

From Database to Data Reports

**Use of ARIES Client Level Data in
HIV Planning Council Annual Utilization
Reports**

Presented to the Austin Area Comprehensive HIV Planning Council
July 30, 2013

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Welcome/Introduction

Primary Responsibilities

- ARIES Technical Assistance
- Ad Hoc Data reporting and analysis
 - ❖ Planning Council Reports
 - ❖ Grant Application Data
 - ❖ Client Satisfaction Surveys
- Ryan White Services Report (RSR)
- AustinHIV.com website

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Overview

- ARIES background information
- Data Collected
- ARIES Data Entry Screens
- Agency-level Reporting
- HIV Planning Council Annual Utilization Reports
- Reporting Challenges
- Conclusion

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What do you know about ARIES?

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About ARIES

- Developed by State of California, the County of San Diego, the County of San Bernardino, and the State of Texas
- Managed in Texas by the Department of State Health Services
- Implemented by Austin TGA in 2006

- Web-based
- Online
- Real-time

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Austin Data

For the period March 1, 2008 through February 28, 2013

- 558,206 individual service delivery records entered or uploaded into ARIES
- 4,615 unduplicated clients

On average,
between 80-85% of Austin
TGA clients share their
ARIES data cross agencies.

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Data Collected

- Demographic**
- Clinical**
- Services**
- Case Notes**
- Needs Assessments**
- Care Plans**
- Referrals**

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Data Collected in ARIES

Demographic	Clinical	Services
<ul style="list-style-type: none">• Race• Ethnicity• Gender• DOB• Income• Poverty Level• Insurance• Sexual Orientation	<ul style="list-style-type: none">• HIV Status• CD-4• Viral Load• STI/Hepatitis• Immunizations• TB	<ul style="list-style-type: none">• Date• Funding Source• Contract• Service Category• Units• Cost

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ARIES Data Entry Screens

Screens from ARIES Training/Prototype Site

** Client data on the following slides is fictitious*

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Demographics

[DEMO-GRAPHICS](#)
[ELIGIBILITY](#)
[PROGRAMS](#)
[MEDICAL](#)
[MEDICATIONS](#)
[RISK & ASSESSMENTS](#)
[CARE PLAN](#)
[CARE NOTES](#)
[SERVICES](#)
[CUSTOM DATA](#)

[CONTACT INFO](#)
[DEMOGRAPHIC DETAIL](#)
[LIVING SITUATION](#)
[AGENCY SPECIFICS](#)

Joe N Brown

Contact Information [Edit](#)

Phones:
 512-999-8061 (Mobile) -- be confidential; no messages
okcorral@gmail.com -- do not contact; be confidential; no messages

Residence:
 as of 3/1/2013
 701 Vargas Road
 Austin, TX 78741
County: Riverside
Geog Area/HSDA: 4815-Austin

Previous Address:
 701 Vargas Road
 Austin, TX 78741
County: Riverside
Geog Area/HSDA: 4815-Austin
[Contact Information](#)

Contact by mail: No
 Be confidential

Mailing Address:
 701 Vargas Road
 Austin, TX 78741
County: Riverside
Geog Area/HSDA: San Diego - Central

Emergency:
 John Jones
 7201 Levander Loop
 Austin, TX 78702
Phone 1: 512-472-1111
Phone 2:
 be confidential; no messages

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Demographics

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Joe N Brown

Identifiers [Edit](#)

Gender: Male
Birth date: 9/17/1963 (49 years old)
ARIES ID: 100050673

Demographics [Edit](#)

AKA: JoJo
SSN: 999-77-2121
Hispanic: No
Race: 1) Black 2) 3)
Marital Status: Single
Sexual Orientation: Heterosexual
Education Level: Trade/Technical
Veteran: No
Primary language: English
Secondary language:
Place of Death:
Special needs:
Notes:

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Agency Enrollment

[DEMO-GRAPHICS](#) | [ELIGIBILITY](#) | [PROGRAMS](#) | [MEDICAL](#) | [MEDICATIONS](#) | [RISK & ASSESSMENTS](#) | [CARE PLAN](#) | [CASE NOTES](#) | [SERVICES](#) | [CUSTOM DATA](#)

[CONTACT INFO](#) | [DEMOGRAPHIC DETAIL](#) | [LIVING SITUATION](#) | [AGENCY SPECIFICS](#)

Joe N Brown

Agency Specifics [Edit](#)

Share Data: Yes

Agency Name: [Clear View Mission](#)

Agency Status: Active as of 3/4/2010

Reason for Status Change:

Agency Enrollment Date: 3/4/2010

Referral:

Client ID1: 1221-A

Client ID2:

Agency User Field 1:

Agency User Field 2:

Enrolled at

Agency Name	Agency Status
Clear View Mission	Active as of 3/4/2010

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Medical

[DEMO-GRAPHICS](#) | [ELIGIBILITY](#) | [PROGRAMS](#) | [MEDICAL](#) | [MEDICATIONS](#) | [RISK & ASSESSMENTS](#) | [CARE PLAN](#) | [CASE NOTES](#) | [SERVICES](#) | [CUSTOM DATA](#)

[BASIC MEDICAL](#) | [MEDICAL HISTORY](#) | [OB/GYN & PREGNANCY](#)

Joe N Brown

Basic Medical [Edit](#)

Primary Medical Care: Federally qualified health center/hospital

Provider and Last Visit Date: David Powell;

Primary HIV Care: Federally qualified health center/hospital

Provider and Last Visit Date: David Powell;

CDC Disease Stage: CDC-Defined AIDS, from Medical Record

Acuity: Austin TGA Non-medical, Raw Score 1 Level 1 (Other), dated 6/18/2013

Medically unable to work:

Current Weight:

Usual weight:

AIDS Diagnosis: 8/4/2007 (per Medical Record in Travis TX)

Year First Tested HIV+: 2000

Partner Notification Offered:

Partners to be notified by client:

Partners to be notified by health dept.:

Date health dept. notified:

Other Chronic Medical Conditions:

AIDS Condition	Diagnosed
CD4 Count less than 200 or CD4 Percent less than 14	8/24/2007

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Medical

[DEMO-GRAPHICS](#) | [ELIGIBILITY](#) | [PROGRAMS](#) | **MEDICAL** | [MEDICATIONS](#) | [RISK & ASSESSMENTS](#) | [CARE PLAN](#) | [CASE NOTES](#) | [SERVICES](#) | [CUSTOM DATA](#)

[BASIC MEDICAL](#) | [MEDICAL HISTORY](#) | [OB/GYN & PREGNANCY](#)

Joe N Brown [Edit](#) [Flowsheet](#)

Most recent CD4: 500 as of 5/1/2013
 Lowest CD4: 300 as of 1/1/2012
 Most recent Viral Load: 10 as of 5/2/2013, 1, Roche PCR Ultrasensitive
 Highest Viral Load: 10 as of 5/2/2013, 1, Roche PCR Ultrasensitive
 TB Test Medically Indicated: Yes 1/1/2013
 TB PPD Skin Test:
 MDR: No
 IGRA: 1/1/2013, Negative
 Chest X-Ray:
 TB Treatment:

STI/Hep	Test Date	Diagnosis	Lab Value	Tx Ind?	Treat Date	Outcome
Syphilis	2/28/2013	Positive diagnostic test		Yes	3/1/2013	
Syphilis	2/1/2012	Negative diagnostic test		No		
Hepatitis C	2/1/2012	Negative diagnostic test		No		

Immunization	Is not medically indicated	Date Immunized
Hepatitis B - Dose 2	false	1/1/2013
Hepatitis B - Dose 2	false	9/1/2012
Hepatitis B - Dose 1	false	6/1/2012

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Services

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Joe N Brown

Services [New](#)

Date and Staff

Program Primary

Secondary Subservice [Search](#)

Date	Staff	Category	UOS	Total
5/1/2013	Cynthia Manor	Ryan White > Case Management (non-medical) > Case Management (non-medical) > Case Management (non-medical)	4.00 15 Minutes @ \$10.00	\$40.00
4/1/2013	Cynthia Manor	Ryan White > Case Management (non-medical) > Case Management (non-medical) > Case Management (non-medical)	1.00 15 Minutes @ \$10.00	\$10.00
3/1/2013	Cynthia Manor	Ryan White > Case Management (non-medical) > Case Management (non-medical) > Case Management (non-medical)	1.00 15 Minutes @ \$10.00	\$10.00

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Services

Client: Brown, Joe

Staff * Manor, Cynthia

Date of Service * 5/1/2013

Contract Name * 13-14 Part A

Program * Ryan White

Primary Service * Case Management (non-medical)

Secondary Service * Case Management (non-medical)

Agency Subservice * Case Management (non-medical)

Units of Service * 4.00 @ \$ 10.00 per 15 Minutes = \$ 40.00 Total

Client Payment CARE/HIPP Co-Payment *

Actual Minutes Spent

Service Notes

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Agency Level Reporting

Online Ad Hoc Reports

Data Exports

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Utilization by Service Category

5002 Utilization by Primary Category

Primary Service Category	Unduplicated Clients	Units	Total Cost
Case Management (non-medical)	2	15.00	150.00
Medical Case Management (including Treatment Adherence)	2	8.00	80.00
Medical Transportation Services	4	16.00	315.00
Mental Health Services	1	4.00	200.00
Oral Health Care	1	2.00	400.00
Outpatient/Ambulatory Medical Care	5	22.00	2,125.00

6 records, generated 6/19/2013 10:31:48 AM
 Criteria: Service Line Item Service Date BETWEEN '3/1/2013' AND '6/19/2013' AND Funding Source Name IN ('Ryan White Part A')

[Export](#)

Utilization by Demographics

5012 Utilization by Age Category

Age Category	Unduplicated Clients	Units	Total Cost
13-24	2	31.00	1,555.00
25-44	2	20.00	1,030.00
45-64	1	16.00	685.00

3 records, generated 6/19/2013 10:25:57 AM
 Criteria: Service Line Item Service Date BETWEEN '3/1/2013' AND '6/19/2013' AND Funding Source Name IN ('Ryan White Part A')

[Export](#)

5011 Utilization by Household Poverty Level Category

Household Poverty Level Category	Unduplicated Clients	Units	Total Cost
<= Poverty Line	3	43.00	2,185.00
101 - 200%	2	24.00	1,085.00

2 records, generated 6/19/2013 10:26:56 AM
 Criteria: Service Line Item Service Date BETWEEN '3/1/2013' AND '6/19/2013' AND Funding Source Name IN ('Ryan White Part A')

[Export](#)

Race-Major 1 by Ethnicity-Major Hispanic with Service - Contract Name=13-14 Part A

Race-Major 1	Yes	No	Unknown	UDC
Black	0	1	0	1
Other	1	0	0	1
White	1	2	0	3
UDC	2	3	0	5

Data Exports

Analysis Tools

- Microsoft Access
- Microsoft Excel
- SPSS

Uses

- Desktop Monitoring Client Follow-up Lists
- Ryan White Services Report (RSR) Completeness Report
- Quality Management Committee's Return to Care Collaborative
- Other Miscellaneous Requests

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Questions?

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HIV Planning Council Annual Utilization Reports

From Agency-Level to TGA-Level Reporting

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Challenges

- Report Development**
- Data Unduplication**
- Other**

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Report Development Challenges

The most critical part of the project is exporting and preparing the data. Problems in process can adversely affect the remainder of the project.

1. Exporting data from ARIES
2. Unduplicating demographic data across agencies
3. Standardizing service category names
4. Categorizing *New* and *Continuing* clients
5. Other miscellaneous categorizing of data
 - Race/ethnicity

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Report Development Challenges

6. Calculated Data
 - Age
 - Years since HIV diagnosis
 - Poverty level categories
 - Other
7. Living situation
8. Insurance

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Unduplication of Demographics

First	MI	Last	Shared?	DOB	Gender	Race	Ethnicity	Poverty Level	Year First HIV+
Cynthia	G	Anderson	No	7/21/1980	Female	White	Hispanic	200	2011
Joe	N	Brown	Yes	9/17/1963	Male	Black	Non-Hispanic	129	2000
Sandra		Cruz	Yes	12/31/1970	Female	Other	Hispanic	0	2012
Rick	C	Dawson	Yes	4/20/1989	Male	White	Non-Hispanic	150	2013
Chris	T	Doe	Yes	1/17/1990	Male	White	Non-Hispanic	121	1996

- *Cynthia Anderson* (above) is not shared
 - ❖ Receiving services at two or more agencies
 - ❖ May not have identical demographic information at these agencies
 - ❖ Can only use the demographic data of one agency
 - ❖ Unique Record Number (URN)

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Unduplication of Demographics

- “New” and “Continuing” clients at the TGA level
 - ❖ Based on agency enrollment date
 - ❖ Many clients receive services at multiple agencies
 - ❖ Enrollment dates vary from agency to agency
 - ❖ Use of client’s earliest agency enrollment date among
- Longitudinal Data
 - ❖ Living Situation
 - ❖ Insurance
 - ❖ Multiple *active* entries of the same category counted only once
 - ❖ Excluding out-of-date entries (insurance)

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Other

- Changes in the ARIES Primary Service Category names
 - ❖ Most applicable to the 5-year reports
 - ❖ Example: *Ambulatory/Outpatient Medical Care* versus *Outpatient/Ambulatory Medical Care*

- Subservice category names standardized within an agency but not across agencies
 - ❖ *Social case management* versus *Case Management Non-Medical*
 - ❖ Standardization *within* agencies is critical to their ability to run historical reports

Other

- Impact of changes to certain non-longitudinal data
 - ❖ ZIP code
 - ❖ County
 - ❖ Poverty level

Revisiting PC Reports

Service Utilization by Ryan White Funding Source (#11)
 Service Utilization by Demographics (#1)

Service Utilization by Funding

Utilization by Primary Service Category and Ryan White Funding Sources for GY 2012-13										
	Ryan White Totals		Part A		Part B		Part C		MAI	
	Clients	Units	Clients	Units	Clients	Units	Clients	Units	Clients	Units
TOTAL	2,711	76,931	2,539	54,132	1,562	5,906	1,677	9,539	170	7,354
AIDS Pharmaceutical Assistance (local)	1,194	9,605	1,117	8,341	513	1,264	.	.	.	.
Case Management (non-medical)	441	18,354	345	10,871	.	.	59	2,205	165	5,278
Food Bank/Home-Delivered Meals	367	3,120	367	3,120	.	.	.	.	.	.
Health Insurance Assistance - CARE-HIP Copays	48	337	25	160	35	177	.	.	.	.
Hospice Services	16	360	16	360	.	.	.	.	.	.
Insurance-Medical	70	432	52	336	54	96	.	.	.	.
Insurance-Prescription Drugs	16	18	10	10	7	8	.	.	.	.
Medical Case Management (including Treatment Adherence)	150	11,573	146	9,497	.	.	.	.	10	2,076
Medical Nutrition Therapy	174	3,674	174	3,674	.	.	.	.	.	.
Medicare/Medicaid Supplement	64	305	38	80	44	225	.	.	.	.
Mental Health Services	335	2,265	314	2,051	22	214	.	.	.	.
Oral Health Care	1,252	4,612	1,111	3,037	374	469	674	1,106	.	.
Outpatient/Ambulatory Medical Care	1,570	14,506	1,388	6,828	1,024	3,202	1,145	4,476	.	.
Outreach Services	38	38	38	38	.	.	.	.	.	.
Psychosocial Support Services	30	870	30	870	.	.	.	.	.	.
Substance Abuse Services - Outpatient	182	1,532	182	1,532	.	.	.	.	.	.
Substance Abuse Services - Residential	16	416	16	416	.	.	.	.	.	.
Transportation	629	4,914	467	2,911	56	251	149	1,752	.	.

Service Utilization by Funding

Report #11

- Basic utilization report
- Clients are counted once based on ARIES unique record number (URN)
 - ❖ How you “count” clients affects the results
- Some services have more than one category
 - ❖ Health Insurance and Premium Cost Assistance (insurance medical, medicare/medicaid supplement, etc.)
 - ❖ Medical Transportation versus Transportation Services (State Services)
 - ❖ HOPWA Housing

Service Utilization by Demographics

Notice! Please review Report User Documentation for important information.		Transportation GY 2012-13					
		All Funding		Part A		MAI	
		Clients	Units	Clients	Units	Clients	Units
Gender	TOTAL	652	5,386	467	2,911		
	Male	445	3,493	318	1,997		
	Female	197	1,803	141	827		
	Transgender	10	90	10	87		
Age	TOTAL	652	5,386	467	2,911		
	< 2						
	2 - 12	1	1				
	13 - 17	1	9				
	18 - 24	23	168	11	37		
	25 - 44	236	1,595	172	718		
	45 - 64	375	3,474	274	2,089		
65 +	16	139	10	67			
Race/Ethnicity	TOTAL	652	5,386	467	2,911		
	White (not Hispanic)	195	1,520	124	657		
	Black (not Hispanic)	290	2,517	231	1,614		
	Hispanic	161	1,316	109	638		
	American Indian or Native Alaskan	2	9	1	1		
	Asian	1	1	1	1		
	Pacific Islander	2	14				
	Other	1	7	1	4		
Household Poverty Level	TOTAL	652	5,386	467	2,911		
	<=100 %	525	4,322	388	2,398		
	101 - 133 %	72	677	50	343		
	134 - 200 %	40	398	22	131		
	201 - 300 %	13	63	7	25		
	301 - 400 %	1	2	1	2		
	Over 400 %	1	14	1	14		
	Unknown						

Service Utilization by Demographics

Report #1

- “Biggest” set of reports
- Customization calculated fields
 - ❖ Age categories
 - ❖ Poverty level
- Creation of new categories from multiple fields
 - ❖ Race + Ethnicity = Race/Ethnicity
- Impact of fields converted to longitudinal format
 - ❖ Living situation
- Excluding “unexpired” insurance data that may be out of date

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Report User Documentation

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Key Points in Interpreting the Reports

- Service delivery data is not always static
- Keep in mind implications of Data Unduplication
 - ❖ Some agency-level demographics may not match TGA-level demographics
- “New” and “continuing” are calculated as a function of *enrollment date*
- Residential and poverty level information is *not* longitudinal.
- Clients with more than one of the same “active” insurance are counted only once for that insurance.

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Key Points in Interpreting the Reports

- Insurance Status
 - ❖ Is not tied to the service delivery module
 - ❖ Does not directly indicate whether insurance paid for any given service
- Race and ethnicity are captured separately in ARIES

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Q & A

- **What challenges do you have using the reports?**
- **What concerns do you have about ARIES data?**
- **Offer your suggestions for improvement.**
- **Other discussion.**

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Conclusion

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Thank You

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