General Instructions:

- HOT4ART contains several sheets (Figure 1) with which the user can interface. In the sheets ribbon, the user should use all sheets in red (e.g., Set-up, Dashboard, Treatment Models, Service Providers, Client Distribution, Task Assignment).
- The black Task-shifting and Model-shifting sheets are optional but recommended. The purple Results sheet contains the outputs from the tool. The orange Daily Workload sheet is also optional and is for site-level users only.
- Throughout the tool, light green indicates cells that allow user input. Dark green, blue, orange, and white cells indicate protected cells that contain headings, descriptions, and formulas that cannot be changed by the user.
- Some of the sheets contain light green cells with pre-populated data. It is possible for the user to override these inputs and insert values that are specific to his or her own context.
- Light yellow text boxes in each sheet contain specific instructions. The user should refer to these instructions before interfacing with the sheet.
- The Dashboard sheet (Figure 1) provides a brief description of all the sheets in the tool.
- The tool can be used in either English or French. The tool can also be used at the site (health facility) level or above-site level (health sub-district, district, county, provincial, regional or national).

Figure 1: Dashboard
**Sheet-by-Sheet Instructions:**

The user interface for the tool is set up as follows:

- In the **Set-up** sheet (Figure 2), the user should:
  1. Select the language he or she prefers to use (English or French).
  2. Select the level at which the tool is being used (site level or above-site level).
  3. Insert the name of the health facility or above-site entity.
  4. Select user's level of experience with differentiated service delivery (DSD) models; enter user’s name; and the date when data in the tool were last modified.
  5. Click the red ‘Update Tool’ button to proceed to the next sheet.
  6. The user is asked to save the tool under a new file name. It is recommended to do so. This leaves the original tool unchanged as a backup file.

**Figure 2: Set Up**
In the **Dashboard** sheet (Figure 1), the user should:

1. Read the brief description of each sheet provided to understand each sheet’s role. No data inputs are required in the Dashboard.
2. Click the Treatment Models button to start using the tool. Clicking this button moves the user to the Treatment Models sheet.

*Note: Instead of clicking on the buttons, experienced users can click directly on the tabs to proceed. This applies to all sheets.*

In the **Treatment Models** sheet (Figure 3), the user should:

1. In row 9, input country-specific names of the DSD models that are currently implemented or planned in a country (country-specific models should align with the global model names in row 3).
2. If necessary, edit descriptions of the DSD models in row 10 to reflect their country-specific configuration or nomenclature.
3. In rows 12 to 19, input the frequency of performance of critical tasks over the course of a year for the various DSD models selected. A drop-down menu of 0 to 12 is provided for each cell. Frequencies for DSD models that are not practiced at the site and/or above site can be left blank.
4. Input up to three additional tasks, in cells B21 to B23, that the user deems key components of the site’s antiretroviral therapy (ART) service delivery continuum if they are not included in the standard list of critical tasks already provided in rows 12 to 19.
5. From a drop-down menu, input the frequency at which each of these additional tasks is performed over the course of a calendar year for the various DSD models selected.
6. Clicking the grey button will display the definitions for all standard ART tasks; these can be printed.
7. Click the red Go to Next Sheet button to move to the Service Providers sheet.

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**Figure 3: Treatment Models**

<table>
<thead>
<tr>
<th>Global Model Name</th>
<th>ART Model 1</th>
<th>ART Model 2</th>
<th>ART Model 3</th>
<th>ART Model 4</th>
<th>ART Model 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Facility-based, healthcare worker-managed, individual model</td>
<td>Facility-based, health care worker-managed, individual model (Fast Track)</td>
<td>Healthcare worker-managed group model (meet in- or outside facilities)</td>
<td>Out-of-facility, healthcare worker-managed individual model</td>
<td>Out-of-facility, client-managed group model</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Abbreviated ART model name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Standard Care</td>
<td>Comprehensive management for ART clients who are stable or complex or who are still new on ART and whose adherence history has not yet been determined. Such ART clients are individually managed at facility level.</td>
</tr>
<tr>
<td>2. Facility Individual</td>
<td>ART refill visits are separated from individual consultations. When clients have an ART refill, they bypass any clinical or adherence support and proceed directly to receive their medication. Clients receive their ART refills in a group and either a professional or a lay health care staff member manages this group. The groups meet inside or outside health care facilities.</td>
</tr>
<tr>
<td>3. HW Managed Group</td>
<td>ART refills and in some cases, clinical consultations are provided to individuals outside of health facilities. Clients receive their ART refills in a group but this group is managed and run by clients themselves. Generally, client-managed groups meet outside of health care facilities.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Country-Specific Model Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fast track drug refill</td>
<td></td>
</tr>
<tr>
<td>Facility-based groups</td>
<td></td>
</tr>
<tr>
<td>Community drug distribution points</td>
<td></td>
</tr>
<tr>
<td>Community-client led ART delivery</td>
<td></td>
</tr>
</tbody>
</table>

| Frequency of performing tasks for ART service delivery per model in a year |
|-----------------------------|------------------|------------------|------------------|------------------|
| Enrollment/Registration     | 12               | 6                | 6                | 3                |
| Health Education            | 12               | 6                | 6                | 3                |
| Triage                      | 12               | 6                | 6                | 3                |
| Consultation/Clinical Assessment | 12          | 6                | 6                | 3                |
| Blood Draw                  | 2                | 1                | 1                | 1                |
| Adherence Counseling        | 12               | 2                | 2                | 2                |
| ART Refill                  | 12               | 6                | 6                | 3                |
| Updating Records            | 12               | 6                | 6                | 3                |

| Additional tasks and the frequency they are performed under each ART model per year |
|---------------------------------------------|------------------|------------------|------------------|------------------|
| Follow up                                  | 12               | 6                | 6                | 3                |
| Community outreach                         | 4                | 4                | 4                | 4                |
In the **Service Providers** sheet (Figure 4), the user should:

1. In column C, input total available working hours in a week. This includes all ART and other clinical (HIV and other healthcare) tasks and administrative tasks.
2. In column D, input the maximum number of hours per week that each type of staff can spend on ART. A calculator (brown button) can estimate the number of hours a provider may spend on ART in an integrated HIV service delivery setting as the proportion of ART clients of all outpatient visits.
3. Column E shows the hours worked per week on other clinical (HIV and other healthcare) and administrative tasks. It is the difference between columns C and D; this is automatically calculated.
4. In column F rows 8 to 17, input the total number of service providers at the health facility for each service provider type who are available for ART service delivery.
5. Of the service providers in column F, in column G, the tool tentatively assigns all these providers as providing the maximum number of hours for ART (shown in column D).
6. If not all providers work the maximum number of hours on ART, enter the number of staff working less in column H.
7. For all staff in column H (to a maximum of 10 staff), input the number of hours spent on ART per week per service provider in columns I to R. Use one column per service provider.

**Note:** Hours worked per week can be assigned for a maximum of 10 individual staff who work less than the maximum; if there are more than 10 in column H, each staff in in excess of 10 will be assigned the same number of hours per week as the 10th staff in column R. For more than 10 working less than the maximum hours per week on ART, users should ensure that the hours assigned to the 10th staff are similar to those above 10.

8. Based on the number of staff working the maximum number of hours on ART and the number of staff assigned less than the maximum hours, full-time equivalents (FTE) available for ART are calculated in column T. The tool will later compare the available FTEs with the FTEs required to deliver ART to all clients seen at the health facility and identify staffing gaps and surpluses.
9. Clicking the grey button will show/print the definitions for all standard ART service providers.
10. Users can add up to six additional service provider types by providing the same information as for the standard service providers above. Each additional provider must be matched to a standard service provider in column V for client contact times to be applied correctly by the tool.
11. Click the red Go to Next Sheet button to move to the Client Distribution sheet.

**Figure 4: Service Providers**
In the **Client Distribution** sheet (Figure 5), the user should:

1. Input the anticipated ART client caseload for the next 12 months.
2. Input the distribution of these clients into “new” and “existing” client categories based on the in-country guidance for these categories. All new clients are assigned to standard care by default.
3. Input the distribution of the existing client category into client sub-populations (adults, adolescents, children, pregnant and breastfeeding women [PBFW]).
4. Input the distribution of the client sub-populations across the DSD models selected in the Treatment Models sheet. (For the PBFW sub-population, mother-baby pairs count as one.)
5. Check for red highlights in some cells and warning messages in red type, which will appear next to the Check Total cells, if the distribution is not done correctly. These warnings disappear when the errors are corrected.
6. Note that the Total Number of Clients and Percent Distribution by Model table in this sheet will populate automatically.
7. Click the red Go to Next Sheet button to move to the Task Assignment sheet.

![Figure 5: Client Distribution](image)
In the **Task Assignment** sheet (Figure 6), the user should:

1. Use the drop-down list available for each cell in column F to select the service provider most likely to perform a critical task along the ART service delivery continuum for each DSD model selected in the Treatment Models sheet.

   **Note:** Only one service provider can be assigned to a task. It should be the provider who performs this task most frequently. In many cases several providers may already perform a task. This will be rectified in the next step of task shifting.

2. If additional tasks were entered on the Treatment Models sheet, input into column H (rows 17 to 19 as appropriate) an estimation of contact time per client and into columns I and K (rows 17 to 19) the range for this contact time for the service provider who performs each additional task input for each DSD model. **Note:** All times in columns H, I and K must be on a per client basis.

3. Among standard ART tasks, health education and adherence counseling can be designated as group tasks—indicated by “Y” or “y” in column G and the group size for each model of care. A group setting is the default for models 3 and 5. The tool converts the time per group to time per client.

4. Any of the user-added tasks can be designated as a group or community outreach task—indicated by “Y” or “y” in column G. A calculator helps estimate the time per client by clicking the grey button at the bottom of each table, which converts the total time spent per group or for a community outreach activity into minutes per client. The group/community outreach designation must be made before clicking the button.

5. Click the red Go to Next Sheet button to move to the optional Task-shifting sheet or go straight to the purple Results sheet to view outputs from the tool.

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**Figure 6: ART Task Assignments**

<table>
<thead>
<tr>
<th>Critical Tasks for ART Service Delivery</th>
<th>Service Provider (providing the ART task most frequently)</th>
<th>Group (V)</th>
<th>Contact Time per Client (Mins)</th>
<th>Range (+/-1 SD)</th>
<th>No. of Times per Year</th>
<th>Hours of Staff Time Needed</th>
<th>Range (+/-1 SD)</th>
<th>Clients per group for tasks done in a group setting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enrollment/Registration</td>
<td>Facility-based Auxiliary (FBA)</td>
<td>1.1</td>
<td>0.8 - 1.3</td>
<td>12</td>
<td>598</td>
<td>447 - 749</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>Health Education</td>
<td>Nurse (N)</td>
<td>19.3</td>
<td>2.9 - 35.6</td>
<td>12</td>
<td>10,706</td>
<td>1,616 - 19,796</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Triage</td>
<td>Nurse (N)</td>
<td>1.9</td>
<td>0.8 - 3.0</td>
<td>12</td>
<td>1,069</td>
<td>445 - 1,694</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Consultation/Clinical Assessment</td>
<td>Non Physician Clinician (NPC)</td>
<td>3.2</td>
<td>0.9 - 5.5</td>
<td>12</td>
<td>1,759</td>
<td>472 - 3,047</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blood Draw</td>
<td>Laboratory Technician (LT)</td>
<td>2.2</td>
<td>1.8 - 14.8</td>
<td>2</td>
<td>768</td>
<td>165 - 1,371</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adherence Counseling</td>
<td>Social Service Worker (SSW)</td>
<td>8.1</td>
<td>2.2 - 14.0</td>
<td>12</td>
<td>4,482</td>
<td>1,198 - 7,765</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ART Refill</td>
<td>Nurse (N)</td>
<td>2.7</td>
<td>0.0 - 9.5</td>
<td>12</td>
<td>1,507</td>
<td>0 - 5,277</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Updating Records</td>
<td>Data Officer</td>
<td>1.0</td>
<td>1.0 - 1.0</td>
<td>12</td>
<td>556</td>
<td>556 - 556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Follow up</td>
<td>Community Health Worker (CHW)</td>
<td>3.0</td>
<td>2.0 - 4.0</td>
<td>12</td>
<td>1,667</td>
<td>1,111 - 2,222</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Calculate contact time for group & community tasks for user-added tasks only.*
In the optional but recommended **Taskshifting** sheet users can optimize their staffing. This sheet can be used in conjunction with the next **Modelshifting** sheet or independently. The user should:

1. First, decide how task shifting will be done either by manipulating actual client numbers or percentages of total caseload by selecting the appropriate drop-down and clicking the **Setup** button on this sheet.

   **Caution:** *This choice should be made before changing any numbers in the tables, because switching the selection later will erase all user entries on this sheet.*

2. Shift the pre-populated ART client numbers under the relevant ART service delivery tasks to multiple service providers, as appropriate, for desired models selected on the **Treatment Models** sheet.

3. Do Task-shifting and/or task-sharing in the blue- and/or orange-shaded boxes for the DSD models for which the user wishes to perform task-shifting and/or task-sharing. The green boxes show the baseline before task-shifting and/or task-sharing.

4. Note the appearance of red highlights indicating an error when the sum and/or percentage of ART clients is different after redistribution.

5. Click the red Go to Next Sheet button to move to the **Model-shifting** sheet or go straight to the purple **Results** sheet to view results.

**Figure 7. Task-shifting / Task-sharing**
In the **Modelshifting** sheet, the user can consider some model-shifting scenarios. This sheet can be used in conjunction with the Task-shifting sheet or independently. The user should:

1. First, decide how model shifting will be done either by manipulating actual client numbers or percentages of total caseload by selecting the appropriate drop-down and clicking the Set Up button on this sheet.

   *Caution: This choice should be made before changing any numbers in the tables, because switching the selection later will erase all user entries on this sheet.*

2. Shift client sub-populations from one DSD model that requires more skilled service providers to another with lesser human resource requirements.

   *Please note that it is possible to shift ART clients to an entirely new DSD model for which no ART task frequencies and service providers were assigned in the Treatment Models and Service Providers sheets. FTEs will only be calculated after task frequencies and service providers have been assigned to tasks.*

3. If used independently from the Taskshifting sheet, only use the green table.

4. If used in conjunction with the Taskshifting sheet, also use the blue and orange tables for each task-shifting scenario.

5. Review graphs that are displayed in this sheet to assist with the interpretation of the effects of the changes that have been made.

6. Click the red Go to Next Sheet button to move to the Results sheet.

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**Figure 8: Model-shifting**
In the **Results** sheet, the user should:

1. Review the results from the data entered into the previous sheets (no data inputs are required here).
2. The user can format all tables and charts on this tab and copy them into a PowerPoint slide. They can be printed by clicking the print button.

In the **Daily Workload** sheet (an experimental and optional tab) the site-level user can determine if the number of examination and/or consultation rooms available meets the requirements of the daily ART client caseload at the facility. For this tab, the user should input:

1. The number of hours that constitute one work week at the facility.
2. The number of days per week ART services are provided at the facility.
3. The number of hours that constitute one work shift at the facility.
4. The number of hours during the work shift that ART services are provided at the facility.
5. The number of hours during the work shift that non-ART services (e.g., other clinical and administrative tasks unrelated to direct ART service provision) are performed.
6. The number of shifts service providers work on each ART clinic day.
7. The number of examination rooms available at the facility for ART-related clinical consultations.

![Figure 9: Average number of Exam rooms and FTEs required on an ART clinic day](image-url)
**Updating the Tool to a newer version and data import on the Setup tab.**

Users of the Tool will periodically receive new versions that add features and fix issues. Tool upgrades will not contain any data. A button for data import from a previous version of the Tool is provided on the ‘Setup’ tab. Clicking this button will import all user data from an earlier version of the Tool. The import will apply the language and site/above site options from the earlier version of the tool on the 'Setup' tab. After clicking the button, the user will be asked to select the Excel file for importing data. Usually this will be the last version of the Tool saved by the user. A message will notify the user when the data import completed successfully and recommend saving the Tool under a new name.

*Caution: Data import should only be done before users enter data into the tool. The data import will replace any data already entered by the user. Users will be asked to confirm the import and may cancel the procedure. If no file name is selected for importing data, the import will also be canceled. Only data from Tool version 1 will be imported.*

**Tool Versions Change Log**

A log of changes made in each version of the Tool can be found in row 100 and below on the Setup tab.