

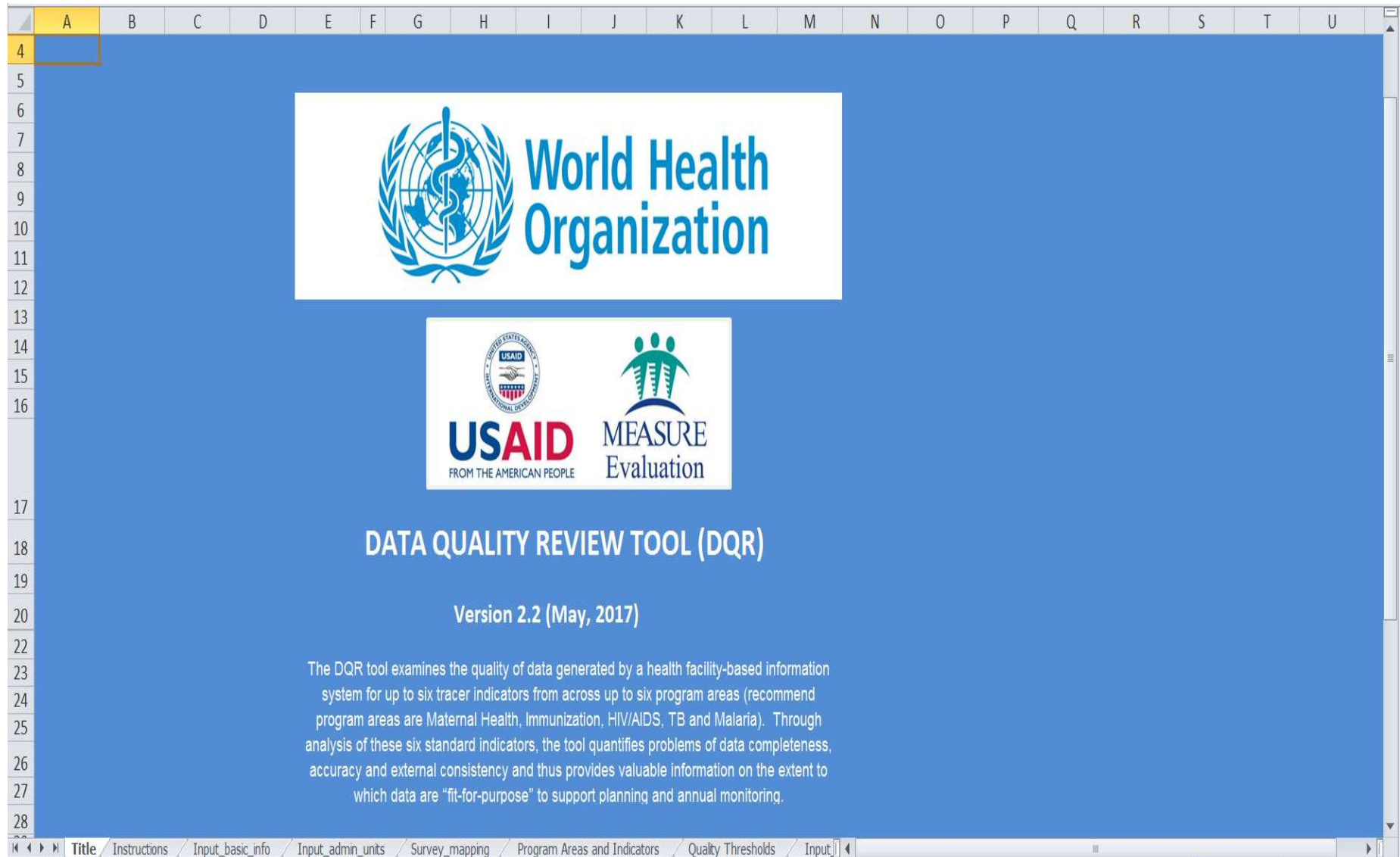


Data Quality Review (DQR)

*Desk review
Excel Tool*



Opening Screen



Input Basic Information Tab – Parameters of the analysis

| | A | B | C | D | E | F | G | H | I | J | K | S | T |
|----|--|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | INPUT BASIC INFORMATION FOR THE REPORTING SYSTEM AND PARAMETERS OF THE ANALYSIS | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | |
| 3 | 0 | Please input some basic information required for your data quality analysis | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | |
| 5 | 1 | Please select your country of interest (If your country is not on the list, please hit the "Delete" button and leave the cell blank) | | | | | | | | | | | |
| 6 | Burundi | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | |
| 8 | 2 | Please select year of interest for data analysis (If your reporting year starts at some other month besides January, i.e. June, please select the year in which the last month of reporting falls) | | | | | | | | | | | |
| 9 | 2016 | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | |
| 11 | 3 | Country RHIS/Programme data flow model: Reporting levels/aggregation levels in country (If the next reporting level is national, please leave it blank) | | | | | | | | | | | |
| 12 | Facility → District → National | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | |
| 14 | 4 | For what administrative unit level are you conducting your analysis? (NB: Analysis cannot be conducted at the facility level. Please also ensure that you have population denominators for the administrative level of analysis. You can input data for lower levels, but for the Data Quality Review metrics calculated in this tool, the data are aggregated to the administrative level selected for analysis. For example, you can input facility level service output data but the analysis will only be done for higher administrative level, such as, a district) | | | | | | | | | | | |
| 15 | District | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | |
| 17 | 5 | What is the periodicity of reporting for the administrative level for which you are conducting the analysis? | | | | | | | | | | | |
| 18 | Monthly | | | | | | | | | | | | |
| 19 | 6 | What is the periodicity of reporting from health facilities? | | | | | | | | | | | |
| 20 | Monthly | | | | | | | | | | | | |
| 21 | 7 | What is the periodicity of reporting from aggregation levels (e.g. the district, region)? | | | | | | | | | | | |
| 22 | District Monthly | | | | | | | | | | | | |

Title / Instructions / **Input_basic_info** / Input_admin_units / Survey_mapping / Program Areas and Indicators / Quality Thresholds / Input

Input Administrative Units for the Analysis

| | A | B | C | D | E | F | G | H |
|----|---|-----------------|-----------------|--------------|--------------|---|---|---|
| 1 | | | | | | | | |
| 3 | Input administrative units for the level of analysis and the units to which they report | | | | | | | |
| 4 | | | | | | | | |
| 5 | <p>Table 1: Please fill in the required information in each column starting from Col 1. For each unique administrative unit name in Column 2 (there should be NO duplicate names in Col 2), there should be a corresponding number in Column 1. Please DO NOT type any additional numbers beyond the total number of administrative units typed/pasted in Column 2. For example, if you have 100 districts in your country, please only type numbers from 1-100 in Column 1. Do not type in 101 and higher. Please use "Paste special" and paste ONLY VALUES when you are copying and pasting information. Column titles will be populated based on information you have entered in the Input_basic_info worksheet. In each column please enter name of the appropriate administrative unit. Further details on data entry for each column can be found in the "DQR Tool User's Guide" document.</p> <p><i>Note: Pasting values for administrative units is a calculation intensive step and can take some time. Please be patient after pasting the values and allow Excel to complete the task before moving on to the next step.</i></p> | | | | | | | |
| 10 | | | | | | | | |
| 11 | Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | | | |
| 12 | No. | District | National | | | | | |
| 13 | 1 | District 1 | | | | | | |
| 14 | 2 | District 2 | | | | | | |
| 15 | 3 | District 3 | | | | | | |
| 16 | 4 | District 4 | | | | | | |
| 17 | 5 | District 5 | | | | | | |
| 18 | 6 | District 6 | | | | | | |
| 19 | 7 | District 7 | | | | | | |
| 20 | 8 | District 8 | | | | | | |
| 21 | 9 | District 9 | | | | | | |
| 22 | 10 | District 10 | | | | | | |

File Home Insert Formulas Data Review View Help

Title / Instructions / Input_basic_info / **Input_admin_units** / Survey_mapping / Program Areas and Indicators / Quality Thresholds / Input

Input Program Areas and Indicators

Program Areas and Indicators:
Please input DQR Indicators by Program Area here. If the required program area or indicator does not appear on the drop-down lists, please select "other, specify" and enter the user-defined indicators in the spaces provided. For In-depth Program Reviews, please select the required Program from each Program Area drop-down list. Enter Data Verification indicators at the bottom of this page.

| Program Area | Indicators | Record user-defined indicators here: | Indicator Type: |
|-------------------|--|--------------------------------------|-----------------|
| 1 Maternal_Health | 1 ANC 1st Visit | | 1=Cumulative |
| | 2 ANC 4th Visit | | 2=Current |
| 2 Immunization | 1 3rd dose DPT-containing vaccine | | Cumulative |
| | 2 1st dose DPT-containing vaccine | | Cumulative |
| 3 HIV_AIDS | 1 Number of HIV+ persons in palliative care | | Current |
| | 2 Number of HIV+ persons currently on ART | | Current |
| 4 Malaria | 1 Number of confirmed malaria cases reported | | Cumulative |
| | 2 Presumed malaria cases | | Cumulative |
| 5 Immunization | 1 OPV3 | | Cumulative |
| | 2 3rd dose DPT-containing vaccine | | Cumulative |
| 6 Other_Specify | 1 Other_Specify | Penta 1st doses | Cumulative |
| | 2 Other_Specify | ANC 1st Visits | Cumulative |

Specify: Multi-program

Navigation: Title / Instructions / Input_basic_info / Input_admin_units / Survey_mapping / **Program Areas and Indicators** / Quality Thresholds / Input

Input Quality Thresholds

Quality Thresholds:

'Quality thresholds' are the values that set the limits of acceptable error in data reporting. The analyses in the DQR compare results to these thresholds to judge the quality of the data. Recommended values are included for each metric in column 1. User-defined thresholds can be input into col 2 which will take precedence over the values in col 1.

| Threshold | |
|-------------|--------------|
| | |
| Recommended | User-defined |
| Col 1 | Col 2 |

Domain 1: Completeness and Consistency of Reporting/Indicator Data

1a ***Completeness and Timeliness of Reporting from Health Facilities and Aggregation Levels: District, Region, Province***

| | | | |
|------|---|-----|--|
| 1a1a | Completeness of Province Level Reporting | 75% | |
| 1a1b | Timeliness of Province Level Reporting | 75% | |
| 1a2a | Completeness of Region Level Reporting | 75% | |
| 1a2b | Timeliness of Region Level Reporting | 75% | |
| 1a3a | Completeness of District Level Reporting | 75% | |
| 1a3b | Timeliness of District Level Reporting | 75% | |
| 1a4a | Completeness of Health Facility Level Reporting | 75% | |
| 1a4b | Timeliness of Health Facility Level Reporting | 75% | |

1b ***Completeness of Indicator Reporting: % of data elements that are non-zero values; % of data elements that are non-missing values***

Program Area 1: Maternal_Health

| | | | |
|-----|----------------------------|-----|--|
| 1b1 | Indicator 1: ANC 1st Visit | 90% | |
|-----|----------------------------|-----|--|

Program Area 2: Immunization

| | | | |
|-----|--|-----|--|
| 1b2 | Indicator 1: 3rd dose DPT-containing vaccine | 67% | |
|-----|--|-----|--|

Program Area 3: HIV_AIDS

| | | | |
|-----|--|-----|--|
| 1b3 | Indicator 1: Number of HIV+ persons currently on ART | 90% | |
|-----|--|-----|--|

Program Area 4: Malaria

| | | | |
|-----|---|-----|--|
| 1b4 | Indicator 1: Number of confirmed malaria cases reported | 90% | |
|-----|---|-----|--|

Input Information on Completeness and Timeliness

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | U | V |
|----|--|---------------|---|-------|-------|-------|---|--------|--------|--------|--|--|------|------------|------|--|---|---|---|---|---|---|
| 2 | | | | | | | | | | | | | | | | | | | | | | |
| 3 | Completeness of HMIS Reporting: Input Reports Received | | | | | | | | | | | Reporting Frequency | | Facility : | | Monthly | | | | | | |
| 4 | | | | | | | | | | | | District | | Monthly | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | | | | |
| 8 | <p>Table 10: This worksheet requires you to fill in information on the total number of reports received for your unit of analysis as well as for facilities within the unit of analysis to calculate the completeness rate. Please use "Paste special" and paste only <u>values</u> when you are copying and pasting information. Columns 1 and 2 are automatically populated for you based on information you entered in previous worksheets. Data can only be typed/pasted into columns that are in green. Columns in white are write-protected. Further details on data entry for each column can be found in the "Data Quality Review tool" document, section on "Instructions for data preparation".</p> | | | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | | | | |
| 12 | Col 1 | Col 2 | | | | | | | | | | | | | | | | | | | | |
| 13 | | | Total HF's providing services in the district | | | | Total number of facility reports received at the district level | | | | Number received on time (year of analysis) | Total number of district reports received at the level | | | | Number received on time (year of analysis) | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | | | | |
| 15 | Nº | District | 2013 | 2014 | 2015 | 2016 | 2013 | 2014 | 2015 | 2016 | | 2013 | 2014 | 2015 | 2016 | | | | | | | |
| 16 | | Overall Total | 7,048 | 7,107 | 7,175 | 7,431 | 73,807 | 77,323 | 81,288 | 85,662 | 76,793 | 515 | 549 | 557 | 562 | 505 | | | | | | |
| 17 | 1 | District 1 | 197 | 197 | 197 | 202 | 1,674 | 1,851 | 2,016 | 2,272 | 2,209 | 12 | 12 | 12 | 12 | 12 | | | | | | |
| 18 | 2 | District 2 | 136 | 136 | 145 | 147 | 1,315 | 1,422 | 1,539 | 1,699 | 1,622 | 10 | 11 | 11 | 12 | 10 | | | | | | |
| 19 | 3 | District 3 | 177 | 177 | 177 | 177 | 1,516 | 1,611 | 1,758 | 1,945 | 1,400 | 11 | 11 | 11 | 12 | 11 | | | | | | |
| 20 | 4 | District 4 | 96 | 96 | 96 | 99 | 930 | 957 | 958 | 1,130 | 1,045 | 12 | 11 | 12 | 12 | 11 | | | | | | |
| 21 | 5 | District 5 | 123 | 123 | 123 | 125 | 1,177 | 1,205 | 1,397 | 1,420 | 1,363 | 10 | 11 | 12 | 12 | 9 | | | | | | |
| 22 | 6 | District 6 | 127 | 126 | 127 | 129 | 1,301 | 1,291 | 1,370 | 1,525 | 1,380 | 12 | 11 | 12 | 12 | 11 | | | | | | |
| 23 | 7 | District 7 | 74 | 74 | 79 | 81 | 854 | 979 | 918 | 995 | 810 | 11 | 11 | 12 | 12 | 8 | | | | | | |
| 24 | 8 | District 8 | 187 | 199 | 205 | 216 | 2,109 | 2,359 | 2,453 | 2,694 | 2,665 | 11 | 12 | 12 | 12 | 12 | | | | | | |
| 25 | 9 | District 9 | 39 | 41 | 42 | 46 | 472 | 479 | 493 | 487 | 369 | 10 | 12 | 12 | 12 | 9 | | | | | | |

Input Population Data

| | A | B | C | E | F | G | H | I | J | K | L | M |
|----|----------------------------|---|-----------------|---|-----------------------------|---------------------------|---|-----------------------------|---------------------------|-----------|---|---|
| 1 | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | |
| 3 | | Standard Administrative Unit Populations | | Table 9: This worksheet requires you to type/paste official denominator estimates and Health Program denominators (if available) for the year of analysis. Please use "Paste special" and paste only values when you are copying and pasting information. Columns 1 and 2 are automatically populated for you based on information you entered in previous worksheets. Data can only be typed/pasted into columns that are in green. Columns in white are write-protected. | | | | | | | | |
| 4 | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | |
| 7 | Reporting Structure | | | Denominators for Domain 4 Evaluation (select using dropdown lists) | | | | | | | | |
| 8 | | | | Official Government Statistics (e.g. National Statistics Office) | | | Program Denominators (if applicable) | | | | | |
| 9 | Nº | Aggregation level selected for analysis | | Live births | Expected pregnancies | Children < 1 yr | Live births | Expected pregnancies | Children < 1 yr | | | |
| 10 | | District | National | 2016 | 2016 | 2016 | 2016 | 2016 | 2016 | | | |
| 11 | | | | | | | | | | | | |
| 12 | | Overall Total | | 1,529,616 | 1,528,273 | 1,464,633 | | | | 1,359,815 | | |
| 13 | 1 | District 1 | | 25,029 | 25,029 | 24,178 | | | | 18,778 | | |
| 14 | 2 | District 2 | | 33,483 | 33,483 | 32,344 | | | | 23,798 | | |
| 15 | 3 | District 3 | | 59,852 | 59,852 | 57,458 | | | | 56,001 | | |
| 16 | 4 | District 4 | | 31,930 | 31,930 | 30,653 | | | | 28,139 | | |
| 17 | 5 | District 5 | | 17,825 | 17,825 | 17,219 | | | | 14,810 | | |
| 18 | 6 | District 6 | | 14,708 | 14,708 | 14,178 | | | | 13,244 | | |
| 19 | 7 | District 7 | | 25,532 | 24,188 | 22,173 | | | | 19,303 | | |
| 20 | 8 | District 8 | | 45,131 | 45,131 | 42,874 | | | | 39,387 | | |
| 21 | 9 | District 9 | | 5,108 | 5,108 | 4,925 | | | | 6,030 | | |
| 22 | 10 | District 10 | | 32,141 | 32,141 | 31,048 | | | | 29,340 | | |

Input Data on Indicator Trends

| | A | B | C | D | E | F | G | H | I | J | K | L | M | N | O | P | Q | |
|---|-------|--|----------|-------|-------|---------------|-----------------|-----------|-----------|--|--------------|-----------|-----------|---|----------|---------|-------|--|
| 1 | | | | | | | | | | | | | | | | | | |
| 2 | | Input Service Outputs for Trend Analysis for Selected Indicators | | | | | | | | Table 8: Please paste your annual service data for selected indicators for up to the three years preceding | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | Maternal_Health | | | | Immunization | | | | HIV_AIDS | | | |
| 6 | Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | ANC 1st Visit | | | | 3rd dose DPT-containing vaccine | | | | Number of HIV+ persons in palliative care | | | | |
| 7 | No. | District | National | | | 2013 | 2014 | 2015 | 2016 | 2013 | 2014 | 2015 | 2016 | 2013 | 2014 | 2015 | 2016 | |
| 8 | | Overall Total | | | | 1,196,237 | 1,265,317 | 1,271,562 | 1,287,838 | 1,122,786 | 1,187,804 | 1,173,759 | 1,191,422 | 790,674 | 840,092 | 973,144 | 988,3 | |
| 9 | 1 | District 1 | | | | 15,418 | 16,513 | 17,490 | 18,611 | 15,314 | 15,725 | 16,348 | 16,407 | 2,442 | 2,595 | 2,839 | 3,0 | |
| 10 | 2 | District 2 | | | | 22,232 | 24,308 | 21,848 | 24,680 | 20,233 | 22,437 | 21,753 | 22,122 | 8,618 | 9,156 | 10,018 | 10, | |
| 11 | 3 | District 3 | | | | 50,049 | 49,693 | 50,221 | 42,528 | 46,066 | 49,567 | 47,483 | 40,166 | 16,278 | 17,295 | 18,923 | 20, | |
| 12 | 4 | District 4 | | | | 27,300 | 25,472 | 25,415 | 25,867 | 24,485 | 25,720 | 22,556 | 23,433 | 24,627 | 26,166 | 28,629 | 30, | |
| 13 | 5 | District 5 | | | | 12,429 | 13,250 | 13,364 | 13,231 | 12,071 | 13,379 | 13,215 | 11,858 | 1,917 | 2,037 | 2,228 | 2, | |
| 14 | 6 | District 6 | | | | 12,402 | 12,830 | 12,489 | 13,037 | 11,631 | 11,912 | 11,897 | 12,049 | 6,102 | 6,483 | 7,093 | 7, | |
| 15 | 7 | District 7 | | | | 12,787 | 15,503 | 14,856 | 16,732 | 13,200 | 16,792 | 15,190 | 16,747 | 950 | 1,009 | 1,104 | 1, | |
| 16 | 8 | District 8 | | | | 33,177 | 33,052 | 34,052 | 34,225 | 32,227 | 32,461 | 31,409 | 32,185 | 74,437 | 79,089 | 86,533 | 93,0 | |
| 17 | 9 | District 9 | | | | 5,933 | 6,184 | 6,413 | 6,651 | 5,133 | 5,225 | 5,305 | 5,342 | 1,646 | 1,748 | 1,913 | 2,0 | |
| 18 | 10 | District 10 | | | | 26,633 | 30,223 | 30,456 | 32,613 | 23,221 | 28,116 | 28,286 | 30,782 | 8,348 | 8,870 | 9,705 | 10, | |
| 19 | 11 | District 11 | | | | 56,940 | 55,850 | 55,391 | 53,110 | 57,065 | 58,360 | 54,725 | 53,079 | 29,561 | 31,408 | 34,364 | 36, | |
| 20 | 12 | District 12 | | | | 23,705 | 22,971 | 22,290 | 22,757 | 20,512 | 22,124 | 21,134 | 21,424 | 12,795 | 13,595 | 14,874 | 15, | |
| 21 | 13 | District 13 | | | | 49,843 | 55,313 | 60,894 | 62,995 | 41,579 | 45,027 | 49,379 | 53,618 | 26,316 | 27,961 | 30,592 | 32, | |
| 22 | 14 | District 14 | | | | 45,016 | 48,626 | 46,610 | 43,397 | 41,278 | 43,231 | 40,996 | 39,865 | 16,171 | 17,182 | 18,799 | 20, | |
| 23 | 15 | District 15 | | | | 10,474 | 11,383 | 11,571 | 11,663 | 10,818 | 10,923 | 11,315 | 11,497 | 7,586 | 8,061 | 8,819 | 9, | |
| 24 | 16 | District 16 | | | | 31,783 | 32,538 | 36,249 | 32,808 | 33,561 | 34,856 | 33,420 | 32,822 | 20,710 | 22,004 | 24,075 | 25, | |
| 25 | 17 | District 17 | | | | 34,948 | 34,304 | 34,335 | 34,301 | 29,713 | 30,781 | 30,288 | 31,816 | 73,545 | 78,141 | 85,496 | 91, | |
| Input_Standard_Populations Input_Indicator_Populations External_Data_Sources Input_trend_data Input_PA1_Ind1 Input_PA1_I1 | | | | | | | | | | | | | | | | | | |

Input Indicator Data

| | | | | | | | | | | | | | | | | | | | | |
|----|--|-------------|----------|-------|-------|--|----------|---------|---------|---------|---------|---------|---------|-----------|--------------------|----------|----------|--|--|--|
| | A | B | C | D | E | G | H | I | J | K | L | M | N | O | P | Q | R | S | T | |
| 1 | Input: Maternal_Health - ANC 1st Visit | | | | | | | | | | | | | | = moderate outlier | | | | = extreme outlier | |
| 2 | | | | | | | | | | | | | | | | | | | | |
| 3 | Please paste your monthly service data for ANC 1st Visit for the selected unit of analysis. Columns 1-5 are automatically populated for you based on information you entered in previous worksheets. Data can only be typed/pasted into columns that are in green. | | | | | | | | | | | | | | | | | | | |
| 4 | Columns 6-17 are write-protected. | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | | |
| 6 | Col 1 | Col 2 | Col 3 | Col 4 | Col 5 | Columns 6 - 17: Monthly 'ANC 1st Visit' Data | | | | | | | | | | | | Col 18 | Col 19 | |
| 7 | No. | District | National | | | January | February | March | April | May | June | July | August | September | October | November | December | DQR Year Value: aggregate for 'cumulative' indicators; final period value for 'current' indicators | Total # Monthly Missing Values for District Level Data | |
| 8 | | Total | | | | 120,112 | 116,461 | 111,416 | 102,960 | 112,419 | 111,659 | 107,490 | 108,695 | 108,902 | 107,939 | 108,250 | 84,700 | 1,301,003 | | |
| 9 | 1 | District 1 | | | | 2,000 | 1,400 | 1,600 | 1,543 | 1,619 | 1,450 | 1,510 | 1,500 | 1,500 | 1,502 | 1,587 | 1,400 | 18,611 | | |
| 10 | 2 | District 2 | | | | 2,140 | 2,200 | 2,183 | 1,970 | 2,019 | 2,311 | 2,048 | 2,613 | 1,867 | 1,866 | 1,788 | 1,675 | 24,680 | | |
| 11 | 3 | District 3 | | | | 4,197 | 4,491 | 4,101 | 3,862 | 4,281 | 4,024 | 3,910 | | 4,140 | 3,855 | 3,486 | 3,522 | 43,869 | | |
| 12 | 4 | District 4 | | | | 2,699 | 2,408 | 2,212 | 2,103 | 2,279 | 2,373 | 2,227 | 2,213 | 2,197 | 1,726 | 2,328 | 2,311 | 27,076 | | |
| 13 | 5 | District 5 | | | | 1,262 | 1,334 | 1,168 | 1,035 | 1,133 | 1,147 | 1,177 | 1,230 | 1,103 | 932 | 1,017 | 1,087 | 13,625 | | |
| 14 | 6 | District 6 | | | | 1,167 | 1,138 | 1,167 | 1,024 | 1,208 | 1,086 | 1,156 | 1,135 | 1,096 | 1,054 | 1,010 | 998 | 13,239 | | |
| 15 | 7 | District 7 | | | | 1,507 | 1,555 | 1,398 | 1,180 | 1,320 | 1,177 | 1,397 | 1,673 | 1,503 | 1,527 | 1,505 | 1,211 | 16,953 | | |
| 16 | 8 | District 8 | | | | 3,314 | 3,227 | 3,077 | 2,718 | 3,099 | 3,044 | 2,782 | 2,900 | 2,619 | 2,621 | 2,898 | 1,926 | 34,225 | | |
| 17 | 9 | District 9 | | | | 685 | 574 | 608 | 560 | 724 | 509 | 529 | 544 | 554 | 530 | 495 | 541 | 6,853 | | |
| 18 | 10 | District 10 | | | | 2,989 | 2,885 | 2,732 | 2,686 | 2,701 | 2,858 | 2,902 | 2,903 | 2,596 | 2,808 | 2,687 | 2,611 | 33,358 | | |
| 19 | 11 | District 11 | | | | 4,906 | 5,083 | 4,673 | 4,271 | 4,823 | 5,494 | 4,236 | 4,323 | 4,019 | 4,236 | 4,391 | 4,201 | 54,656 | | |
| 20 | 12 | District 12 | | | | 1,971 | 2,032 | 2,030 | 1,881 | 2,040 | 2,275 | 1,964 | 2,031 | 1,915 | 1,772 | 1,762 | 1,633 | 23,306 | | |
| 21 | 13 | District 13 | | | | 5,780 | 5,464 | 5,373 | 5,106 | 5,739 | 5,180 | 5,086 | 5,398 | 5,440 | 5,388 | 5,384 | 5,311 | 64,649 | | |
| 22 | 14 | District 14 | | | | 4,805 | 4,077 | 3,659 | 3,528 | 3,389 | 3,519 | 3,461 | 3,646 | 3,103 | 3,602 | 4,147 | 4,233 | 45,169 | | |
| 23 | 15 | District 15 | | | | 1,121 | 989 | 989 | 936 | 1,055 | 974 | 965 | 1,069 | 999 | 954 | 955 | 1,008 | 12,014 | | |
| 24 | 16 | District 16 | | | | 2,823 | 3,022 | 2,833 | 2,826 | 2,940 | 2,851 | 2,733 | 2,936 | 2,789 | 2,594 | 2,700 | 2,685 | 33,732 | | |
| 25 | 17 | District 17 | | | | 3,261 | 3,319 | 2,973 | 2,913 | 2,926 | 2,761 | 2,716 | 3,004 | 2,796 | 2,900 | 2,994 | 1,738 | 34,301 | | |
| | Input_PA1_Ind1 Input_PA1_Ind2 Input_PA2_Ind1 Input_PA2_Ind2 Input_PA3_Ind1 Input_PA3_Ind2 Input_PA4_Ind1 Input_PA4_Ind2 | | | | | | | | | | | | | | | | | | | |

Summary Dashboard

BURUNDI - ANNUAL DATA QUALITY REVIEW: RESULTS, 2016

DOMAIN 1: COMPLETENESS OF REPORTING

| No. | Indicator | Definition | National Score (%) | # of districts not attaining quality threshold | % of districts not attaining quality threshold |
|--|--|---|--------------------|--|--|
| Indicator 1: Completeness and timeliness of reporting | | | | | |
| 1a | Completeness of District Reporting | National district reporting completeness rate and districts with poor completeness of reporting | 99.1% | 1 | 2.1% |
| 1b | Timeliness of District Reporting | National district reporting timeliness rate and districts with poor timeliness of reporting | 90.3% | 3 | 6.4% |
| 1c | Completeness of Facility Reporting | National facility reporting completeness rate and districts with poor facility reporting completeness | 96.1% | 8 | 17.0% |
| 1d | Timeliness of Facility Reporting | National facility reporting timeliness rate and districts with poor facility reporting timeliness | 89.6% | 11 | 23.4% |
| Indicator 1e: Completeness of indicator data - presence of missing and zero values | | | | | |
| 1e.1 | Completeness of indicator data (missing values) | Maternal_Health - ANC 1st Visit | 98.9% | 1 | 2.1% |
| | | Immunization - 3rd dose DPT-containing vaccine | 99.3% | | |
| | | HIV_AIDS - Number of HIV+ persons in palliative care | 99.8% | | |
| | | Malaria - Number of confirmed malaria cases reported | 99.8% | | |
| | | Immunization - OPV3 | 98.9% | 1 | 2.1% |
| | | Multi-program - Penta 1st doses | 99.1% | | |
| 1e.2 | Completeness of indicator data (zero values) | Maternal_Health - ANC 1st Visit | 98.9% | 2 | 4.3% |
| | | Immunization - 3rd dose DPT-containing vaccine | 99.5% | | |
| | | HIV_AIDS - Number of HIV+ persons in palliative care | 100.0% | | |
| | | Malaria - Number of confirmed malaria cases reported | 99.5% | 1 | 2.1% |
| | | Immunization - OPV3 | 100.0% | | |
| | | Multi-program - Penta 1st doses | 100.0% | | |
| Indicator 1f: Consistency of reporting completeness over time | | | | | |
| 1f.1 | Consistency of Reporting Completeness - District Reporting | Consistency of district reporting completeness and districts deviating from the expected trend | 105.8% | | |
| 1f.2 | Consistency of Reporting Completeness - Facility Reporting | Consistency of facility reporting completeness and Districts deviating from the expected trend | 103.5% | | |

Domain 1: Completeness of Reporting

Indicator 1a: National district reporting completeness rate and districts with poor completeness rate

| | 2014 |
|---|---|
| National district reporting completeness rate | 98.3% |
| Number of districts with completeness rate below 75% | 4 |
| Percent of districts with completeness rate below 75% | 5.6% |
| Districts with reporting completeness rate below 75% | District 1, District 3, District 7, District 10 |

Interpretation of results: Indicator 1a

- Good reporting completeness continuing a trend upwards from recent years.
- Investigate districts with < 75% completeness for the year.
- Districts 1 and 3 had stock out of reporting forms during 2nd quarter of last year
-

Domain 1: Completeness of Indicator Data

Indicator 1e: Completeness of Indicator Reporting - Presence of Missing and Zero Values

| 2016 | | | | | | |
|--|-------------------|---------|--------|---|------|--------------------------|
| National score | | | | Districts with > user-defined % of zero or missing values | | |
| Program Area and Indicator | Quality Threshold | Type | % | No. | % | Name |
| Maternal_Health - ANC 1st Visit | <= 90% | Missing | 98.9% | 1 | 2.1% | District 44 |
| | | Zero | 98.9% | 2 | 4.3% | District 17, District 29 |
| Immunization - 3rd dose DPT-containing vaccine | <= 90% | Missing | 99.3% | 1 | 2.1% | District 19 |
| | | Zero | 99.5% | 1 | 2.1% | District 17 |
| HIV_AIDS - Number of HIV+ persons in palliative care | <= 90% | Missing | 99.8% | | | |
| | | Zero | 100.0% | | | |
| Malaria - Number of confirmed malaria cases reported | <= 90% | Missing | 99.8% | | | |
| | | Zero | 99.5% | 1 | 2.1% | |
| Immunization - OPV3 | <= 90% | Missing | 98.9% | 1 | 2.1% | District 7 |
| | | Zero | 100.0% | | | |
| Multi-program - Penta 1st doses | <= 90% | Missing | 99.1% | 1 | 2.1% | District 23 |
| | | Zero | 100.0% | | | |
| Total (all indicators combined) | | Missing | 99.3% | 4 | 8.5% | |
| | | Zero | 99.6% | 4 | 8.5% | |

Interpretation of results: Indicator 1e

-
-
-
-

Domain 2: Internal Consistency - Outliers

DOMAIN 2: INTERNAL CONSISTENCY OF REPORTED DATA

Indicator 2a: Identification of Outliers

Indicator 2a.1: Extreme Outliers (>3 SD from the mean)

2016

| Program Area and Indicator | National score | Districts with extreme outliers relative to the mean | | |
|--|----------------|--|------|--------------------------------------|
| | % | No. | % | Name |
| Maternal_Health - ANC 1st Visit | 0.2% | 1 | 2.1% | District 39 |
| Immunization - 3rd dose DPT-containing vaccine | 0.0% | | | - |
| HIV_AIDS - Number of HIV+ persons in palliative care | 0.5% | 3 | 6.4% | District 9, District 38, District 41 |
| Malaria - Number of confirmed malaria cases reported | 0.0% | | | - |
| Immunization - OPV3 | 0.4% | 2 | 4.3% | District 31, District 39 |
| Multi-program - Penta 1st doses | 0.0% | | | - |
| Total (all indicators combined) | 0.2% | | | |

Interpretation of results - Indicator 2a1:

-
-
-
-
-
-

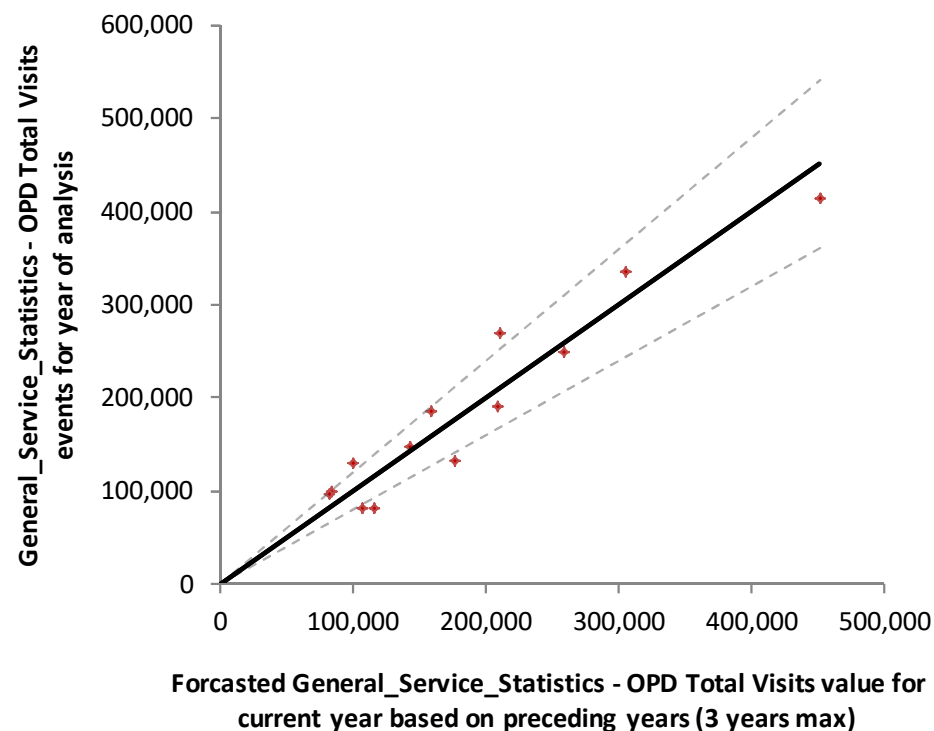
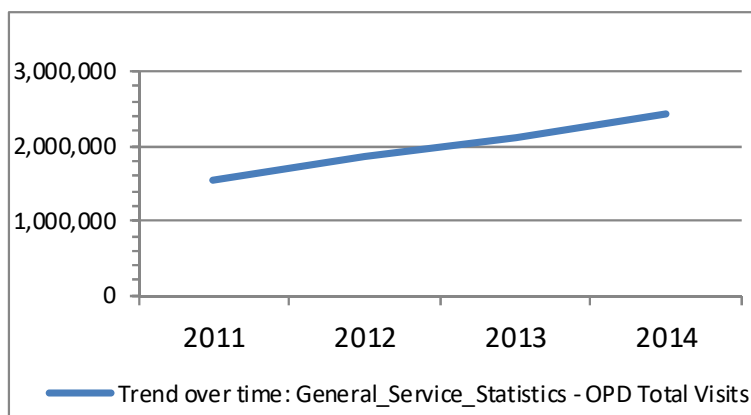
Domain 2: Consistency over time

2b3: Consistency of 'General_Service_Statistics - OPD Total Visits' over time

| | |
|--|-----------------|
| Year | 2014 |
| Expected trend | Increasing |
| Compare districts to: | expected result |
| Quality threshold | 20% |
| National score (%) | 100% |
| Number of districts with divergent scores | 5 |
| Percent of districts with divergent scores | 38.5% |

Names of districts with divergent scores:

District 6, District 7, District 8, District 9, District 11



Interpretation of results - Indicator 2c3:

- This indicator is increasing over time (Outpatient visits are increasing - something we were expecting given social mobilisation for public health services).
- Comparison of expected result (that the forecasted value is equal to the actual value for 2014) yields 5 districts with ratios that exceed the quality threshold of 20%. 3 are inferior of the quality threshold while 2 are greater.
- Errors are not systematic (e.g. all in one direction) Review district outpatient registers in affected districts to confirm reported values.

Domain 2: Consistency between related indicators

Indicator 2c: Internal Consistency - Consistency Between Related Indicators

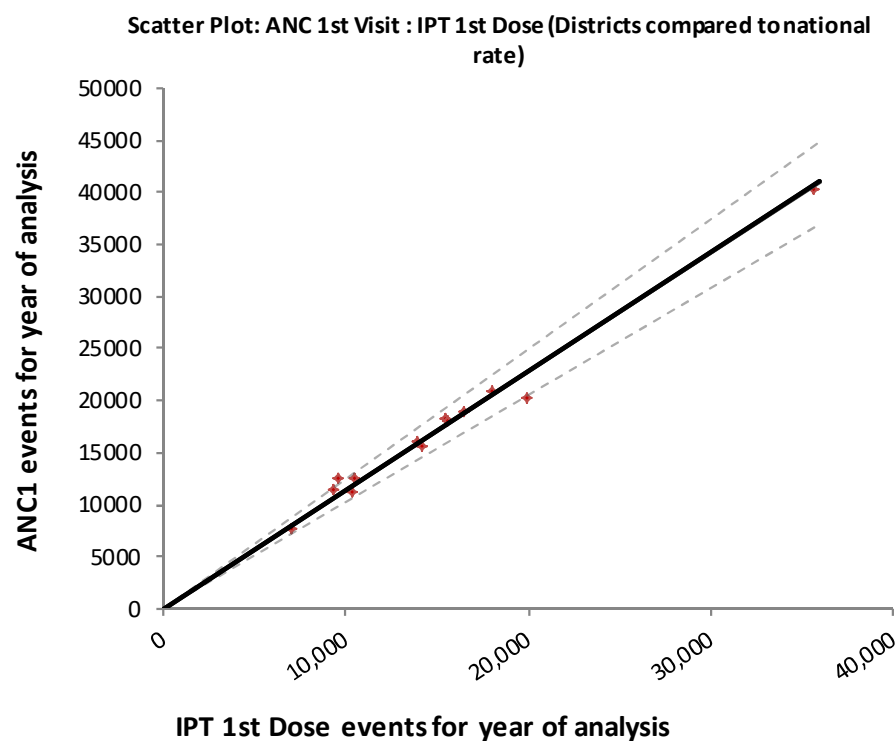
Consistency between related indicators - Ratio of two related indicators and Districts with ratios significantly different from the national ratio *

2c1: Maternal Health Comparison: ANC 1st Visit : IPT 1st Dose

| | |
|--|---------------|
| Year | 2014 |
| Expected relationship | equal |
| Compare districts with: | national rate |
| Quality Threshold | 10% |
| National Score (%) | 114% |
| Number of districts with divergent scores | 2 |
| Percent of districts with divergent scores | 15.4% |

Names of districts with divergent scores:

District 5, District 6



Interpretation of results - Indicator 2c1:

- Data seem pretty good - only district 5 has a largely discrepant value
- IPT seems consistently lower than ANC1 - more pregnant women should be receiving IPT
- Stock out of fansidar in Region 2 could explain low number of IPT in Districts 5. Call DHIO in these districts to investigate
- National rate is 114% - most districts are close to this value. District 6 is performing well relative to the other districts but is 'discrepant' relative to the national rate. - no follow up needed.

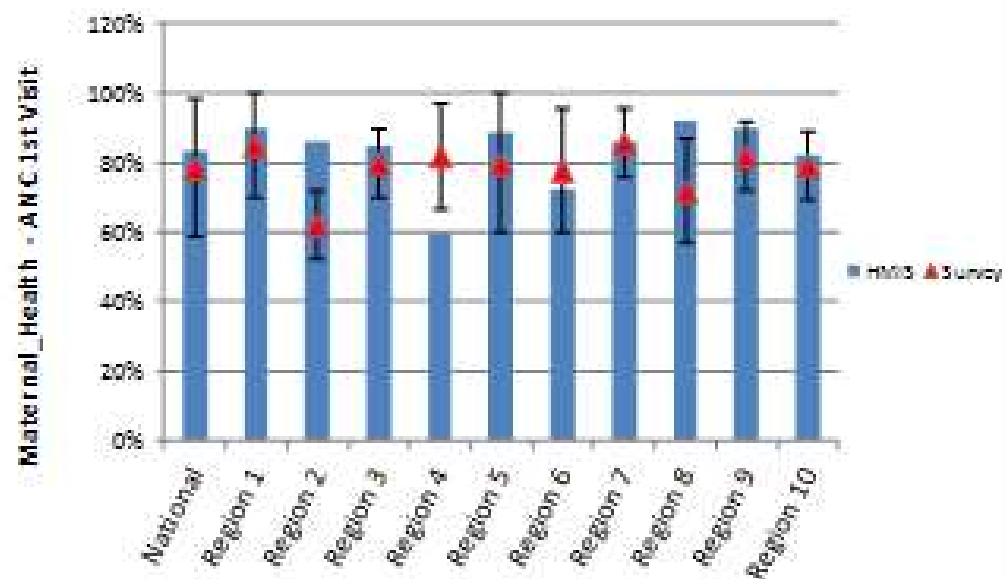
Domain 3: External Consistency – Consistency with survey values

Indicator 3a: Comparison of Routine Data with Population-based Survey Values from the Same Period

3a1: 'ANC 1st Visit' consistency ratio (ratio between the facility rates and survey rates)

| | |
|--|-------|
| Year | 2014 |
| Quality Threshold | 33% |
| National Score (%) | 106% |
| Number of Regions with divergent scores | 3 |
| Percent of Regions with divergent scores | 30.0% |
| Names of Regions with divergent scores: | |

Region 2, Region 4, Region 8



Interpretation of results - Indicator 3a1:

- ANC HMIS value in region 4 looks too low - could result from missing source documents or a failure to record service delivery. Review report forms from districts in the region to verify the reported values
- ANC HMIS value in regions 2 and 8 seems too high - could be double counting or duplicate reporting. Call District Health Information Officers to investigate

Domain 4: Consistency of population data – Comparison of denominators in use in-country

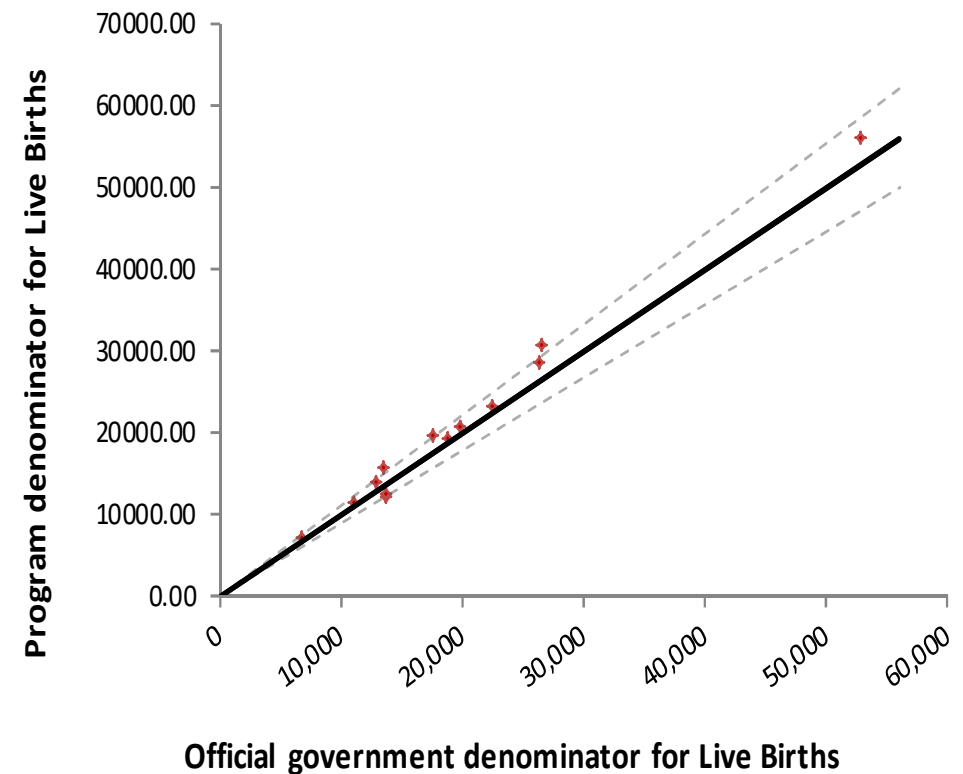
Indicator 4b: Consistency of denominator between program data and official government population statistics

Indicator 4b1 - Comparing the official Live Births denominator to a program denominator, if applicable

| | |
|--|-------|
| Year | 2014 |
| Quality Threshold | 10% |
| National Score (%) | 106% |
| Number of districts with divergent scores | 4 |
| Percent of districts with divergent scores | 30.8% |

Names of districts with divergent scores:

District 1, District 5, District 7, District 12



Interpretation of results - Indicator 4b1:

- the Program denominators in Districts 1, 7, and 12 seem too large - and too small in District 5. Review growth rates used by program to estimate intercensal yearly values for live births.