

Retention/Adherence Data Validation Exercise before UCSR Entry

Lily Alexander

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Abstract

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

1 High-level codebook for all variables

disease	Disease
---------	---------

type: string (str3)

unique values: 1 missing "": 0/38

tabulation:	Freq.	Value
	38	"HIV"

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

type: string (str3), but longest is str2

unique values: 1 missing "": 0/38

tabulation:	Freq.	Value
	38	"No"

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

type: string (str12)

unique values: 2 missing "": 0/38

tabulation:	Freq.	Value
	28	"Marseille, E"

10 "Rodrigues, R"

warning: variable has embedded blanks

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

type: numeric (int)

range: [2011,2014] units: 1

unique values: 2 missing .: 0/38

tabulation: Freq. Value


28	2011
10	2014

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

type: string (str29)

unique values: 3 missing "": 0/38

tabulation: Freq. Value

14	"cost per person served"
14	"cost per person-quarter of CM" 
10	"cost per person-year"

warning: variable has embedded blanks

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

type: string (str130)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

28	"Case management to improve adherence for HIV-infected patients receiving antiretroviral therapy in Ethiopia: a micro-costing study"
10	"Mobile phones to support adherence to antiretroviral therapy: what would it cost the Indian National AIDS Control Program?"

warning: variable has embedded blanks

journal_etc	Journal
-------------	---------

```

-----
                type: string (str34)

unique values: 2                                missing "": 0/38

tabulation: Freq. Value
              28 "Cost Eff Resour Alloc. 2011; 9: 18"
              10 "J Int AIDS Soc. 2014; 17(1): 19036"

warning: variable has embedded blanks

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

                type: string (str56)

unique values: 2                                missing "": 0/38

tabulation: Freq. Value
              28 "<https://www.ncbi.nlm.nih.gov/pmc/artic
                  les/PMC3264532/>."
              10 "<https://www.ncbi.nlm.nih.gov/pmc/artic
                  les/PMC4154142/>."

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

                type: string (str8)

unique values: 2                                missing "": 0/38

tabulation: Freq. Value
              28 "Ethiopia"
              10 "India"

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

                type: string (str12)

unique values: 15                                missing "": 0/38

examples: "Axum"
          "Dessie"
          "Gondar"
          "Karnataka"

warning: variable has embedded blanks

-----

```

no_sites Sites

```
type: numeric (byte)
range: [1,2] units: 1
unique values: 2 missing .: 0/38
tabulation: Freq. Value
              28 1
              10 2
```

pop_density Urbanicity

```
type: string (str5)
unique values: 2 missing "": 0/38
tabulation: Freq. Value
              6 "rural"
              32 "urban"
```

ownership Ownership

```
type: string (str17)
unique values: 2 missing "": 0/38
tabulation: Freq. Value
              28 "international NGO"
              10 "mixed"
warning: variable has embedded blanks
```

platform Platform

```
type: string (str15), but longest is str14
unique values: 1 missing "": 0/38
tabulation: Freq. Value
              38 "Fixed facility"
warning: variable has embedded blanks
```

facility_cat Platform specificity

```

        type: string (str68), but longest is str37
unique values: 2                                missing "": 0/38

tabulation: Freq. Value
              10 "Hospital - Tertiary (teaching)"
              28 "Unspecified health care facility type"

warning: variable has embedded blanks

```

```

id_class                                                    Intervention Category

```

```

        type: string (str18)
unique values: 1                                missing "": 0/38

tabulation: Freq. Value
              38 "Treatment and Care"

warning: variable has embedded blanks

```

```

id_int                                                    Intervention

```

```

        type: string (str23)
unique values: 1                                missing "": 0/38

tabulation: Freq. Value
              38 "Retention and Adherence"

warning: variable has embedded blanks

```

```

int_description_long                                    Intervention Description (Long)

```

```

        type: string (str298)
unique values: 2                                missing "": 0/38

tabulation: Freq. Value
              28 "The case management services consist of
                  adherence counseling and support; health
                  education; peer support; and referral of
                  clients to community-based organizations
                  equipped to address specific barriers to
                  adherence such as malnutrition,
                  substance abuse or material needs for
                  clothin, rent, and food."

```

10 "The mHealth intervention deployed in the HIVIND trial had two components; the first was an automated IVR call and the second was a passive, neutral, picture message (SMS). Every patient in the intervention arm of the trial received each component of the mHealth intervention once a week."

warning: variable has embedded blanks

clinical_monitoring

Clinical monitoring

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation:	Freq.	Value
	38	"."

demand_generation

Demand generation

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation:	Freq.	Value
	38	"."

counseling_content

Counseling content

type: string (str52)

unique values: 2 missing "": 0/38

tabulation:	Freq.	Value
	10	"adherence counseling"
	28	"adherence counseling, peer-support; health education"



warning: variable has embedded blanks

staff_type

Staff type & number

type: string (str78)

```

unique values: 2                                missing "": 0/38

  tabulation: Freq. Value
                28 "Case Manager (NR), Adherence Supporters
                  (NR), Case Management Supervisors (NR)"
                10 "Counselors (NR)"

warning: variable has embedded blanks

```

```

supportive_care                                Supportive care

```

```

type: string (str67)

unique values: 2                                missing "": 0/38

  tabulation: Freq. Value
                10 "."
                28 "nutrition support; substance abuse;
                  material needs (clothing, rent)"

warning: variable has embedded blanks

```

```

visits                                          Visit type & number

```

```

type: string (str24)

unique values: 2                                missing "": 0/38

  tabulation: Freq. Value
                10 "monthly follow-up visits"
                28 "visits (NR)"

warning: variable has embedded blanks

```

```

referrals                                      Referrals

```

```

type: string (str2), but longest is str1

unique values: 1                                missing "": 0/38

  tabulation: Freq. Value
                38 "."

```

```

method                                          Method

```

```

type: string (str1)

```

unique values: 1 missing "": 0/38

tabulation: Freq. Value
38 "."

id_tech Technology

type: string (str39)

unique values: 4 missing "": 0/38

tabulation: Freq. Value
28 "."
3 "SMS reminders"
4 "SMS+IVR"
3 "interactive voice response (IVR)
system"

warning: variable has embedded blanks

treatment_phase Treatment phase

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation: Freq. Value
38 "."

arv_regimen ARV Regimen

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation: Freq. Value
38 "."

treatment Treatment

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38 "."

screening_diagnoses

Screening and diagnosis

type: string (str3), but longest is str1

unique values: 1 missing "": 0/38

tabulation:	Freq.	Value
	38	"."

community_awareness

Community awareness

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation:	Freq.	Value
	38	"."

health_system



Health system

type: string (str39)

unique values: 4 missing "": 0/38

tabulation:	Freq.	Value
	28	"."
	3	"SMS reminders"
	4	"SMS+IVR"
	3	"interactive voice response (IVR) system"

warning: variable has embedded blanks

id_activities

Costed activities

type: string (str63)

unique values: 4 missing "": 0/38

tabulation:	Freq.	Value
	3	"adherence counseling, IVR"
	3	"adherence counseling, SMS"
	4	"adherence counseling, SMS+IVR"
	28	"adherence counseling; health education;

peer support; referrals"

warning: variable has embedded blanks

start_month Start Month

type: numeric (byte)

range: [10,10] units: 1

unique values: 1 missing .: 10/38

tabulation: Freq. Value

28	10
10	.

start_year Start Year

type: numeric (int)

range: [2008,2008] units: 1

unique values: 1 missing .: 10/38

tabulation: Freq. Value

28	2008
10	.

end_month End Month

type: numeric (byte)

range: [9,9] units: 1

unique values: 1 missing .: 10/38

tabulation: Freq. Value

28	9
10	.

end_year End Year

type: numeric (int)

range: [2009,2009] units: 1

unique values: 1 missing .: 10/38

tabulation: Freq. Value

28	2009
----	------

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

```

      type: numeric (byte)

      range: [12,12]          units: 1
unique values: 1             missing .: 0/38

      tabulation: Freq. Value
                   38  12

```

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

```

      type: numeric (int)

      range: [2006,2006]      units: 1
unique values: 1             missing .: 10/38

      tabulation: Freq. Value
                   28  2006
                   10  .

```

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

```

      type: numeric (byte)

      range: [.,.]           units: .
unique values: 0             missing .: 38/38

      tabulation: Freq. Value
                   38  .

```

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

```

      type: string (str18)

unique values: 1             missing "": 0/38

      tabulation: Freq. Value
                   38  "General Population"

      warning: variable has embedded blanks

```

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

```

-----
                type:  string (str12)

unique values:  1                               missing "":  0/38

tabulation:  Freq.  Value
              38  "HIV positive"

warning:  variable has embedded blanks

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

                type:  string (str30)

unique values:  2                               missing "":  0/38

tabulation:  Freq.  Value
              10  "."
              28  "85% aged 20-45; 15% aged 46-65"

warning:  variable has embedded blanks

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

                type:  string (str11)

unique values:  2                               missing "":  0/38

tabulation:  Freq.  Value
              10  "."
              28  "58% females"

warning:  variable has embedded blanks

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

                type:  string (str14)

unique values:  2                               missing "":  0/38

tabulation:  Freq.  Value
              10  "."
              28  "75% unemployed"

warning:  variable has embedded blanks

-----

```

pop_education Education

type: string (str14)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

10	"."
28	"37% illiterate"

warning: variable has embedded blanks

hiv_prev HIV Prevalence

type: numeric (byte)

range: [.,.] units: .

unique values: 0 missing .: 38/38

tabulation: Freq. Value

38	.
----	---

tb_prev TB Prevalence

type: string (str2), but longest is str1

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	"."
----	-----

tb_rx_resistance TB Drug Resistance

type: string (str1)

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	"."
----	-----

costing_purpose Costing Purpose

type: string (str213)

unique values: 2 missing "": 0/38

```

tabulation: Freq. Value
              28 "To estimate unit costs of case
management services for ART patients in
three provinces in Ethiopia, document
the variation in costs, and explore
opportunities for greater efficiency in
the provision of CM services"
              10 "To study the costs of mobile phone
reminder strategies (mHealth
interventions) to support adherence in
the context of India's National AIDS
Control Program (NACP)."
```

warning: variable has embedded blanks

```

timingTiming
```

type: string (str15)

unique values: 1 missing "": 0/38

```

tabulation: Freq. Value
              38 "cross-sectional"
```

```

country_samplingCountry Sampling
```

type: string (str3), but longest is str1

unique values: 1 missing "": 0/38

```

tabulation: Freq. Value
              38 "."
```

```

geo_sampling_incountryGeographic Area In Country Sampling
```

type: string (str9)

unique values: 2 missing "": 0/38

```

tabulation: Freq. Value
              10 "."
              28 "purposive"
```

```

site_samplingSite Sampling
```

```

type: string (str1)

unique values: 1 missing "": 0/38

```

```

tabulation: Freq. Value
             38  "."

```

```

px_sampling Patient Sampling

```

```

type: string (str14)

unique values: 2 missing "": 0/38

```

```

tabulation: Freq. Value
             28 "entire program"
             10 "random"

```

```

warning: variable has embedded blanks

```

```

sample_size_derived Sample size formally derived

```

```

type: string (str3)

unique values: 2 missing "": 0/38

```

```

tabulation: Freq. Value
             28 "no"
             10 "yes"

```

```

controls Controls

```

```

type: string (str3)

unique values: 2 missing "": 0/38

```

```

tabulation: Freq. Value
             28 "no"
             10 "yes"

```

```

econ_perspective_actual Perspective

```

```

type: string (str8)

unique values: 1 missing "": 0/38

```

```

tabulation: Freq. Value

```

38 "provider"

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

type: string (str14)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

28	"economic"
10	"financial only"

warning: variable has embedded blanks

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

type: string (str12)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

10	"per protocol"
28	"real world"

warning: variable has embedded blanks

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

type: string (str19)

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	"some costs included"
----	-----------------------

warning: variable has embedded blanks

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

type: string (str177)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

10	"development of intervention and web interface, recording intervention"
----	---

messages in different languages,
 equipment (laptop), hardware
 maintenance, program officer salary,
 overhead"
 28 "overhead & administrative costs at
 headquarters"

warning: variable has embedded blanks

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

type: string (str29)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

28	"Patient costs"
10	"Patient costs, Buliding/space"

warning: variable has embedded blanks

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

type: string (str7)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

10	"limited"
28	"none"

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

type: string (str8)

unique values: 2 missing "": 0/38

tabulation: Freq. Value

28	"analyzed"
10	"ignored"

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

type: string (str8)

unique values: 1 missing "": 0/38

```

      tabulation: Freq. Value
                  38 "excluded"

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

      type: string (str2)

unique values: 1                                     missing "": 0/38

      tabulation: Freq. Value
                  38 "no"

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

      type: string (str3)

unique values: 1                                     missing "": 0/38

      tabulation: Freq. Value
                  38 "yes"

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

      type: string (str108)

unique values: 2                                     missing "": 0/38

      tabulation: Freq. Value
                  10 "equipment (laptop, phone) for
                    demonstration, management personnel,"
                  28 "management personnel, curriculum
                    development, office rental, travel
                    costs, telecommunications, IT,
                    utilities"

      warning: variable has embedded and trailing blanks

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

      type: string (str4)

unique values: 2                                     missing "": 0/38

      tabulation: Freq. Value
                  10 "."

```

28 "none"

volunteer_time Valuing Volunteer Time

type: string (str3), but longest is str1

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	."
----	----

family_time Valuing Family Time

type: string (str3), but longest is str1

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	."
----	----

px_costs_measured Patient-Incurred Costs Measured

type: string (str12)

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	"not included"
----	----------------

warning: variable has embedded blanks

cat_cost Catastrophic Cost Calculated

type: string (str4)

unique values: 1 missing "": 0/38

tabulation: Freq. Value

38	"none"
----	--------

currency_yr Reported Currency Year

type: numeric (int)

range: [2009,2013] units: 1
unique values: 2 missing .: 0/38

tabulation: Freq. Value
28 2009
10 2013

iso_code Reported Currency

type: string (str3)
unique values: 2 missing "": 0/38
tabulation: Freq. Value
10 "INR"
28 "USD"

currency_iso Currency of Data Collection

type: string (str3)
unique values: 2 missing "": 0/38
tabulation: Freq. Value
28 "ETB"
10 "INR"

currency_x Currency Exchange Method

type: string (str11)
unique values: 1 missing "": 0/38
tabulation: Freq. Value
38 "market only"
warning: variable has embedded blanks

current_x_rate Currency Exchange Rate

type: numeric (double)
range: [11.2,61.95] units: .01
unique values: 2 missing .: 0/38
tabulation: Freq. Value

28 11.2
10 61.95

discount_rate Discount Rate

type: numeric (byte)
range: [.,.] units: .
unique values: 0 missing .: 38/38
tabulation: Freq. Value
38 .

inflation Inflation rate

type: string (str2), but longest is str1
unique values: 1 missing "": 0/38
tabulation: Freq. Value
38 ". "

mean_cost Mean Unit Cost

type: numeric (double)
range: [11.1416,1537.0665] units: 1.000e-08
unique values: 36 missing .: 0/38
mean: 175.994
std. dev: 396.569
percentiles: 10% 25% 50% 75% 90%
20.0549 28.9682 57.3792 100.523 160.439

si_personnel Personnel (SI)

type: numeric (double)
range: [355193.53,355193.53] units: 1
unique values: 1 missing .: 34/38
tabulation: Freq. Value
4 355193.53
34 .



si_per_service_delivery Personnel: Direct Service Delivery (SI)

type: numeric (double)

range: [39.600498,39.600498] units: 1
unique values: 1 missing .: 34/38

tabulation: Freq. Value
4 39.600498
34 .

si_per_support Personnel: Support (SI)

type: numeric (double)

range: [355153.93,355153.93] units: 1
unique values: 1 missing .: 34/38

tabulation: Freq. Value
4 355153.93
34 .

si_per_mixed_unspec Personnel: Mixed Unspecified (SI)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

si_recurrent Recurrent Goods (SI)

type: numeric (double)

range: [60599.6,60680.885] units: .001
unique values: 3 missing .: 34/38

tabulation: Freq. Value
1 60599.6
1 60670.047
2 60680.885
34 .

si_rec_key_drugs Recurring: Supplies (key drugs) (SI)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

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

type: numeric (double)

range: [10.838031,92.123263] units: 1.000e-06
unique values: 3 missing .: 34/38

tabulation: Freq. Value
1 10.838031
1 81.285233
2 92.123263
34 .

si_rec_nonmed_int_supplies Recurring: Non-medical Supplies (SI)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

si_rec_building_space Recurring: Building Space (SI)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

si_rec_other Recurring: Other (SI)

```

        type: numeric (double)

        range: [60588.762,60588.762]          units: 1
unique values: 1                          missing .: 34/38

        tabulation: Freq. Value
                     4 60588.762
                     34 .

```

```

si_capital                                                    Capital (SI)

```

```

        type: numeric (double)

        range: [28345.617,28345.617]          units: 1
unique values: 1                          missing .: 34/38

        tabulation: Freq. Value
                     4 28345.617
                     34 .

```

```

si_cap_medical_equip                                          Capital: Equipment (medical) (SI)

```

```

        type: numeric (double)

        range: [11671.725,11671.725]          units: 1
unique values: 1                          missing .: 34/38

        tabulation: Freq. Value
                     4 11671.725
                     34 .

```

```

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

```

```

        type: numeric (double)

        range: [16673.893,16673.893]          units: 1
unique values: 1                          missing .: 34/38

        tabulation: Freq. Value
                     4 16673.893
                     34 .

```

```

si_cap_build                                                  Capital: Building/space (SI)

```

```

        type: numeric (float)

```



```

      range:  [,.]          units:  .
unique values: 0          missing : 38/38

```

```

tabulation:  Freq.  Value
              38      .

```

si_cap_vehic	Capital: Vehicles (SI)
--------------	------------------------

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

```

      range:  [,.]              units:  .
unique values: 0              missing .: 38/38

```

```
tabulation:  Freq.  Value
              38      .
```

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

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

```

      range:  [,.]              units:  .
unique values: 0              missing .: 38/38

```

```

tabulation:  Freq.  Value
              38      .

```

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

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

```

      range:  [,.]          units:  .
unique values: 0          missing .: 38/38

```

```

tabulation:  Freq.  Value
              38      .

```

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

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

```

      range:  [39.6005,131.72376]      units:  .00001
unique values:  3                      missing .:  34/38

```

```

tabulation:  Freq.  Value
              1  39.600498
              1  120.88573

```

2 131.72376
34 .

a_prisd_rc_counseling Primary SD: R&C Counseling (A)

type: numeric (double)

range: [39.600498,39.600498] units: 1
unique values: 1 missing .: 34/38

tabulation: Freq. Value
4 39.600498
34 .

a_prisd_unspecified Primary SD: Unspecified (A)

type: numeric (double)

range: [81.28523,92.12326] units: .00001
unique values: 2 missing .: 35/38

tabulation: Freq. Value
1 81.285233
2 92.123263
35 .

a_secondary_sd Secondary Service Delivery (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

a_ancillary Ancillary (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

a_anc_demand_generation Ancillary: Demand Generation (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

a_anc_lab_services Ancillary: Lab Services (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

a_anc_adhreten Ancillary: Adherence/Retention (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

a_anc_unspecified Ancillary: Unspecified (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .

a_operational Operational (A)

type: numeric (double)



range: [444088.31,444099.15] units: .01
unique values: 2 missing : 34/38

tabulation: Freq. Value
3 444088.31
1 444099.15
34 .

a_ope_bldg_equip Operational: Buildings and Equipment (A)

type: numeric (double)

range: [18132.858,18132.858] units: 1
unique values: 1 missing : 34/38

tabulation: Freq. Value
4 18132.858
34 .

a_ope_logistics Operational: Logistics (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing : 38/38

tabulation: Freq. Value
38 .

a_ope_program_mgmt Operational: Program Management (A)

type: numeric (double)

range: [322639.84,322639.84] units: 1
unique values: 1 missing : 34/38

tabulation: Freq. Value
4 322639.84
34 .

a_ope_supervision Operational: Supervision (A)

type: numeric (double)

range: [32514.092,32514.092] units: 1
unique values: 1 missing : 34/38

```

tabulation: Freq. Value
              4 32514.092
              34 .

```

```

a_ope_training Operational: Training (A)

```

```

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
              38 .

```

```

a_ope_transportation Operational: Transportation (A)

```

```

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
              38 .

```

```

a_ope_massed Operational: Mass Education (A)

```

```

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
              38 .

```

```

a_ope_hmis Operational: HMIS and Record-Keeping (A)

```

```

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
              38 .

```

a_ope_technology_development Operational: Technology development (A)

type: numeric (double)

range: [11671.725,11671.725] units: 1
unique values: 1 missing .: 34/38

tabulation: Freq. Value
4 11671.725
34 .

a_ope_unspecified Operational: Unspecified (A)

type: numeric (double)

range: [40371.666,40371.666] units: 1
unique values: 1 missing .: 34/38

tabulation: Freq. Value
4 40371.666
34 .

a_mixed Mixed (A)

type: numeric (float)

range: [.,.] units: .
unique values: 0 missing .: 38/38

tabulation: Freq. Value
38 .