate dependent variable(s) (e.g. bias) using chi2 tests
2	**Select variables**	Determine those to included in the latent class model based primarily on associative strength
3	**Iterate multiple models**	For each, consider multiple solutions (e.g. 5,6, and 7 segment solutions), with the resulting number balancing the "optimal" statistical solution, the logic of the segment profiles ('e.g. makes sense'), and the simplicity necessary for use in the field (e.g. limit to 3-4 segments)
4	**Insert or remove variables**	Move in/out as needed to strengthen the difference both between groups and between individual groups and the overall sample, e.g. removing one of a highly correlated pair of variables or eliminating a measure that showed no difference across segments
5	**Pressure test**	Review segmentation with qualitative evidence and experts to ensure the segments are sensible and align with reality (e.g. represent real individuals) before finalizing

Then…



Complete Provider Bias Driver Tree



Scoring indicates prevalence of provider bias by driver type

Expression of bias (low to more severe) ►

Driver type ▼	Low Attitudinal Bias	High Attitudinal Bias	Biased Provider Behaviors	Decline service - All scenarios	Decline service - Client is too young / Age bias as stated reason	Decline service - Client has no or too few children / Parity bias as stated reason	Decline service - Client is unmarried / Marital status bias as stated reason	Conditioned counseling on questioning AND believed modern methods inappropriate
Negative Attitudes	22.5177	5.0764	9.0098	0.2553	3.0626	10.1925	8.1219	0.5278
Lack of empathy	18.4983	5.4623	9.7156	0.1596	3.4755	10.4213	8.4496	0.6233
Product inexperience	17.0115	4.7350	10.5575	1.0000	4.7648	10.8200	8.3642	0.3014
Lack of motivation	21.0138	5.1012	7.9358	0.5904	4.7142	7.9132	8.6879	0.3836
Limited knowledge or insufficient provider training	17.1984	5.3463	5.8281	0.2500	3.5482	8.0927	6.3427	0.9863
Misinformation re: hormonal methods	20.7991	5.1696	8.9271	0.3511	6.0502	14.3163	8.5810	0.1575
Difficulty communicating	30.8386	5.6652	9.3034	0.1489	3.9418	6.7372	8.1845	0.1096
Provider attributes	21.9165	5.3710	5.2388	0.5000	2.5657	9.3660	7.9037	0.6781
Workload	16.9132	5.0604	7.7108	0.8351	4.7648	10.8200	8.3642	0.8699
Incentives	14.8260	5.2159	7.2393	0.2234	4.4388	7.8485	7.4929	0.3630
Risk avoidance	21.7848	5.1380	12.6822	0.6223	4.5011	8.2223	8.4505	0.4247
Workplace norms	20.3365	5.1855	11.7645	0.2194	5.1607	8.8616	8.1046	0.5685
Clinic reputation	22.2315	5.5547	13.8561	0.1702	6.2174	6.5680	7.0922	0.1096
Community hierarchy	21.4221	5.2073	8.9443	0.2207	5.8658	12.2423	8.7118	1.0000
Geographic displacement	18.2606	5.5181	9.8450	0.2074	5.0197	17.4531	7.1988	0.1096
Religion	20.7325	5.0283	5.7364	0.3218	4.4033	16.2905	8.2562	0.6986
Social norms	23.9346	5.8454	9.9199	0.2926	4.9600	11.0531	8.2407	1.0000

*Pink cells denote driver's mean is <u>**above the mean**</u> driver strength scores

"Stress-testing" driver strengths with stricter limits highlights major bias drivers

Expression of bias (low to more severe) ▶

Driver type ▼	Low Attitudinal Bias	High Attitudinal Bias	Biased Provider Behaviors	Decline service - All scenarios	Decline service - Client is too young / Age bias as stated reason	Decline service - Client has no or too few children / Parity bias as stated reason	Decline service - Client is unmarried / Marital status bias as stated reason	Conditioned counseling on questioning AND believed modern methods inappropriate
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*Dark pink cells denote <u>top third percentile</u> driver strength scores

Hypothetical archetypes as a first approximation of potential segments

DEVELOPED FROM LITERATURE REVIEW AND EXPERT INTERVIEWS

Empathic counselor

- Providers who empathize with adolescents, see them as complete and complex people, and treat them with compassion and without judgement
- 'Ideal providers from a 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, protective attitude that runs directly against an adolescent's need for decision making authority
- Lacks the ability or willingness to take a youth perspective
- May additionally suffer from an inability to communicate effectively with youth

Good Citizen

- Advices adolescent client with a strong bias towards upholding social norms, with a primary believe that doing so will afford the best overall outcome for the client
- Similar to the "Conformer" in terms of adherence to social/religious norms, though motivated from a desire to do best for the adolescent client and therefore distinct in terms of influenceability

Norm Conformer

- Religious or morally-driven providers who are fundamentally against elements of adolescent family planning 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 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
- Optimizing for doing the greatest good 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 or simply misunderstand adolescents and view them in a negative way
- Not necessarily adverse to providing FP services to youth in principle

***Note**: our assumption was that these hypothetical archetypes would form elements of the segments that resulted from the statistical segmentation, not that this assortment of sub-groups would resemble the final set of segments*

Summary of major drivers of bias

		Detached Professional	Average Passive	Content Conservative	Impromptu Sister	Sympathetic Guardian	Paternalistic Clinician
Biographic drivers	Regularly counsel 15-18	21%	**8%**	**0%**	20%	10%	47%
	Prior personal FP use	94%	63%	**59%**	81%	71%	**48%**
	FP training in last year	73%	**36%**	**38%**	58%	48%	73%
Situational drivers	Fairly Compensated	**9%**	17%	44%	**4%**	23%	15%
	Over-loaded	55%	80%	88%	**92%**	86%	**100%**
	Fear for clinic reputation	**69%**	28%	37%	10%	1%	2%
Societal drivers	Fear of fertility delays	8%	22%	**87%**	**61%**	17%	22%
	Client religion influence	15%	**45%**	**42%**	29%	4%	21%
	Child-bearing pressure for newlyweds	17%	20%	**41%**	9%	7%	**88%**

Summary of major attitudinal and behavioral manifestations of bias

			Detached Professional	Average Passive	Content Conservative	Impromptu Sister	Sympathetic Guardian	Paternalistic Clinician
Attitudinal Bias		Spousal/parent consent[1]	~5%	15-20%	**~50%**	<1%	1-2%	12-13%
Attitudinal Bias		Low respect for privacy	7%	**17%**	4%	2%	0%	14%
Attitudinal Bias		Nulliparous bias	15%	26%	**68%**	**50%**	10%	**80%**
Attitudinal Bias		Unmarried bias	16%	31%	**68%**	4%	3%	**66%**
Behavioral Bias[2]	Youth (15)	Refuse service	1%	11%	**50%**	4%	11%	**81%**
Behavioral Bias[2]	Youth (15)	Deny MM counseling[4]	5%	27%	**52%**	18%	23%	**81%**
Behavioral Bias[2]	Youth (15)	Promote abstinence[5]	**33%**	17%	**32%**	13%	4%	19%
Behavioral Bias[2]	Un-married[3]	Refuse service	1%	27%	**70%**	6%	7%	**95%**
Behavioral Bias[2]	Un-married[3]	Deny MM counseling	4%	36%	**73%**	14%	22%	**95%**
Behavioral Bias[2]	Un-married[3]	Promote abstinence	**55%**	19%	17%	22%	16%	--
Behavioral Bias[2]	Nulli-parous	Refuse service	1%	15%	**72%**	8%	9%	**93%**
Behavioral Bias[2]	Nulli-parous	Deny MM counseling	8%	38%	**75%**	27%	37%	**93%**

1 Range indicates parental / spousal consent 2. The data from the "Behavioral Bias" rows is from a conjoint exercise; providers were read randomly selected scenarios about clients with different characteristics (age, marital status, parity), and asked about how they would provide servicers. 3 In Pakistan, "unmarried" was presented as "previously married" which was more appropriate for local context. 4. "Deny MM counseling" includes providers who declined services all together. 5. Providers who refused services were coded as not having promoted abstinence.

Summary of major segment factors relevant for idea development and refinement

	Detached Professional	Average Passive	Content Conservative	Impromptu Sister	Sympathetic Guardian	Paternalistic Clinician
SIZE	Large	Large	Moderate	Moderate	Small	Very Small
OVERALL BIAS	Low	Moderate	High	Moderate	Low	High
BIAS DRIVERS	• Negative Attitudes • Reputation • Lack of empathy	• No training • Competing risks • Reputation • Lack of empathy	• No training • Social norms • Power dynamics • Reputation	• Working conditions • Social norms • Power dynamics	• Religion • Training • Misinformation	• Competing risks • AYSRH training • Social norms • Power dynamics
BIAS OUTCOMES	• Some limitation on options	• Limited options	• Forced Consent • Judgement • Limited options	• Privacy violation • Judgement	• Some limitation on options (IUD)	• Forced consent • Privacy violation • Judgement • Limited options
MAJOR BC OPPORTUINITIES	• Emotional connectivity with youth	• Build empathy, leveraging client rep. concerns	• Dispel method misinformation in near-term	• Channel ability to relate with youth narratives	• Clarify LARC safety, value	• Tools for more efficiency AYSRH counseling
OVERALL OPPORTUNITY	Moderate	High	Moderate	Low/Moderate	Low/Moderate	Low/Moderate

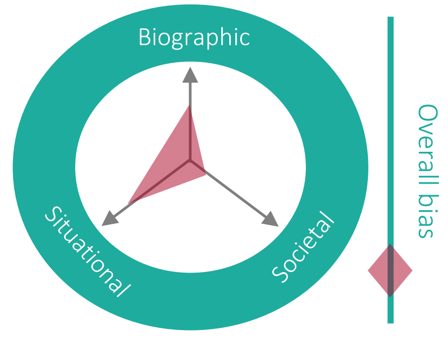
Detached Professional (32%)

79% of Providers in Burkina Faso
8% of Providers in Tanzania

SEGMENT COMPOSITON

SEGMENT SUMMARY

Mostly Burkinabe midwifes who frequently engage youth clients and have used FP themselves. Well-trained, with low attitudinal and behavioral bias towards young clients, they are nonetheless apprehensive providing AYSRH service and emotionally detached from youth. Their major behavior change opportunity appears to be in strengthening their emotional connection with youth.



BEHAVIOR CHANGE BARRIERS

- Most have already received formal AYSRH training
- Somewhat discontent with working conditions, particularly pay
- Disconnected, seem not to care deeply

BEHAVIORAL BIASES

- Low overall behavior biases, though 15-20% do evidence marital and nulliparous biases
- Appear to be relatively mild in terms of severity

MAJOR DRIVERS

- Few really enjoy working with youth
- Prevalent fear that providing FP to youth may damage clinic reparation
- Few are close with a young client who has had a major problem post-pregnancy

CONSIDERATIONS FOR BC

- Low acute need for reducing bias, but also potentially low-hanging fruit if they can be “woken up”
- Focus on emotional connectivity, rather than clinical education

OUTCOMES OF BIAS

- Very low rates of attitudinal bias and refusal of service
- However, very likely to promote abstinence among youth and unmarried clients

Detached Professionals Profile

ATTRIBUTES

Christians (68%)

Midwifes (89%)

Predominately middle-class clients (43%)

Attribute	Value
Have used FP in the past	94% *(avg. 75%)*
Often counsel youth 15-18	21% *(avg. 14%)*
Often **counsel** youth 19-24	40% *(avg. 31%)*
FP training within last year	73% *(avg. 52%)*
Have had youth FP training	60% *(avg. 50%)*
Comfortable discussing sex with youth	20% *(avg. 26%)*
Consider themselves over-loaded	55% *(avg. 76%)*

BELIEFS

Belief	Value
Highly concerned about delays in return to fertility	8% *(avg. 30%)*
Believe hormonal methods are not safe for youth	6% *(avg. 11%)*
Contraception makes youth more promiscuous	5% *(avg. 21%)*
Providing youth FP may damage clinic reputation	69% *(avg. 38%)*
Very concerned about impact of FP on client reputation	11% *(avg. 15%)*
Their own religion permits limiting	16% *(avg. 29%)*
Struggling newlyweds should delay pregnancy	10% *(avg. 23%)*

GENERAL ATTITUDES

Attitude	Value
Sex is part of a healthy life for youth	22% *(avg. 23%)*
Youth have no modesty when talking about sex	20% *(avg. 31%)*
Personally close to an impacted young person	23% *(avg. 41%)*
Highly enjoy working with youth	13% *(avg. 40%)*
Youth may need to be punished for bad behavior	9% *(avg. 27%)*
An FP provider should teach youth how to behave	65% *(avg. 65%)*
Consider themselves fairly paid	9% *(avg. 18%)*

ATTITUDINAL BIASES

Bias	Value
Strongly prefers not to provide FP without an HIV test	0% *(avg. 14%)*
Prefers to provider quicker/easier methods	4% *(avg. 20%)*
Most of often feels like… an older friend	43% *(avg. 49%)*
Needs to know marital status for FP counseling	16% *(avg. 28%)*
Nulliparous clients should not use certain methods	15% *(avg. 31%)*
IUDs are appropriate for young nulliparous women	18% *(avg. 11%)*
Spousal or parental consent required	3-7% *(avg. 15-16%)*

XX% >10pp above average   XX% < 10pp below average   XX% within 10pps of average

Average Passive (32%)

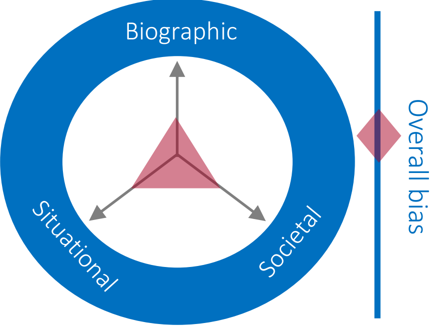
59% of Providers in Tanzania
25% of Providers in Pakistan
12% of Providers in Burkina Faso

SEGMENT COMPOSITON

SEGMENT SUMMARY

Split across geographies, age and educational groups and religion, these mostly nurses & midwifes appear to embody baseline professional and social norms across the sampled regions. Many bias drivers are present, though not severe, and feel strongly it's not their role to teach youth how to behave. A major behavior change opportunity could be to **deepen their understanding of youth challenges and empathy for AYSRH.**

AVERAGE PASSIVE



BEHAVIOR CHANGE BARRIERS

- Do not seem interested in becoming invested in youth
- Does not consider sex a healthy part of life for youth
- Lowest rate of recent training

BEHAVIORAL BIASES

- Elevated rates of required HIV testing
- Close to a third show parity or marital biases

MAJOR DRIVERS

- Low prevalence of training
- Fear of competing HIV/STD risks
- Group most concerned with client reputation risk of using FP
- Few are close with a young client who has had a major problem post-pregnancy

CONSIDERATIONS FOR BC

- Build empathy through more compelling youth narratives
- Informal, low-touch solutions outside of official training
- They fear for client reputation, which suggests potential for deeper caring for youth

OUTCOMES OF BIAS

- Tends to exhibit average amounts of behavioral bias compared to other segments
- Denies modern method counseling to about one third of youth, unmarried and nulliparous clients
- Highest rate of service refusal towards unmarried clients

Average Passive Profile

ATTRIBUTES

Slight majority Christian (59%)

Nurses (49%) & midwifes (34%

Predominately poor clients (37%)

Attribute	Value
Have used FP in the past	63% *(avg. 75%)*
Often counsel youth 15-18	8% *(avg. 14%)*
Often counsel youth 19-24	17% *(avg. 31%)*
FP training within last year	36% *(avg. 52%)*
Have had youth FP training	57% *(avg. 50%)*
Comfortable discussing sex with youth	25% *(avg. 26%)*
Consider themselves over-loaded	80% *(avg. 76%)*

BELIEFS

Belief	Value
Highly concerned about delays in return to fertility	22% *(avg. 30%)*
Believe hormonal methods are not safe for youth	4% *(avg. 11%)*
Contraception makes youth more promiscuous	21% *(avg. 21%)*
Providing youth FP may damage clinic reputation	28% *(avg. 38%)*
Very concerned about impact of FP on client reputation	27% *(avg. 15%)*
Their own religion permits limiting	20% *(avg. 29%)*
Struggling newlyweds should delay pregnancy	17% *(avg. 23%)*

GENERAL ATTITUDES

Attitude	Value
Sex is part of a healthy life for youth	7% *(avg. 23%)*
Youth have no modesty when talking about sex	23% *(avg. 31%)*
Personally close to an impacted young person	27% *(avg. 41%)*
Highly enjoy working with youth	32% *(avg. 40%)*
Youth may need to be punished for bad behavior	41% *(avg. 27%)*
An FP provider should teach youth how to behave	41% *(avg. 65%)*
Consider themselves fairly paid	17% *(avg. 18%)*

ATTITUDINAL BIASES

Bias	Value
Strongly prefers not to provide FP without an HIV test	25% *(avg. 14%)*
Prefers to provider quicker/easier methods	20% *(avg. 20%)*
Most of often feels like… an older friend	52% *(avg. 49%)*
Needs to know marital status for FP counseling	31% *(avg. 28%)*
Nulliparous clients should not use certain methods	26% *(avg. 31%)*
IUDs are appropriate for young nulliparous women	14% *(avg. 11%)*
Spousal or parental consent required	15-20% *(avg. 15-16%)*

XX% >10pp above average   XX% < 10pp below average   XX% within 10pps of average

Content Conservative (15%)

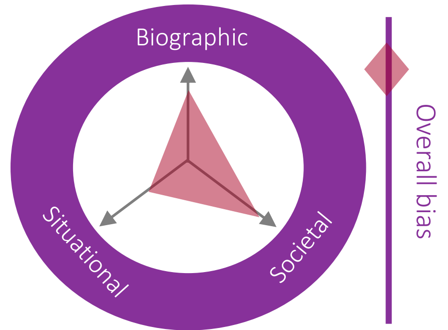
59% of Providers in Pakistan

SEGMENT COMPOSITON

SEGMENT SUMMARY

Nearly entirely Pakistani, these Muslim doctors & nurses tend to be younger, less religious, and professionally content. While they enjoy working with youth and generally trust youth to make their own decisions, they demonstrate a strong distrust of hormonal methods and conservative perspectives on sex before marriage. While engrained norms may be harder to shift, an immediate behavioral change opportunity with this groups appears to be dispelling product misinformation.

CONTENT CONSERVATIVE



BEHAVIOR CHANGE BARRIERS

- Embedded conservative beliefs on youth autonomy and social roles
- No formal AYSRH training

BEHAVIORAL BIASES

- Nearly half support need for spousal or parental consent, more than any other segment
- A majority evidence both unmarried and nulliparous bias

MAJOR DRIVERS

- None have AYSRH training
- Believe they are responsible for teaching youth how to behave
- Misinformation regarding safety of hormonal methods for youth
- Some concern for clinic reputation

CONSIDERATIONS FOR BC

- In the near term, opportunity to dispel method misinformation
- Longer term or more broadly, address attitudinal biases towards youth, though social norms present challenges

OUTCOMES OF BIAS

- Laws/norms prohibiting sexual relationships before marriage prevent providers from providing services to unmarried clients
- Very high levels of bias towards youth clients and nulliparous clients

Content Conservative (15%)

ATTRIBUTES

Muslim (97%)

Midwives (54%) & Doctors (34%)

Predominately poor clients (46%)

Attribute	Value
Have used FP in the past	59% *(avg. 75%)*
Often counsel youth 15-18	0% *(avg. 14%)*
Often **counsel** youth 19-24	49% *(avg. 31%)*
FP training within last year	38% *(avg. 52%)*
Have had youth FP training	2% *(avg. 50%)*
Comfortable discussing sex with youth	49% *(avg. 26%)*
Consider themselves over-loaded	88% *(avg. 76%)*

BELIEFS

Belief	Value
Highly concerned about delays in return to fertility	*87%(avg. 30%)*
Believe hormonal methods are not safe for youth	45% *(avg. 11%)*
Contraception makes youth more promiscuous	77% *(avg. 21%)*
Providing youth FP may damage clinic reputation	37% *(avg. 38%)*
Very concerned about impact of FP on client reputation	13% *(avg. 15%)*
Their own religion permits limiting	71% *(avg. 29%)*
Struggling newlyweds should delay pregnancy	68% *(avg. 23%)*

GENERAL ATTITUDES

Attitude	Value
Sex is part of a healthy life for youth	64% *(avg. 23%)*
Youth have no modesty when talking about sex	64% *(avg. 31%)*
Personally close to an impacted young person	80% *(avg. 41%)*
Highly enjoy working with youth	58% *(avg. 40%)*
Youth may need to be punished for bad behavior	32% *(avg. 27%)*
An FP provider should teach youth how to behave	86% *(avg. 65%)*
Consider themselves fairly paid	44% *(avg. 18%)*

ATTITUDINAL BIASES

Bias	Value
Strongly prefers not to provide FP without an HIV test	11% *(avg. 14%)*
Prefers to provider quicker/easier methods	65% *(avg. 20%)*
Most of often feels like… an older friend	55% *(avg. 49%)*
Needs to know marital status for FP counseling	68% *(avg. 28%)*
Nulliparous clients should not use certain methods	68% *(avg. 31%)*
IUDs are appropriate for young nulliparous women	0% *(avg. 11%)*
Spousal or parental consent required	43-61% *(avg. 15-16%)*

XX% >10pp above average   XX% < 10pp below average   XX% within 10pps of average

Impromptu Sister (10%)

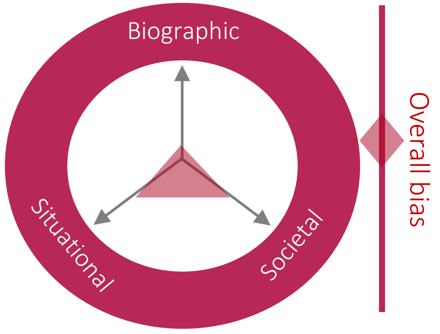
16% of Providers in Tanzania
8% of Providers in Burkina Faso
2% of Providers in Pakistan

SEGMENT COMPOSITON

SEGMENT SUMMARY

This group skews younger and less educated, and appear to strongly identify and connect with youth clients, which can mean they might judge them for making mistakes or boss them around like younger siblings. Nearly all feel they have a responsibility to teach youth and an acute concern for fertility delays. A behavior change opportunity would be to leverage their close bond in clarifying policies that result in the best outcomes for youth.

IMPROMPTU SISTER



MAJOR DRIVERS

- Strong association with youth clients, possible as elder siblings
- Nearly all consider themselves underpaid and overbooked
- Concerns over delaying fertility
- Do not consider sex part of a healthy life for youth

BEHAVIOR CHANGE BARRIERS

- Professionally strained
- Emotionally perhaps too close to youth
- May feel they already know what's best for their "little sisters"

CONSIDERATIONS FOR BC

- Nearly all enjoy working with youth, which should be explicitly acknowledged
- Very comfortable counseling youth
- Educate around safety of methods, value for youth

BEHAVIORAL BIASES

- None feel a need for parental or spousal consent
- Very little marital bias
- Very strong nulliparous bias and a desire to protect fertility
- Not a strong respect for privacy

OUTCOMES OF BIAS

- Expressions of bias notably below average for unmarried, youth, and nulliparous clients
- However, in conjoint exercise, denied modern methods to about a quarter of nulliparous clients

Impromptu Sister profile

ATTRIBUTES

Mostly Christian (63%)

Nurses (39%), Midwives (33%) & Other (24%)

Middle-class clients (50%)

Attribute	Value
Have used FP in the past	81% *(avg. 75%)*
Often counsel youth 15-18	20% *(avg. 14%)*
Often counsel youth 19-24	25% *(avg. 31%)*
FP training within last year	58% *(avg. 52%)*
Have had youth FP training	63% *(avg. 50%)*
Comfortable discussing sex with youth	75% *(avg. 26%)*
Consider themselves over-loaded	92% *(avg. 76%)*

BELIEFS

Belief	Value
Highly concerned about delays in return to fertility	*61%* *(avg. 30%)*
Believe hormonal methods are not safe for youth	8% *(avg. 11%)*
Contraception makes youth more promiscuous	7% *(avg. 21%)*
Providing youth FP may damage clinic reputation	10% *(avg. 38%)*
Very concerned about impact of FP on client reputation	5% *(avg. 15%)*
Their own religion permits limiting	32% *(avg. 29%)*
Struggling newlyweds should delay pregnancy	9% *(avg. 23%)*

GENERAL ATTITUDES

Attitude	Value
Sex is part of a healthy life for youth	10% *(avg. 23%)*
Youth have no modesty when talking about sex	46% *(avg. 31%)*
Personally close to an impacted young person	69% *(avg. 41%)*
Highly enjoy working with youth	92% *(avg. 40%)*
Youth may need to be punished for bad behavior	39% *(avg. 27%)*
An FP provider should teach youth how to behave	93% *(avg. 65%)*
Consider themselves fairly paid	4% *(avg. 18%)*

ATTITUDINAL BIASES

Bias	Value
Strongly prefers not to provide FP without an HIV test	1% *(avg. 14%)*
Prefers to provider quicker/easier methods	8% *(avg. 20%)*
Most of often feels like… an older friend	65% *(avg. 49%)*
Needs to know marital status for FP counseling	4% *(avg. 28%)*
Nulliparous clients should not use certain methods	50% *(avg. 31%)*
IUDs are appropriate for young nulliparous women	6% *(avg. 11%)*
Spousal or parental consent required	0-1% *(avg. 15-16%)*

XX% >10pp above average XX% < 10pp below average XX% within 10pps of average

Sympathetic Guardian (7%)

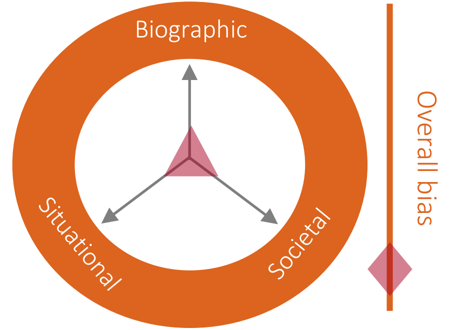
17% of Providers in Tanzania

SEGMENT COMPOSITON

SEGMENT SUMMARY

While a majority of these relatively young providers, mostly nurses, are the least open minded about youth sexuality, they tend to find youth easy and enjoyable to work with and respect their decision making. They recognize the importance in delaying early pregnancy and are not concerned about clinic or client reputations. A strong bias against IUDs, however, suggests a behavior change opportunity to provide more clear guidance on methods.

SYMPATHETIC GUARDIAN



BEHAVIOR CHANGE BARRIERS

- Any existing behavioral biases may driven be deep-seated religious and/or cultural norms

BEHAVIORAL BIASES

- Lowest overall nulliparous and marital bias
- Strong aversion to IUDs
- No consent or privacy biases

MAJOR DRIVERS

- Very few believe their religion supports limiting
- Do not believe sex is part of a healthy life for youth
- No formal AYSRH training

CONSIDERATIONS FOR BC

- Predominate need to focus on the values of spacing and limiting
- Need to clarify safety and value of IUDs

OUTCOMES OF BIAS

- Comparatively low levels refusal of service and promotion of abstinence
- However, would deny a modern method to about one third of nulliparous clients, and one quarter of youth and unmarried clients

Sympathetic Guardian profile

ATTRIBUTES

- Mostly Christian (63%)
- Mainly Nurses (73%)
- Bulk of youth clients are poor (46%)

Attribute	Value
Have used FP in the past	71% *(avg. 75%)*
Often counsel youth 15-18	10% *(avg. 14%)*
Often counsel youth 19-24	12% *(avg. 31%)*
FP training within last year	48% *(avg. 52%)*
Have had youth FP training	70% *(avg. 50%)*
Comfortable discussing sex with youth	77% *(avg. 26%)*
Consider themselves over-loaded	86% *(avg. 76%)*

BELIEFS

Belief	Value
Highly concerned about delays in return to fertility	*17%* *(avg. 30%)*
Believe hormonal methods are not safe for youth	4% *(avg. 11%)*
Contraception makes youth more promiscuous	0% *(avg. 21%)*
Providing youth FP may damage clinic reputation	1% *(avg. 38%)*
Very concerned about impact of FP on client reputation	2% *(avg. 15%)*
Their own religion permits limiting	9% *(avg. 29%)*
Struggling newlyweds should delay pregnancy	1% *(avg. 23%)*

GENERAL ATTITUDES

Attitude	Value
Sex is part of a healthy life for youth	1% *(avg. 23%)*
Youth have no modesty when talking about sex	9% *(avg. 31%)*
Personally close to an impacted young person	47% *(avg. 41%)*
Highly enjoy working with youth	68% *(avg. 40%)*
Youth may need to be punished for bad behavior	31% *(avg. 27%)*
An FP provider should teach youth how to behave	77% *(avg. 65%)*
Consider themselves fairly paid	23% *(avg. 18%)*

ATTITUDINAL BIASES

Bias	Value
Strongly prefers not to provide FP without an HIV test	11% *(avg. 14%)*
Prefers to provider quicker/easier methods	4% *(avg. 20%)*
Most of often feels like… a parent	49% *(avg. 36%)*
Needs to know marital status for FP counseling	3% *(avg. 28%)*
Nulliparous clients should not use certain methods	10% *(avg. 31%)*
IUDs are appropriate for young nulliparous women	0% *(avg. 11%)*
Spousal or parental consent required	0-2% *(avg. 15-16%)*

XX% >10pp above average   XX% < 10pp below average   XX% within 10pps of average

Paternalistic Clinician (3%)

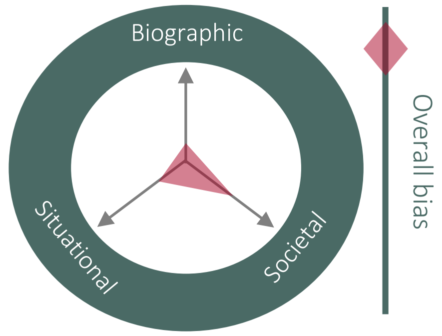
13% of Providers in Pakistan

SEGMENT COMPOSITON

SEGMENT SUMMARY

Older doctors who frequently counsel youth and are generally comfortable doing so, despite considerable generational gaps. Some progressive attitudes around youth decision making and timing of pregnancy are offset by strong marital and nulliparous biases, as well as a fear of competing SRH risks. A major behavioral change opportunity may existing in **helping these providers improve efficiency of servicing youth through counseling tools.**

PATERNALISTIC CLINICIAN



BEHAVIOR CHANGE BARRIERS

- Oldest group, likely set in their ways of thinking and counseling
- Most over-booked group while also strongest believers that youth take more time to counsel

BEHAVIORAL BIASES

- Strong preference to deny FP without and HIV test
- Highest nulliparous bias (80%)
- Very high marital bias (66%), on par with Content Conservative
- Low respect for privacy

MAJOR DRIVERS

- Low past personal FP use
- No formal AYSRH training
- Believe providers should teach youth clients how to behave
- Believe youth lack modesty
- Belief that young newlyweds should have children ASAP

CONSIDERATIONS FOR BC

- Leverage progressive beliefs on timing and limiting, as well as formal education
- More than three quarters have their own adolescent children
- Emphasize efficiency through tools to aide AYSRH counseling

OUTCOMES OF BIAS

- Compared against other segments, highest levels of bias across client groups
- Laws/norms prohibiting sexual relationships before marriage prevent providers from providing services to unmarried clients

Paternalistic Clinician profile

ATTRIBUTES

Muslim (96%)

Mostly Doctors (74%)

Bulk of youth clients are well-off (76%)

Have used FP in the past	48% *(avg. 75%)*
Often counsel youth 15-18	47% *(avg. 14%)*
Often counsel youth 19-24	44% *(avg. 31%)*
FP training within last year	73% *(avg. 52%)*
Have had youth FP training	4% *(avg. 50%)*
Comfortable discussing sex with youth	41% *(avg. 26%)*
Consider themselves over-loaded	100% *(avg. 76%)*

BELIEFS

Highly concerned about delays in return to fertility	22% *(avg. 30%)*
Believe hormonal methods are not safe for youth	4% *(avg. 11%)*
Contraception makes youth more promiscuous	6% *(avg. 21%)*
Providing youth FP may damage clinic reputation	2% *(avg. 38%)*
Very concerned about impact of FP on client reputation	5% *(avg. 15%)*
Their own religion permits limiting	99% *(avg. 29%)*
Struggling newlyweds should delay pregnancy	91% *(avg. 23%)*

GENERAL ATTITUDES

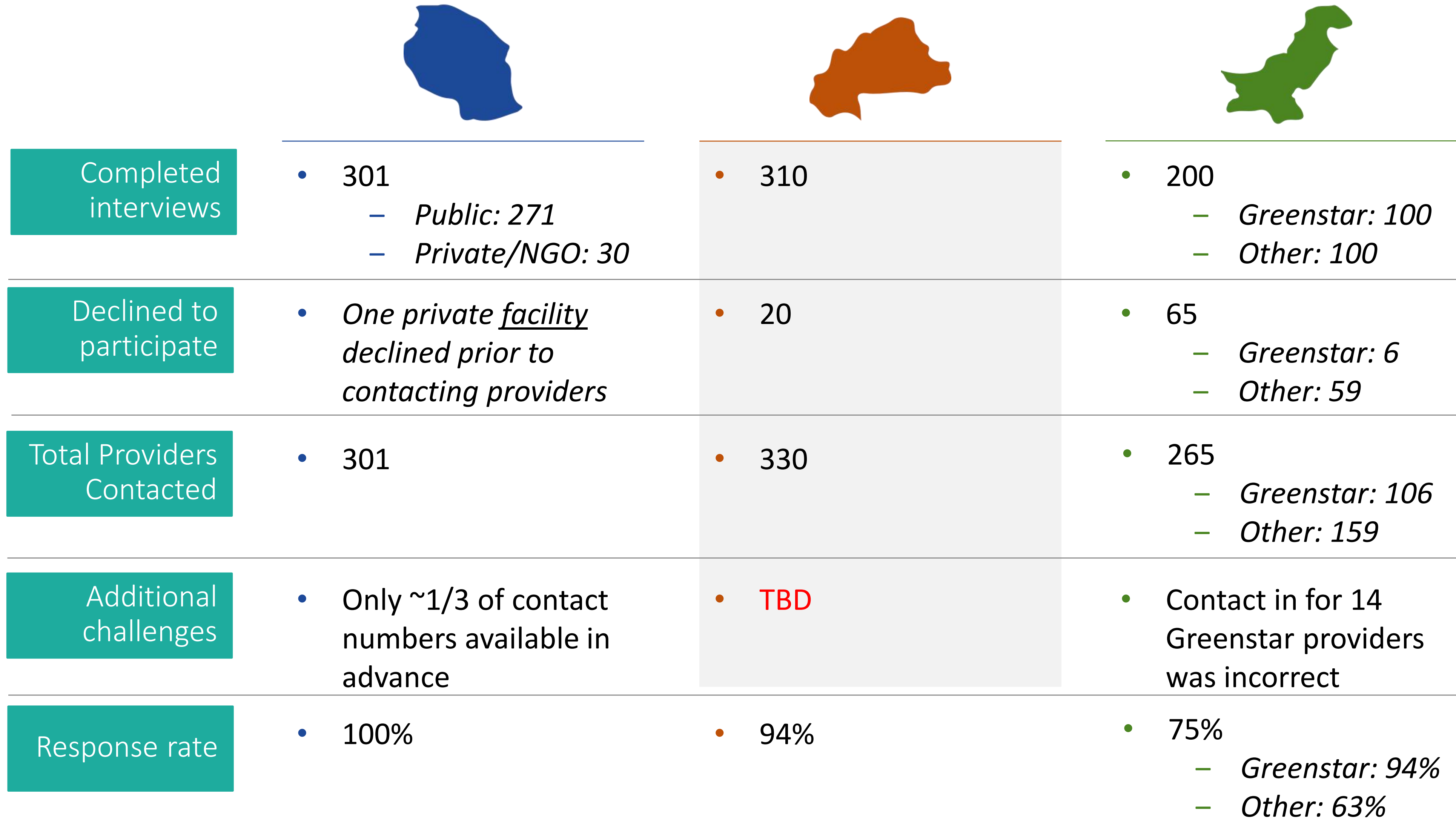
Sex is part of a healthy life for youth	87% *(avg. 23%)*
Youth have no modesty when talking about sex	92% *(avg. 31%)*
Personally close to an impacted young person	100% *(avg. 41%)*
Highly enjoy working with youth	87% *(avg. 40%)*
Youth may need to be punished for bad behavior	2% *(avg. 27%)*
An FP provider should teach youth how to behave	100% *(avg. 65%)*
Consider themselves fairly paid	15% *(avg. 18%)*

ATTITUDINAL BIASES

Strongly prefers not to provide FP without an HIV test	93% *(avg. 14%)*
Prefers to provider quicker/easier methods	32% *(avg. 20%)*
Most of often feels like a… parent	100% *(avg. 36%)*
Needs to know marital status for FP counseling	66% *(avg. 28%)*
Nulliparous clients should not use certain methods	80% *(avg. 31%)*
IUDs are appropriate for young nulliparous women	0% *(avg. 11%)*
Spousal or parental consent required	12-13% *(avg. 15-16%)*

XX% >10pp above average XX% < 10pp below average XX% within 10pps of average

Survey response rates by country



Completed interviews	• 301 – *Public: 271* – *Private/NGO: 30*	• 310	• 200 – *Greenstar: 100* – *Other: 100*
Declined to participate	• *One private facility declined prior to contacting providers*	• 20	• 65 – *Greenstar: 6* – *Other: 59*
Total Providers Contacted	• 301	• 330	• 265 – *Greenstar: 106* – *Other: 159*
Additional challenges	• Only ~1/3 of contact numbers available in advance	• TBD	• Contact in for 14 Greenstar providers was incorrect
Response rate	• 100%	• 94%	• 75% – *Greenstar: 94%* – *Other: 63%*

1 Primarily due to incorrect contact information
2 Excludes 'Unable to reach' respondents

Segment assignment confidence: modal classification table

	Detached Professional N = 272	Average Passive N = 260	Content Conservative N = 121	Impromptu Sister N = 76	Sympathetic Guardian N = 56	Paternalistic Clinician N = 26
Detached Professional	**254.93**	11.64	0	1.21	0.67	0
Average Passive	15.58	**244.05**	1.69	1.32	0.33	0.05
Content Conservative	0	1.00	**119.29**	0.32	0	0.01
Impromptu Sister	1.48	2.78	0.02	**72.99**	0.45	0
Sympathetic Guardian	0.01	0.44	0	0.15	**54.55**	0
Paternalistic Clinician	0	0.09	0	0	0	**25.94**

1 Range indicates parental / spousal consent

Segment assignment confidence: proportional classification table

	Detached Professional N = 268.45	Average Passive N = 263.02	Content Conservative N = 120.63	Impromptu Sister N = 77.72	Sympathetic Guardian N = 55.15	Paternalistic Clinician N = 26.02
Detached Professional	**246.23**	19.63	0.01	2.09	0.50	0
Average Passive	19.63	**237.43**	2.03	3.23	0.58	0.13
Content Conservative	0.01	2.03	**118.31**	0.26	0	0.01
Impromptu Sister	2.09	3.23	0.26	**71.56**	0.58	0
Sympathetic Guardian	0.50	0.58	0	0.58	**53.50**	0
Paternalistic Clinician	0	0.13	0.01	0	0	**26.02**

1 Range indicates parental / spousal consent