Data Validation Exercise before Entry into UCSR

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Abstract

Summary. This is a document to validate and check variables before they are inte grated into the UCSR.

1 High-level codebook for all variables

```
-------------------------------------------------------------------------------------------------
disease                                                                                   Disease
-------------------------------------------------------------------------------------------------

                  type:  string (str3)

         unique values:  1                              missing "":  0/163

            tabulation:  Freq.   Value
                           163   "HIV"

-------------------------------------------------------------------------------------------------
collapsed                                                                               Collapsed
-------------------------------------------------------------------------------------------------

                  type:  string (str3), but longest is str2

         unique values:  1                              missing "":  0/163

            tabulation:  Freq.   Value
                           163   "No"

-------------------------------------------------------------------------------------------------
lead_author                                                                           Lead Author
-------------------------------------------------------------------------------------------------

                  type:  string (str21)

         unique values:  25                             missing "":  0/163

              examples:  "Chang, W
                         "Maheswaran, H"
                         "Nguyen, VT"
```

```
                          "Obure, CD"

              warning:  variable has embedded blanks

        ----------------------------------------------------------------------------------
        ref_year                                                            Reference Year
        ----------------------------------------------------------------------------------

                 type:  numeric (int)

                range:  [1997,2016]                    units:  1
        unique values:  12                         missing .:  0/163

                 mean:      2012
            std. dev:  3.95967

          percentiles:        10%       25%       50%       75%       90%
                             2007      2010      2012      2016      2016

        ----------------------------------------------------------------------------------
        output_unit2                                                            Output unit
        ----------------------------------------------------------------------------------

                 type:  string (str20)

        unique values:  4                         missing "":  0/163

           tabulation:  Freq.  Value
                          150   "."
                            1   "Cost Per Person Year"
                            4   "Patient Visit"
                            8   "Per Visit"

              warning:  variable has embedded blanks

        ----------------------------------------------------------------------------------
        title                                                                        Title
        ----------------------------------------------------------------------------------

                 type:  string (str167)

        unique values:  25                        missing "":  0/163

             examples:  "Cost and quality of life analysis of HIV
                         self-testing and facility-based HIV testing and
                         counselling in Blantyre, Malawi "
                         "Expenditure Analysis of HIV Testing and Counseling
                         Services Using the Cascade Framework in Vietnam"
                         "Optimising the cost and delivery of HIV counselling
                         and testing services in Kenya and Swaziland"
                         "Optimising the cost and delivery of HIV counselling
                         and testing services in Kenya and Swaziland"

              warning:  variable has embedded and trailing blanks
```

```
--------------------------------------------------------------------------------
journal_etc                                                              Journal
--------------------------------------------------------------------------------

              type:  string (str57)

     unique values:  25                        missing "":  0/163

          examples:  "BMC Med. 2016 Feb 19;14:34"
                     "J Acquir Immune Defic Syndr. 2010 Jul;54(3):317-23"
                     "Rural Remote Health. 2015 Oct-Dec;15(4):3357"
                     "Sex Transm Infect. 2012 Nov; 88(7): 498503"

           warning:  variable has embedded blanks

--------------------------------------------------------------------------------
url                                                                          URL
--------------------------------------------------------------------------------

              type:  string (str91)

     unique values:  25                        missing "":  0/163

          examples:  "<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC359549
                     8/>."
                     "<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC505152
                     8/>."
                     "<https://www.ncbi.nlm.nih.gov/pubmed/20453819>."
                     "<https://www.ncbi.nlm.nih.gov/pubmed/26572854>."

--------------------------------------------------------------------------------
iso_name                                                                 Country
--------------------------------------------------------------------------------

              type:  string (str14)

     unique values:  16                        missing "":  0/163

          examples:  "Kenya"
                     "Malawi"
                     "South Africa"
                     "Swaziland"

           warning:  variable has embedded blanks

--------------------------------------------------------------------------------
location                                                                Location
--------------------------------------------------------------------------------

              type:  string (str107)

     unique values:  27                        missing "":  0/163
```

```
          examples:  "."
                     "."
                     "Blantyre"
                     "KwaZulu Natal province"

           warning:  variable has leading, embedded, and trailing blanks

-------------------------------------------------------------------------------------
no_sites                                                                        Sites
-------------------------------------------------------------------------------------

              type:  string (str5)

     unique values:  19                              missing "":  0/163

          examples:  "1"
                     "1"
                     "34"
                     "56"

-------------------------------------------------------------------------------------
pop_density                                                                Urbanicity
-------------------------------------------------------------------------------------

              type:  string (str7)

     unique values:  3                               missing "":  0/163

         tabulation:  Freq.  Value
                        86   "Mixture"
                        36   "Rural"
                        41   "Urban"

-------------------------------------------------------------------------------------
ownership                                                                   Ownership
-------------------------------------------------------------------------------------

              type:  string (str17)

     unique values:  4                               missing "":  0/163

         tabulation:  Freq.  Value
                         8   "In-Country Ngo"
                        16   "International Ngo"
                       115   "Mixed"
                        24   "Public"

           warning:  variable has embedded blanks

-------------------------------------------------------------------------------------
platform                                                                     Platform
-------------------------------------------------------------------------------------

              type:  string (str15)
```

```
                  unique values:  4                        missing "":  0/163

                     tabulation:  Freq.  Value
                                    15   "."
                                     4   "Community Based"
                                   119   "Fixed Facility"
                                    25   "Outreach"

                        warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
facility_cat                                                      Platform specificity
-------------------------------------------------------------------------------------

                           type:  string (str68)

                  unique values:  14                       missing "":  0/163

                       examples:  "Clinic At Hospital (Intervention- Or
                                  Disease-Specific)"
                                  "Health Center (E.G. Community Health Clinic -
                                  Sometimes W/ 1-2 Beds)"
                                  "Hospital - Primary (District)"
                                  "Mix Of Health Care Facility Types"

                        warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
id_class                                                          Intervention Category
-------------------------------------------------------------------------------------

                           type:  string (str7)

                  unique values:  1                        missing "":  0/163

                     tabulation:  Freq.  Value
                                   163   "Testing"


-------------------------------------------------------------------------------------
id_int                                                                    Intervention
-------------------------------------------------------------------------------------

                           type:  string (str26)

                  unique values:  2                        missing "":  0/163

                     tabulation:  Freq.  Value
                                   159   "HCT"
                                     4   "HIV COUNSELING AND TESTING"

                        warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
```

                           type: string (strL)

                  unique values: 40   missing "": 0/163

                       examples: "At the 17 VCTCs studied in Andhra Pradesh, 36 272
                                  persons received HIV pre-test counselling during the
                                  2002 03 fiscal year, of whom 35 844 (98.8%)
                                  underwent an HIV test. Of the persons tested, 32 413
                                  (90.4%) received post-test counselling. HIV infection
                                  was detected in 6866 (19.2%) of the persons tested,
                                  of whom 6638 (96.7%) received post-test counselling.
                                  The number of persons receiving post-test counselling
                                  at each VCTC in the 200203 fiscal year varied widely
                                  from 334 to 7802 (median 979), and the percentage of
                                  HIV-positive persons also varied widely between VCTCs
                                  from 5.4% to 52.6% (median 22%). The overall
                                  HIV-positivity rate in post-test counselled clients
                                  was 20.5%.
All VCTCs used a similar testing protocol
                                  and fee structure. HIV testing was done with rapid
                                  test kits. If the first test was positive, two more
                                  types of rapid tests were performed to confirm the
                                  positive result. The result was certified by the
                                  medical officer at the VCTC and handed over to the
                                  client usually on the day after pre- test counselling
                                  and blood sample collection. The fee charged for the
                                  HIV test was a nominal Rs 10 (US$ 0.21). This fee was
                                  waived if the medical officer assessed the client to
                                  be very poor and unable to afford this, which was
                                  done for 0%45% of clients in various VCTCs."
                                  "In a typical site, clients passed through several
                                  SDPs, namely the Heart 2 Heart centre (HTC
                                  unit)which is the entry point in the ART program,
                                  the antenatal clinicwhich is the entry point for
                                  HIV-positive pregnant women, the ART patient
                                  monitoring and management unit, the ART clinic, the
                                  ART laboratory, the ART pharmacy, and the ART
                                  adherence counseling."
                                  "The study area included three high-density urban
                                  sub- urbs of Blantyre, Malawi with an adult
                                  population of approximately 34,000 residents and
                                  adult HIV prevalence of 18 % . Twenty-eight clusters
                                  of approximately 1,200 adults were randomised to
                                  either HIVST or standard-of- care (control). In all
                                  clusters, participants could access HTC at the health
                                  facilities by self-presenting or after referral by
                                  medical personnel. In the 14 intervention HIVST
                                  clusters, resident volunteer counsellors promoted
                                  HIVST and provided pre- and post-test counselling, as
                                  well as directions on how to use the self-test kits.
                                  Participants could self-test in the privacy of their

own homes. Routine and confirmatory HIV testing and care ser- vices were available at Queen Elizabeth Central Hospital (QECH), and two primary health clinics located in the study area (Ndirande Health Centre, Chilomoni Health Centre). HIVST was provided for a two-year period, with the service introduced from February to May 2012. From the onset of intervention in seven HIVST clusters, and from January 2013 in all HIVST clusters, participants could also request home-based assessment and initiation of 14 days of HIV care, including ART if eligible . Subsequent care was provided at the primary care level"

"VCT refers to the client-initiated counselling and testing for HIV through VCT centres, while PITC involves the incorporation of HCT into routine healthcare, including general primary care, maternal and child healthcare, care for sexually transmitted infections and inpatient services. Both VCT and PITC services are offered in Kenya and Swaziland, and follow similar testing procedures in both countries.

There are, however, several differences between the PITC and VCT models, which have associated resource implications. While PITC services are routinely offered to all clients attending services, regardless of their reason for accessing services, VCT is dependent upon clients seeking testing. Within VCT, counselling and testing is provided by a lay VCT counsellor or a nurse. For PITC, pre- and post-test counselling is provided by a nurse, and testing is conducted either by the same nurse or provided by a laboratory technologist or a lay counsellor. VCT generally involves one-on-one or couples counselling, while for PITC pre- test counselling may be provided to groups. PITC may also involve much less post-test counselling than VCT, and thus, requires a shorter length of staff time for each visit."

```
            warning:  variable has leading, embedded, and trailing blanks

-------------------------------------------------------------------------------------------
clinical_monitoring                                                      Clinical monitoring
-------------------------------------------------------------------------------------------

               type:  string (str3), but longest is str1

      unique values:  1                          missing "":  0/163

         tabulation:  Freq.  Value
                       163   "."


-------------------------------------------------------------------------------------------
```

```
demand_generation                                                    Demand generation
--------------------------------------------------------------------------------------------
                type:  string (str154)

       unique values:  10                              missing "":  0/163

            examples:  "."
                       "."
                       "."
                       "."

             warning:  variable has leading, embedded, and trailing blanks

--------------------------------------------------------------------------------------------
counseling_content                                                  Counseling content
--------------------------------------------------------------------------------------------
                type:  string (str201)

       unique values:  13                              missing "":  0/163

            examples:  "Counseling Provided - Content Nr"
                       "Pre-Test Counseling, Post-Test Counseling"
                       "Pre-Test Counseling, Post-Test Counseling"
                       "Pre-Test Counseling, Post-Test Counseling"

             warning:  variable has leading and embedded blanks

--------------------------------------------------------------------------------------------
staff_type                                                          Staff type & number
--------------------------------------------------------------------------------------------
                type:  string (str205)

       unique values:  21                              missing "":  0/163

            examples:  "Counselor (Nr)"
                       "Doctors (Nr), Nurses (Nr), Clinical Officer (Nr),
                       Counselor (Nr), Social Workers (Nr), Community Health
                       Workers (Nr), Peer Educators (Nr), Laboratory
                       Technicians (Nr), Pharmacists (Nr), And Volunteers
                       (Nr)"
                       "Nurses (Nr),  Laboratory Technologist (Nr), Lay
                       Counselor (Nr)"
                       "Physician (65), Nurse (76)"

             warning:  variable has embedded blanks

--------------------------------------------------------------------------------------------
supportive_care                                                       Supportive care
--------------------------------------------------------------------------------------------
                type:  string (str85)
```

```
            unique values:  5                      missing "":  0/163

               tabulation:  Freq.  Value
                             150   "."
                               2   "1/3Yrs"
                               2   "Bp Monitoring, Rapid Testing For Blood
                                    Glucose , Cholesterol Levels,
Hemoglobin

                                    Level"
                               4   "Feeding Plan, Care For Aids Orphans,
                                    Wellness Management Services, Stis
                                    Treatment"
                               5   "Oi Treatment"

                  warning:  variable has embedded blanks

-------------------------------------------------------------------------------------
visits                                                           Visit type & number
-------------------------------------------------------------------------------------

                     type:  string (str44)

            unique values:  9                      missing "":  0/163

               tabulation:  Freq.  Value
                             117   "."
                               5   "2"
                               1   "4983 Total Annual Visits By All
                                    Patients"
                               1   "5296 Total Annual Visits By All
                                    Patients"
                               1   "7 Total Annual Visits By All Patients"
                               1   "746 Total Annual Visits By All
                                    Patients"
                              30   "Pre-Test Session (1), Post-Test
                                    Sessions (1)"
                               5   "Pre-Test Session (1), Post-Test
                                    Sessions (2)"
                               2   "Yes - Details Nr"

                  warning:  variable has embedded blanks

-------------------------------------------------------------------------------------
referrals                                                                   Referrals
-------------------------------------------------------------------------------------

                     type:  string (str64)

            unique values:  6                      missing "":  0/163

               tabulation:  Freq.  Value
                             150   "."
                               1   "No"
```

```
                         2  "Rapid Test"
                         2  "To Private Provider If Insured
To Mohss

                            Facility If Not Insured"
                         4  "Yes - Hiv Care"
                         4  "Yes-Details Nr"


            warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
method                                                                        Method
-------------------------------------------------------------------------------------

               type:  string (str288)

      unique values:  17                         missing "":  0/163

           examples:  "Hiv Rapid Test"
                      "Hiv Rapid Test"
                      "Hiv Rapid Test"
                      "Rapid Test"

            warning:  variable has embedded and trailing blanks


-------------------------------------------------------------------------------------
id_tech                                                                   Technology
-------------------------------------------------------------------------------------

               type:  string (str288)

      unique values:  17                         missing "":  0/163

           examples:  "Hiv Rapid Test"
                      "Hiv Rapid Test"
                      "Hiv Rapid Test"
                      "Rapid Test"

            warning:  variable has embedded and trailing blanks


-------------------------------------------------------------------------------------
treatment_phase                                                      Treatment phase
-------------------------------------------------------------------------------------

               type:  string (str3), but longest is str1

      unique values:  1                          missing "":  0/163

         tabulation:  Freq.  Value
                        163  "."


-------------------------------------------------------------------------------------
arv_regimen                                                              ARV Regimen
-------------------------------------------------------------------------------------
```

```
                  type:  string (str98)

         unique values:  2                          missing "":  0/163

            tabulation:  Freq.  Value
                          158  "."
                            5  "1st line: Lamivudine/zidovudine +
                               nevirapine 150/300 ; 2nd line:
                               Tenofovir/lamivudine + nevirapine"

               warning:  variable has embedded blanks

-------------------------------------------------------------------------------------------
treatment                                                                         Treatment
-------------------------------------------------------------------------------------------

                  type:  string (str25)

         unique values:  3                          missing "":  0/163

            tabulation:  Freq.  Value
                          156  "."
                            5  "Yes, Details NR"
                            2  "cotrimoxazole prophylaxis"

               warning:  variable has embedded blanks

-------------------------------------------------------------------------------------------
screening_diagnoses                                                  Screening and diagnosis
-------------------------------------------------------------------------------------------

                  type:  string (str47)

         unique values:  6                          missing "":  0/163

            tabulation:  Freq.  Value
                           12  "."
                          128  "HIV testing"
                            3  "HIV testing, STI testing"
                            9  "HIV testing; OI testing"
                            9  "HIV, Malaria, hypertension and diabetes
                               testing"
                            2  "HIV, Syphilis, HepB testing"

               warning:  variable has embedded blanks

-------------------------------------------------------------------------------------------
community_awareness                                                      Community awareness
-------------------------------------------------------------------------------------------

                  type:  string (str40)

         unique values:  6                          missing "":  0/163
```

```
          tabulation:  Freq.   Value
                          4    "annual HIV prevention campaign"
                        129    "."
                          5    "None"
                          2    "Peer education"
                         14    "mass media"
                          9    "mass media, community meetings,
                               programs"

             warning:  variable has leading and embedded blanks

--------------------------------------------------------------------------------------
health_system                                                             health_system
--------------------------------------------------------------------------------------

                type:  string (str2), but longest is str1

       unique values:  1                         missing "":  0/163

          tabulation:  Freq.   Value
                        163    "."

--------------------------------------------------------------------------------------
id_activities                                                           Costed activities
--------------------------------------------------------------------------------------

                type:  string (str92)

       unique values:  9                         missing "":  0/163

          tabulation:  Freq.   Value
                        102    "Counseling Content, Screening &
                               Diagnoses"
                         18    "Demand Generation, Counseling Content,
                               Screening & Diagnoses"
                          9    "Demand Generation, Counseling Content,
                               Screening & Diagnoses, Community
                               Awareness"
                          2    "Demand Generation, Counseling Content,
                               Screening & Diagnoses, Treatment,
                               Community Awareness"
                          4    "Demand Generation, Counseling Content,
                               Supportive Care, Screening & Diagnoses"
                          2    "Demand Generation; Counseling;
                               Referrals"
                          4    "Rapid Test"
                         17    "Screening & Diagnoses"
                          5    "Supportive Care, Arv Regimen, Screening
                               & Diagnoses, Treatment"

             warning:  variable has embedded blanks

--------------------------------------------------------------------------------------
start_month                                                               Start Month
```

```
--------------------------------------------------------------------------------

              type:  numeric (byte)

             range:  [1,12]                         units:  1
     unique values:  11                         missing .:  63/163

              mean:      4.19
         std. dev:   2.98039

       percentiles:        10%        25%        50%        75%        90%
                            1          2          4          6         10

--------------------------------------------------------------------------------
start_year                                                            Start Year
--------------------------------------------------------------------------------

              type:  numeric (int)

             range:  [1996,2015]                    units:  1
     unique values:  16                         missing .:  0/163

              mean:   2008.38
         std. dev:   3.78954

       percentiles:        10%        25%        50%        75%        90%
                           2004       2007       2008       2011       2013

--------------------------------------------------------------------------------
end_month                                                              End Month
--------------------------------------------------------------------------------

              type:  numeric (byte)

             range:  [3,12]                          units:  1
     unique values:  8                          missing .:  63/163

        tabulation:  Freq.   Value
                        22   3
                        17   4
                        12   5
                         4   6
                         5   7
                         2   8
                        12   9
                        26   12
                        63   .

--------------------------------------------------------------------------------
end_year                                                                End Year
--------------------------------------------------------------------------------

              type:  numeric (int)
```

```
               range:   [1996,2015]                          units:   1
       unique values:   15                             missing .:   0/163

                mean:   2009.07
           std. dev:    3.8515

         percentiles:          10%         25%        50%        75%        90%
                              2005        2007       2009       2012       2014

-----------------------------------------------------------------------------------------
period_portrayed                                                           Total Months
-----------------------------------------------------------------------------------------

                type:   string (str9)

       unique values:   8                           missing "":   0/163

          tabulation:   Freq.   Value
                          2    "10"
                        113    "12"
                         16    "12 months"   💬
                          9    "13"
                         10    "3"
                          5    "6"
                          4    "6-12"
                          4    "9"

             warning:   variable has embedded blanks

-----------------------------------------------------------------------------------------
year_intro                                                     Year introduced at study site
-----------------------------------------------------------------------------------------

                type:   numeric (int)

               range:   [2001,2008]                          units:   1
       unique values:   6                             missing .:   145/163

          tabulation:   Freq.   Value
                          4    2001
                          2    2003
                          7    2004
                          1    2006
                          2    2007
                          2    2008
                        145    .

-----------------------------------------------------------------------------------------
coverage                                                                        Coverage
-----------------------------------------------------------------------------------------

                type:   string (str28)

       unique values:   5                           missing "":   0/163
```

```
          tabulation:  Freq.  Value
                         157  "."
                           1  ".98"
                           1  ".99"
                           2  "60% of the community members"
                           2  "800000 people"

             warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
id_pop_dem_std                                              Target group (demographic)
-------------------------------------------------------------------------------------

                type:  string (str23)

       unique values:  9                          missing "":  0/163

          tabulation:  Freq.  Value
                           5  "."
                          12  "Adults"
                         115  "General Populations"
                           6  "High-risk groups"
                           2  "People who Inject Drugs"
                           2  "Prisoners"
                           2  "Sex Worker"
                           2  "explicit"
                          17  "inferred"

             warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
id_pop_clin_std                                                Target group (clinical)
-------------------------------------------------------------------------------------

                type:  string (str18)

       unique values:  1                          missing "":  0/163

          tabulation:  Freq.  Value
                         163  "Unknown HIV Status"

             warning:  variable has embedded blanks


-------------------------------------------------------------------------------------
pop_age                                                                    Average Age
-------------------------------------------------------------------------------------

                type:  string (str20)

       unique values:  7                          missing "":  0/163

          tabulation:  Freq.  Value
                         143  "."
```

```
                      2   "25"
                      4   "28"
                      5   "30"
                      4   "34"
                      4   "41.5"
                      1   "Rural: 29, Urban: 27"


            warning:  variable has embedded blanks


-----------------------------------------------------------------------------------------------
pop_sex                                                                                   Gender
-----------------------------------------------------------------------------------------------

               type:  string (str32)

      unique values:  22                              missing "":  0/163

           examples:  "."
                      "."
                      "."
                      "37.2% Male"


            warning:  variable has embedded blanks


-----------------------------------------------------------------------------------------------
pop_ses                                                                                      SES
-----------------------------------------------------------------------------------------------

               type:  string (str102)

      unique values:  9                               missing "":  0/163

          tabulation:  Freq.   Value
                        134   "."
                          2   "19% uneployed, median monthy income
                              (range) is $77($36-$128)"
                          4   "50% employed"
                          2   "7% unemployed, median monthly incom
                              (range) is $48($36-$72)"
                          2   "7% unemployed, median monthly income
                              (range) is $124 (52-246)"
                          1   "Mean monthly house hold expenditures:
                              Rural: $52, Urban: $108"
                          2   "Monthly median income ($17.64)"
                         12   "high quintile (12.6%), 2nd highest
                              (21.7%),middle (22.9%), 2nd lowest
                              (21.7%), lowest quintile (20.9%)"
                          4   "high quintile (22.2%), 2nd highest
                              (19.9%),middle (19.1%), 2nd lowest
                              (18.7%), lowest quintile (19.9%)"


            warning:  variable has embedded blanks


-----------------------------------------------------------------------------------------------
```

```
pop_education                                                                Education
--------------------------------------------------------------------------------------

                   type:  string (str85)

          unique values:  6                          missing "":  0/163

             tabulation:  Freq.  Value
                           144   "."
                             1   "Ever attended school (77%)"
                             1   "Ever attended school (79%)"
                             1   "Secondary or higher: Rural: 32.1%,
                                  Urban: 54%"
                             4   "up to standard 8 (38.7%), up to form 6
                                  (57%), University or training college
                                  (3.2%)"
                            12   "up to standard 8 (52.2%), up to form 6
                                  (44.7%), University or training college
                                  (4.1%)"

                warning:  variable has embedded blanks

--------------------------------------------------------------------------------------
hiv_prev                                                               HIV Prevalence
--------------------------------------------------------------------------------------

                   type:  string (str60)

          unique values:  28                         missing "":  0/163

               examples:  "."
                          ".066"
                          ".09"
                          ".26"

                warning:  variable has embedded blanks

--------------------------------------------------------------------------------------
tb_prev                                                                 TB Prevalence
--------------------------------------------------------------------------------------

                   type:  string (str3), but longest is str1

          unique values:  1                          missing "":  0/163

             tabulation:  Freq.  Value
                           163   "."

--------------------------------------------------------------------------------------
tb_rx_resistance                                                    TB Drug Resistance
--------------------------------------------------------------------------------------

                   type:  string (str1)
```

```
          unique values:  1                         missing "":  0/163

             tabulation:  Freq.  Value
                            163  "."
```

----
costing_purpose   Costing Purpose

```
                   type:  string (str991)

          unique values:  25                        missing "":  0/163

               examples:  "To demonstrate the feasibility, acceptability and
                          cost of home-based HIV testing and to examine the
                          applicability of the model to high HIV prevalence
                          settings."
                          "To evaluate costs and outcomes of voluntary
                          counselling and testing (VCT) service delivery models
                          in urban Indonesia."
                          "To examine the relative costs of provider-initiated
                          testing and counselling (PITC) services compared with
                          voluntary counselling and testing (VCT) services in
                          the same health facilities in two low-resource
                          settings: Kenya and Swaziland."
                          "To inform scalability, authors sought to determine:
                          1) overall cost and efficiency of this approach; and
                          2) costs associated with point-of-care (POC) CD4
                          testing, multi-disease services, and community
                          mobilization."

                warning:  variable has embedded and trailing blanks
```

----
timing   Timing

```
                   type:  string (str15)

          unique values:  1                         missing "":  0/163

             tabulation:  Freq.  Value
                            163  "Cross-Sectional"
```

----
country_sampling   Country Sampling

```
                   type:  string (str9)

          unique values:  2                         missing "":  0/163

             tabulation:  Freq.  Value
                             90  "."
```

```
                            73   "Purposive"

------------------------------------------------------------------------------------------
geo_sampling_incountry                                 Geographic Area In Country Sampling
------------------------------------------------------------------------------------------

               type:  string (str11)

      unique values:  5                         missing "":  0/163

         tabulation:  Freq.  Value
                         58  "."
                         16  "Cluster"
                         14  "Convenience"
                         58  "Purposive"
                         17  "Random"

------------------------------------------------------------------------------------------
site_sampling                                                                Site Sampling
------------------------------------------------------------------------------------------

               type:  string (str14)

      unique values:  6                         missing "":  0/163

         tabulation:  Freq.  Value
                         11  "."
                         16  "Cluster"
                         24  "Convenience"
                         47  "Entire Program"
                         53  "Purposive"
                         12  "Random"

            warning:  variable has embedded blanks

------------------------------------------------------------------------------------------
px_sampling                                                              Patient Sampling
------------------------------------------------------------------------------------------

               type:  string (str14)

      unique values:  4                         missing "":  0/163

         tabulation:  Freq.  Value
                         98  "."
                         16  "Cluster"
                          8  "Convenience"
                         41  "Entire Program"

            warning:  variable has embedded blanks

------------------------------------------------------------------------------------------
sample_size_derived                                            Sample size formally derived
------------------------------------------------------------------------------------------
```

```
                 type:  string (str2)

        unique values:  2                              missing "":  0/163

           tabulation:  Freq.  Value
                         120   "."
                          43   "No"

---------------------------------------------------------------------------------------------
controls                                                                             Controls
---------------------------------------------------------------------------------------------

                 type:  string (str3)

        unique values:  3                              missing "":  0/163

           tabulation:  Freq.  Value
                         138   "."
                          17   "No"
                           8   "Yes"

---------------------------------------------------------------------------------------------
econ_perspective_actual                                                           Perspective
---------------------------------------------------------------------------------------------

                 type:  string (str8)

        unique values:  2                              missing "":  0/163

           tabulation:  Freq.  Value
                         139   "Provider"
                          24   "Society"

---------------------------------------------------------------------------------------------
econ_costing                                                                Economic / Financial
---------------------------------------------------------------------------------------------

                 type:  string (str14)

        unique values:  2                              missing "":  0/163

           tabulation:  Freq.  Value
                         153   "Economic"
                          10   "Financial Only"

              warning:  variable has embedded blanks

---------------------------------------------------------------------------------------------
real_world                                                             Real World / Per Protocol
---------------------------------------------------------------------------------------------

                 type:  string (str12)
```

```
           unique values:  2                       missing "":  0/163

              tabulation:  Freq.  Value
                              3   "Per Protocol"
                            160   "Real World"


                 warning:  variable has embedded blanks


-------------------------------------------------------------------------------------------
asd_costs                                                      Above Service Costs Included
-------------------------------------------------------------------------------------------

                    type:  string (str19)

           unique values:  3                       missing "":  0/163

              tabulation:  Freq.  Value
                             27   "."
                             96   "No Costs Included"
                             40   "Some Costs Included"


                 warning:  variable has embedded blanks


-------------------------------------------------------------------------------------------
list_asd_costs                                                       Above Service Cost List
-------------------------------------------------------------------------------------------

                    type:  string (str164)

           unique values:  10                      missing "":  0/163

                examples:  "."
                           "."
                           "."
                           "Monitoring And Evaluation, Training"


                 warning:  variable has embedded and trailing blanks


-------------------------------------------------------------------------------------------
omitted_costs                                                                 Omitted Costs
-------------------------------------------------------------------------------------------

                    type:  string (str234)

           unique values:  11                      missing "":  0/163

                examples:  "Patient costs"
                           "Patient costs"
                           "Patient costs"
                           "Patient costs"


                 warning:  variable has leading and embedded blanks


-------------------------------------------------------------------------------------------
```

```
sensitivity_analysis                                              Sensitivity Analysis
--------------------------------------------------------------------------------------

                    type:  string (str13)

          unique values:  4                        missing "":  0/163

             tabulation:  Freq.  Value
                             1   "."
                             4   "Comprehensive"
                            15   "Limited"
                           143   "None"


--------------------------------------------------------------------------------------
scale                                                               Economies of scale
--------------------------------------------------------------------------------------

                    type:  string (str9)

          unique values:  3                        missing "":  0/163

             tabulation:  Freq.  Value
                            11   "Analyzed"
                           111   "Discussed"
                            41   "Ignored"


--------------------------------------------------------------------------------------
research_costs                                                   Research Costs Included
--------------------------------------------------------------------------------------

                    type:  string (str8)

          unique values:  2                        missing "":  0/163

             tabulation:  Freq.  Value
                            53   "."
                           110   "Excluded"


--------------------------------------------------------------------------------------
unrelated_costs                                                 Unrelated Costs Included
--------------------------------------------------------------------------------------

                    type:  string (str2)

          unique values:  2                        missing "":  0/163

             tabulation:  Freq.  Value
                           139   "."
                            24   "No"


--------------------------------------------------------------------------------------
overhead                                                         Overhead Costs Included
--------------------------------------------------------------------------------------
```

```
              type:  string (str3)

      unique values:  2                         missing "":  0/163

         tabulation:  Freq.  Value
                         12  "No"
                        151  "Yes"

--------------------------------------------------------------------------------
overhead_costs                                                Overhead Costs List
--------------------------------------------------------------------------------

              type:  string (str461)

      unique values:  19                        missing "":  0/163

           examples:  "Building Maintenance, Communications And Stationery
                      "
                      "Buildings, Equipment, Supplies And Support Staff"
                      "Details Nr"
                      "None"

            warning:  variable has embedded and trailing blanks

--------------------------------------------------------------------------------
pot_distortions                                              Potential distortions
--------------------------------------------------------------------------------

              type:  string (str93)

      unique values:  2                         missing "":  0/163

         tabulation:  Freq.  Value
                        159  "."
                          4  "THERE WAS A SIGNIFICANT VARIATION IN
                             THE NUMBER OF PTIENTS PER MONTHS DURING
                             THE STUDY PERIOD"

            warning:  variable has embedded blanks

--------------------------------------------------------------------------------
volunteer_time                                              Valuing Volunteer Time
--------------------------------------------------------------------------------

              type:  string (str18)

      unique values:  4                         missing "":  0/163

         tabulation:  Freq.  Value
                        122  "."
                         16  "Interview"
                          1  "Local Paid Income"
                         24  "Valued - Method Nr"
```

23

```
             warning:  variable has embedded blanks


-------------------------------------------------------------------------------
family_time                                                  Valuing Family Time
-------------------------------------------------------------------------------

                type:  string (str17)

       unique values:  2                        missing "":  0/163

          tabulation:  Freq.   Value
                        147    "."
                         16    "Local Full Income"


             warning:  variable has embedded blanks


-------------------------------------------------------------------------------
px_costs_measured                             Patient-Incurred Costs Measured
-------------------------------------------------------------------------------

                type:  string (str32)

       unique values:  5                        missing "":  0/163

          tabulation:  Freq.   Value
                         12    "."
                        108    "Not Included"
                          3    "Not Includedt Included"
                         16    "Not Includedt Includedt Included"
                         24    "Yes"


             warning:  variable has embedded blanks


-------------------------------------------------------------------------------
cat_cost                                          Catastrophic Cost Calculated
-------------------------------------------------------------------------------

                type:  string (str12)

       unique values:  3                        missing "":  0/163

          tabulation:  Freq.   Value
                        143    "."
                         19    "No"
                          1    "See Cell R67"


             warning:  variable has embedded blanks


-------------------------------------------------------------------------------
currency_yr                                          Reported Currency Year
-------------------------------------------------------------------------------

                type:  numeric (int)
```

```
          range:  [1999,2016]                    units:  1
  unique values:  16                         missing .:  11/163

           mean:  2009.71
      std. dev:  3.12569

    percentiles:        10%       25%       50%       75%       90%
                       2007      2008      2009      2012      2014

-------------------------------------------------------------------------------------
iso_code                                                          Reported Currency
-------------------------------------------------------------------------------------

           type:  string (str3)

  unique values:  13                       missing "":  0/163

       examples:  "KES"
                  "MWK"
                  "SZL"
                  "USD"

-------------------------------------------------------------------------------------
currency_iso                                               Currency of Data Collection
-------------------------------------------------------------------------------------

           type:  string (str3)

  unique values:  11                       missing "":  0/163

       examples:  "KES"
                  "KES"
                  "MWK"
                  "USD"

-------------------------------------------------------------------------------------
currency_x                                                    Currency Exchange Method
-------------------------------------------------------------------------------------

           type:  string (str29)

  unique values:  3                        missing "":  0/163

     tabulation:  Freq.  Value
                    25   "."
                   122   "Market Only"
                    16   "Traded/Market, Non-Traded Ppp"

        warning:  variable has embedded blanks

-------------------------------------------------------------------------------------
current_x_rate                                                 Currency Exchange Rate
-------------------------------------------------------------------------------------
```

```
              type:  string (str17)

      unique values:  30                        missing "":  0/163

           examples:  "."
                      "426"
                      "7.85"
                      "78.79000000000001"

------------------------------------------------------------------------------------------------
discount_rate                                                                      Discount Rate
------------------------------------------------------------------------------------------------

               type:  string (str6)

      unique values:  5                         missing "":  0/163

         tabulation:  Freq.  Value
                        57   "."
                        91   ".03"
                         1   ".04"
                        12   "3"
                         2   "3%, 6%"  

            warning:  variable has embedded blanks

------------------------------------------------------------------------------------------------
inflation                                                                          Inflation rate
------------------------------------------------------------------------------------------------

               type:  string (str2), but longest is str1

      unique values:  1                         missing "":  0/163

         tabulation:  Freq.  Value
                       163   "."

------------------------------------------------------------------------------------------------
mean_cost                                                                          Mean Unit Cost
------------------------------------------------------------------------------------------------

               type:  numeric (double)

              range:  [2.01,1995]                    units:  1.000e-07
      unique values:  162                        missing .:  0/163

               mean:  104.345
           std. dev:  260.71

        percentiles:        10%       25%       50%       75%       90%
                           5.71      8.89    22.547     97.04     237.6

------------------------------------------------------------------------------------------------
si_personnel                                                                       Personnel (SI)
```

```
-------------------------------------------------------------------------------------------------
             type:  numeric (double)

            range:  [.12,252.31547]                    units:  1.000e-07
    unique values:  51                               missing .:  111/163

             mean:   14.4749
        std. dev:   42.9122

      percentiles:         10%         25%         50%         75%         90%
                           1.1     2.01286       3.345        8.15     15.6733

-------------------------------------------------------------------------------------------------
si_per_service_delivery                             Personnel: Direct Service Delivery (SI)
-------------------------------------------------------------------------------------------------

             type:  numeric (double)

            range:  [1.1125,252.31547]                 units:  1.000e-07
    unique values:  11                               missing .:  152/163

             mean:   48.5122
        std. dev:   87.6372

      percentiles:         10%         25%         50%         75%         90%
                       1.17327        1.19     2.66034     51.3848     188.585

-------------------------------------------------------------------------------------------------
si_per_support                                                     Personnel: Support (SI)
-------------------------------------------------------------------------------------------------

             type:  numeric (double)

            range:  [.97,4.18]                         units:  .01
    unique values:  5                                missing .:  158/163

       tabulation:  Freq.   Value
                        1   .97000003
                        1   1
                        1   1.15
                        1   2.1400001
                        1   4.1799998
                      158   .

-------------------------------------------------------------------------------------------------
si_per_mixed_unspec                                     Personnel: Mixed Unspecified (SI)
-------------------------------------------------------------------------------------------------

             type:  numeric (double)

            range:  [.12,15.785844]                    units:  1.000e-07
    unique values:  44                               missing .:  118/163
```

```
                mean:    4.6582
           std. dev:    4.68231

        percentiles:        10%        25%        50%        75%        90%
                           .73    1.82624    2.93202       4.89       13.5

-------------------------------------------------------------------------------------
si_recurrent                                                  Recurrent Goods (SI)
-------------------------------------------------------------------------------------

                type:   numeric (double)

               range:   [.31,285.39489]               units:   1.000e-16
       unique values:   51                            missing .:  112/163

                mean:    15.1464
           std. dev:    47.9909

        percentiles:        10%        25%        50%        75%        90%
                          1.03     1.5931       3.04       6.98     18.886

-------------------------------------------------------------------------------------
si_rec_key_drugs                              Recurring: Supplies (key drugs) (SI)
-------------------------------------------------------------------------------------

                type:   numeric (double)

               range:   [0,0]                         units:   1
       unique values:   1                             missing .:  159/163

          tabulation:   Freq.   Value
                           4    0
                         159    .

-------------------------------------------------------------------------------------
si_rec_med_int_supplies         Recurring: Medical Supplies (excluding drugs) (SI)
-------------------------------------------------------------------------------------

                type:   numeric (double)

               range:   [.15,105.53811]               units:   1.000e-07
       unique values:   15                            missing .:  147/163

                mean:    12.3581
           std. dev:    28.3915

        percentiles:        10%        25%        50%        75%        90%
                           .15        .67    2.44425     5.7703    56.9055

-------------------------------------------------------------------------------------
si_rec_nonmed_int_supplies                       Recurring: Non-medical Supplies (SI)
-------------------------------------------------------------------------------------

                type:   numeric (double)
```

```
          range:  [.9390244,14.896922]          units:  1.000e-07
  unique values:  6                      missing .:  157/163

      tabulation:  Freq.  Value
                      1   .93902439
                      1   6.1543941
                      1   8.7398436
                      1   9.3928576
                      1   13.378343
                      1   14.896922
                    157   .

----------------------------------------------------------------------------------
si_rec_building_space                               Recurring: Building Space (SI)
----------------------------------------------------------------------------------

           type:  numeric (double)

          range:  [0,37.578747]               units:  1.000e-07
  unique values:  13                     missing .:  150/163

           mean:  9.07248
      std. dev:  13.2757

    percentiles:        10%       25%       50%       75%       90%
                       .228    .58422   1.57636   13.5157   35.9994

----------------------------------------------------------------------------------
si_rec_mixed                                                 Recurring: Mixed (SI)
----------------------------------------------------------------------------------

           type:  numeric (double)

          range:  [.,.]                       units:  .
  unique values:  0                      missing .:  163/163

      tabulation:  Freq.  Value
                    163   .

----------------------------------------------------------------------------------
si_rec_other                                                 Recurring: Other (SI)
----------------------------------------------------------------------------------

           type:  numeric (double)

          range:  [.0445,135.11758]           units:  1.000e-10
  unique values:  49                     missing .:  114/163

           mean:  8.23052
      std. dev:  22.9344

    percentiles:        10%       25%       50%       75%       90%
                        .31       .97      2.76      5.73     11.16
```

```
-------------------------------------------------------------------------------------------
si_capital                                                                    Capital (SI)
-------------------------------------------------------------------------------------------

              type:  numeric (double)

             range:  [.03,24.5]                      units:  1.000e-09
     unique values:  40                          missing .:  120/163

              mean:  1.53918
         std. dev:  4.02745

       percentiles:          10%        25%      50%        75%         90%
                             .07        .15      .42    .908414       3.17


-------------------------------------------------------------------------------------------
si_cap_med_equip                                        Capital: Equipment (medical) (SI)
-------------------------------------------------------------------------------------------

              type:  numeric (double)

             range:  [.05226481,10.642858]           units:  1.000e-08
     unique values:  8                           missing .:  154/163

        tabulation:  Freq.   Value
                        1    .05226481
                        1    .46925133
                        1    .52999997
                        2    .69
                        1    .69999999
                        1    1.17
                        1    1.5605701
                        1    10.642858
                      154    .


-------------------------------------------------------------------------------------------
si_cap_nonmed_equip                                 Capital: Equipment (non-medical) (SI)
-------------------------------------------------------------------------------------------

              type:  numeric (double)

             range:  [.09282,.31043479]              units:  1.000e-08
     unique values:  5                           missing .:  158/163

        tabulation:  Freq.   Value
                        1    .09282
                        1    .11433757
                        1    .18347827
                        1    .2123412
                        1    .31043479
                      158    .


-------------------------------------------------------------------------------------------
```

```
si_cap_building_space                                         Capital: Building Space (SI)
-------------------------------------------------------------------------------------------

            type:  numeric (double)

           range:  [0,6.4642859]                    units:  1.000e-09
   unique values:  30                            missing .:  126/163

            mean:    .63324
        std. dev:   1.22081

     percentiles:          10%         25%         50%        75%        90%
                           .04         .09      .22686         .5       1.67


-------------------------------------------------------------------------------------------
si_cap_vehicles                                                    Capital: Vehicles (SI)
-------------------------------------------------------------------------------------------

            type:  numeric (float)

           range:  [.,.]                            units:  .
   unique values:  0                             missing .:  163/163

      tabulation:  Freq.   Value
                    163   .


-------------------------------------------------------------------------------------------
si_cap_mixed                                                          Capital: Mixed (SI)
-------------------------------------------------------------------------------------------

            type:  numeric (double)

           range:  [.,.]                            units:  .
   unique values:  0                             missing .:  163/163

      tabulation:  Freq.   Value
                    163   .


-------------------------------------------------------------------------------------------
si_cap_other                                                          Capital: Other (SI)
-------------------------------------------------------------------------------------------

            type:  numeric (double)

           range:  [0,7.3928571]                    units:  1.000e-08
   unique values:  11                            missing .:  152/163

            mean:   2.30332
        std. dev:   2.93384

     percentiles:          10%          25%         50%        75%        90%
                          .304      .344418         .78    5.64171    7.30662


-------------------------------------------------------------------------------------------
```

```
si_mixed                                                                          Mixed (SI)
--------------------------------------------------------------------------------------------

                 type:  numeric (double)

                range:  [.29000001,7.6999998]         units:  1.000e-08
        unique values:  7                           missing .:  156/163

           tabulation:  Freq.  Value
                            1  .29000001
                            1  .65999998
                            1  3.15202
                            1  5.30865
                            1  5.8295002
                            1  7.35672
                            1  7.6999998
                          156  .


--------------------------------------------------------------------------------------------
si_unspecified                                                              Unspecified (SI)
--------------------------------------------------------------------------------------------

                 type:  numeric (double)

                range:  [.07,.23]                      units:  .01
        unique values:  5                           missing .:  158/163

           tabulation:  Freq.  Value
                            1  .07
                            1  .09
                            1  .12
                            1  .13
                            1  .23
                          158  .


--------------------------------------------------------------------------------------------
a_primary_sd                                                    Primary Service Delivery (A)
--------------------------------------------------------------------------------------------

                 type:  numeric (double)

                range:  [.12,357.85358]                units:  1.000e-18
        unique values:  47                          missing .:  115/163

                 mean:   21.2108
            std. dev:   61.2749

          percentiles:        10%        25%        50%        75%        90%
                          1.17327    3.68951      5.805    11.9594      19.23


--------------------------------------------------------------------------------------------
a_prisd_unspecified                                               Primary SD: Unspecified (A)
--------------------------------------------------------------------------------------------
```

```
                type:   numeric (double)

               range:   [.15000001,102.43737]        units:   1.000e-14
       unique values:   34                        missing .:   128/163

                mean:   7.99035
            std. dev:   17.0006

         percentiles:         10%        25%        50%        75%        90%
                             .21        2.68       4.01       6.83      11.16

-----------------------------------------------------------------------------------
a_prisd_unspec_counseling                        Primary SD: Counseling unspecified (A)
-----------------------------------------------------------------------------------

                type:   numeric (double)

               range:   [1.1125,2.66034]            units:   .00001
       unique values:   4                         missing .:   159/163

           tabulation:   Freq.   Value
                            1   1.1125
                            1   1.17327
                            1   1.34787
                            1   2.6603401
                          159   .

-----------------------------------------------------------------------------------
a_prisd_post_test_counseling                     Primary SD: Post-test counseling (A)
-----------------------------------------------------------------------------------

                type:   numeric (double)

               range:   [2.93202,2.93202]           units:   .00001
       unique values:   1                         missing .:   162/163

           tabulation:   Freq.   Value
                            1   2.9320199
                          162   .

-----------------------------------------------------------------------------------
a_prisd_lab_services                             Primary SD: Lab services (A)
-----------------------------------------------------------------------------------

                type:   numeric (double)

               range:   [.82,105.53811]             units:   1.000e-06
       unique values:   5                         missing .:   154/163

           tabulation:   Freq.   Value
                            5   .81999999
                            1   1.21
                            1   1.52
                            1   56.905495
```

33

```
                              1   105.53811
                            154   .


--------------------------------------------------------------------------------
a_prisd_htc_service_delivery                        Primary SD: HTC service delivery (A)
--------------------------------------------------------------------------------

              type:   numeric (double)

             range:   [.73,51.3848]                 units:   1.000e-07
     unique values:   30                        missing .:   132/163

              mean:   6.40677
         std. dev:    9.8743

       percentiles:        10%        25%        50%        75%        90%
                          1.41       2.22       3.29       5.04      11.45


--------------------------------------------------------------------------------
a_prisd_hiv_rapid_test                               Primary SD: HIV rapid testing (A)
--------------------------------------------------------------------------------

              type:   numeric (double)

             range:   [1.0789981,252.31547]         units:   1.000e-07
     unique values:   6                         missing .:   157/163

        tabulation:   Freq.   Value
                          1   1.0789981
                          1   1.1758733
                          1   3.8399999
                          1   13.23
                          1   86.147948
                          1   252.31547
                        157   .


--------------------------------------------------------------------------------
a_prisd_arv_delivery                                        Primary SD: ARV delivery
--------------------------------------------------------------------------------

              type:   numeric (double)

             range:   [.12,1.99]                    units:   .01
     unique values:   4                         missing .:   159/163

        tabulation:   Freq.   Value
                          1   .12
                          1   .34999999
                          1   1.1
                          1   1.99
                        159   .


--------------------------------------------------------------------------------
a_secondary_sd                                           Secondary Service Delivery (A)
```

```
----------------------------------------------------------------------------------------------
                  type:  numeric (float)

                 range:  [.,.]                            units:  .
         unique values:  0                              missing .:  163/163

            tabulation:  Freq.  Value
                          163   .
----------------------------------------------------------------------------------------------
a_ancillary                                                                  Ancillary (A)
----------------------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.01,6.4642859]                 units:  1.000e-09
         unique values:  27                            missing .:  133/163

                  mean:   .769139
             std. dev:   1.37778

           percentiles:        10%        25%        50%        75%        90%
                              .045        .09        .26         .5    2.65702

----------------------------------------------------------------------------------------------
a_anc_demand_generation                                    Ancillary: Demand generation (A)
----------------------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.01,.12]                        units:  .01
         unique values:  2                              missing .:  161/163

            tabulation:  Freq.  Value
                            1   .01
                            1   .12
                          161   .

----------------------------------------------------------------------------------------------
a_anc_lab_services                                           Ancillary: Lab Services (A)
----------------------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.,.]                            units:  .
         unique values:  0                              missing .:  163/163

            tabulation:  Freq.  Value
                          163   .

----------------------------------------------------------------------------------------------
a_anc_adhreten                                          Ancillary: Adherence/Retention (A)
----------------------------------------------------------------------------------------------
```

```
               type:  numeric (float)

              range:  [.,.]                          units:  .
      unique values:  0                         missing .:  163/163

         tabulation:  Freq.  Value
                        163  .

----------------------------------------------------------------------------------------
a_anc_bldg_equip                                          Ancillary: Building equipment (A)
----------------------------------------------------------------------------------------

               type:  numeric (double)

              range:  [.10966694,2.4703918]        units:  1.000e-09
      unique values:  2                         missing .:  161/163

         tabulation:  Freq.  Value
                          1  .10966694
                          1  2.4703918
                        161  .

----------------------------------------------------------------------------------------
a_anc_unspecified                                              Ancillary: Unspecified (A)
----------------------------------------------------------------------------------------

               type:  numeric (double)

              range:  [0,6.4642859]                units:  1.000e-09
      unique values:  25                        missing .:  135/163

               mean:  .72729
           std. dev:  1.38492

        percentiles:        10%        25%        50%        75%        90%
                            .03        .08        .26        .47    2.82927

----------------------------------------------------------------------------------------
a_operational                                                          Operational (A)
----------------------------------------------------------------------------------------

               type:  numeric (double)

              range:  [.11,171.11693]              units:  1.000e-11
      unique values:  25                        missing .:  138/163

               mean:  14.1732
           std. dev:  41.8464

        percentiles:        10%        25%        50%        75%        90%
                       .242518        .78       1.68       3.67    7.39286

----------------------------------------------------------------------------------------
```

```
a_ope_bldg_equip                                        Operational: Buildings and Equipment (A)
--------------------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,39.059299]                    units:  1.000e-06
        unique values:  9                            missing .:  153/163

            tabulation:  Freq.  Value
                             1  0
                             1  .03
                             2  .04
                             1  .14
                             1  .49698001
                             1  .67648
                             1  1.5486
                             1  38.952554
                             1  39.059299
                           153  .


--------------------------------------------------------------------------------------------
a_ope_logistics                                                    Operational: Logistics (A)
--------------------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.,.]                             units:  .
        unique values:  0                            missing .:  163/163

            tabulation:  Freq.  Value
                           163  .


--------------------------------------------------------------------------------------------
a_ope_program_mgmt                                       Operational: Program Management (A)
--------------------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.11,4.2499998]                   units:  1.000e-08
        unique values:  11                           missing .:  152/163

                  mean:  1.29197
             std. dev:  1.20691

           percentiles:        10%        25%       50%       75%        90%
                               .24     .32379      1.12   1.82624       2.37


--------------------------------------------------------------------------------------------
a_ope_supervision                                               Operational: Supervision (A)
--------------------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.,.]                             units:  .
```

```
        unique values:  0                         missing .:  163/163

          tabulation:  Freq.  Value
                         163   .


-----------------------------------------------------------------------------------------
a_ope_training                                              Operational: Training (A)
-----------------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.0445,32.56015]          units:  1.000e-08
        unique values:  17                        missing .:  146/163

                  mean:   3.60981
             std. dev:   7.85549

          percentiles:        10%        25%       50%       75%        90%
                           .05271    .344418       .75      1.69    7.39286


-----------------------------------------------------------------------------------------
a_ope_transportation                                  Operational: Transportation (A)
-----------------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [0,119.87785]             units:  1.000e-09
        unique values:  5                         missing .:  158/163

          tabulation:  Freq.  Value
                           1   0
                           1   .01827782
                           1   .30399999
                           1   15.018416
                           1   119.87785
                         158   .


-----------------------------------------------------------------------------------------
a_ope_massed                                          Operational: Mass Education (A)
-----------------------------------------------------------------------------------------

                  type:  numeric (float)

                 range:  [.,.]                     units:  .
        unique values:  0                         missing .:  163/163

          tabulation:  Freq.  Value
                         163   .


-----------------------------------------------------------------------------------------
a_ope_hmis                                     Operational: HMIS and Record-Keeping (A)
-----------------------------------------------------------------------------------------

                  type:  numeric (float)
```

```
               range:  [.,.]                          units:  .
       unique values:  0                          missing .:  163/163

          tabulation:  Freq.  Value
                         163   .

--------------------------------------------------------------------------------------------
a_ope_unspecified                                          Operational: Unspecified (A)
--------------------------------------------------------------------------------------------

                type:  numeric (double)

               range:  [.39,45.943081]                units:  1.000e-06
       unique values:  7                          missing .:  156/163

          tabulation:  Freq.  Value
                           1   .38999999
                           1   .77999997
                           1   .79716
                           1   1.0700001
                           1   1.39
                           1   12.179782
                           1   45.943081
                         156   .

--------------------------------------------------------------------------------------------
a_mixed                                                                          Mixed (A)
--------------------------------------------------------------------------------------------

                type:  numeric (double)

               range:  [.31,38.892174]                units:  1.000e-08
       unique values:  15                         missing .:  148/163

                mean:  11.4798
            std. dev:  14.1788

         percentiles:        10%         25%         50%         75%         90%
                             .88        1.05     5.30865     28.4174     36.7278

--------------------------------------------------------------------------------------------
a_mix_bldg_equip                                          Mixed: Building equipment (A)
--------------------------------------------------------------------------------------------

                type:  numeric (double)

               range:  [.228,.228]                    units:  .001
       unique values:  1                          missing .:  162/163

          tabulation:  Freq.  Value
                           1   .228
                         162   .
```

```
--------------------------------------------------------------------------------
a_unspecified                                                    Unspecified (A)
--------------------------------------------------------------------------------

                  type:  numeric (double)

                 range:  [.05226481,14.896922]        units:  1.000e-08
         unique values:  8                         missing .:  155/163

            tabulation:  Freq.  Value
                             1  .05226481
                             1  .18000001
                             1  .41999999
                             1  .46925133
                             1  1.5605701
                             1  8.7398436
                             1  10.642858
                             1  14.896922
                           155  .
```