

The logo features a large, stylized red graphic element on the left side, resembling a thick, L-shaped bar. The year '2018' is written vertically in light blue text within the vertical part of this bar. To the right of the bar, the word 'NATIONAL' is written in light blue, uppercase letters. Below 'NATIONAL', the name 'RYAN WHITE' is written in large, bold, white, uppercase letters. Underneath 'RYAN WHITE', the text 'CONFERENCE ON HIV CARE & TREATMENT' is written in light blue, uppercase letters. The entire logo is set against a dark blue background with a vertical red bar on the far left and a horizontal red bar at the bottom.

**2018** NATIONAL  
**RYAN WHITE**  
CONFERENCE ON HIV CARE & TREATMENT

# Bridging the data (systems) divide! Integrating data systems for better HIV reporting and care coordination- Group session 11079

*Margaret Haffey, Catharine Calianos- Boston Medical Center;*

*Piper Duarte- Parkland Health & Hospital System;*

*Mari Millery, Jesse Thomas, Daisy Gely- Northeast/Caribbean AETC*

# Session Overview:

Whether building bridges across data silos or care silos, or responding to a disaster, information exchange is critical. Effective data exchange can address the problems of patient mobility, care coordination, and population data needs, and will help achieve the NHAS goals. But if left isolated and uncoordinated, data systems create duplication of efforts, reporting difficulties, and disconnected clinical care.

Three diverse regions and care landscapes bring their challenges and successes with integrating data systems to bridge the information divide. Boston enhanced their Electronic Health Records (EHRs) with additional reporting software; Dallas leveraged their EHR to its full breadth for comprehensive evaluation, while Puerto Rico prepared HIV care settings for the emerging policy trends and requirements of a Health Information Exchange (HIE), after the need was amplified in the aftermath of the devastating 2017 hurricanes. Bridging the data divide, providers are able to share data with external agencies, generate internal reports, improve data governance, and support communication between key stakeholders.

Join HIV care agencies who are maximizing data utilization to improve access and coordination of care at their own organizational level, while building infrastructure needed to move toward a national HIE, all implemented with the aim of benefitting the patient.

# Session Objectives:

- Understand the process to implement an interface between Electronic Health Records (EHR) and HRSA reporting systems (CAREWare)
- Identify ways data consolidation can improve care coordination
- Identify methods to assess the need for health information exchange in HIV care settings

# *From the field #2: Harnessing EPIC to ensure Standards of Care while optimizing Care Coordination*

**Piper Duarte, MPH**

*Performance Improvement Analyst-Parkland Health & Hospital System- HIV Services Department*

*Special thanks to the following stakeholders who allowed me to bring our work to you: Gwendolyn Martin, Case Management Manager; Tuula Persson, RN Case Manager; Sridhar Kandakuri, Applications IT; HIV Analytics Team*



*In a large, urban HIV clinic system, how can EPIC be harnessed to deliver valuable (and required) information?*

# Parkland HIV Services Department (PHSD) objectives: share experience to better

- Understand how EPIC can help ensure Standards of Care
- Identify ways data can be utilized for standardization
- Identify ways data consolidation can impact care coordination

# Background

Clients entering care at Parkland HIV Services receive a comprehensive set of assessments, allowing them to be eligible to receive care and identify need.

Baseline audit highlighted the need for documentation to be migrated to EPIC to enable review alongside their clinical care. Though case management provided numerous referrals for partner agency services, clear documentation of referral tracking was absent.

- Issues:
  - *Dual Entry*
  - *Assessments could not be reviewed by clinic*
  - *Comparative and historical referrals unable to be viewed*
  - *Unable to track referral & follow up*
  - *Frequency of contact by MCM didn't match ACUITY of client*



# Project AIM & GOALS:

AIM: Create Flowsheets within EPIC to meet

- Standards of Care
- Optimize Care Coordination
- Eliminate dual documentation
- Create Referral Tracking

• GOALS:

- Increase clients initially assessed for ACUITY to 70%
- Increase clients with updated Care Plans to 70%
- Increase automated reporting *within* EPIC for Standards of Care

# EPIC Migration: objectives to achieve goal

1. Use Standards of Care as Guide
  2. Leverage Ambulatory IT to build CM Navigator within EPIC
  3. Meet Weekly with Stakeholders
  4. Create Flowsheets
- Evaluating processes informed IT to assist the Flowsheet build
  - Standards of Care could be 'mimicked' to reflect all data capture needs
  - Distinct fields allows for reports to ensure fidelity & show progress
  - Remove dual entry!

# Care Coordination Impact: an example

Eligibility needs, referral history and comparative assessments are now accessible to all staff coordinating care

1. Acuity
2. Identify need
3. Discuss resources
4. Provide referrals
5. Develop a mutually agreed upon care plan

References  Open

INTAKE

- Chart Review
- Care Everywh...
- SnapShot
- Reason for Visit
- Intake Forms
- Vitals
- Prior Pathogens...
- Emerging Pathog...
- Allergies
- History

CHARTING

- Problem List
- Verify Rx Benefits
- Outside Meds
- SmartSets
- Meds & Orders
- Goals
- Progress Notes
- Visit Diagnoses

HIV CASE MANAGEMENT

- Risk Reduction
- SAMISS

HIV GRANT DOCUMENTATION

- Adherence
- Acuity Scale**
- Barriers & Pt Status
- Care Plan
- Checklist
- CIF
- CM Closure
- Consent Forms
- Incentives
- Lost To Care

RESULTS REVIEW

- History
- Demographics

LETTERS

ORDER ENTRY

Flowsheets

- Review Flows...
- Problem List
- Patient Messa...
- Immunizations

VISIT NAVIGATOR

### Acuity Scale

Time taken: 0812 12/5/2018 Values By

Show:  Row Info  Last Filed  Details

+ Add Row + Add Group

TX Acuity Scale

Medical and Mental Health

Linked to HIV Medical Care	0=(Self Management) Engaged in Consistent HIV Medical Care	1=(Basic) Completed 50% or more HIV Medical Appointments in the last 6 months	2=(Moderate) Has completed <50% of HIV medical appointments OR has completed 1st medical visit	3=(Intensive) Newly diagnosed, lost to care, or no medical care in more than 6 months
Current HIV Health Status	0=(Self Management) Virally suppressed, no history of opportunistic infections (OI), no hospitalization in > 12 months	1=(Basic) Detectable viral load (VL) but on ARVs, no OIs in the < 6 months or is on treatment, no hospitalization < 6 months	2=(Moderate) Refuses ARV with CD4 > 200, OI not treated in the < 6 months, hospitalized < 6 months, newly dx in the < 6	3=(Intensive) Refuses ARVs with CD4 < 200, OII not treated in the > 6 months, hospitalized > 6 months, newly dx in the > 6
Medication Adherence	0=(Self Management) Adherent to medications as prescribed for more than 6 months without assistance OR is not being prescribed	1=(Basic) Adherent to medications as prescribed less than 6 months and more than 3 months with minimal assistance	2=(Moderate) Misses taking several doses of scheduled meds weekly. Takes long/extended "drug holidays" against medical	3=(Intensive) Resistance/ minimal adherence to medications and treatment plan even with assistance
Mental Health	0=(Self Management) No history of mental health problems or long term stability demonstrated, no need for referral	1=(Basic) Past problems and/or reports current difficulties already engaged in mental health care	2=(Moderate) Experiencing severe difficulty in daily functioning, requires significant support, needs referral to mental health care	3=(Intensive) Danger to self or others, needs immediate intervention, needs but not accessing therapy
Substance Misuse	0=(Self Management) No difficulties with substance misuse or long term stability demonstrated, no need for referral	1=(Basic) Past problems, < 1 year recovery, recurring problems, not impacting ability to pay bills or health	2=(Moderate) Current substance misuse, willing to seek help, impact ability to pay bills and access to medical care	3=(Intensive) Current substance misuse, not willing to seek help, unable to pay bills or maintain medical care. Crisis
HIV Knowledge & Understanding	0=(Self Management) Verbalizes clear understanding about HIV	1=(Basic) Some understanding verbalized, needs additional information in some areas	2=(Moderate) Little understanding, needs counseling or referral to make informed health decisions	3=(Intensive) Uninformed of HIV disease progression, unable to make informed decisions about health
Sexual Health	0=(Self Management) Practices safer sex 100% of the time, demonstrates a strong understanding of safer sex	1=(Basic) Engages in safer sex practices >75% of the time, demonstrates a fair understanding of safer sex	2=(Moderate) Engages in safer sex practices 50-75% of the time, demonstrates poor understanding of safer sex	3=(Intensive) Engages in safer sex practices <50% of the time, little or no understanding of safer sex
Dental	0=(Self Management) Has own medical insurance and payer, able to access dental care	1=(Basic) Aware of dental services offered and requires assistance accessing dental care < 2 times a year, referral	2=(Moderate) Needs information and referral to access dental services. No dental crisis, needs information or	3=(Intensive) Needs immediate assistance to access dental care, dental crisis. Does not have access to dental care

*Our final product! EPIC migration allowed for our case managers to have dedicated, standardized flowsheets to document the clients' assessments and care plans.*

References  Open

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Visit Navigator

Psychosocial

Housing/ Living Situation	<input type="checkbox"/> 0=(Self Management) Living in habitable, stable housing, does not need assistance <input type="checkbox"/> 1=(Basic) Stable housing subsidized or not, occasionally needs assistance with paying for housing < 3 times per year <input type="checkbox"/> 2=(Moderate) Unstable housing subsidized or not, housing subsidy violation/ eviction imminent, needs housing help 3-6 times a year <input type="checkbox"/> 3=(Intensive) Unable to live independently, recently evicted, homeless, temporary housing, accesses assistance > 7 times a year
Culture/Language	<input type="checkbox"/> 0=(Self Management) Understands service system and is able to navigate it <input type="checkbox"/> 1=(Basic) Client may be functionally illiterate and needs most forms and written materials explained <input type="checkbox"/> 2=(Moderate) Client may require translation or sign interpretation, and needs assistance understanding complicated materials <input type="checkbox"/> 3=(Intensive) Unable to understand service system, or is in crisis and needs immediate assistance with translation
Legal	<input type="checkbox"/> 0=(Self Management) No recent or current legal problems, all legal documents client desires are completed <input type="checkbox"/> 1=(Basic) Possible recent or current legal problems, client wants assistance in completing standard legal documents <input type="checkbox"/> 2=(Moderate) Client is on probation or parole-recently released in the last 3 months <input type="checkbox"/> 3=(Intensive) Incarcerated OR immediate crisis (legal altercation, no POA, guardianship issues, etc.)
Transportation	<input type="checkbox"/> 0=(Self Management) Client has reliable transportation. Is able to cover costs of transportation (e.g. bus tickets <input type="checkbox"/> 1=(Basic) Needs occasional assistance < 3 times a year, ride arrangements needed <input type="checkbox"/> 2=(Moderate) No means. Under or unserved area for public transportation. Needs assistance 3-6 times per year <input type="checkbox"/> 3=(Intensive) Lack of transportation is a serious contributing factor to lack of medical care, needs assistance > 7 times per year
Support System	<input type="checkbox"/> 0=(Self Management) Client reports no support needs <input type="checkbox"/> 1=(Basic) Mostly stable, but requests additional support (support group) <input type="checkbox"/> 2=(Moderate) Inconsistent support (family out of town, limited friends) <input type="checkbox"/> 3=(Intensive) No support- in crisis or in jeopardy of crisis
Domestic Violence/ Intimate Partner Violence	<input type="checkbox"/> 0=(Self Management) No reported domestic violence/ intimate partner violence <input type="checkbox"/> 1=(Basic) History of domestic violence/ intimate partner violence occurred > 1 year ago <input type="checkbox"/> 2=(Moderate) Domestic violence/ intimate partner violence reported within last year <input type="checkbox"/> 3=(Intensive) Active domestic violence/ intimate partner violence- life threatening situation
Utilities	<input type="checkbox"/> 0=(Self Management) Requires no financial assistance <input type="checkbox"/> 1=(Basic) Utilities in jeopardy of disconnection <input type="checkbox"/> 2=(Moderate) One utility disconnected or in imminent danger of being disconnected <input type="checkbox"/> 3=(Intensive) More than one utility disconnected
Self-Efficacy/ Activities of Daily Living	<input type="checkbox"/> 0=(Self Management) Client's basic needs being adequately met, no evidence of inability to manage basic needs/ADLS <input type="checkbox"/> 1=(Basic) Client has the ability to meet basic needs and manage ADL, but may need referral and information to identify available resources <input type="checkbox"/> 2=(Moderate) Needs assistance identifying, obtaining, and maintaining basic needs and managing ADL. Poor ADL management is noticeable and/or pronounced <input type="checkbox"/> 3=(Intensive) Unable to perform basic life skills/ ADLs without assistance, acute nutritional deficit, access barriers to food or clothing, in crisis, ect.



Acuity Scale

Total Acuity Points

No Case Management: 0-9 points

Initial Case Management Assessment

NO Care Plan

Documentation in ARIES will NOT reflect case management

Is Client Pregnant?  Yes  No

<input type="checkbox"/> Homeless <input type="checkbox"/> CD4 count < 200 or VL > 10,000 copies/ml <input type="checkbox"/> New to Antiretroviral therapy <input type="checkbox"/> Unable to navigate System of Care due to language	<input type="checkbox"/> Recently released from incarceration <input type="checkbox"/> Newly diagnosed <input type="checkbox"/> Not in care/re-engaging in care	<input type="checkbox"/> Pregnant <input type="checkbox"/> Untreated mental illness (including substance use disorders) <input type="checkbox"/> Non-adherence to HIV medication
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Suggested MCM  Yes  No

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- Consent Forms
- Incentives
- Lost To Care
- Oral Health
- Referral Form
- Self Attestation
- WHODAS 12 Score
- WHODAS 36 Score
- Report Links
- LOS

BILLING REASON AND TIME

Orders Care Teams Print A/S Preview A/S Therapy Plan Procedure Documentation Events Pain/Opioid Geri Assessment Forms

Referral Form

Adult Day Care	AIN/Daire Center	Other				
Children's Services	Bryan's House	Other				
Community Case Management Services	Prism Health	AIDS Services of Dallas	Bryan's House	Resource Center of Dallas	Legacy Counseling Center	AIDS Interfaith Network
Counseling Services	Legacy Counseling Center	Other				
Dental Services	Community Dental Care	Baylor College of Dentistry	Nelson-Tebedo Dental Clinic	Other		
Food	Resource Center Food Pantry	Other				
Hospice	Legacy Founder's Cottage	Other				
Household and Personal Hygiene Items	White Rock Friends General Store	Other				
Housing/Emergency Shelter	AIDS Services of Dallas	Legacy Counseling	Other			
Legal Services	Dallas Legal Hospice	Other				
Pet Services	Pets Pals, Resource Center	Other				
Ex-Offenders Services	Project Fresh Start	Other				
Financial Assistance	Cathedral of Hope	Dallas County HOPWA	Emergency Financial Assistance	Other		
Socialization	AIN/Daire Center	Resource Center Hot Lunch Program	White Rock Lunch Program	Other		
Transportation	AIN (Bus passes or Care-A-Van)	Other				
Substance Abuse	Legacy Counseling	Greater Council on Alcohol and Drug Abuse	Homeward Bound	Other		

ALL GRANT DOCUMENTATION AVAILABLE within EPIC EHR— inclusive of historical assessments & referrals

Flowsheet Report

Select Flowsheets to View

PKAMB HIV REFERRAL FORM [431]		
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Chart Review

Care Everywh...

SnapShot

HIV Referral Form	3/15/2018	11/28/2018
Dental Services		Community Dental Care
Food		Resource Center Food Pantry
Transportation	AIN (Bus passes or Care-A-Van)	AIN (Bus passes or Care-A-Van)

Results Review

History

Demographics

Letters

Order Entry

Flowsheets

# Care Coordination Impact

- Providers can now see:
  - ACUITY
  - Referral closure
  - Documented barriers to care
  - Eligibility status
- Flowsheets provide streamlined, structured data entry, allowing better assessment of patients need for medical case management and shared view of progress to achieve clinic outcomes.
- Upon project completion, Case Management encounters **doubled**.

# EPIC Migration Results

With completion of case management documentation migration to EPIC, reports can now be run to monitor:

- ✓ ACUITY Screening
  - ✓ SAMISS Screening
  - ✓ RISK REDUCTION Screening
  - ✓ ELIGIBILITY Checklist
  - ✓ CARE PLAN Updates
  - ✓ BARRIERS TO CARE
  - ✓ ORAL HEALTH Screening
  - ✓ MEDICATION ADHERENCE
- 
- Succinct tracking of patients through medical case management and their readiness to graduate from medical case management - through the build of the ACUITY flowsheet- facilitated productivity and retention of clients in care.



# Results (cont'd)

- AUDIT REVIEW COMPARISON 2016-2018
  - ACUITY: improved from 0% to 87%
  - Frequency of contact matches ACUITY: improved from 0% to 76%
  - Referral tracking: improved from 0% to 92%

*Audit Accolades-* Recent State and Federal monitoring of the program determined that this EPIC Grant Documentation Project set the team as 'trailblazers' in establishing best practice.

Reporting created now validates capacity and prioritization.

Documentation efforts have allowed more robust 'deep dives' when analyzing why clients are not achieving outcomes (ACUITY, Barriers to Care, Referral Closure)

Using EPIC to its full breadth improved data governance and report consolidation, while incorporating grant metrics and requirements through novel, seamless utilization.



**KEEP  
CALM  
AND  
REMEMBER YOU'RE  
DOING A GREAT JOB**

## Contact information:

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