Epidemiology, Evaluation, and Impact of Data for Homeless Populations at the Facility, Local, and State Level

Ben King, MPH
Robert Dominguez, MA, NCC, LPC
Daniel Gore

Disclosures

- Ben King – Project Manager; Hospital Physicians in Clinical Research, PLLC
  - NHCHC Research Coordinating Committee & Conference Abstract Reviewer
  - Ending Community Homelessness Collaborative (ECHO) Austin – Chair; Data Work Group
  - American Public Health Association – Chair; Caucus on Homelessness
  - International Street Medicine Institute – Member

Disclosures

- Daniel Gore – HMIS Project Manager; Texas Homeless Network
  - Ending Community Homelessness Collaborative (ECHO) Austin – Chair; HMIS committee;
  - Texas Interagency Council for the Homeless – Ex-Chair; Homeless Data Warehouse Committee
- Robert Dominguez – Practice Manager; Austin Resource Center for the Homeless (ARCH) HCH Clinic & Right to Sight Vision Clinic
  - Ending Community Homelessness Collaborative (ECHO) Austin – Member; Data Work Group


TEXAS
HOMELESS
NETWORK


ECHO


Seton
Healthcare Family


HPCR
Expert Clinical Trial Management


NATIONAL
HEALTH CARE
for the
HOMELESS
COUNCIL


CommUnityCare

ARCH


APHA
American
Public Health
Association


iCare
Integrated Care Collaboration
Improving Access to Healthcare in Central Texas

Overview

- Epidemiology & Homelessness — Ben King
- Data Systems
  - Facility perspective — Robert Rodriguez
  - Local HMIS & State perspective — Daniel Gore
  - Community Data perspective — Ben King

Epidemiology of Homelessness

- “Art, like morality, consists in drawing the line somewhere” – W.K. Chesterton

- Defining Homelessness
- Consent / Authorization
- Data Collection Strategies
  - Characterization of populations
  - Needs Assessments
  - Utilization

Definitions

HUD (pre-HEARTH):

- An individual or family who lacks a fixed, regular, and adequate nighttime residence, which includes a primary nighttime residence of:
  - Place not designed for or ordinarily used as a regular sleeping accommodation (including car, park, abandoned building, bus/train station, airport, or camping ground)
  - Publicly or privately operated shelter or transitional housing, including a hotel or motel paid for by government or charitable organizations;
- Or being discharged from an institution where he or she has been a resident for **30 days or less and the person resided in a shelter or place not meant for human habitation immediately prior to entering that institution.**
- Or being evicted within 7 days
- Or is fleeing a domestic violence housing situation and no subsequent residence has been identified and the person lacks the resources and support networks needed to obtain housing.

- No:
  - Living with friends or family
  - Housing instability

Definitions

McKinney Vento:

- In places not meant for human habitation, such as cars, parks, sidewalks, abandoned buildings (on the street).
- In an emergency shelter.
- In transitional or supportive housing for homeless persons who originally came from the streets or emergency shelters.
- In any of the above places but is spending a short time (up to 30 consecutive days) in a hospital or other institution.
- Is being evicted within a week from a private dwelling unit and no subsequent residence has been identified and the person lacks the resources and support networks needed to obtain housing.
- Is being discharged within a week from an institution, such as a mental health or substance abuse treatment facility or a jail/prison, in which the person has been a resident for more than 30 consecutive days and no subsequent residence has been identified and the person lacks the resources and support networks needed to obtain housing.
- Is fleeing a domestic violence housing situation and no subsequent residence has been identified and the person lacks the resources and support networks needed to obtain housing.

Definitions

HEARTH:

- (26 pages in the CFR to consolidate the “final rule”)
  - An Individual or Family Who Lacks a Fixed, Regular, and Adequate Nighttime Residence
  - An Individual or Family Who Will Imminently Lose Their Housing
  - Unaccompanied Youth and Families With Children and Youth Defined as Homeless Under Other Federal Statutes
  - Individual or Family Who Is Fleeing, or Attempting To Flee, Domestic Violence, Dating Violence, Sexual Assault, Stalking, or Other Dangerous or Life-Threatening Conditions

Consent / Authorization

- Research consent
  - Waiver
- HIPAA
  - Authorization to Use and Disclose PHI
  - Waiver
- Release of Information (ROI)
- Business Use Agreement
- Limited Data Sharing Agreement

Data Collection Strategies

Overview:

- Census / Registration
- Sampling:
  - Convenience Sample
  - Snowball Sample
  - Peer to Peer
  - Random Sampling
- Ex: 100,000 Homes Campaign
- Ex: Austin's Point in Time Count Sample

Data Collection Strategies

- Selection Bias:
  - Error in choosing the individuals or groups to take part in a study or assessment
  - Causes distortion of the resulting data analysis
  - Can lead to erroneous conclusions

Data Collection Strategies

Census:

- 100% of a population
  - (therefore not a true sample)
- Examples:
  - event registrations
  - Institutional data
    - (patient population=population of interest)
  - The Census

Data Collection Strategies

Convenience sample:

- Sample defined by a non-random variable
  - Usually a location or time window
- Typically characterized by ease of access
- Examples:
  - Institutional / Agency data
    - (if patient population = subset of population of interest)
  - ED patients presenting during business hours

Data Collection Strategies

Snowball Sampling:

- Also called: Chain sampling, referral sampling

- Existing subjects recruit future subjects from among their acquaintances
- Useful for accessing hidden populations (IVDUs, sex workers)
  - modification of selection bias issues
- Allows for environmental studies of social network structures
- Cannot make unbiased estimates of a population from snowball
  - Caveat: “respondent driven sampling”

Data Collection Strategies

Peer to peer sampling:

- Members of population being studied are used as data collectors
- Quality of data heavily depends on training & complexity of the assessment in question
- Example: CBP Community Health Workers as data collectors

Data Collection Strategies

Random sampling:

- Involving some component of unpredictability
- Observations (individual units of sample) are independent
- All units of population have an equal chance of being selected from the entire population

- Not perfectly representative of population sampled
  - Difference can be called ‘sampling error’, standard error, or confidence interval

Data Collection Strategies

Examples:

- 100,000 Homes campaign: Vulnerability Index
- HUD CoC- Point in Time Count
- Homeless Resource Fair

100,000 HOMES

For 100,000 homeless Americans by July 2013

- Austin Point in Time Count - Survey

CommUnityCare

Healthcare for the Homeless

Our Mission: We will work with the community as peers with open eyes and a responsive attitude to provide the right care, at the right time, at the right place.

Austin/Travis County, Texas

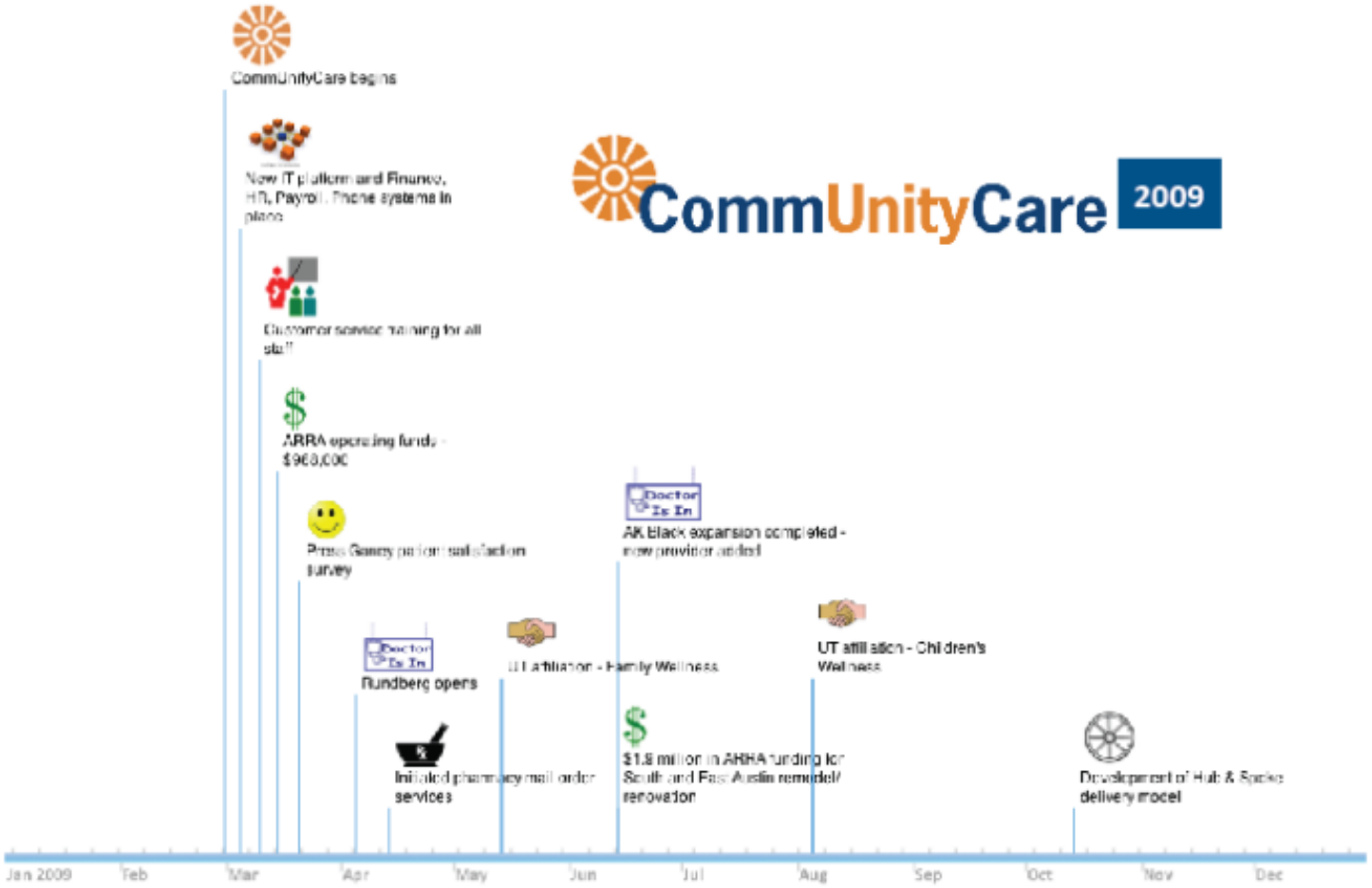
- Largest safety net provider of primary care in Austin/ Travis County; UDS 2011:
  - 57,296 unduplicated patients
  - 237,451 clinic visits
- 20 medical clinics, 4 dental clinics, 1 specialty care clinic
- Primary medical care, dental, behavioral health, specialty care: cardiology, dermatology, endocrinology, gastroenterology
- Vision screening services by referral to area providers through a local foundation grant
- Special population-of-focus clinics:
  - David Powell Clinic, serving Central Texas patients with HIV
  - ARCH, dedicated to serving Austin's homeless
    - Began seeing patients in October 2004
    - HCH grantee under our HRSA 330 since 2005

CommUnityCare

History

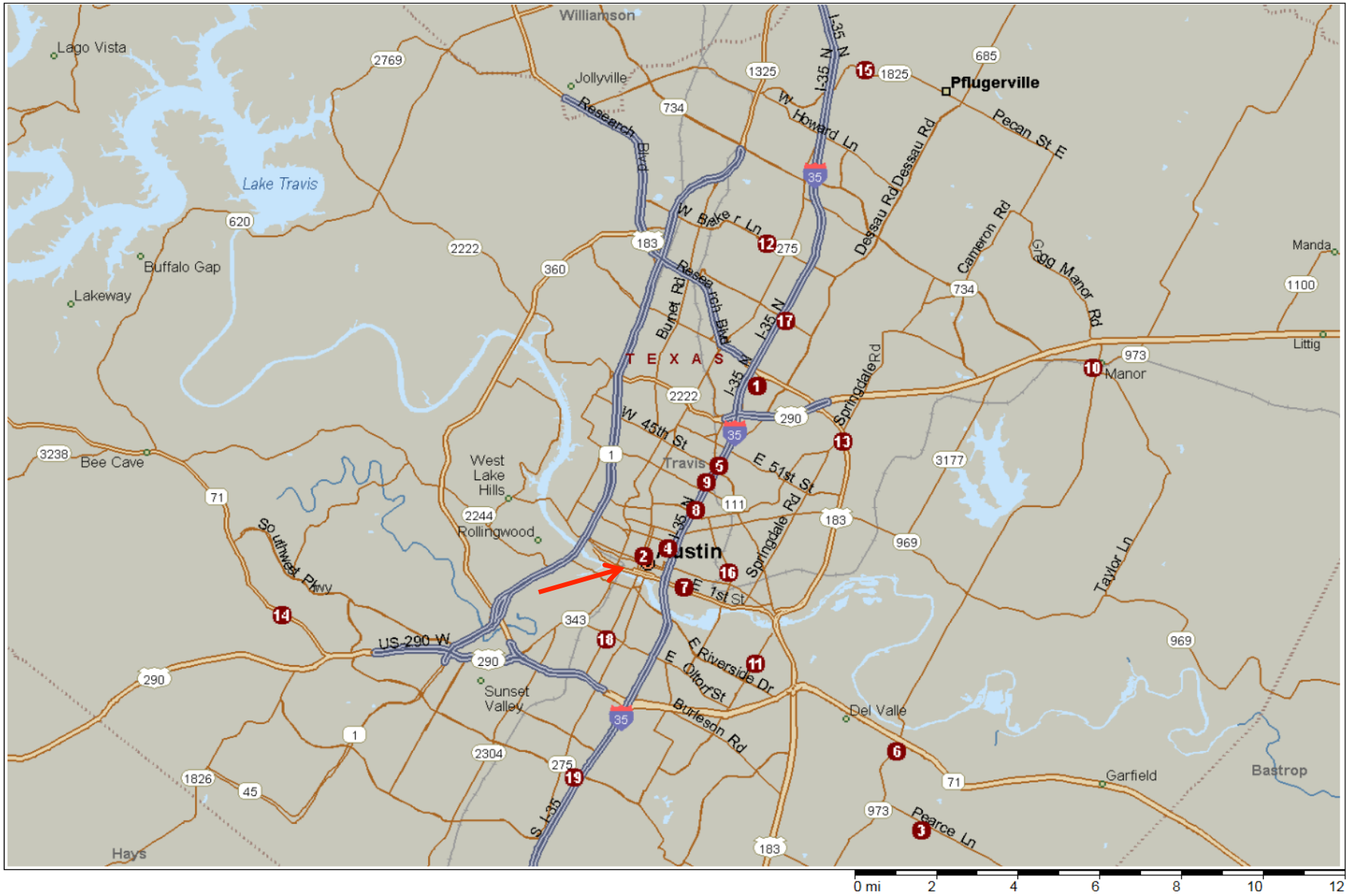
- Local health department clinics funded and operated under the City of Austin and Travis County until March 1, 2009
- Transition from the City of Austin to the Travis County Healthcare District (Central Health)

CommUnity Care Timeline



ARCH, Austin Resource Center for the Homeless

CommUnityCare Locations



- Resource Center owned by City of Austin
  - Constructed in 2003
  - Managed under contract by Front Steps, a local private non-profit
- Located in the heart of downtown Austin (2 on the map)
- Services provided at ARCH
  - Day Resource Center, emergency overnight shelter (100 beds), physical and mental health care (through CommUnityCare), legal assistance, substance abuse treatment
- Facilities include
  - large common-use room, showers and locker rooms, laundry facilities, computer room, art studio,
  - large commercial kitchen and dining room

- Clinic services provided by CommUnityCare
  - Family Medicine (Dr. Matthew Carlberg, MD and Jordan Swindle, PA-C)
  - Dental (mobile dental provided off site)
  - Vision- Right to Sight
  - Behavioral Health Care
  - Case Management (2 staff on site)
  - Lab services and Class D Pharmacy
- 4 exam rooms in 1,500 sq ft of clinic space
- 9 FTEs on site, including two providers
- 40 hours of clinical coverage per week
- Eligibility Services- in house screening for MAP
- Network Pharmacy Services- patients can have prescriptions filled at any one of 17 local pharmacies
  - One location less than 2 miles from the clinic
  - Two more locations less than 3 miles from clinic
- Patients have no copay for services
- Transportation services: bus passes, cab service

HCH UDS 2011:

- 1,207 unduplicated patients
  - 23% female, 77% male
  - 97% between 20 and 64 yo
    - 16 individuals younger than 20
    - 16 individuals older than 64
  - 98% under 100% FPL
    - 75% covered by MAP, local county program funded by Central Health (Travis County Healthcare District)
    - 11% unfunded
    - 8% Medicaid
    - 5% Medicare
  - Race/Ethnicity
    - 48% White
    - 32% African American
    - 18% Hispanic
    - 2% Asian, Native American, Pacific Islander
- 5,230 clinic visits
  - 2,833 (54%) medical visits
  - 1,771 (34%) case management visits
  - 626 (12%) behavioral health visits

HCH UDS 2011, cont:

- Diagnosis Profile
  - Behavioral Health issues (~25% of patients)
    - Including depression, anxiety, PTSD, substance abuse
  - Hypertension (9%)
  - Diabetes (6%)
  - Hepatitis C (4%)
  - Respiratory illness (4%)
    - Including Asthma, bronchitis, emphysema

Data Systems and Collection

- NextGen Practice Management since 2004
  - Patient demographics, appointments, third party billing
- NextGen EHR since 2006
  - Early versions were highly customized and tailored to individual providers needs
    - Moving away from extensive customization
      - LESS customization with MORE functionality and consistency across the network
  - Next EHR upgrade scheduled for June 15, 2012
    - Featuring improved process and workflow

Strategic and Operational Use of Data

- OC3 metrics (Optimizing Comprehensive Clinical Care)
  - A framework for redesigning the "system" to maximize health outcomes and remove unnecessary waits and delays for patients.
  - Measuring access, improving it, getting patients in when they need to be seen, and to be seen by their doctor
    - *See your own and don't make them wait*
      - Measures: Productivity, Cycle Time, Red Zone, No Show Rates, 3NA, Continuity, Panel size (supply & demand), clinical outcomes

- Forecasting placement of new clinics
  - Patient demographics helped determine the placement of our new North Central location

Thank you!

Contact information:
Robert P. Dominguez, Jr., M.A., NCC, LPC
Practice Manager
ARCH - Health Care for the Homeless / Right to Sight Vision Clinic
Contract Manager
Clinic at LifeWorks Youth Outreach Center
CommUnityCare FQHC / Joint Commission Accredited
Ph: 512-978-9925 / Fax: 512-978-8129
robert.dominguez@communitycaretx.org
www.communitycaretx.org

Homeless Service Data

Daniel Gore
HMIS Project Manager
Texas Homeless Network

512.687.5107
daniel@thn.org

HUD Reporting Objectives

- To improve the capacity of local communities to collect high quality data;
- To enhance the way data are used to inform local, regional and national understanding of homelessness and the performance of homeless assistance programs and systems;
- To support informed decision making about resource needs and allocations;
- To build information partnerships with other agencies and systems to achieve goals; and,
- To manage grant cycles more efficiently so communities can focus on programming.

What is HMIS?

- A Homeless Management Information System is a *locally* administered, electronic data collection system that stores longitudinal client-level information on persons who access the homeless service system.
- A federal response to a congressional directive to capture better data on homelessness.
- Early efforts in the 80s – 90s by the National Human Services Data Consortium preceded congressional action in 2001's McKinney-Vento Act.
- HUD publishes HMIS standards in 2004 via the Federal Register related to data collection, privacy and security (subsequent updates).

What is HMIS Important?

- Every Continuum of Care (CoC is required to implement an HMIS and participation is scored annually in the CoC Notice of Funding Availability (NOFA).
- Local data is submitted to HUD for the Annual Homeless Assessment Report (AHAR) to Congress (first report in 2007).
- Local systems support coordinated intake, eligibility determination, assessment and case management.

Key Stakeholders

- Continuum of Care lead agency/entity
  - Oversight, policies, protocols
- HMIS lead agency/entity
  - Implementation, training, support
- Participating agencies
- Grantors and local sponsors
- HUD Technical Assistance providers
- Software Vendors
- Users
- Clients

http://www.hudhre.info/

Why Integrated Data Systems?

- Identify the prevalence and patterns of service utilization within and across various systems;
- Identify the risk and protective factors associated with program use;
- Identify costs associated with various types of utilization;
- Design interventions or program investments in one or more domains (e.g. housing stabilization) to reduce costs in another domain (e.g. health care);
- Identify vulnerable subpopulations (e.g. preschool children) based on antecedents in other systems (e.g. child welfare);
- Inform policy decisions with analysis and demonstrable program outcomes (e.g. reduced teen pregnancies).

Texas Homeless Data Warehouse

- An effort to integrate data from 15 separate HMIS systems and other agencies providing mainstream services;
- Goals include the ability to report:
  - Trends in transactional data;
  - Population characteristics;
  - Unduplicated count of the state's *served* homeless population; and
  - Performance measures and outcomes.
- Project is currently in Phase 1 of 4.

Project Timeline

- Phase 1: Planning
  - Identify Stakeholders (September 2010)
  - Benefits Analysis (May 2011)
  - Project Governance/Management (January 2012)
  - Request For Information (April 2012)
  - Define scope and requirements
  - Design data sharing agreements and security protocols

Project Timeline

- Phase 2: Development
  - Request For Offer (July 2012)
  - Request For Proposal (September 2012)
  - Budget approval from sponsor (TBA)
  - Select software vendor and implementation provider
  - Sign off on deliverables

Project Timeline

- Phase 3: Implementation
  - Integrated Homeless Service Data
  - Training and Technical Assistance
  - Reporting Tools
  - Monitoring and Evaluation

Project Timeline

- Phase 4: Expansion
  - Planning to integrate with other health and human service data
  - Review changes to project scope and product features
  - Iterative rollout (2020 – 2025)

Challenges

- No single statewide HMIS
- No statewide data warehouse
- No federal funding at this time
- Only a recent history of cross-departmental collaboration and governance on State IT projects
- Exclusive planning processes
- Lack of dialogue between key stakeholders
- Focus on cost and resources without first understanding need and requirements

Lessons Learned… So Far

- Building a data warehouse is a human process, NOT an IT project
- Build an infrastructure where it is needed and only when necessary
- Promote inclusive AND integrated planning processes
- Sustain momentum
- Embrace ambiguity
- Identify your project champion

Community Data

Ben King

Project Manager & Chief Research Scientist
Hospital Physicians in Clinical Research, PLLC
UT Southwestern EM GME; Research
Seton Healthcare Family; Department of Emergency Medicine; Research
BTKing@seton.org

Federal

- HUD
- NIDAA / SAMHSA
- CDC
- Census
- Bureau of Labor Statistics
- Advocacy

State

- State Housing Agency
- Data Warehousing
- Advocacy

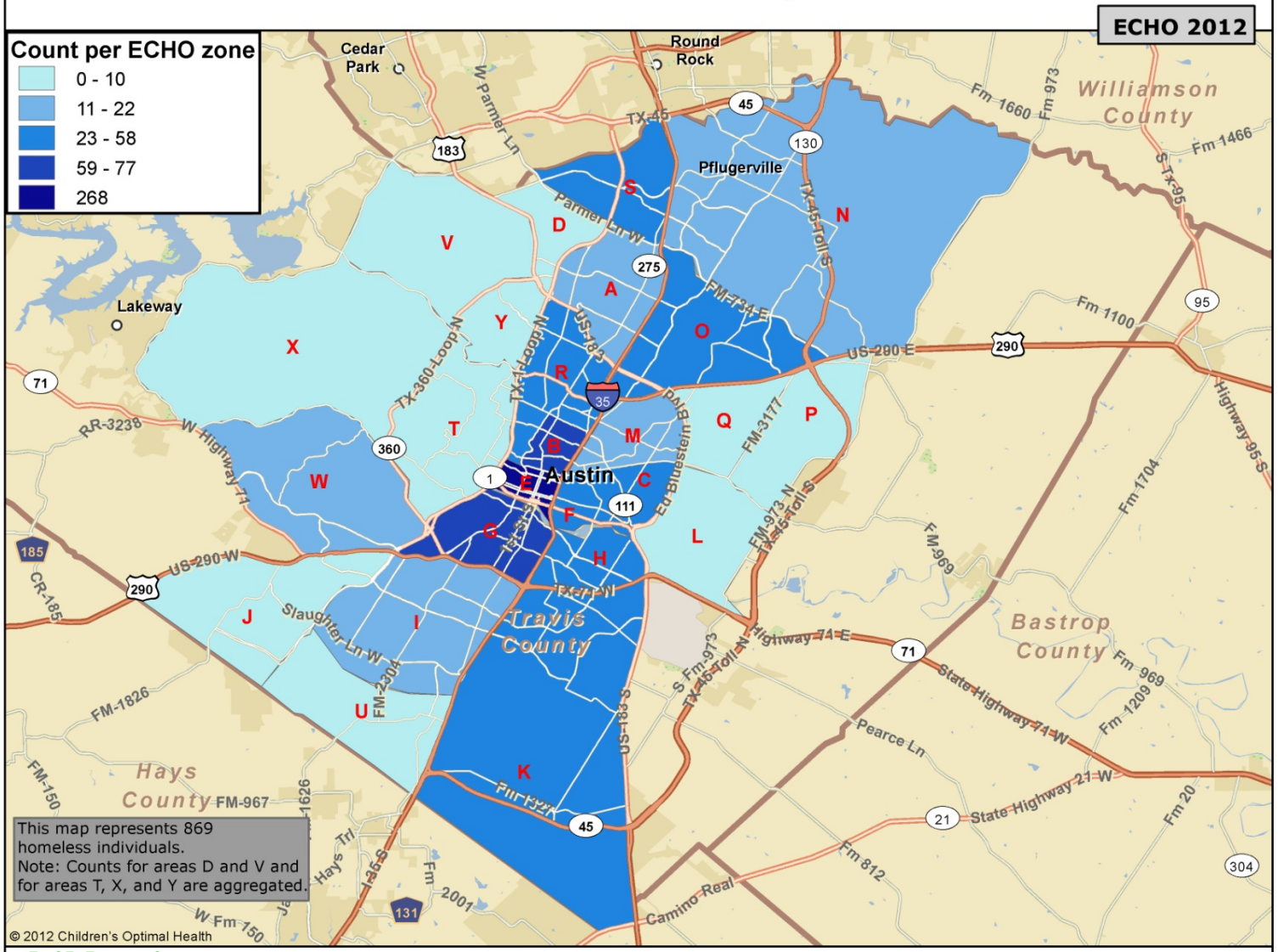
Local

- AHAR
- HIC
- PITC (CoC)
- HMIS
- Community Reporting Metrics
- Advocacy

Community Reporting Metrics

- Reports
- White Papers
  - Strategy /Planning
  - Advocacy
  - Fundraising support
- Graphics / GIS

Count of homeless individuals by ECHO Zones



children's optimal health

Maps produced by Children's Optimal Health display visual correlations among multiple layered datasets. They do not represent cause and effect relationships.

Data Sources:
ECHO 2012;
ESRI 2011;

Miles
0 2 4 6 8

N

Mohan Rao
05/02/2012

Discussion…

Questions?