Breaking the Cycle of Transmission:

Increasing uptake of HIV testing, prevention and linkage to treatment among young men in South Africa.
The challenge: Young South African men are less likely to be diagnosed and treated and are transmitting HIV to younger female partners.


Source: South African National Strategic Plan on HIV, TB and STIs 2017-2022
The goal: Support South African stakeholders in reaching young men with HIV services.

1. How can we **better understand young men’s decisions and behaviours** around HIV testing, prevention and treatment?

2. How can we **identify different segments** of young men to enable better tailoring/targeting?

3. How can we **reach each segment more effectively** with HIV prevention, testing and treatment?
We have finished the research phase and are now moving into design and piloting.
Research took place in KZN and MPU with a total of 2095 men and 67 healthcare providers.

**Geographic focus**
- 5 districts of KwaZulu-Natal (eThekwini, King Cetshwayo, Ugu, uMgungundlovu, Zululand)
- 3 districts of Mpumalanga (Ehlanzeni, Gert Sibande, Nkangala)

**Qualitative phase** (n=76 men aged 25-34, 67 healthcare providers)
- Targeted sample to achieve mix of HIV-positive (linked and not linked) and HIV-negative, in ‘high-risk, hard-to-reach’ areas
- Eight-hour ethnographic shadowing (18 men, 4 HCPs)
- Two-hour in-depth interviews (58 men, 64 HCPs)
- Carried out by trained interviewers from similar demographics in the respondent’s home language

**Quantitative phase** (n=2019 men aged 20-34)
- Men 20-34, matric or less, lower socio-economic status (NLI 1-4)
- Random sample based on Enumerated Area sampling
- One-hour tablet-based survey, carried out by trained interviewers from similar demographics in the respondent’s home language
The qualitative research pointed to various barriers and challenges.

Anticipated loss with no corresponding gain
Fear, not indifference
Grief and trauma
Inconsistent condom use based on intuition
Testing positive means life collapses
Disclosure is frightening
Provider empathy is not guaranteed
Many men’s responses to HIV are characterized by **anticipated loss** with no corresponding gain.

Men are often perceived as **indifferent** when actually they are **paralysed by fear**.

Many live with constant **stress and insecurity**; HTS and ART feel like additional burdens – not a relief.

Many are AIDS orphans, and **unresolved grief and trauma** can trigger reflexive distancing from HIV services.

Many engage in high-risk behaviours for HIV transmission that they **rationalize or misunderstand**.

Testing positive can feel like life is over, triggering anticipated **loss of identity, status, pleasure and even life**.

They want to be **in control** of decisions around testing, treatment, and disclosure, but often feel **hunted and coerced**.

**Disclosure** ranks high on their list of fears. Many anticipate it will result in relationship conflict or loss, as well as loss of status among their family, peers and community.

The **clinic environment** is not welcoming or familiar.

Provider empathy is often **limited and conditional**, and counselling is often **scripted and didactic**.
A good segmentation meets several criteria:

**Distinct**
- No overlap in the segments
- Easily identifiable and recognisable
- Easily described (in terms of attitudes and behaviours)

**Meaningful**
- Based on attitudes and behaviours that are relevant to the product or service being developed/offered

**Actionable**
- Informs prioritisation of segments to target (and why), how to find them and how best to engage with them

**Process:**

- **Data cleaning & categorization**: Reduces the number of variables; places data into different themes
- **Modelling**: Links attitudes to behaviours, group respondents into homogenous segments
- **Evaluation of options**: Examine potential clusters of respondents based on fit statistics, key attitudes, goals, behaviours, demographics, etc.
- **Profiling based on selected solution**: Clustering solution with the most potential selected, and groups fully profiled with the available data

The quantitative results facilitated identification of segments based on knowledge, attitudes and behaviours.
We identified five segments of men in relation to HIV testing and linkage.

**Mr. Grey**
A traditional, community-oriented, often rural man, with a low level of education, low HIV knowledge, high level of fear of HIV, and a traditional concept of gender, but a positive outlook and a sense of responsibility to family and community. Fears that HIV would diminish his standing with family and community.

**Mr. Rose**
Young, fun-loving, and optimistic, with a high level of HIV knowledge and progressive views on gender, but also a higher number of sexual partners. In denial about his level of risk and concerned that an HIV diagnosis would mean ‘the end of the party’.

**Mr. Teal**
Young, responsible, engaged in his community, optimistic about the future, and open about sexual health and health-seeking, with progressive views on gender. Fears an HIV diagnosis would turn him from ‘the good guy’ into ‘the bad guy’.

**Mr. Blue**
Older, more educated and more stable, but with a bleak outlook on life, few meaningful connections or sources of motivation, and problematic alcohol use linked to impulsive behaviour, and negative views of the health system. Fears that having HIV would be yet another burden in a burdensome life.

**Mr. Green**
Disconnected and pessimistic, with a low level of education, very low HIV knowledge, high levels of depression, problematic use of alcohol, a traditional concept of gender, higher rates of intimate partner violence, and negative views of healthcare. Fears HIV as yet another failure in life.
What’s similar across segments?

• Low levels of stable employment, averaging 35%.

• Low and inconsistent condom use – only 31% said they ‘always used a condom in the past year’.

• Average of 2.4 sexual partners in past year.

(Note: All figures are self-reported.)
Mr Teal

18% of the men in this segment who had tested positive never initiated treatment

What's keeping him from linking?
- Fears having HIV would diminish his reputation, turning him from ‘the good guy’ into ‘the bad guy’
- Fears having HIV would jeopardize his primary relationship

What might help?
- Counseling to help him reframe and retain his identity as a good member of the community
- Support in disclosing to his family and community
- Messages that reduce stigma around PLHIV as irresponsible, promiscuous, ‘a problem’

Young, responsible, engaged in his community, optimistic about the future, and open about sexual health and health-seeking
Mr Teal by the numbers

15% HIV+ 82% initiated

Age
- 20-24, 45%
- 25-29, 33%
- 30-34, 22%

Joint youngest of segments

Circumcision
- None, 32%
- Traditional, 17%
- Clinic <16, 26%
- Clinic >16, 25%

More likely to have been medically circumcised

Testing
- Never tested
  - 8%
- Frequent tester
  - 59%
- Infrequent tester
  - 33%
- Not tested within last year
  - 32%
- Tested within last year
  - 60%

Education
- 58% matric
- Average level of education

Employment
- 32% with a steady job
- Least likely to be employed

| Breaking the cycle of transmission |
Mr Teal prioritises community, family and work.
Mr. Rose

30% of the men in this segment who had tested positive never initiated treatment

What’s keeping him from linking?
• Fears starting ART would mean ‘the end of the party’
• Fears disclosure would jeopardize his primary relationship

What might help?
• Counseling that focuses on continuing to live a fun and carefree life, rather than what he must give up
• Support in disclosing to his partner and friends
• Messages on U=U/Treatment as Prevention

Young, fun-loving, and optimistic about his future, with a high level of HIV knowledge but also a higher number of sexual partners
Mr Rose by the numbers

Age
- 20-24, 43%
- 25-29, 39%
- 30-34, 17%

Location
- MP, 52%
- KZN, 48%

Circumcision
- None, 40%
- Traditional, 19%
- Clinic <16, 25%
- Clinic >16, 17%

Average rates of medical circumcision

Education
- 60% matric
- Above average level of education

Employment
- 36% with a steady job
- Above average likelihood of being employed

Testing
- Never tested, 12%
- Frequent tester, 56%
- Infrequent tester, 32%
- Tested within last year, 50%
- Not tested within last year, 27%

Second highest testing frequency compared to other segments

Joint youngest of all segments

14% HIV+ 70% initiated (lowest)

More likely to be urban, predominantly Ehlanzeni and eThekwini
Mr Rose prioritises friends and fun.
Mr Green

30% of the men in this segment who had tested positive never initiated treatment

What’s keeping him from linking?
- Fears having HIV would drag him down even further in life
- Very low knowledge of HIV and ART
- Few people he trusts or feels comfortable talking to
- Negative view of healthcare system and providers

What might help?
- Empathetic counseling that helps him to surface and cope with his extensive issues and barriers
- Peer outreach that makes services and support relatable
- Services that make it easy to be on treatment
- Adherence clubs and other social/group approaches
- Information on the benefits of treatment

Disconnected and pessimistic, with a low level of education, very low HIV knowledge, more indicators of depression, problematic use of alcohol, a traditional concept of gender, higher rates of intimate partner violence
Mr Green by the numbers

**Age**

<table>
<thead>
<tr>
<th>Segment</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>20-24</td>
<td>38%</td>
</tr>
<tr>
<td>25-29</td>
<td>37%</td>
</tr>
<tr>
<td>30-34</td>
<td>25%</td>
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</tbody>
</table>

Average age amongst segments

**Circumcision**

<table>
<thead>
<tr>
<th>Type</th>
<th>Percentage</th>
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</thead>
<tbody>
<tr>
<td>None</td>
<td>46%</td>
</tr>
<tr>
<td>Traditional</td>
<td>20%</td>
</tr>
<tr>
<td>Clinic &lt;16 Clinic, after 16</td>
<td>19%</td>
</tr>
<tr>
<td>Clinic, after 16</td>
<td>14%</td>
</tr>
</tbody>
</table>

Least likely to be medically circumcised

**Education**

- **58% matric**
  - Average level of education

**Employment**

- **35% with a steady job**
  - Second least likely to be employed

**Testing**

- **Never tested**
  - 12%

- **Frequent tester**
  - 52%
  - 66%

- **Infrequent tester**
  - 36%

- **Not tested within last year**
  - 22%

Lower than average testing rates and frequency

**Breaking the cycle of transmission**
Mr Green prioritises friends and recreation.
Mr Blue

25% of the men in this segment who had tested positive never initiated treatment

What’s keeping him from linking?
• Fears that having HIV would be yet another burden to carry
• Few meaningful connections or sources of motivation
• Few people he trusts or feels comfortable talking to
• Negative view of the healthcare system and providers

What might help?
• Empathetic counseling that helps him to identify and leverage sources of motivation
• Services that make it easy to be on treatment
• Information on the benefits of treatment

More educated and more stable, but with a bleak outlook on life, few meaningful connections or sources of motivation, and problematic alcohol use linked to impulsive behavior
Mr Blue by the numbers

- **Circumcision**: Most likely to live in KZN of all segments
  - Not circumcised, 45%
  - Traditional, 13%
  - Clinic, before 16, 24%
  - Clinic, after 16, 18%

- **Age**: Comparatively older
  - 20-24, 29%
  - 25-29, 43%
  - 30-34, 28%

- **Education**: Comparatively less likely to be circumcised
  - 73% matric
  - Most educated segment

- **Employment**: 40% with a steady job
  - Most likely of all segments to be employed

- **Testing**: Medium testing frequency among segments
  - Never tested
    - 9%
  - Infrequent tester
    - 38%
  - Frequent tester
    - 53%
  - Tested within last year
    - 64%
  - Not tested within last year
    - 26%
Mr Blue has few strong motivations, making interventions challenging to design.
Mr Grey
14% of the men in this segment who had tested positive never initiated treatment

What’s keeping him from linking?
• He’s actually not doing too bad—his greater barrier is testing
• Fears having HIV would diminish his standing in the community
• Few people he trusts or feels comfortable talking to

What might help?
• Counseling that helps him cope with his fear of losing his identity as a traditional family and community man
• Support in disclosing to his partner, family and community
• Messages on U=U/Treatment as Prevention

A traditional, community-oriented, often rural man, with a low level of education, low HIV knowledge, high level of fear of HIV, but a positive outlook and a sense of responsibility to family and community
Mr Grey by the numbers

Location
- MP, 38%
- KZN, 62%

Most likely to live in a traditional rural home
Second most likely to live in KZN

Age
- 20-24, 42%
- 25-29, 36%
- 30-34, 23%

Average age amongst segments

Circumcision
- None, 32%
- Traditional, 15%
- Clinic <16, 32%
- Clinic >16, 21%

More likely to be medically circumcised before 16

Education
- 55% matric
- Lowest level of education

Employment
- 33% with a steady job
- Second least likely to be employed

Testing
- 11% Never tested
- 47% Frequent tester
- 42% Infrequent tester
- 39% Not tested within last year
- 50% Tested within last year

Low testing frequency among segments

14% HIV+
85% initiated (highest)
Mr Grey prioritizes community and family.
<table>
<thead>
<tr>
<th></th>
<th>Teal</th>
<th>Rose</th>
<th>Green</th>
<th>Blue</th>
<th>Grey</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV prevalence</td>
<td>15%</td>
<td>14%</td>
<td>19%</td>
<td>14%</td>
<td>14%</td>
</tr>
<tr>
<td>ART initiation</td>
<td>82%</td>
<td>70%</td>
<td>70%</td>
<td>75%</td>
<td>85%</td>
</tr>
<tr>
<td>VMMC</td>
<td>51%</td>
<td>42%</td>
<td>33%</td>
<td>42%</td>
<td>53%</td>
</tr>
<tr>
<td>HIV knowledge</td>
<td>High</td>
<td>Highest</td>
<td>Lowest</td>
<td>Middle</td>
<td>Low</td>
</tr>
<tr>
<td>Social support</td>
<td>Highest</td>
<td>High</td>
<td>Middle</td>
<td>Lowest</td>
<td>Low</td>
</tr>
<tr>
<td>Gender equity</td>
<td>Highest</td>
<td>High</td>
<td>Lowest</td>
<td>Middle</td>
<td>Low</td>
</tr>
<tr>
<td>Optimism</td>
<td>Highest</td>
<td>High</td>
<td>Lowest</td>
<td>Low</td>
<td>Middle</td>
</tr>
<tr>
<td>Top values</td>
<td>Community</td>
<td>Friends, recreation, sex</td>
<td>Friends, recreation</td>
<td>None</td>
<td>Community, family</td>
</tr>
</tbody>
</table>
Segments at a glance: Demographics

**Location**
- More likely MPU: 48% KZN/52% MPU
- More likely KZN: 79% KZN/21% MPU

**Education (% with matric)**
- Less educated: 52%, 55%, 58%, 60%, 73%

**Employment (% with steady job)**
- Less likely to be employed: 32%, 33%, 35%, 36%, 40%
- More likely to be employed: 52% KZN/48% MPU

**Age**
- Younger: 25.7, 25.9, 26.1, 26.3, 26.9
- Older
<table>
<thead>
<tr>
<th>Segment</th>
<th>Characteristics</th>
</tr>
</thead>
</table>
| **Teal** | Lowest level of risk (more likely to be circumcised, fewer casual partners)  
• Fears that being HIV-positive would diminish his reputation and standing |
| **Rose** | High level of acquisition/transmission risk (more casual partners)  
• In denial about his level of risk  
• Fears that being HIV-positive would require undesirable lifestyle changes |
| **Green** | High level of acquisition/transmission risk (low VMMC, high alcohol use, more casual partners)  
• Low knowledge of HIV, perhaps as a deliberate avoidance tactic  
• Few people he trusts or feels comfortable talking to about sexual health  
• Negative view of health system and healthcare workers  
• Fears that being HIV-positive would drag him even further down in life |
| **Blue** | Few meaningful connections or sources of motivation  
• Few people he trusts to talk about sexual health  
• Negative view of health system and healthcare workers  
• Fears that being HIV-positive would be yet another burden to carry |
| **Grey** | Lower level of risk (higher VMMC and condom use, fewer casual partners)  
• Few people he trusts or feels comfortable talking to about sexual health  
• Fears that being HIV-positive would diminish his standing in the community |
### Segments at a glance: What might improve linkage to treatment?

<table>
<thead>
<tr>
<th>Color</th>
<th>Segment</th>
<th>Counseling/Support</th>
<th>Messages</th>
</tr>
</thead>
</table>
| Teal  | • Counseling that helps him cope with fear of losing his identity as an upstanding member of the community  
      • Support in disclosing to his family and community  
      • Messages that reduce stigma around PLHIV as irresponsible, promiscuous, ‘a problem’ | **Rose**  
      • Counseling that focuses on continuing to live a fun and carefree life, rather than what he must give up  
      • Support in disclosing to his partner and friends  
      • Messages that focus on U=U/Treatment as Prevention, which he is likely to find motivating | **Green**  
      • Empathetic counseling that helps him to surface and cope with his particular barriers (including depression)  
      • Community/peer outreach that takes services and support to him—he is unlikely to go to the clinic  
      • Services that make it easy to be on treatment—make it a relief rather than a burden  
      • Adherence clubs and other social/group approaches—he likes ‘safety in numbers’ and tends to go with the flow  
      • Information on the benefits of starting treatment—he has very low overall knowledge of HIV | **Blue**  
      • Challenging segment as he reports few strong motivations in life  
      • Empathetic counseling that helps him to surface and cope with his particular barriers  
      • Community/peer outreach that takes services and support to him—he is also unlikely to go to the clinic  
      • Messages that focus on U=U/Treatment as Prevention, which he may find somewhat relevant | **Grey**  
      • Challenge for this segment appears to be more testing than linkage  
      • Counseling that helps him cope with his fear of losing his identity as a traditional family man and community man  
      • Support in disclosing to his partner, family and community  
      • Messages that focus on U=U/Treatment as Prevention, which he is likely to find motivating |
Priority segments for treatment

- **Teal** and **Grey**: Fewer barriers, lower risk
- **Blue**: Fewer barriers, higher risk
- **Rose**: More barriers, lower risk
- **Green**: More barriers, higher risk
PrEP
Barriers to PrEP adoption and use fall into four main categories.

1. **Social**
   - What will people around me think?

2. **Inter-personal**
   - What will my partners think?

3. **Psychological**
   - How does PrEP affect my identities?

4. **Practical**
   - How will I fit this into my daily routine?
Mr. Teal and Mr. Rose seem to be the best candidates for PrEP.

**Mr. Rose** shows high interest in PrEP, motivated by the reward of a carefree lifestyle while staying away from the HIV ‘cliff edge’. He also has fewer barriers than other segments. His level of risk is also relatively higher, with more casual partners and less consistent condom use.

**Potential challenge:** Motivation to sustain use given his tendency to underestimate his risk

Among this segment, 36% responded that they are ‘very likely’ to use it.

**Mr. Teal** also shows high interest in PrEP, motivated by a sense of responsibility and the desire to protect his reputation. He also has fewer barriers than other segments. His risk level is relatively lower, but he may be a social catalyst for making PrEP acceptable to other segments.

**Potential challenge:** Motivation to sustain use given his lower level of risk

Among this segment, 42% responded that they are ‘very likely’ to use it.
Priority segments for PrEP

- Higher risk
- Lower risk
- More interest / fewer barriers
- Less interest / more barriers

Colors:
- Teal
- Rose
- Blue
- Grey
- Green
Next steps

• Design workshops
• Prototyping
• Piloting & evaluation
Acknowledgements

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