




DFWHC FOUNDATION

Introduction to Data Initiative and
Uses of the Information and
Quality Services Center

Prepared for: Dr. Hye-Chung Kum,
April 9, 2017



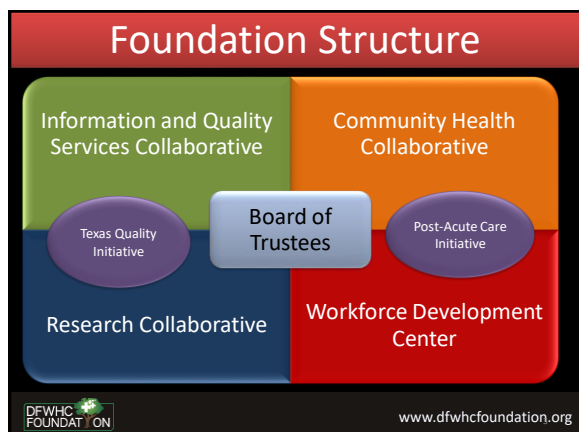
DFWHC FOUNDATION

Values
Integrity, Quality, Neutrality, Collaboration, Learning and Excellence

Mission
Inspire continuous improvement in health and healthcare delivery
through collaboration, coordination, education, research and
communication.

Vision
Be the trusted "go to" resource to inform collective improvement of
health and healthcare outcomes.

DFWHC FOUNDATION www.dfwhcfoundation.org



Relationship and History



Non-profit foundation affiliated with
Dallas-Fort Worth Hospital Council

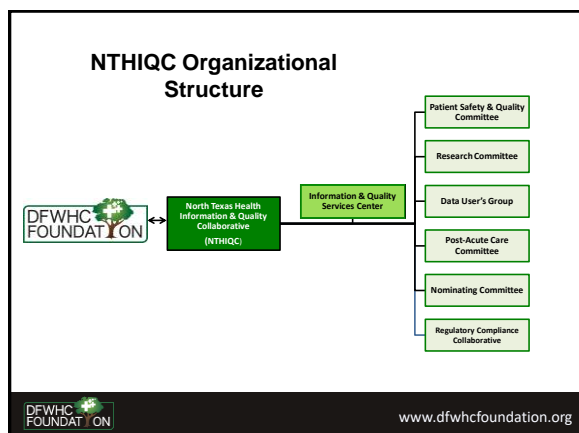
Information & Quality Services Center in
existence for 17 years

Services contracts in place with Business
Associate Agreements

More than 90 healthcare facilities participate
in the IQSC

Data submitted to the Texas Healthcare
Information Collaborative

DFWHC FOUNDATION www.dfwhcfoundation.org



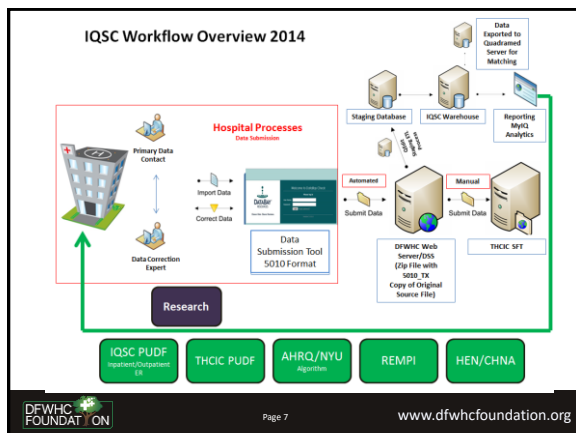
Role of the NTHIQC



The image shows a signpost with five directional signs pointing in different directions, symbolizing guidance and support:

- SUPPORT
- HELP
- ADVICE
- GUIDANCE
- ASSISTANCE

DFWHC FOUNDATION www.dfwhcfoundation.org



DATA INTEGRITY is KEY

INFORMATION & QUALITY SERVICES CENTER
QUALITY ASSURANCE REPORT

DFWHC FOUNDATION

www.dfwfoundation.org

Information

DATA CONTENT AND AVAILABILITY

DFWHC FOUNDATION

www.dfwfoundation.org

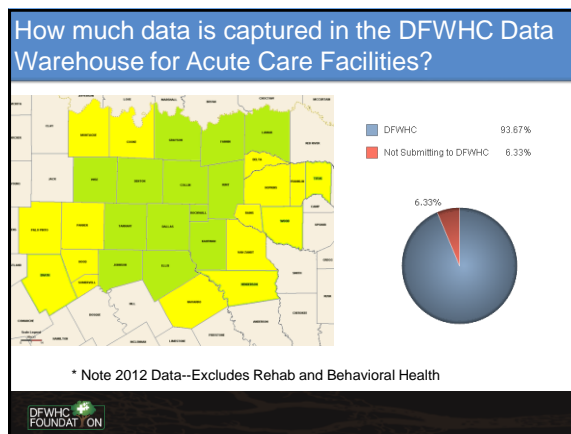
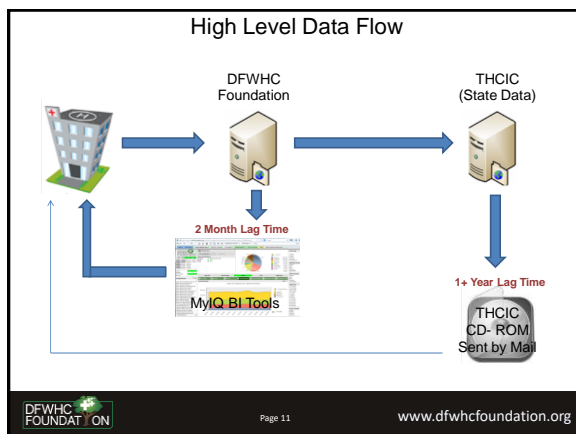
Contributing Facilities and Patients

- 81 Facilities
 - 66 Acute
 - 7 Rehab/Psych
 - 8 Ambulatory Surgery
- 17 counties
- 17 SNF

* Note: Color intensity on map is normalized against the population for the Zip Code

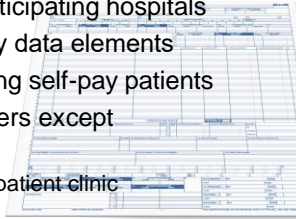
DFWHC FOUNDATION

www.dfwfoundation.org



General Description of Information Submitted

- Claims from all participating hospitals
- No “blinding” of any data elements
- All payers - including self-pay patients
- All patient encounters except
 - outpatient lab
 - hospital-based outpatient clinic



www.dfwhcfoundation.org

Claims Data is the data from the patients bill

Date of Admit

Patient Name &
Demographics

What was found to be Wrong with the patient – Diagnosis Codes

What was done to treat the patient – Procedure Codes

Cost involved in treatment– Revenue Codes

Who treated the patient– Attending & Operating Physicians

Date of Discharge



www.dfwhcfoundation.org

Inpatient Claims Information

- North Texas Data from 2003 to Present
- Texas State Data 2004 to Present
- Case level detail
- Diagnosis codes 1-25
- Procedure codes 1-25
- All Charge Data
(Total Charge only in Texas State Data)
- Physician ID and Name
(Not included in Texas State Data)



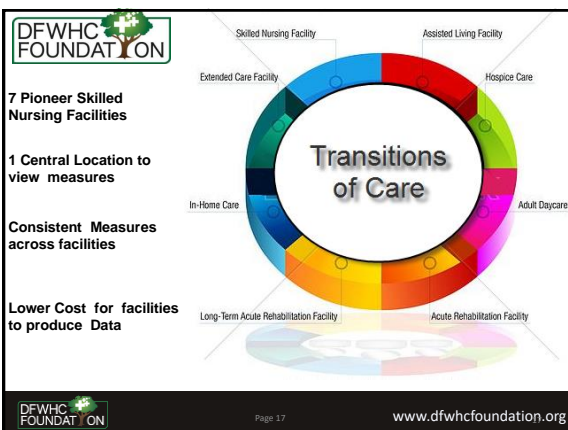
www.dfwhcfoundation.org

Outpatient Claims Information

- North Texas Data from 2006 to Present
 - 44 volunteer hospitals 2006 -2009
 - All Facilities beginning Q4 2009
- Case level detail
- Diagnosis codes 1-25
- Procedure codes 1-25
- All Charge Data



www.dfwhcfoundation.org



Page 17

www.dfwhcfoundation.org

Skilled Nursing MDS File


- CMS Minimum Data Set File
- Patient Assessment Data
- Diagnosis Codes
- Patient Demographics
- Clinical Information
- More than 1000 data elements
- Data Collection just begun production in 2015
- Still refining and learning dataset




www.dfwhcfoundation.org

Outpatient Claims Information
Unique to DFWHC Foundation


- ✓ Physician ID and Name
- ✓ ER Encounters with NYU Algorithm back to 2006
- ✓ Observation, GI and Cardiology Encounters
- ✓ Skilled Nursing Facility MDS File



DFWHC FOUNDATION  www.dfwhcfoundation.org

Regional Enterprise Master Patient Index (REMPI)


- Probabilistic electronic tool that matches patient encounters across hospitals and systems when applied to the Information and Quality Services Center Data Set
 - REMPI Number = Medical Record Number (MRN)
 - 1 REMPI Number Per Patient w/Multiple Encounters
- **Benefits**
 - Post Discharge Mortality Analysis (With SSA Death Master)
 - Readmission Analysis (across all Hospitals in the region)
 - ED Frequent Flyer Analysis (across all Hospitals in the region)


DFWHC FOUNDATION  www.dfwhcfoundation.org

TXI

Texas Quality Initiative

- Regional STS Certified Clinical Data Registry
- > 90% of North Texas CABG and AVR Encounters
- REMPI Matching to Claims Warehouse Information



DFWHC FOUNDATION  www.dfwhcfoundation.org



Knowledge

USES OF INFORMATION AND BUSINESS INTELLIGENCE TOOLS

DFWHC FOUNDATION  www.dfwhcfoundation.org

State Data Vs. DFWHC Foundation Data

DFWHC Foundation	THCIC (State Data)
<ul style="list-style-type: none"> • Faster <ul style="list-style-type: none"> – Takes 2 months for the data to be available in most cases • More Data <ul style="list-style-type: none"> – ED Data back to 2006 – Physician Field not blinded • Approximately 94% of all Inpatient Claims are in the DFWHC Data Warehouse for North Central Texas 	<ul style="list-style-type: none"> • Bigger Area Covered <ul style="list-style-type: none"> – 99% of all Inpatient Claims – All of Texas represented • The official Data record <ul style="list-style-type: none"> – All facilities are required to certify their data • Slower <ul style="list-style-type: none"> – Takes about 1 year for the data to become available • Can be less accurate <ul style="list-style-type: none"> – If an issue is found in the data after certification the State will not change the data – Only Partial ED Data

DFWHC FOUNDATION  www.dfwhcfoundation.org

Business Intelligence

- ✓ **Quality Metrics** – Hospital Acquired Condition and AHRQ Measures
- ✓ **Improvement of Cardiovascular Services**
- ✓ **Readmission Analyses**
 - ER “Frequent Flyer” Reports
- ✓ **Market segment assessments** – by service line, physician and geography
- ✓ **Community Health Needs Assessments and Regional Community Health Improvement Reporting**
- ✓ **Grants/Research**
- ✓ **Compliance and Duplicates**



DFWHC FOUNDATION  www.dfwhcfoundation.org

Enhanced Data

NYU Algorithm– Non-Emergent Encounters

Algorithms to Measure Quality

AHRQ Quality Data

Readmission Quality Data




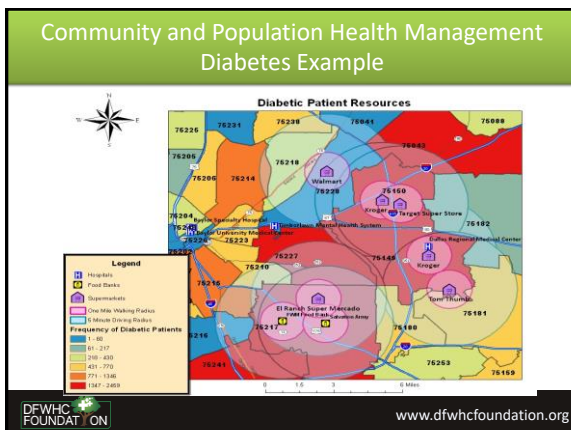
Taking Data to the Next Level
Population Health, Research,
Physician Analytics

DFWHC FOUNDATION  www.dfwhcfoundation.org

Examples: Community and Population Health Management

- Uses Now and Contemplated
 - Diabetes
 - Congestive Heart Failure
 - Patient Migration
 - Emergency Room Analysis
 - Form 990 Analyses
 - 1115 Waiver Metrics

DFWHC FOUNDATION  www.dfwhcfoundation.org



HEALTHY NORTH TEXAS

www.healthyntexas.org

HEALTHY NORTH TEXAS

HOME EXPLORE DATA SEE HOW WE COMPARE LOCATE RESOURCES & FUNDING LEARN MORE

View Community Indicators
Generate a Report
Learn More about Community Health Coalitions
Use the CHS Guide


Healthy North Texas is a web-based source of community health and population data. We invite planners, policy makers, and community members to use the site as a tool for community assessment, strategic planning, identifying best practice for improvement, collaboration and advocacy.

Indicator Data by County Demographic Data by County Topic Centers

DFWHC FOUNDATION  www.dfwhcfoundation.org

Grants and Research – Partial List


- Cardiac Research- UTSW Heart Study
- VTE – Baylor and Sanofi Aventis
- Injury Prevention Center and Genesis – Domestic Abuse and Child Endangerment
- Breastfeeding Initiative in the Workplace
- Abdominal Aortic Aneurysms Registry – Baylor Research Institute
- Tarrant County United Way Aging Study
- EPA and ER Admission Study – Emory and Georgia Tech
- Readmission Studies (multiple with local partners)
- Trauma studies – Parkland/UTSW
- Cardiovascular Surgery Research (3 projects) – Baylor Research Institute
- Multiple submitted studies through UNTHSC
- Hospital Engagement Network CMS Contractor

DFWHC FOUNDATION  www.dfwhcfoundation.org

Contacts

Kristin Jenkins
kjenkins@dfwhcfoundation.org

**Dallas-Fort Worth Hospital Council
Education and Research Foundation**

DFWHC FOUNDATION  www.dfwhcfoundation.org