Measuring HIV-related Stigma and Discrimination in Health Care Settings in Thailand:  A Health Care Provider Survey

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- Thai Network of People Living with HIV/AIDS Foundation (TNP+)
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Acknowledgements

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The stigma and discrimination measurement survey questionnaire for health care facility staff was also adapted from the questionnaires developed under the HPP global activity.

The guideline manual was mainly constructed by based on data information and lesson learned from the pilot study of measuring HIV-related stigma and discrimination in health care setting in Thailand in 2014, led by the International Health Policy Program (IHPP), Ministry of Public Health. Thus, it is important to note that this is the collaborative work of several development partners both international and national sectors. The contributing team, including:

- the research team comprised the International Health Policy Program (IHPP), Research Institute of Health Sciences (RIHES), Faculty of Medicine, Chiang Mai University, Chiang Mai Provincial Health Office, and AIDS, TB, and STI Control Division, Bangkok Metro Politian (BMA);
- the technical team, consisted of technical experts from the Research Triangle International (RTI);
- the supportive team, which were USAID, UN joint team (UNAIDS, UNDP, UNFPA, UNICEF, and ILO; the National AIDS Management Centre (NAMc), Department of Disease Control, Ministry of Public Health; Foundation for AIDS rights (FAR); and Thailand Networks of People Living with HIV/AIDS Foundation (TNP+).

Last but not least, this work would have not been possible without kind assistance of health staff in all participated hospitals in the two pilot provinces. We are very thankful for your participation.

1 http://www.healthpolicyproject.com
PART 1: Background to the surveys

What and who is this manual for?
The purpose of this manual is to provide guidance in implementing a standardized survey to monitor how much HIV-related stigma and discrimination (S&D) is occurring in health care services. The manual provides the rationale for measuring S&D in health facilities, a description of the survey sections and the practical steps and guidance for implementing the surveys.

Monitoring S&D in health services will be done by conducting a survey among staff of health care facilities. This survey will help the MOPH, Provincial Health Offices and health facility administrators better understand what staff know and feel about HIV, people living with or at higher risk of HIV, and what they know about health facility policies and procedures related to HIV.

This manual is for program managers, facility managers, policymakers and others who are interested in exploring, assessing, and reducing HIV-related S&D in health care settings. The first step in developing interventions to reduce HIV stigma and discrimination in health care facilities is to understand the views and behaviors of staff towards people living with HIV.

The provincial surveys will be used:
- as a baseline for program monitoring and evaluation to assess the effect of intervention activities on reducing HIV-related stigma and discrimination, and
- as a monitoring tool to assess levels of HIV-related S&D over time.

The health facility staff survey is designed to be administered among all levels and types of staff, including staff who provide direct health care services to PLHIV and people at higher risk of HIV (e.g. doctors, nurses and other health care providers, who work at ARV or VCT clinic) and staff who work in other units, but may indirectly provide services (e.g. dentists, pharmacists, administrative and support staff, and security guards). The reason why data should be collected from all staff levels, and not just doctors and nurses, is because HIV-related stigma and discrimination can be experienced by a patient at every level of contact within a health care facility. By including a broad range of staff in the data collection process and in subsequent HIV stigma reduction programming, HIV stigma can be addressed across an entire health facility.

Why measure HIV stigma and discrimination in health care settings?
HIV-related stigma and discrimination exists across multiple social settings including the community, household, places of workshop and health care settings.
The stigma and discrimination that a person living with HIV (or suspected of living with or especially vulnerable to HIV) may fear or encounter at a health facility can influence their decision to go for HIV testing or other health exams or care, to go to or return to a facility for treatment and could lead to delays in seeking ARV treatment and other support services. HIV stigma negatively impacts the quality of all health care services provided so reducing HIV-related stigma and discrimination in health care settings is crucial to removing barriers to access to HIV prevention, care and treatment services. In addition to contravening the right to health, stigma and discrimination in health facilities has the potential to fuel the spread of HIV.

Research has shown that HIV stigma and discrimination is often directed towards people living with HIV or suspected of being HIV positive, or towards people who are or suspected of being from populations at higher risk of HIV such as men who have sex with men, sex workers, transgendered people and drug users. Such stigma and discrimination may occur in many different forms including but not limited to: refusal to provide treatment services, referring to another provider or health facility, putting them at the end of a queue irrespective of when they arrived to the facility, gossiping about and/or disclosing a patient’s HIV status to colleagues/family members without their consent, and the use of degrading language when interacting with them. Research has shown that patients living with HIV or at greater risk of HIV often experience differential care that visibly marks them when performed in a public area of a health facility or in front of other health facility staff. For instance, a provider may use double gloves during non-invasive procedures (like taking temperature or blood pressure) with patients living with HIV or they assume are HIV+ or are at risk of HIV, but not other patients. This excessive use of gloves has been linked to providers’ fears of HIV transmission.

HIV-related stigma and discrimination can also be experienced by staff who offer care to people from these groups. Known as secondary stigma, staff may experience HIV stigma from colleagues, friends, or family members due to their association with people living with HIV or at higher risk of HIV. Secondary stigma is an important component of HIV stigma to diminish because it has the potential to impact the way services are offered.

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The 2009 Thailand *People Living with HIV Stigma Index* found that S&D were prevalent and occurred in a range of sectors including in the work place, education, community and health care settings. S&D towards people living with HIV are a particularly significant problem in the health sector in Thailand and recognized as key barriers to an effective HIV response as they negatively impact on HIV testing, disclosure, linkage into care and treatment, adherence and retention in HIV prevention, treatment, care and support and in particular to reaching those most vulnerable to HIV, who often face multiple and compounded stigmas. The *Stigma Index* revealed 20% of respondents were denied health services and 20% reported discriminatory reactions of health service providers on discovering the respondent’s HIV positive status. People living with HIV in Thailand also reported high levels of internalized stigma manifesting as shame, guilt and low self-esteem and because of this many avoided clinics and hospitals despite needing to access medical services.7

S&D in the health sector, both real and anticipated or feared, deters and delays people from undertaking HIV-testing and treatment or adhering to medication regimens, reducing quality of life for people living with HIV, and driving new infections. The HIV epidemic in Thailand is concentrated in key affected populations including men who have sex with men, transgender persons, sex workers and people who inject drugs. These groups already experience significant stigma, discrimination, human rights violations and gender inequality in the community. A 2009 USAID study showed that men who have sex with men and transgenders experienced high levels of discrimination in the form of violence, with 24% of men who have sex with men and 33% of transgenders out of a total of 86 respondents reporting physical violence, and 63% of men who have sex with men and 78% of transgenders reporting emotional violence in the past 12 months.8 It is probable that people living with HIV experience S&D, not only due to living with HIV but also because of their gender identities and sexual orientation or associated behaviors such as drug use or sex work.

The Government of Thailand is dedicated to reducing the stigma and discrimination experienced by people living with HIV and key affected populations. In 2011, Thailand’s National AIDS Committee expressed its commitment to the UNAIDS *Getting to Zero: 2011 – 2015 Strategy*9 with zero new infections, zero AIDS-related deaths and zero stigma and discrimination, at the General Assembly High Level Meeting on AIDS in New York. Thailand’s *National AIDS Strategy 2012 – 2016* is committed to this vision and aims to identify barriers to access to HIV prevention, treatment, care and support caused by stigma and discrimination.10 The national strategy outlines three goals regarding stigma and discrimination in Thailand to be

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7 People Living with HIV Stigma Index, Asia Pacific Regional Analysis 2011, GNP+, ICW Global, IPPF, UNAIDS.
8 Screening for Violence Against men who have sex with men and Transgenders: Report on a Pilot Project in Mexico and Thailand, October 2009, Myra Betron, USAID.
achieved by 2016: the revision of all laws and policies that obstruct equal access to HIV prevention and treatment; the inclusion of human rights and gender specific needs in all HIV responses; and the reduction of stigma and discrimination towards people living with HIV and key affected populations.

These surveys will allow program managers and health care services administrators and staff to monitor whether S&D reduction interventions are actually having an impact on reducing S&D in health care services, so that barriers to people with HIV or at risk of HIV accessing the services are reduced. The hope is that with more people feeling comfortable going for testing and treatment, HIV transmission will decrease and people will receive better care.
PART 2: Implementing the surveys

The following steps need to be followed to implement the provincial survey of HIV-related stigma and discrimination in health care facilities:

1. Make a list of health facilities to be included in the survey
2. Calculate the sample size for the survey
3. Select respondents in each health facility
4. Data collection
5. Train field workers in overseeing the data collection
6. Data entry and cleaning
7. Data analysis
8. Reporting, presenting the results

Each of these steps is described in detail below, and examples are also provided for key steps. A set of Excel files which provide some templates for several of these steps is also available and can be downloaded from the MOPH website [http://www.namc.ddc.moph.go.th]

1. Make a list of health facilities

In order to produce a profile of S&D in the province according to the distribution of staff among the province’s health facilities, we need to prepare a list of the facilities we wish to sample from in the province. This might be all health facilities, or only facilities meeting certain criteria, such as those who actually see HIV patients, or those that conduct or refer for HIV testing and treatment and provide other HIV and STI services. Since we are hoping to eliminate HIV-related S&D in all health services (even non-HIV related care and treatment), it is suggested that all health facilities be included in the sampling. Alternatively, a province may prioritize its S&D reduction efforts to certain facilities, and may want to sample from just these facilities, to assess how effective the interventions have been in the targeted facilities.

The list of facilities does not need to follow any order, but should include the name of the facility and the number of clinical and non-clinical support staff who might have contact with patients. Administrative staff who work completely behind the scene who have no contact with patients do not need to be included in the totals since they will not be selected to complete the questionnaire. At the bottom of the list, include the total of health facility staff for the list of facilities in the province. Then the proportion of staff in each facility will be calculated (column E). An example is provided below in Table 1.
Table 1. Example of facility listing to determine number of respondents

<table>
<thead>
<tr>
<th>Health Facility</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provincial Referral Hospital</td>
<td>1.</td>
<td>91</td>
<td>18%</td>
<td>66</td>
<td>25</td>
</tr>
<tr>
<td>District Hospital A</td>
<td>2.</td>
<td>56</td>
<td>11%</td>
<td>37</td>
<td>19</td>
</tr>
<tr>
<td>District Hospital B</td>
<td>3.</td>
<td>39</td>
<td>8%</td>
<td>28</td>
<td>11</td>
</tr>
<tr>
<td>District Hospital C</td>
<td>4.</td>
<td>39</td>
<td>8%</td>
<td>27</td>
<td>12</td>
</tr>
<tr>
<td>District Hospital D</td>
<td>5.</td>
<td>49</td>
<td>10%</td>
<td>35</td>
<td>14</td>
</tr>
<tr>
<td>District Hospital E</td>
<td>6.</td>
<td>34</td>
<td>7%</td>
<td>25</td>
<td>9</td>
</tr>
<tr>
<td>District Hospital F</td>
<td>7.</td>
<td>47</td>
<td>9%</td>
<td>34</td>
<td>13</td>
</tr>
<tr>
<td>District Hospital G</td>
<td>8.</td>
<td>20</td>
<td>4%</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>District Hospital H</td>
<td>9.</td>
<td>24</td>
<td>5%</td>
<td>17</td>
<td>7</td>
</tr>
<tr>
<td>District Hospital I</td>
<td>10.</td>
<td>24</td>
<td>5%</td>
<td>19</td>
<td>5</td>
</tr>
<tr>
<td>District Hospital J</td>
<td>11.</td>
<td>40</td>
<td>8%</td>
<td>29</td>
<td>11</td>
</tr>
<tr>
<td>District Hospital K</td>
<td>12.</td>
<td>37</td>
<td>7%</td>
<td>27</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. Calculate the sample size

This survey will gather data from health facility staff who provide direct and indirect services and care to people living with and at higher risk of HIV. Staff who provide direct services to people living with and at higher risk HIV include those who work in ARV clinics, STI clinics, TB clinics or VCT clinics. Additional clinical staff who provide indirect services to people living with HIV include those who work in other units across the hospital. Example units include in-patient ward, internal medicine, surgery, antenatal care, dentistry, obstetrics/gynecology, intensive care, and pharmacy, among others.

The survey aims to obtain information from a range of non-clinical staff who also work in health facilities. This is because studies have shown that people living with HIV have encountered HIV-related stigma and discrimination from non-clinical as well as clinical staff. Therefore, we will assess HIV stigma levels among for example cashiers, receptionists, cleaning staff, and ward attendants, in addition to staff who are medically trained (e.g. doctors, nurses, lab technicians). Hospital staff such as those who do not have ward duties or would only have incidental patient

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contact such as administrative staff, accountants, bookkeepers, engineering and maintenance staff will not be included in the sampling. Health facility staff will be included based on voluntary participation. The survey will collect data from health facility staff who are both males and females and who are at least 18 years of age.

To calculate the minimum sample size, we need an estimate (from other studies, where possible) of the prevalence of the phenomenon we plan to measure, in this case HIV-related stigma and discrimination in health care facilities. For our purposes we will use fear of HIV transmission when in contact with PLHIV as reported by health care staff as the variable which demonstrates the level of stigma. Other variables could be used, such as the proportion of staff reporting having observed denial of care or providing poorer quality of care to PLHIV, but as awareness increases of these types of discrimination, reported observation of them by health care staff could increase in the short term. We will make the assumption that decreasing fear of transmission will lead in time to decreasing denial of care or poor quality of care.

Thus, the number of staff who participate in the survey depends on several factors:

- Total number of staff working in the province
- An estimate of the level prevalence of HIV-related S&D
- The amount of change in the level of prevalence to measure
- The design effect needed to allow statistically significant comparisons of periodic surveys
- An estimated of the proportion of questionnaires that will be completed correctly

We can get the total number of staff from the list of health facilities prepared in the previous step. To estimate the level of existing HIV-related S&D, we will use the results of a pilot study conducted in 2014 in Chiang Mai and Bangkok Provinces. This study showed that 65.6% of health staff expressed some degree of fear of HIV transmission from performing routine examinations and being in contact with PLHIV. We will want to a sample size large enough to measure a statistically significant change of 10% in the level of S&D from the estimated level.

The minimum sample size required for the S&D survey in health facilities per province uses the following formula:\(^{12}\):

\[
n = \frac{Z^2 \times P(1-P)}{D^2}
\]

Where:

\[ Z = 1.96 \text{ (for 95\% level of confidence)} \]
\[ P = \text{expected population prevalence} \]
\[ D = .5 \times \text{Confidence interval (or degree of change to measure)} \]

Here is an example of how to calculate the sample size. The calculation is based on the following assumptions:

- Total population of 500 staff in selected hospitals per province (from Table 1 above)
- 65.6\% frequency of fear of HIV transmission, based on the baseline/pilot assessment of S&D in Bangkok and Chiang Mai
- Ability to measure an absolute change in stigma levels of +/-10%.

\[
n = \frac{1.96 \times 1.96 (0.656(1-0.656))}{(10\%)^2}
\]
\[
n = \frac{0.8669}{0.001} = 87
\]

If we were sampling from a large population, the minimum sample needed would be 87 respondents per province. But since we have a very limited population to sample from (only health facility staff), we need to adjust the sample size. The formula for sample size calculation provided above is used for large populations. For limited populations, \( n \) is adjusted by a finite population correction factor:

\[
n = \frac{n}{1 + (n / \text{Population})}
\]
\[
n = \frac{87}{1 + (87 / 500)} = 74
\]

So, the number of respondents we’ll need for the province is 74.

However, we are going to want to measure S&D periodically to make sure that interventions designed to reduce S&D are having the desired impact. In order to allow the comparison of sequential measures to be statistically significant, we need to have a larger sample size each time we do the survey. We need to increase the sample size by a factor called the design effect. For our purposes, we will apply a design effect of 2 to allow for comparison of sequential survey results, giving a sample size of 148.

\[ n = n \times \text{design effect} \]
\[ n = 74 \times 2 = 148 \]

One final adjustment factor needs to be applied. The questionnaires are going to be self administered, that is, respondents will read and select their responses on a printed questionnaire or on a tablet, rather than being interviewed by someone who has been trained to complete the questionnaire properly. Some respondents will make mistakes or not fully completing the questionnaire. Sometimes these mistakes and missing answers can be tracked down and corrected, but some will not. We will assume that 10% of the questionnaires will have a number of mistakes or will be incompletely filled in, and thus be unusable for the analysis, leaving 90% of the questionnaires to be analyzed.

\[ n = \frac{n}{\text{completion rate}} \]

\[ n = \frac{148}{90\%} = 164 \]

So, assuming that 90% of self-administered questionnaires are correctly completed, we will need 164 respondents to be recruited in the province.

An Excel spreadsheet template is provided to help with these calculations, and the sample size will depend on the total number of health facility staff and other parameters described above if you choose to change them.

### 3. Select respondents in each health facility

Firstly, we need to know how many respondents are needed from each of the health facilities included in the survey. The number of respondents from each health facility will be calculated based on the proportion of staff in the province working in the facility (column E in Table 1 above). To calculate the number of respondents to be recruited per facility, add a new column to the health facility table (column F) and multiply the total sample size needed for the province by the proportion of staff in each facility from the list of facilities prepared in step 1. In the example table, the Provincial Referral Hospital has 18% of the staff in the province (from column E). The total sample size for the province is 162 (from the sample size calculation example given above). So the number of respondents needed from the Provincial Referral Hospital is 29 (164 x 18%). This shown in Table 2 below with the number of respondents to recruit in each facility in column F.

Secondly, we will recruit respondents in each health facility. Ideally they should be selected randomly from throughout the facility. To do this, the facility will need to supply a list of the names of the staff, organized by department or service, if possible. The list should then be randomized by the survey team.
For example, from Table 2 below, District Hospital A has a total of 56 staff. The number of respondents needed from that hospital is 18. Starting at the top of the randomized staff list, the first 18 people will be asked to complete the questionnaire. If anyone among the first 18 decline or are absent on the day of the survey, the next person on the list will be asked.

Table 2. Example of facility listing to determine number of respondents

<table>
<thead>
<tr>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
<th>F</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Health Facility</td>
<td>Clinical staff</td>
<td>Non-clinical support staff</td>
<td>Total staff</td>
<td>Proportion</td>
</tr>
<tr>
<td>1.</td>
<td>Provincial Referral Hospital</td>
<td>66</td>
<td>25</td>
<td>91</td>
<td>18%</td>
</tr>
<tr>
<td>2.</td>
<td>District Hospital A</td>
<td>37</td>
<td>19</td>
<td>56</td>
<td>11%</td>
</tr>
<tr>
<td>3.</td>
<td>District Hospital B</td>
<td>28</td>
<td>11</td>
<td>39</td>
<td>8%</td>
</tr>
<tr>
<td>4.</td>
<td>District Hospital C</td>
<td>27</td>
<td>12</td>
<td>39</td>
<td>8%</td>
</tr>
<tr>
<td>5.</td>
<td>District Hospital D</td>
<td>35</td>
<td>14</td>
<td>49</td>
<td>10%</td>
</tr>
<tr>
<td>6.</td>
<td>District Hospital E</td>
<td>25</td>
<td>9</td>
<td>34</td>
<td>7%</td>
</tr>
<tr>
<td>7.</td>
<td>District Hospital F</td>
<td>34</td>
<td>13</td>
<td>47</td>
<td>9%</td>
</tr>
<tr>
<td>8.</td>
<td>District Hospital G</td>
<td>14</td>
<td>6</td>
<td>20</td>
<td>4%</td>
</tr>
<tr>
<td>9.</td>
<td>District Hospital H</td>
<td>17</td>
<td>7</td>
<td>24</td>
<td>5%</td>
</tr>
<tr>
<td>10.</td>
<td>District Hospital I</td>
<td>19</td>
<td>5</td>
<td>24</td>
<td>5%</td>
</tr>
<tr>
<td>11.</td>
<td>District Hospital J</td>
<td>29</td>
<td>11</td>
<td>40</td>
<td>8%</td>
</tr>
<tr>
<td>12.</td>
<td>District Hospital K</td>
<td>27</td>
<td>10</td>
<td>37</td>
<td>7%</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>500</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

This randomization is easily done in Excel. Create a list of staff following the sample in Table 3 below and list staff names with their department in columns B and C. In column C, use the random number generator in Excel =rand() to insert a random number for each person. Since Excel will update the random number each time you make a change to the sheet once the you have filled in column C you will need to “fix” that number so it doesn’t change. Highlight all the cells in column C and select copy. Then select Paste Special, then select Values and apply the paste to the whole column.

Now you need to sort the list based on the random numbers. Select the list of names including only columns B, C and D. From the Excel menu select Data, then Sort. Choose the Random number column as the “Sort by” field. The list is now randomized and you can select the first 18 names as those you will invite to complete the S&D survey.

If anyone is absent or declines to participate, they are replaced by those on the list following name number 18 (see the example in Table 3 below).
Table 3. Example of randomizing staff list for respondent selection

<table>
<thead>
<tr>
<th></th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Name 27</td>
<td>C</td>
<td></td>
<td>0.015193869</td>
<td>Yes</td>
</tr>
<tr>
<td>2</td>
<td>Name 31</td>
<td>C</td>
<td></td>
<td>0.017361745</td>
<td>Yes</td>
</tr>
<tr>
<td>3</td>
<td>Name 33</td>
<td>C</td>
<td></td>
<td>0.034439948</td>
<td>Yes</td>
</tr>
<tr>
<td>4</td>
<td>Name 20</td>
<td>C</td>
<td></td>
<td>0.037312705</td>
<td>Yes</td>
</tr>
<tr>
<td>5</td>
<td>Name 29</td>
<td>C</td>
<td></td>
<td>0.040677983</td>
<td>Refused</td>
</tr>
<tr>
<td>6</td>
<td>Name 2</td>
<td>A</td>
<td></td>
<td>0.070483621</td>
<td>Yes</td>
</tr>
<tr>
<td>7</td>
<td>Name 28</td>
<td>C</td>
<td></td>
<td>0.075466802</td>
<td>Yes</td>
</tr>
<tr>
<td>8</td>
<td>Name 16</td>
<td>B</td>
<td></td>
<td>0.093013422</td>
<td>Yes</td>
</tr>
<tr>
<td>9</td>
<td>Name 24</td>
<td>C</td>
<td></td>
<td>0.1334559</td>
<td>Yes</td>
</tr>
<tr>
<td>10</td>
<td>Name 4</td>
<td>A</td>
<td></td>
<td>0.151083657</td>
<td>Yes</td>
</tr>
<tr>
<td>11</td>
<td>Name 11</td>
<td>B</td>
<td></td>
<td>0.235807278</td>
<td>Yes</td>
</tr>
<tr>
<td>12</td>
<td>Name 41</td>
<td>D</td>
<td></td>
<td>0.238781509</td>
<td>Yes</td>
</tr>
<tr>
<td>13</td>
<td>Name 39</td>
<td>D</td>
<td></td>
<td>0.242125575</td>
<td>Absent</td>
</tr>
<tr>
<td>14</td>
<td>Name 6</td>
<td>A</td>
<td></td>
<td>0.252422776</td>
<td>Yes</td>
</tr>
<tr>
<td>15</td>
<td>Name 34</td>
<td>C</td>
<td></td>
<td>0.252864004</td>
<td>Yes</td>
</tr>
<tr>
<td>16</td>
<td>Name 12</td>
<td>B</td>
<td></td>
<td>0.254150897</td>
<td>Yes</td>
</tr>
<tr>
<td>17</td>
<td>Name 40</td>
<td>D</td>
<td></td>
<td>0.27263361</td>
<td>Yes</td>
</tr>
<tr>
<td>18</td>
<td>Name 37</td>
<td>D</td>
<td></td>
<td>0.295321367</td>
<td>Yes</td>
</tr>
<tr>
<td>19</td>
<td>Name 47</td>
<td>E</td>
<td></td>
<td>0.316299093</td>
<td>Replace #5</td>
</tr>
<tr>
<td>20</td>
<td>Name 5</td>
<td>A</td>
<td></td>
<td>0.329718369</td>
<td>Replace #13</td>
</tr>
<tr>
<td>21</td>
<td>Name 55</td>
<td>E</td>
<td></td>
<td>0.343821999</td>
<td>No</td>
</tr>
<tr>
<td>22</td>
<td>Name 18</td>
<td>C</td>
<td></td>
<td>0.368064871</td>
<td>No</td>
</tr>
<tr>
<td>23</td>
<td>Name 36</td>
<td>C</td>
<td></td>
<td>0.37109605</td>
<td>No</td>
</tr>
<tr>
<td>24</td>
<td>Name 26</td>
<td>C</td>
<td></td>
<td>0.378949851</td>
<td>No</td>
</tr>
<tr>
<td>25</td>
<td>Name 9</td>
<td>B</td>
<td></td>
<td>0.408951235</td>
<td>No</td>
</tr>
<tr>
<td>etc</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

In order to maintain confidentiality, the randomized list of names should not be shared with the facility staff or management and must be kept in a secure place or destroyed at the end of the survey. The final order of the names should be kept by the survey team for the purposes of selecting respondents only. The survey questionnaires will not ask for names or have any code that can link them back to the staff list, so the identity of respondents remains confidential. Once the survey is complete, the randomized list should be destroyed or kept in a secure place which is not available to the facility staff or management, so that the identity of respondents is kept confidential.
4. **Data collection**

Data will be collected within each health facility over a 1 or 2 day period. This should be enough for the 20 or so respondents in each facility to have time to complete the questionnaire. Ideally a room should be set aside where respondents can go to complete the questionnaire. The questionnaire is not long so it should not take more than 15-20 minutes to complete. More than one respondent can complete the questionnaire in the same room at the same time, as long as they don’t talk to each other, discuss the questionnaire, or look at each others’ answers to the questions.

Health facilities are busy places so all staff might not be available to complete the survey at the requested time. By having a designated room for the survey, staff can swing by the room when they are free in their schedules. You can offer lunch and/or refreshments and tea through the day for staff. Also, staff who agree to complete the survey can be offered a small incentive, either a cash payment or small gift to express appreciation for their time and effort.

When staff arrive to complete the survey, they should first be given an informed consent form which includes information about the survey, the purpose, the intended use of the data, the estimated time needed to complete the questionnaire, and an explanation of confidentiality procedures. If they agree to participate in the survey, they are then invited to sign the informed consent form. The form is taken and they are then provided with the survey questionnaire. (Informed consent, confidentiality and storage are discussed later).

Staff should complete the questionnaire in one session, and should not take the questionnaire away to complete later or in another place.

In order to ensure that all these procedures are followed as closely as possible, you should plan to have one or two data collection team members present in the room throughout the day.

5. **Train field workers in overseeing the data collection**

During the data collection data collectors should be available to assist in answering any questions on the informed consent statement or questions that may arise from respondents as they are completing the survey. The data collectors will also be responsible for reviewing the completed surveys for completeness and safeguarding the surveys. In the review, the data collectors should play close attention to any missing data.

Data collectors should be trained to provide this support during the data collection phase. The training should consist of explanations of informed consent and confidentiality, storage and safeguarding completed questionnaires and informed consent forms, and very importantly, explanations of the content of the survey questionnaire. The content of the training is contained in the next few sections.
which describe the questionnaire, and confidentiality and informed consent. During the training, data collectors should practice completing the questionnaire themselves and note areas of confusion, questions about the meaning of certain questions for discussion and clarification.

A sample training agenda is provided in Appendix 5: Data collection team training agenda.

This survey was designed to capture root causes of HIV stigma and discrimination. The key areas or domains that have been shown in research and are subsequently collected in this survey include:

1. Fear of HIV infection;
2. Institutional-level facilitators and barriers (facility policy and work environment);
3. Attitudes (stereotypes and prejudice);
4. Discrimination, experienced by health facility staff; and
5. Opinions about people who are at greater risk of acquiring HIV.

These categories of information are broken into three sections in the questionnaire, as follows:

**Table 4. Questionnaire sections and categories of questions**

<table>
<thead>
<tr>
<th>Section</th>
<th>Category</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Background</td>
<td>Demographic information, Job duties</td>
<td>3 questions (current position and baseline/endline)</td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>Note:</strong> baseline (1 question) will ask whether respondents have ever received training about S&amp;D and endline (2 sub-items) will ask the same as baseline, but also ask about the specific training provided by each health facility.</td>
</tr>
<tr>
<td>S&amp;D Drivers</td>
<td>Fear</td>
<td>1 question with 3 sub-items</td>
</tr>
<tr>
<td></td>
<td>Health facility policies and work environment</td>
<td>4 questions</td>
</tr>
<tr>
<td></td>
<td>Attitude towards PLHIV</td>
<td>2 questions (1 question with 4 sub-items)</td>
</tr>
<tr>
<td>Enacted stigma</td>
<td>Observed</td>
<td>2 questions (1 question with 2 sub-items)</td>
</tr>
<tr>
<td></td>
<td>Behavior driven by fear</td>
<td>1 question with 2 sub-items</td>
</tr>
</tbody>
</table>
Key populations: gay, transgender, sex workers, PWID and migrant workers

<table>
<thead>
<tr>
<th>Section</th>
<th>Category</th>
<th>Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Observed</td>
<td>1 question with 5 sub-items</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>14 questions with 24 (baseline)/25 (endline) items</td>
<td></td>
</tr>
</tbody>
</table>

The following descriptions of each section and set of questions need to be clearly understood by all survey team members. These descriptions provide the rationale for asking each question and how it will contribute to an overall understanding of S&D in the province and/or health facility.

**Part 1: General/Personal Information – Question 1, Question 13**

This section contains only two questions. The first is to ask what the respondent's current position is in the health facility.

The second question, at the end of the questionnaire asks if the respondent has received training in S&D reduction. This question is asked at the end of the questionnaire to reduce any influence it might have on how a respondent might answer the questions in the survey. For a pre-intervention, baseline survey, the question only asks if the respondent has ever participated in S&D reduction training. For a post-intervention or endline assessment, the question has two parts: has the respondent ever participated in S&D reduction training, and has the respondent participated in a specific S&D reduction training that has been offered by the MOPH recently as part of Thailand’s current campaign to eliminate S&D in health services.

These questions should be answered last, after the rest of the questionnaire is complete.

**Part 2: Infection Control and Prevention**

*Fear of HIV infection – Question 2*

This concept is geared at understanding staff’s level of fear or worry of HIV infection when doing their jobs at health care facilities. This fear can lead to discriminatory behaviors like physical isolation of patients living with HIV or refusal to care for patients living with HIV. Understanding the specific fears of health facility staff will allow you to develop more effective programs that address HIV transmission concerns.
Fear of HIV infection is captured in Question #2. The responses to these questions also contain a “not applicable” category that is available for staff who feel that their duties do not include the job responsibility that is being asked about. (See Analysis Tips box for analysis guidelines of not applicable, don’t know, missing and skip patterned questions.)

**Self-reported use of unnecessary precautions with PLHIV - Question 3**

The use of unnecessary or excessive precautions when providing care or services to a patient living with HIV in a health care setting is a manifestation of the fear of HIV infection in routine job responsibilities. These types of behaviors include avoiding physical contact, wearing double gloves, among others. The use of such extra precautions may be noticeable to others in the health care setting including other patients and health facility staff, which could lead to disclosure of a patient living with HIV’s status without their consent. Note that this set of questions includes a not applicable response (See Analysis Tips box for guidance on not applicable.)

**Part 3: Health Facility Environment**

**Observed discriminatory behavior - Question 4 (2 parts)**

The observed discriminatory behavior questions do not directly ask health facility staff if they themselves have engaged in specific stigmatizing behaviors because previous research has shown that staff often know which types of behaviors are acceptable and which ones are not and may provide the socially desirable response, whether or not they have actually engaged in the behavior. Therefore, the questions ask whether staff have observed the discriminatory behaviors in their health facility in the past 12 months, rather than whether they themselves have engaged in them. This indicator is important to ask because it provides a measure of stigmatizing behaviors occurring in a health care setting.

**Attitudes (stereotypes and prejudices) - Question 5**

An important cause of HIV stigma and discrimination in health care settings is attitudes and opinions of health facility staff towards people living with HIV. In this section we ask whether people are comfortable to work with colleagues or co-workers (either other staff or possibly community volunteers who are living with HIV.

**Part 4: Health Facility Policies**

**Institutional-level facilitators and barriers – Questions 6-9**

This section of the questionnaire collects data on institutional factors that can help to reduce HIV-related stigma and discrimination, and also support health facility staff to offer safe and welcoming services to patients living with HIV and key
populations affected by HIV. Causes of stigma at the institutional-level include the absence of anti-discrimination policies and guidelines related to the treatment of patients living with HIV and key populations affected by HIV, and related to the protection of health facility staff from risk of HIV infection. In facilities where such policies do exist, stigma can occur if the policies and guidelines are not enforced. The root causes of stigma also stem from lack of knowledge or inadequate trainings on policies and standards like universal precautions, and inconsistent supervision and support. The overall physical environment of a health facility may also result in stigma like a sign identifying a ward or clinic as specifically serving people living with HIV.

Part 5: Opinions about PLHIV

*Attitudes (stereotypes and prejudices) - Questions 10-11*

As above, attitudes and opinions of health facility staff about people living with HIV strongly influence how staff interact with patients who are or might be living with HIV. Measuring stereotypes and prejudices toward people living with HIV and key populations is important because values and attitudes may affect how a provider consciously or unconsciously treats patients, which health care options are offered to patients, which individuals are offered testing and when they are offered testing. The questions are designed to understand the opinions and stereotypes of health facility staff towards people living with HIV (Question 10), and pregnant women living with HIV (Question 11).

Part 6: Issues related to Key Affected Populations regardless of their HIV status

*Observed discriminatory behavior - Question 12 (5 parts)*

The majority of people living with HIV and those at increased risk of acquiring HIV come from specific population groups which are often stigmatized and seen in a negative way by the broader general community because of their sexuality or perceived sexuality, or behaviors that have put them at higher risk. In this section we ask about observed discriminatory practice towards people who are or thought to be from key populations which are at higher risk of HIV. Some staff, because of their religious or cultural background might have negative opinions about people who may be at higher risk of HIV, but are still able be professional and provide acceptable quality of care to patients who they perceive to be from these groups. While it may not be possible to change people’s moral attitudes or opinions, it is important that any sort of discrimination towards any patients should never occur.
PART 3:  Informed consent and confidentiality

Informed consent
Informed consent procedures must be considered and utilized to ensure ethical research is implemented. Informed consent informs the respondent about the study purpose, potential consequences or benefits of study participation (with this survey there are minimal benefits or consequences with participation), how anonymity and confidentiality of responses will be upheld and maintained, provides respondents the opportunity to voluntarily decide whether they would like to participate in the study, and ensures respondents that participation or refusal in the survey will not impact their current job status. The informed consent statement should also tell respondents that they can refuse to answer any questions or stop the interview at any time. The statement should appear on the first page of the survey and instruct respondent to ask any clarifying questions about the statement from data collectors in the room.

After reading the informed consent statement, the respondent signs the form signifying that they understand the informed consent statement and survey information statement. The next question is to ask whether the respondent is willing to participate in the survey. Respondents should receive a copy of the informed consent statement with the name and number of persons to contact with questions about the study. The signed informed consent statement is handed to a data collection team member to be securely stored with other study documents. There should be no link (code, name, other indicator) to the survey questionnaire that the respondent receives to complete after agreeing to participate.

Upon completion of the survey, respondents should be instructed to put their survey into an envelope, seal the envelope, and hand it to a data collection team member to assign the questionnaire code. This is done to ensure confidentiality and anonymity of respondents.

Confidentiality
In order to maintain the anonymity of respondents and confidentiality of all the data collected during the survey, no names or personal identifiers are collected on the survey questionnaires. The only identifiers used are on the informed consent forms where respondents are asked to sign their name as evidence that the purpose of the survey has been explained to them and that they agree to participate voluntarily. Since the informed consent form has the respondent’s signature, it is important that these be stored separately from the survey questionnaires, and that no coding or identifier is used to link a survey questionnaire to the person’s informed consent form.

The survey team need, however, to be able to ensure that individual survey questionnaires are kept together and can be tracked in case problems are found in
the data set (mistaken data entry, or conflicting responses) and the data analysis team need to check the original paper questionnaire to try and resolve the problem. To do this a code is developed and assigned to each page of every survey questionnaire. This will ensure that a questionnaire can be reassembled if it should fall out of its envelope and lose its staple or paper clip. Also, data entry and analysis staff can check the code in the record containing a mistake or some confusion and go back and find the original paper questionnaire by looking for the corresponding code.

**Questionnaire coding**
The questionnaire does not ask for any identifying or demographic information (age, sex, religion, residence) about respondents. It is important however to have a coding system for the paper questionnaires that allows a link to the record in the database once the data has been entered. This allows the survey team to go back to the paper questionnaire to clarify any mistakes or confusion once discovered during data cleaning and analysis. A simple code will be assigned by the data collection staff after each questionnaire is completed by the respondent. Guidance for constructing the ID number follows:

**Constructing an ID number**
Facility location (urban/rural) and type (hospital/health center/health post/etc) were not included as questions in the survey because this information can be captured through an ID number. If for example, an ID number consists of six numbers it can include:

- the first two numbers signify the province, or district (eg. 01=Bangkok, 02=Amnat Charoen, 03 = Ang Thong, 04 = Bueng Kan, etc) OR the district in the province (eg. 01=Mueang Chon Buri, 02=Ban Bueng, 03=Nong Yai, etc)
- the third number signifies the type of facility (1=regional hospital, 2=district hospital, 3= health center, 4=health post, etc),
- the forth number identifies whether the facility is located in a rural (1), peri-urban (2), or urban area (3),
- the fifth and sixth numbers identify the facility where the survey is implemented (you’ll need to list all the facilities where the survey will take place and assign a number to each one);
- and the seventh and eighth numbers are the unique ID for respondent. This number begins at 1 and is a count of all the respondents interviewed.

| 0 | 3 | 2 | 3 | 0 | 5 | 1 | 7 |

From the ID above we know that this interview took place in Nong Yai district, in the district hospital, in an urban area, at facility #05 and the unique ID for this respondent is 17.
PART 4: Data analysis

The overall objective of the data analysis is to understand the current situation of HIV-related stigma and discrimination in health care settings. Specifically, our aim is to understand the drivers of stigma and discrimination in a health facility, how stigma is enacted in this context and the attitudes staff display towards PLHIV.

Analysis of the S&D survey data should be done by people who are trained in research and data analysis. This guide is only to outline the steps in conducting the analysis, not to teach how to do the analysis or use any software commonly used for these sorts of analyses.

Software packages which are often used for this kind of data analysis include SPSS®, SAS®, STATA®, EpiData and EpiInfo. Each of these software packages will produce the analysis needed, but each one uses different syntax and commands to generate the tables. Software that allows production of graphics, such as Excel is also helpful to prepare eye pleasing and more readily understood images of the results.

Methods used for data analysis

As a first step, we should explore the data by examining frequency distributions on all variables. This will help us address data cleaning issues as well as check for patterns in missing or non-applicable data that need to be handled in the analysis.

The data analysis strategy is two-fold. We first want to examine the overall distribution of a variable to estimate levels of stigma and discrimination and its drivers prevalent in the sample. We can do this by simply checking the frequencies of the variable. We can also “dichotomize” the variables that are measured on a scale to get an overall measure. “Dichotomizing” means to recode a range of possible responses into just one response which captures any positive response to compare with the total negative responses (see the example provided below). In addition, for variables that are part of an overall concept, such as fear, observed stigma, behavior driven by fear and attitudes towards PLHIV, we can create an indicator variable by grouping together similar responses across the items to get an overall measure of the attitude or behavior.

After examining the spread of the variables, the second stage of the analysis is focused on trying to understand what and who drives these behaviors and attitudes. The data analysis strategy here is to “disaggregate” the data to the extent possible to check for underlying patterns. Disaggregation is the process of breaking data into its constituent parts to check for trends and patterns. For instance, we can disaggregate data by occupational categories to assess if particular staff categories are more prone to certain behaviors and attitudes. Similarly, we can check to see if attitudes and behaviors vary by levels of patient load a staff handles or if they work directly with PLHIV.
Now taking the example of the three fear variables, we will demonstrate how the analysis can be conducted.

Example: Fear

The questionnaire contains three questions related to fear. We can begin by examining the distribution of the three fear variables and assess levels of worry reported by generating frequencies of each of the variables. Sample results are shown in Table A.

**Table A: Fear of infection among health care staff in Country X**

<table>
<thead>
<tr>
<th></th>
<th>Not Worried</th>
<th>A little worried</th>
<th>Worried</th>
<th>Very Worried</th>
<th>Not Applicable</th>
<th>Missing / Not stated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worried about touching the clothing, bedding or belongings of PLHIV</td>
<td>54.9</td>
<td>27.4</td>
<td>9.0</td>
<td>1.6</td>
<td>6.9</td>
<td>0.3</td>
</tr>
<tr>
<td>Worried about dressing wounds of PLHIV</td>
<td>27.7</td>
<td>24.8</td>
<td>14.0</td>
<td>9.2</td>
<td>24.0</td>
<td>0.3</td>
</tr>
<tr>
<td>Worried about drawing blood from PLHIV</td>
<td>23.0</td>
<td>22.2</td>
<td>15.3</td>
<td>7.4</td>
<td>30.6</td>
<td>1.6</td>
</tr>
</tbody>
</table>

Secondly, we conduct further analysis by dichotomizing each of the variables into a worry versus not worried variable (e.g. worried = 1 and not worried = 0). We can dichotomize the variable by excluding the non-applicable and missing responses and grouping the different levels of worry (a little, worried, very worried) into one category, and not worried into the other category. With this dichotomized measure, we can now estimate overall levels of worry in the sample under each of the fear variables. For instance, we can now report the percentage of respondents who expressed fear of touching the bedding or clothing of PLHIV.

**Table B: Fear of infection among health care staff in Country X**

<table>
<thead>
<tr>
<th></th>
<th>Not Worried</th>
<th>Worried</th>
<th>N/A or Missing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worried about touching the clothing, bedding or belongings of PLHIV</td>
<td>54.9</td>
<td>38.0</td>
<td>7.1</td>
</tr>
<tr>
<td>Worried about dressing wounds of PLHIV</td>
<td>27.7</td>
<td>48.0</td>
<td>24.3</td>
</tr>
<tr>
<td>Worried about drawing blood from PLHIV</td>
<td>23.0</td>
<td>44.9</td>
<td>32.2</td>
</tr>
</tbody>
</table>
Next, we can also create a variable to estimate overall levels of worry displayed in the sample by combining responses of the three fear variables into one variable. To create this variable, we first will have to create a dichotomous variable consisting of worried versus not worried responses (e.g. worried =1 and not worried =0) for each of the fear variables separately (if you haven’t already done this in the previous step).

Lastly, you will create another new variable “any fear” which is filled by recoding the responses to the dichotomous variables created in the previous step. It is important to note here that if a respondent says worry to any one of the three fear statements, then they are to be included in the numerator of the new “any fear” variable, even if they report that one or both of the other statements are not applicable to them. Hence, by following this procedure, we get an overall measure of worry grouping together respondents who express fear on any of the items versus respondents who respond negatively to all the items. We can now report the percentage of respondents who reported any form of fear of HIV transmission.

Table C: Fear of infection among health care staff in Country X

<table>
<thead>
<tr>
<th></th>
<th>359</th>
</tr>
</thead>
<tbody>
<tr>
<td>All applicable respondents (#)</td>
<td></td>
</tr>
<tr>
<td>Any worry (#/%)</td>
<td>113 (31.5%)</td>
</tr>
</tbody>
</table>

To further understand the drivers of fear, we can disaggregate the data. As a first step, we can cross tabulate the four fear variables to check for patterns in the responses. For instance, we can assess if the same individuals report worry across the four fear items. If we see such a pattern, we can conduct a sub-analysis on this group to understand the composition of the group. Similarly, we can disaggregate fear items by cross tabulating with other variables. For instance, if we cross tabulate fear with variables such as occupational categories or staff working with PLHIV directly, we can evaluate if a particular category of staff are more prone to displaying fear or stigmatizing behavior.

Table D: Fear of infection among different categories of health care staff in Country X

<table>
<thead>
<tr>
<th>Fear characteristics</th>
<th>Staff type</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Professional</td>
<td>Non-professional</td>
<td>Not stated</td>
<td>Total (N=379)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(N=230)</td>
<td>(N=142)</td>
<td>(N=7)</td>
<td>(N=379)</td>
<td></td>
</tr>
<tr>
<td>All applicable respondents (#)</td>
<td>226</td>
<td>128</td>
<td>4</td>
<td>358</td>
<td></td>
</tr>
<tr>
<td>Any worry (#/%)</td>
<td>147 (65.0%)</td>
<td>95 (74.2%)</td>
<td>3 (100.0%)</td>
<td>245 (68.4%)</td>
<td></td>
</tr>
</tbody>
</table>
If the data permit, the following are a recommended grouping for analysis by occupational categories is based on a staff member's amount of patient interaction and potential exposure to body fluids\(^\text{13}\):

1=Medical/exposed. Includes nurses, doctors, dentists, medical technicians.  
2=Non-medical/exposed. Includes cleaners, ward attendants.  
3=Medical/not exposed. Includes lay health workers, counselors.  
4=Non-medical/not exposed. Includes administrative and clerical staff, and guards.

Similarly, we can cross tabulate fear variables with staff having previously participated in S&D trainings and whether a facility has procedures in place to reduce risk of transmission to see if these make a difference in reducing levels of fear.

The same approach should be taken to analyze each area or domain of S&D:

1. **Drivers:**
   a. Fear of HIV transmission  
   b. Attitudes towards PLHIV  
   c. Health facility policies and environment  

2. **Enacted stigma:**
   a. Observed stigma  
   b. Self-reported use of unnecessary precautions  
   c. Secondary stigma  
   d. Attitudes/behavior toward Key Populations

The final analysis should produce the following set of tables which will describe the drivers of stigma and discrimination in a health facility, how stigma is enacted, and the attitudes staff display towards PLHIV and key populations.

1. Fear of infection among health staff  
2. Reported use of unnecessary precautions when providing care of PLHIV  
3. Observed stigma among health staff in the past 12 months  
4. Attitude of health staff towards co-workers living with HIV  
5. Agreement with health facility policies among health staff  
6. Opinion of health staff about PLHIV patients  
7. Observed behaviors towards Key Populations in the past 12 months among health staff

\(^\text{13}\) Stigma And Discrimination In Health Care Facilities: Final MERG-Approved Indicators. Health Policy Project, 2014.
**Constructing S&D indicators**

To report of “any” one of three types of worrying (question 2) refers to “composite index” of fear of infection among health staff, which is the 1st item mentioned in the above section. This composite index has been suggested to be used as a stigma and discrimination indicator of the fear of infection among health care staff recommended by the S&D indicator technical working group.

Hence, in order to monitor the change overtime of stigma and discrimination situation in health care setting, calculation of the composite index of each recommended set of questions will be very useful. Similar methods of calculation and presentation can also be done for the other items suggested in the above section.

Summary of recommended sets of questions to be calculated composite index to detect the S&D in health care setting overtime is shown in the table below.

<table>
<thead>
<tr>
<th>Composite index domain*</th>
<th>Numerator</th>
<th>Denominator</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1. Fear of infection</strong>&lt;br&gt;Question no. 2.1, 2.2, and 2.3</td>
<td>Express any worry of these three worries.&lt;br&gt;(Worry = little worries/ worries/ strongly worries)</td>
<td>All applicable respondents&lt;br&gt;(all people who answer the question, excluding those who answer “non-applicable”)</td>
</tr>
<tr>
<td><strong>2. Report of using unnecessary precautions</strong>&lt;br&gt;Question no. 3.1 and 3.2</td>
<td>Report of using any type of these two precautions.&lt;br&gt;(Yes to any of these two questions)</td>
<td>All applicable respondents&lt;br&gt;(all people who answer the question, excluding those who answer “non-applicable”)</td>
</tr>
<tr>
<td><strong>3. Observed discriminatory practices made by health staff</strong>&lt;br&gt;Question no. 4.1 and 4.2</td>
<td>Having observed any of negative practices of this set of questions.&lt;br&gt;(Observed = once or twice/ several times/ most of the times)</td>
<td>All respondents</td>
</tr>
<tr>
<td><strong>4. Attitude of health staff towards co-workers living with HIV</strong> (Question 5)</td>
<td><strong>Answer</strong> “comfortable or a little comfortable” to Q 5.</td>
<td>All respondents</td>
</tr>
<tr>
<td><strong>5. Attitude and Opinion of health staff towards PLHIV</strong>&lt;br&gt;Question no. 10.1, 10.2, 10.3, and 11</td>
<td>Agree with any of statements of Q 10.1-10.3, and disagree with Q 11.&lt;br&gt;(Agree = strongly agree/ agree, Disagree = strongly disagree/ disagree)</td>
<td>All respondents</td>
</tr>
<tr>
<td>Composite index domain*</td>
<td>Numerator</td>
<td>Denominator</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>6. Agreement with health facility policies among health staff</td>
<td></td>
<td>All respondents</td>
</tr>
<tr>
<td>6.1 Enforcement of intuitional policies (Question 7)</td>
<td>Strongly agree/ agree to Q 7.</td>
<td>All respondents</td>
</tr>
<tr>
<td>6.2 Institutional policies (Question 9)</td>
<td>Yes to Q 9.</td>
<td>All respondents</td>
</tr>
<tr>
<td>7. Observed behaviors towards Key Populations in the past 12 months among health staff (Question 12.1-12.5)</td>
<td>The number of observations for each KP group. (Observed = once or twice/ several times/ most of the times)</td>
<td>All respondents</td>
</tr>
</tbody>
</table>

*Domain 1, 2, 3, 5, and 6 were recommended by the S&D indicator technical working group.
PART 5: Presenting survey results

The purpose of conducting the S&D survey is to allow program managers and health care services administrators and staff to monitor whether S&D reduction interventions are having an impact on reducing S&D in health care services so that barriers to people with HIV or at risk of HIV accessing the services are reduced. It follows then that the survey results should be presented step by step to provide the evidence that S&D is decreasing over time.

Several tables were presented as examples to understand the data analysis in section 4. These tables and similar ones for the survey other variables would be sufficient, with interpretation, to describe the baseline situation of S&D in a health facility or a province. Over time however, we will want to demonstrate trends in each of these areas of drivers of stigma and enacted stigma.

For example, using the fear variables described in the data analysis section, we could set up similar tables with a time factor to demonstrate change over time when the survey is conducted at routine intervals, as shown in the example Table E. This example shows a marked decrease of fear of HIV transmission among health facility staff, but the numbers of staff still reporting fear in 2015 has not yet reached the national target of zero S&D by 2016.

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worried about touching the clothing, bedding or belongings of PLHIV</td>
<td>38.0</td>
<td>17.4</td>
</tr>
<tr>
<td>Worried about dressing wounds of PLHIV</td>
<td>48.0</td>
<td>12.5</td>
</tr>
<tr>
<td>Worried about drawing blood from PLHIV</td>
<td>44.9</td>
<td>5.2</td>
</tr>
</tbody>
</table>

This information can be presented graphically as well, as in Figure A (in the next page).
Similarly, data which has been disaggregated by staff type can be presented by adding the time factor of results from sequential surveys. In the Table F, we show an example of results of surveys conducted in 2014, 2015, and 2016.

Table F: Fear of infection among different categories of health care staff in Province X

<table>
<thead>
<tr>
<th>Staff type</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professional (n / %)</td>
<td>226 / 65.0%</td>
<td>235 / 12.3%</td>
<td>287 / 4.2%</td>
</tr>
<tr>
<td>Non-professional (n / %)</td>
<td>128 / 74.2%</td>
<td>132 / 21.0%</td>
<td>143 / 7.7%</td>
</tr>
<tr>
<td>Not stated (n / %)</td>
<td>4 / 100%</td>
<td>0 / 0 %</td>
<td>0 / 0 %</td>
</tr>
<tr>
<td>Total (n / %)</td>
<td>358 / 68.4%</td>
<td>367 / 15.5%</td>
<td>430 / 5.3%</td>
</tr>
</tbody>
</table>

The decrease in fear of HIV transmission is more obvious if presented graphically, as in Figure B below.
As described in the data analysis section, results of single or sequential S&D surveys should be reported and presented via a series of tables and/or charts for each of the following survey topics:

1. Fear of infection among health staff
2. Reported use of unnecessary precautions when providing care of PLHIV
3. Observed stigma among health staff in the past 12 months
4. Attitude of health staff towards co-workers living with HIV
5. Agreement with health facility policies among health staff
6. Opinion of health staff about PLHIV patients
7. Observed behaviors towards Key Populations in the past 12 months among health staff
Appendices

Appendix 1: Key definitions and concepts
Appendix 2: Informed consent form
Appendix 3: Confidentiality agreement
Appendix 4: Health facility staff questionnaire
Appendix 5: Data collection team training agenda
Appendix 6: Sampling calculation for a hospital survey
Appendix 1: Key definitions and concepts

**Stigma:** Is a social process of devaluing persons, beginning with marking or labeling of differences, attributing negative connotations or values to those differences, leading to distancing and separation of the person and culminating in discrimination.

**Anticipated stigma:** Real or imagined fears of societal (e.g., family, community, health care professionals) attitudes and behaviors if HIV or other stigmatized behavior (e.g., drug use) is disclosed.

**Experienced stigma:** Forms of stigmatizing behaviors or discrimination that are not typically actionable under law and experienced by people living with HIV or individuals associated with HIV, such as family members or health care providers.

**Secondary stigma:** Stigma experienced by individuals who are associated with people living with HIV (e.g., family, partners, friends, health care professionals).

**Internalized stigma:** Acceptance by the self that the external stigma is true and justified—of society’s judgment of oneself as being of a “lesser status.” Can manifest in low self-esteem and sense of worth, self-blame, and self-isolation/withdrawal.

**Compound/Layered stigma:** Experience of multiple stigmas (e.g., stigma toward men who have sex with men, transgender individuals, migrants, poor women, people who inject drugs plus HIV stigma).

**Observed stigma:** Forms of stigma witnessed by an individual (e.g., nurse gossiping about a client’s HIV status as seen by a lab technician).

**Discrimination:** Unfair and unjust treatment of an individual on the basis of a real or perceived status or attribute (e.g., HIV status or association with HIV-positive individuals). Discrimination is typically actionable under law.

**Key populations:** Defined as men who have sex with men (MSM), people who inject drugs (IDU), sex workers (SW) and Transgender persons (TG), bear disproportionate burdens of HIV infection.

**Confidential** (Private or secret): Ensuring confidentiality means making sure that information is kept private or secret and is not shared or made known to others. Measures to ensure confidentiality include using codes instead of names on survey questionnaires, not collecting or recording any information which can be used to discover the identity of the respondent, and storing any of this sort of information in a place which is protected by locks or passwords so no one who shouldn’t have access to the information can find it. Confidentiality is associated with a feeling of
trust, or the belief that if you tell someone something private or secret he/she will not share this information with others without your permission.

**Consent:** Permission or agreement to do something or allow something to happen. Written consent means giving permission in writing and oral consent means giving verbal permission.

**Informed consent:** Voluntary agreement or permission that is given with full knowledge of what is involved (e.g. risks and benefits). For example, if someone decides that they want to take an HIV test and they receive comprehensive and understandable information about the test from a counselor, following which they consent to take an HIV test, this would be called giving informed consent. Similarly, if you are an interviewer administering this questionnaire and you provide a potential interviewee with a comprehensive account of what it will involve to respond to the questionnaire, following which the potential interviewee then says they would like to participate in the survey, the interviewee is then indicating that they are informed and that their participation in the survey is voluntary.
Appendix 2: Informed consent form

This survey may be applied either verbal consent or written consent. Below is the example of informed consent form to be used for the survey.

Informed Consent

Research topic:

“A Survey on HIV-related S&D among Health Care Staff in [name of hospital and province]”

Date ........ / ............... / .......... 

Before signing this consent form to participate in this survey, I had already given detailed information about objectives of the study, the methods of data collection, and possible risks as well as benefits that may happen to the study participants, which made me understand everything clearly.

I volunteered to participate in this survey without force and had the right to terminate my participation at anytime.

I was confirmed by the researcher that they will strictly keep my confidentiality and will present the results of the survey as an overview of the study only.

I Mr/Ms .................................................. received detailed information about the survey both risks and benefits that may happen to me from the researcher. I clearly understood and would like to participate in this survey.

The researcher who is responsible for this survey is:
Name of researcher ............................................
Address ..................................................................
Tel ........................................................................

I had read the above information or the researcher had already read the information for me. Therefore, I clearly understood and was willingly to provide my signature.

Signature ......................................................... participant

Signature ......................................................... witness no.1

Signature ......................................................... witness no.2
Appendix 3: Confidentiality agreement

Sample for interviewers / data entry/analysis staff

I, ____________________________, an interviewer / data analyst administering / supporting the HIV Stigma and Discrimination survey in ____________________________ [INSERT the name of the province in which the study is being conducted], agree to the following:

1) I will take all possible steps to protect the confidentiality of the information I receive during the interviews I conduct. This means that I will not disclose any personally identifying information to anyone, unless:
   a) explicitly instructed to do so by the participant in the pilot/study; or
   b) compelled to disclose specific information under a court order of a competent court.

2) I will not record any personally identifying information on the questionnaire.

3) I will keep the "key" (contact list and questionnaire code) in a secure location (e.g. under lock and key), and stored separately from the questionnaires.

4) Any information stored electronically will be on a password-protected system where I have sole access or in a password-protected file.

5) Following the data entry and verification process, and upon instruction from the project leader with the ____________________________ [INSERT name of the organization managing the survey], I will destroy all completed questionnaires and the "key". I will retain a contact list for the purpose of sharing results of the study with participants expressing interest in receiving such information.

INTERVIEWER / DATA ANALYST : Signature:

Name (printed): ____________________________
Date: __________________
Place (city, country): ____________________________

SUPERVISOR OR WITNESS: Signature:

Name (printed): ____________________________
Date: __________________
Place (city, country): ____________________________
Sample for supervisor

I, ____________________________, a supervisor overseeing HIV Stigma and Discrimination survey in ____________________________ [INSERT the name of the province in which the study is being conducted], agree to the following:

1) I will take all possible steps to protect the confidentiality of the information that is under my care. This means that I will not disclose any personally identifying information to anyone, either verbally or in writing, unless:
   a) explicitly instructed to do so by the participant in the pilot/study; or
   b) compelled to disclose specific information under a court order of a competent court.

2) I will take all possible steps to protect the confidentiality of staff/volunteer information in accordance with local laws and regulations.

3) Any information stored electronically will be on a password-protected system or in a password-protected file, and I will ensure that only project staff/volunteers who need access to this information have the necessary password.

4) I will instruct interviewers administering the survey to keep the "key" (contact list and questionnaire code) in a secure location (e.g. under lock and key), and stored separately from the questionnaires.

5) Following the data entry and verification process, I will destroy all completed questionnaires and the "key". I will instruct interviewers to do the same. I will retain a contact list for the purpose of sharing results of the study with participants expressing interest in receiving such information.

6) I will protect the identity of all people participating in the survey. I will do nothing that discloses the identity of someone who is or has been associated with the project.

7) I am responsible for ensuring that appropriate ethical standards are maintained in this project. As part of the training that is provided to interviewers administering the survey, I will instruct them not to record any personally identifying information on the questionnaire. I will remove (or make illegible) any personally identifying information that I observe when reviewing completed questionnaire (e.g. while doing quality checks).

SUPERVISOR: Signature:

Name (printed): ____________________________
Date: ____________________________
Place (city, country): ____________________________

WITNESS: Signature:

Name (printed): ____________________________
Date: ____________________________
Place (city, country): ____________________________
Appendix 4: Health facility staff questionnaire

## Part 1: General/Personal Information

1. What is your current position (only choose one that applies).

- ☐ 1. Physician
- ☐ 2. Dentist
- ☐ 3. Pharmacist
- ☐ 4. Nurse
- ☐ 5. Medical Lab Technician
- ☐ 6. Nurse aide
- ☐ 7. Cashier
- ☐ 8. Receptionist
- ☐ 9. Social Worker Hospital porter
- ☐ 10. Waiter/Waitress (those serve foods to patients)
- ☐ 11. Dental Assistant Counselor
- ☐ 12. Medical Record Staff
- ☐ 13. Translator/Interpreter
- ☐ 14. Support staff to patients
- ☐ 15. Health Education Staff
- ☐ 16. Counselor/Advisor
- ☐ 17. Cleaning Staff/Janitor/Maid
- ☐ 18. Volunteer/PLHIV network Focal Point
- ☐ 19. Other (please specify) ....................... 

## Part 2: Infection Control and Prevention

2. How worried would you be about getting HIV infection if you did the followings?

<table>
<thead>
<tr>
<th>Situation</th>
<th>Not Worried</th>
<th>A Little Worried</th>
<th>Worried</th>
<th>Very Worried</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Touched the clothing, bedding or belongings of a patient living with HIV or AIDS patient</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
<td>☐ 99.</td>
</tr>
<tr>
<td>2.2 Dressed the wounds of a patient living with HIV or AIDS patient</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
<td>☐ 99.</td>
</tr>
<tr>
<td>2.3 Drew blood from a patient living with HIV or AIDS patient</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
<td>☐ 99.</td>
</tr>
</tbody>
</table>

3. Do you typically do any of the following measures when providing care or services for a PLHIV or AIDS patient:

<table>
<thead>
<tr>
<th>Situation</th>
<th>Yes</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Wear double gloves</td>
<td>☐ 1.</td>
<td>☐ 0.</td>
<td>☐ 99.</td>
</tr>
<tr>
<td>3.2 Use any special infection control/prevention measures with patients living with HIV or AIDS patients that you do not use with other patients.</td>
<td>☐ 1.</td>
<td>☐ 0.</td>
<td>☐ 99.</td>
</tr>
</tbody>
</table>
### Part 3: Health Facility Environment

4. In the past one year, how often have you observed the following in your health facility?

<table>
<thead>
<tr>
<th>Situation</th>
<th>Never</th>
<th>Once or Twice</th>
<th>Several Times</th>
<th>Most of the Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.1 Healthcare workers were unwilling to care for a patient living with or thought to be living with HIV.</td>
<td>0.</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
</tr>
<tr>
<td>4.2 Healthcare workers were providing poorer quality of care to a patient living with or thought to be living with HIV than to other patients.</td>
<td>0.</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
</tr>
</tbody>
</table>

5. Health care workers in this facility feel uncomfortable to work with co-workers or colleagues who are living with HIV?


### Part 4: Health Facility Policies

6. In this health facility, it is not acceptable to perform the blood test for HIV without a patient’s knowledge or consent.


7. In this health facility, I will get in trouble (or have negative impacts on my job) if I discriminate against patients living with HIV or AIDS Patients.


8. There are adequate supplies in this health facility that reduce my risk of becoming infected with HIV.


9. This health facility has written guidelines to protect patients living with HIV or AIDS patients from discrimination.

   □ 1. Yes □ 0. No □ 99. Don’t know/ uncertain

### Part 5: Opinions about PLHIV

10. What is your opinion about the following statements.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree</th>
<th>Agree</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1 Most PLHIV do not care that they could infect other people.</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
</tr>
<tr>
<td>10.2 PLHIV should be ashamed about their HIV status.</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
</tr>
<tr>
<td>10.3 People get infected with HIV because they engage in irresponsible/immoral behaviors.</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
</tr>
<tr>
<td>10.4 A woman who is HIV positive should be sterilized even though she doesn’t want to.</td>
<td>1.</td>
<td>2.</td>
<td>3.</td>
<td>4.</td>
</tr>
</tbody>
</table>

11. Women living with HIV should be allowed to have babies if they wish.

### Part 6: Issues related to Key Affected Populations regardless of their HIV status

12. In the past 12 months, how often have you observed health care workers unwilling to care for a patient who is or thought to be:

<table>
<thead>
<tr>
<th>Group</th>
<th>Never</th>
<th>Once or twice</th>
<th>Several times</th>
<th>Most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>12.1 Gay</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
</tr>
<tr>
<td>12.2 Transgender</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
</tr>
<tr>
<td>12.3 Sex worker</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
</tr>
<tr>
<td>12.4 Drug user</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
</tr>
<tr>
<td>12.5 Migrant</td>
<td>☐ 0.</td>
<td>☐ 1.</td>
<td>☐ 2.</td>
<td>☐ 3.</td>
</tr>
</tbody>
</table>

13. **[BASELINE]** Since you started working, have you ever received training in stigma and discrimination reduction?
   - ☐ 1. Yes
   - ☐ 0. No
   - ☐ 99. Don’t know/uncertain

14. **[ENDLINE]** Post-intervention:

   14.1 Since you started working, have you ever received training in stigma and discrimination reduction?
   - ☐ 1. Yes
   - ☐ 0. No
   - ☐ 99. Don’t know/uncertain

   14.2 Did you ever participate in the [enter name of S&D reduction training] training?
   - ☐ 1. Yes
   - ☐ 0. No
   - ☐ 99. Don’t know/uncertain

**************************************************
## Appendix 5: Data collection team training agenda

<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>8.30am</td>
<td>Opening, welcome and introductions, review of the objectives and the training schedule, logistical arrangements</td>
<td></td>
</tr>
<tr>
<td>9.00am</td>
<td>Human rights and health services Key definitions and concepts related to S&amp;D HIV-related stigma and discrimination</td>
<td>Community group representative</td>
</tr>
<tr>
<td>10.00am</td>
<td>MORNING TEA</td>
<td></td>
</tr>
<tr>
<td>10.30am</td>
<td>HIV-related stigma and discrimination: Exploring attitudes and beliefs</td>
<td>Community group representative</td>
</tr>
<tr>
<td>11:30am</td>
<td>Informed consent and confidentiality, coding</td>
<td></td>
</tr>
<tr>
<td>12.00pm</td>
<td>Sampling, selecting the respondents</td>
<td></td>
</tr>
<tr>
<td>12.30pm</td>
<td>LUNCH</td>
<td></td>
</tr>
<tr>
<td>1.30pm</td>
<td>Introducing the health facility questionnaire</td>
<td>Overview, sections</td>
</tr>
<tr>
<td>2:00pm</td>
<td>Participants complete questionnaire</td>
<td></td>
</tr>
<tr>
<td>2.30pm</td>
<td>AFTERNOON TEA</td>
<td></td>
</tr>
<tr>
<td>3:00pm</td>
<td>Review of questionnaire, Q/A</td>
<td></td>
</tr>
<tr>
<td>4:00pm</td>
<td>Summary of coding and informed consent procedures, Draft data collection schedule</td>
<td></td>
</tr>
<tr>
<td>4.30pm</td>
<td>Next steps and assignments Questions, wrap-up</td>
<td>Representative of group summarize day/learning</td>
</tr>
<tr>
<td>5pm</td>
<td>Close Day 1</td>
<td></td>
</tr>
</tbody>
</table>
Appendix 6: Sampling calculation for a hospital survey

These guidelines provide a suggested approach for doing surveys to monitor the S&D situation in health care settings over time at the provincial level. The suggested approach is to sample from all hospitals to represent the S&D situation across the province. However, each individual hospital can also conduct its own health staff survey in order to monitor the S&D situation in its hospital over time by applying the same method of sampling calculation as presented for the provincial survey.

Thus, the number of staff who participate in the hospital survey will depend on the following factors:

- Total number of staff working in the hospital
- An estimate of the level prevalence of HIV-related S&D
- The amount of change in the level of prevalence to measure
- An estimated of the proportion of questionnaires that will be completed correctly

First, we can have the total number of staff in one hospital to be used for the calculation, supposing there are 100 clinical and non-clinical staff in this hospital. To estimate the level of existing HIV-related S&D, we will use the results of a pilot study conducted in 2014 in Chiang Mai and Bangkok Provinces. This study showed that 65.6% of health staff expressed some degree of fear of HIV transmission from performing routine examinations and being in contact with PLHIV. We will want to a sample size large enough to measure a statistically significant change of 10% in the level of S&D from the estimated level.

The minimum sample size required for the S&D survey in a hospital uses the following formula:

\[ n = \frac{Z^2P(1-P)}{D^2} \]

Where:

- \( Z = 1.96 \) (for 95% level of confidence)
- \( P = \) expected population prevalence
- \( D = .5 \) * Confidence interval (or degree of change to measure)
Here is an example of how to calculate the sample size. The calculation is based on the following assumptions:

- Total population of 100 staff in one studied hospital
- 65.6% frequency of fear of HIV transmission, based on the baseline/pilot assessment of S&D in Bangkok and Chiang Mai
- Ability to measure an absolute change in stigma levels of +/- 10%.

\[
n = \frac{1.96^2 \times 1.96(0.656(1-0.656))}{(10\%)^2}
\]

\[
n = \frac{.8669}{.001} = 87
\]

If we were sampling from a large population, the minimum sample needed would be 87 respondents for this hospital. However, since we have a very limited population to sample from (only 100 health facility staff in one hospital), we need to adjust the sample size. The formula for sample size calculation provided above is used for large populations. For limited populations, \( n \) is adjusted by a finite population correction factor:

\[
n = \frac{n}{1 + \left( \frac{n}{\text{Population}} \right)}
\]

\[
n = \frac{87}{1 + \left( \frac{87}{100} \right)} = 46
\]

So, the number of respondents we'll need for this hospital is 46.

The final adjustment factor needs to be applied is the completion rate. The questionnaire is going to be self administered, that is, respondents will read and select their responses on a printed questionnaire or on a tablet. It is possible that some respondents may make mistakes or not fully completing the questionnaire. Sometimes these mistakes and missing answers can be tracked down and corrected, but some will not. We will assume that 10% of the questionnaires will have a number of mistakes or will be incompletely filled in, and thus be unusable for the analysis, leaving 90% of the questionnaires to be analyzed.

\[
n = \frac{n}{\text{completion rate}}
\]

\[
n = \frac{46}{90\%} = 51
\]
So, assuming that 90% of self-administered questionnaires are correctly completed, we will need at least 51 respondents to be recruited in hospital. Therefore, to ensure that we will have sufficient information, this hospital survey should collect data from 55-60 health staff.

The procedure to select the respondents in each facility is the same as in Part 2, Section 3 above.