HMIS@NCCEH Advisory Board Meeting
Minutes

Monday, November 28, 2022, 1-3 PM
Call-in info (audio): 1 218-382-7174
PIN: 583 198 445#
Web: meet.google.com/qaz-bmus-eea

WELCOME AND INTRODUCTION

ONE	**Vice Chair:** Rachel Waltz
	Rachel called the meeting to order at 1:10 PM and welcomed everyone to the virtual meeting. Rachel introduced two new members, Jenny Simmons and Colin Davis. Jenny Simmons is replacing Ashley VonHatten as a NC Balance of State CoC representative, and Colin Davis is replacing Hanaleah Hoberman as a Durham CoC representative. **Members present:** Rachel Waltz (Vice-Chair, Orange, Orange County Hsg Dept.), Brian Alexander (Secretary, NC BoS, NCCEH), Andrea Carey (Data Center), Kat Weis (Orange, Orange County Hsg Dept.), Debra Vestal (At large, IFC), Mike Fliss (At large, UNC-Chapel Hill). **Members absent:** Lloyd Schmeidler (Chair, Durham, City of Durham CDD), Donna Biederman (At large, Duke U School of Nursing), Jenny Simmons (NC BoS, NCCEH), K'leigh Mayer (At large, NC 2-1-1), Colin Davis (Durham, City of Durham CDD), Bettie Teasley (At large, NCHFA), Kristen McAlhaney (At large, UCCS), Nicole Wilson (At large, Durham VA Medical Center), **Others present**: Adriana Diaz (NCCEH), Nicole Purdy (NCCEH) Dr. Rie Sakai-Bizmark and Frank Wu from the Lundquist Institute joined at 1:23 PM.

APPROVAL OF MINUTES

TWO	**Presenter:** Brian Alexander	
	Goal: ☒ Share Info ☒Obtain Input ☒ Make Decisions	**Formal Approval Needed?** ☒ Yes ☐ No
	The approval of the September 26, 2022, minutes was tabled for the next meeting as the Advisory Board did not meet quorum.	
	Supporting Material: • Draft September 26, 2022, minutes emailed and posted to NCCEH.org prior to the meeting.	

HMIS@NCCEH UPDATE

THREE	**Presenter:** Andrea Carey	
	Goal: ☒ Share Info ☒ Obtain Input ☐ Make Decisions	**Formal Approval Needed?** ☐Yes ☒No

Andrea provided the following updates about the Data Center's work since our last meeting:

HMIS Licenses

- **Durham:** 90 licenses, 83 in use
- **NC Balance of State:** 251 licenses, 228 in use
- **Orange:** 28 licenses, 22 in use

In the 2022-2023 year, our implementation has added two new agencies (2 others pending), 8 new projects, and 45 new users.

HMIS Implementation Updates

Data Configuration Subcommittee Updates

- Meets monthly on the 1st Monday from 10-11 AM currently. Brian is the new CoC representative. Next topics at the December 5th meeting will be the non-cash benefit amount question, a system pop-up notification, and feedback on assessment headers and question descriptions.

Purge Script

- The purge script was successfully implemented September 27th. This script helps put the implementation in compliance with the HUD requirement that client data and files are purged or de-identified after 7 years. Next year, the script will remove client files that have not had entries/exits or service transactions since before 10/1/2015. We plan to schedule this for July on an annual basis.
    - Coordination with WellSky on the script was limited to removal of records, not de-identification. Andrea suggested potentially exploring de-identification option next year.

Annual Privacy Updates

- Required every year for every HMIS User (cutoff was August 1st) and regularly scheduled for the month of September.
- 87% of users fully completed the Privacy Updates, and 43 users were removed (either because they no longer need the license or did not meet the requirement).

Helpdesk Performance for last month:

Metric	Performance Range		Current Performance
	Worst Case	Best Case	
Customer Satisfaction	90%	100%	100%
Average speed of initial reply	8 hours (business)	1 hour (business)	59 min
Average speed of initial reply for new user	16 hours (business)	1 hour (business)	151 min
Median speed of time to resolution	7 days (business)	1 hour (business)	3.3 hrs
ZenGuide visits per month	100 (30% users)	320 (~92% users)	256 views (931 during Oct)

Mike noted the 7-year purge requirements have some loose consequences for thinking about linkage projects. He asked whether the Data Center keeps metrics beyond its purge dates to track histories for aggregate data without having the personal records anymore.

Nicole answered: as a system HMIS@NCCEH has kept historical information on its submitted HUD reports; currently no process to store aggregate data outside of HMIS except for HUD reporting. Andrea added that it is not really an option now to scrub identifying information and keep rest of the record; when they spoke to the vendor, (WellSky) the only option was to completely remove the record.

Mike added, *"So that HMIS wouldn't really be a place to store that de-identified data. But I'm more thinking about HUD and public health relevant metrics that would be helpful to store / share over time. Aggregate counts, rates, etc. of key measures do seem to keep for as long as possible, either in house or relying on the HUD available data if it's robust enough!"*

End of Fiscal Year Data Quality clean-up:

- Ahead of Longitudinal System Analysis and System Performance Measures report submission to HUD, the Data Center led a big effort over approximately 6 weeks to improve FY2022 data quality in each CoC. The Data Center approached this work in two phases:
    - Phase 1 had agencies submitting 2 or 3 reports for each project (depending on the project type). Currently, 77% (or 180 projects) have been accepted as final.
    - Phase 2 had the Data Center pulling reports for each CoC in a similar way to how the data is submitted to HUD. A central list was developed for red flags and specific issues sent to agencies. 85% of the 700 red flags have been addressed.

After two months of intensive communication, the Data Center will stop reminding agencies of over-due actions 11/30 and turn to tasks for final review/submission to HUD with CoC coordination.

Statewide Data Reporting:
The Chair of the NC HMIS Governance Committee has approached Ryan and Andrea for discussing statewide cross-implementation options. We are scheduling that in the next 5 weeks. We look forward to seeing how NC HMIS and Wake are considering the possibilities.

Vaccine Linkage with DHHS:
Continues monthly. There was a technical issue with NC DHHS servers that disrupted processing of September and October data. Those will be included with the November data results.

LUNDQUIST RESEARCH PROJECT OVERVIEW

FOUR

Presenter: Dr. Sakai-Bismark and Frank Wu

Goal: ☒ Share Info ☒ Obtain Input ☐ Make Decisions	**Formal Approval Needed?** ☐ Yes ☒ No

Dr. Rie Sakai-Bismark and Frank Wu of the Lundquist Institute presented on the research project for which they have requested HMIS@NCCEH data.

Project objective:

- The goal of the project is to estimate the cost effectiveness of performing random plasma glucose (RPG) and HbA1c tests on homeless women with gestational diabetes who missed the recommended postpartum glucose screening (PGS) - 12 weeks postpartum during any utilization of healthcare (AUHC) and 12 weeks to one year after delivery. The project will also compare the rates of gestational diabetes and PSG screenings between homeless and

housed women. The project focuses on AUHC because 1] AUHC is an opportunity for healthcare providers and social workers to educate homeless patients on GDM and their insurance eligibility and coverage for the screening; and 2] the physical barriers to healthcare access, which are often cited as a reason for the low PGS rate, are removed. AUHC includes inpatient care, emergency department visits, or outpatient visits. The drawback for this strategy is that the OGTT cannot be used because it requires fasting from the night before. Instead, RPG and A1c tests will be used because they can be performed quickly without fasting. The team is collaborating with the Medicaid office to pull the data. They have not received approval to use Medicaid data as of yet.

Specific Aims:

1. Estimate rates of gestational diabetes (GDM) and postpartum glucose screening (PGS) among homeless women.
2. Estimate the cost-effectiveness of providing random plasma glucose (RPG) and glycated hemoglobin (A1c) tests during healthcare utilization for homeless women with GDM who missed the postpartum glucose screening.

Timeline:

- Project has already received funding so they would like to begin the data request process now. We estimate the completion of project 2 years after receipt of data.

Mike asked which health department/division the team is working working with? – DMH. He noted would be nice to get timeline from the Medicaid office.

- Fastest would be 9 months
- Funding is for 2 years and can ask for extension

- Mike made several suggestions:
  - Would not block on gender and think of other nuances like that
    - Rachel: Agree! And using language around birthing parent rather than mothers
  - Data elements being used: name, age, gender, DOB, possibly last 4 digits of SSN
    - To identify folks as experiencing homelessness
    - Mike's comment: Dr. Bizmark: FWIW, our last linkage used: first, middle, last name; DOB & age; race & ethnicity (which we combined), gender, Veteran status (loosely), and homelessness status (loosely). Also available were place-specific information like state, city, zip, county (but required some clever work around).

A vote to consider approving the usage of HMIS@NCCEH data for this project was tabled due to a lack of quorum.

CODI PRESENTATION

FIVE

Goal: ☒ Share Info ☒ Obtain Input ☐ Make Decisions	**Formal Approval Needed?** ☐ Yes ☒ No

Andrea provided an overview of the latest updates with the CODI project.

NC CODI Community and Clinical Data Initiative: Project for Social Determinants of Health Network Linkage

CODI@NC includes the following partners fulfilling various functions within the following implementation roles:

- Seven Data Owners: Duke University (including Hospital), University of North Carolina (UNC) Health, YMCA of the Triangle, Parks and Recreation Department of Chapel Hill, Parks and Recreation Department of Durham, Durham Health Department, and North Carolina Coalition to End Homelessness (NCCEH)
- One Data Partner: The Collaborative Studies Coordinating Center at UNC School of Public Health
- One Linkage Agent: National Association of Community Health Centers (NACHC)
- One Data Coordinating Center (DCC) and Key Escrow: Duke Clinical Research Institute (DCRI)

Master Consortium Agreement (MCA) has been reviewed by NCCEH's attorney, Brian Alexander, and Andrea Carey. This will be the Data Use Agreement establishing the CODI distributed data network (only 46 pages!) and as the most conservative privacy and confidentiality requirement applied to the data, treats all data as covered under HIPAA's Privacy Rule.

Andrea gave an orientation on the Master Consortium Agreement

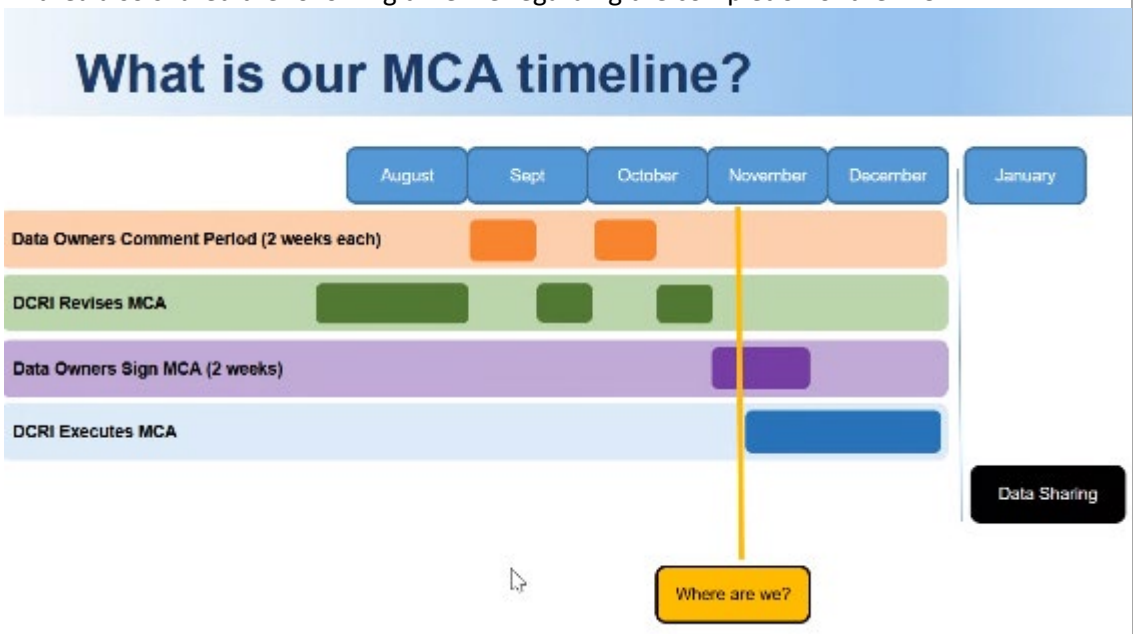
- As a data owner, HMIS@NCCEH gets a fast track for queries
- Retention policy: DCC will retain the query results as long as necessary but no longer than 5 years
- Term and Termination: agreement effective for 5 years; any data owners that join will need to adopt MCA as is; always an option to leave
- Sensitive data: acknowledges that sensitive data is in use and covered by HIPAA
- Addition of new data owners: new data owners are invited to join and can do so by signing the MCA
- Asset delivery: In this context NCCEH's aspect is permanent housing (to identify how clients benefit from interacting with our system)
- Demographic: DOB, gender, race, ethnicity and preferred language
- Using the PRO_CM table to store responses to patient reported outcome measures (PROs) or questionnaires. This table can be used to store item-level responses as well as the overall score for each measure. This table is for storing individual-level SDOH screenings
- Exhibit E in the MCA defines different queries
- Exhibit F reviews the roles and responsibilities of different partners

Mapping how HMIS@NCCEH data will be linked with other CODI partners is underway and almost ready for testing. Andrea gave an example of what that looks like:

Table 1. PRIVATE_DEMOGRAPHIC Table Mapping

CODI Attribute	Cardinality	Type	Source Attribute	Source Table	Source Type	Comments
PATID	1	FK::DEMOGRAPHIC	PersonalID			
PAT_FIRSTNAME	0..1	String	[Client]Name			
PAT_MIDDLE_NAME	0..1	String	[Client]Middle			
PAT_LASTNAME	0..1	String	[Client.csv]Last			
PAT_MAIDENNAME	0..1	String				
BIRTH_DATE	0..1	Date (DD/MM/YYYY)	[Client.csv]Date of Birth			The quality of value of Date of Birth may vary. The client may provide a full date or

Andrea also shared the following timeline regarding the completion of the MCA:



- Right now, synthetic data is being used to make sure the model is working; next step to use real data but cannot do so until the MCA is signed; taking long time to get through legal process for some partners - probably will not happen until beginning of year
    - NCCEH will sign MCA on behalf of implementation; will probably sign before January meeting so may need an electronic vote

Rachel asked if anybody is responsible for monitoring the potential for re-identification later or any monitoring at all. Andrea answered that at every step of the way partners have agreed to not re-identify individuals, and it is built into infrastructure in that one of the first things done is de-identifying individuals; NCCEH will use data partner to hash/de-identify data.

Rachel asked if there are any ongoing research interests NCCEH has to be a requester of this network and not just a provider. Brian said yes because we will have data owners with information we will want to connect with; Andrea added that it will help reinforce the importance of homelessness data and push for other implementations to be data owners and could be opportunity to get statewide homeless data

Mike added it could also send researchers to NC CODI for many data requests (to then approve or not those requests), instead of handling those data requests start to finish themselves with less infrastructure to handle them.

MORTALITY LINKAGE RESEARCH PROJECT OVERVIEW

SIX

Presenter: Mike Fliss

Goal: ☒ Share Info ☒ Obtain Input ☐ Make Decisions

Formal Approval Needed? ☐ Yes ☒ No

Mike provided an overview of the mortality linkage research project he has been working on.

- Early History - 2018
  - Opioid & Substance Use Action Plan - DHHS
    - Goal: "# of people experiencing homelessness"
    - Time & place specific: Monthly, county-specific

  - Conversations with NCCEH and NC HMIS
    - County not possible
    - Dual systems and data governance created difficulties
  - Decided to pause on homelessness as state indicator
    - Use monthly 211 calls for housing instead
    - Housing First policies added as "policy" indicator
  - Funding from Duke Opioid Collaboratory
    - Could not link data from systems two together
    - Link to death certificate records to describe both overdose-specific and all-cause mortality
- Methods – Data Sources
  - Death certificate data (N = 553,286) from 2014 to 2019
  - HMIS records were obtained from (NCCEH).
    - Person-enrollment records were consolidated (n = 67,329) from NCCEH from 2015 to 2019 into (n = 36,090) distinct person records.
    - Population estimates for 81 counties in the service area were obtained from the US Census American Community Survey
- Methods – Linkages & Statistical Analyses
  - Linkage
    - To link death certificates and HMIS records, we harmonized linkage variables and derived homelessness-related place of death variables.
    - Used the fast link probabilistic linkage package [7].
    - Links were 100% hand-reviewed to iteratively improve and ensure linkage quality.
  - Statistical Analyses
    - Death certificate ACME (Automated Classification of Medical Entry [8]) code frequencies were used to compare all-cause and cause-specific mortality rates of the 81-county North Carolina population using age-standardized mortality ratios (SMR) and 95% confidence intervals (CIs).

- Findings
  - **1,953 (5%)** PEH were linked to death certificates.
  - Using age adjusted SMRs, PEH had **7.0 times the all-cause mortality rate** of the North Carolina general population (95% CI: 6.7, 7.3).
  - The **most frequent single cause of death among PEH was a med-drug overdose**, representing 238 (12.2%) deaths (versus 2.0% in the North Carolina population), 13.8 times the North Carolina mortality rate.
  - Other frequent death causes included **suicide/self-harm (4.1%, 9 times the rate); motor vehicle crash/pedestrian injuries (1.9%, 6 times the rate); and firearm assault (1.4%, 10 times the rate).** We also found higher rates of **chronic disease mortality**, including **heart disease (7 times)**, **liver diseases (7 times)**, and **lung cancers (6 times)**.
  - Unpublished table:

	NC* Deaths	HMIS Deat
Cause of Death	**# (%)**	**Observed # (%)** E
Total Deaths	351,740 (100.0)	1953 (100.0)
Med-Drug Overdose	6,955 (2.0)	238 (12.2)
Heart Disease	42,277 (12.0)	212 (10.9)
Cancer (Lung)	21,417 (6.1)	102 (5.2)
Suicide / Self-Harm	5,221 (1.5)	80 (4.1)
Chronic Lower Respiratory Disease / COPD	21,930 (6.2)	77 (3.9)
Diabetes	7,274 (2.1)	56 (2.9)
Alcoholic Liver Disease	2,300 (0.7)	40 (2.0)
Motor Vehicle Crash / Pedestrian	3,624 (1.0)	38 (1.9)
Pending (~40% Overdose in NC)	1,253 (0.4)	29 (1.5)
Bacterial Sepsis	5,670 (1.6)	29 (1.5)
Firearm (Assault)	1,481 (0.4)	28 (1.4)
Liver Cirrhosis	2,770 (0.8)	24 (1.2)
Cancer (Colon)	4,405 (1.3)	22 (1.1)
Cancer (Pancreas)	5,147 (1.5)	21 (1.1)
Heart Disease (Hypertensive)	2,341 (0.7)	19 (1.0)
Cancer (unspecified)	3,822 (1.1)	18 (0.9)

* NC Deaths include 81 county catchment area for NC CEH

- Limitations
  - Not statewide
    - 81 counties. NCCEH was a great, close partner
  - Pre-COVID-19.
    - Ongoing work is needed to stay current
  - Slow…too slow
    - COVID-19 in the middle of the project
    - Data governance legal mire is a constant pain point
  - Not stratified
    - E.g., by race-ethnicity, gender, age, CoC/county. Requires enough events / people
  - Mortality only
    - Doesn't include morbidity, other lived experiences
- Next Steps
  - Current Follow-up Projects
    - Investigating VDRS homelessness variables (housing problems; homeless) - Esther & Mike
    - Creating NC DETECT ED visit homelessness definition - Elliot, Mike, & DPH IVPB
    - Move towards sustainable death linkage (DHHS legal is slow)

	○ Statewide….someday
	Supporting Materials: • Presentation: https://acrobat.adobe.com/link/review?uri=urn:aaid:scds:US:48b50a60-bdab-3b36-bb66-a63d2e6aefaa • Published report: https://www.ncmedicaljournal.com/content/ncm/83/5/390.full.pdf

ADVISORY BOARD GOALS UPDATE

SEEVN	**Presenter:** Rachel Waltz	
	Goal: ☒ Share Info ☒ Obtain Input ☐ Make Decisions	**Formal Approval Needed?** ☐ Yes ☒ No
	Given that most Advisory Board members were absent from today's meeting, the Advisory Board goals update will be tabled until the January 30, 2023 meeting.	
	Supporting Materials • 2022-2023 HMIS@NCCEH Strategic Goals	

There being no other business, the meeting adjourned at 2:57 P.M.

Respectfully submitted,
Brian Alexander, Secretary with staff support from Adriana Diaz

Next Executive Committee Meeting: Monday, January 9, 2023, from 1-2 PM
Next Full HMIS Advisory Board Meeting: Monday, January 30, 2023, from 1-3 PM