MHA: Strategic Quality
What’s Up Wednesday|Lunch and Learn
Your clinical quality, process improvement resource

Jessica Stultz, Director of Clinical Quality
October 4, 2017
October 2017

- Community Health Needs Assessment
- Basic Data Analytics Using Excel
- Missouri ZIP Code Health Rankings
- Strategic Quality Initiatives Updates
- Resources and Upcoming Events
Community Health Needs Assessment

Stephen Njenga, Director of Performance Measurement Compliance
What is a CHNA?

• A community health needs assessment is a document compiling the results of a process, including community representatives, that evaluates the health needs of the community the hospital facility serves.

The CHNA is a process, but the process, conclusions and responses must be thoroughly documented.
Health Policy Brief

Nonprofit Hospitals’ Community Benefit Requirements. Under the Affordable Care Act, many nonprofit hospitals must meet new requirements to retain their tax-exempt status.

IRS
The Affordable Care Act added 501(r) to the Internal Revenue Code. This provided that hospital organizations will not be treated as tax-exempt under 501(c)(3) unless they meet certain requirements. All of the provisions apply to taxable years beginning after March 23, 2010, except the Community Health Needs Assessment (CHNA).

- Establish written financial assistance and emergency medical care policies
- Limit amounts charged for emergency or other medically necessary care to individuals eligible for assistance under the hospital's financial assistance policy
- Make reasonable efforts to determine whether an individual is eligible for assistance under the hospital’s financial assistance policy before engaging in extraordinary collection actions against the individual
- Conduct a Community Health Needs Assessment and adopt an implementation strategy at least once every three years
  - A $50,000 excise tax will be imposed on a hospital that fails to meet the CHNA requirements with respect to any taxable year.
Final Regulations — December 2014

The IRS Final Regulations issued in December 2014 are consistent with earlier guidance issued by the IRS in April 2013. However, they include the following clarifications:

• Expands examples of health needs to include preventing illness and addressing the social determinants of health
• Gives hospitals flexibility if they are unable to obtain required community input
Final Regulations — December 2014

• Adds requirement to use community input in setting priorities as well as in the assessment process
• Requires that CHNA documentation must include evaluation of impact of any actions that were taken to address significant health needs since the previous assessment
• The requirement that implementation strategies include a plan to evaluate planned actions was deleted from the final rule, but the strategy still must include anticipated impact of planned actions
Transparency and Accountability

IRS

<table>
<thead>
<tr>
<th>Part I</th>
<th>Financial Assistance and Certain Other Community Benefits at Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1a</td>
<td>Did the organization have a financial assistance policy during the tax year? If “No,” skip to question 6a.</td>
</tr>
<tr>
<td>1b</td>
<td>If “Yes,” was it a written policy?</td>
</tr>
<tr>
<td>2</td>
<td>If the organization had multiple hospital facilities, indicate which of the following best describes application of the financial assistance policy to its various hospital facilities during the tax year.</td>
</tr>
<tr>
<td></td>
<td>□ Applied uniformly to all hospital facilities</td>
</tr>
<tr>
<td></td>
<td>□ Generally tailored to individual hospital facilities</td>
</tr>
<tr>
<td>3</td>
<td>Answer the following based on the financial assistance eligibility criteria that applied to the largest number of the organization’s patients during the tax year.</td>
</tr>
<tr>
<td>3a</td>
<td>a. Did the organization use Federal Poverty Guidelines (FPG) as a factor in determining eligibility for providing free care? If “Yes,” indicate which of the following was the FPG family income limit for eligibility for free care:</td>
</tr>
<tr>
<td></td>
<td>□ 100% □ 150% □ 200% □ Other %</td>
</tr>
<tr>
<td>3b</td>
<td>b. Did the organization use FPG as a factor in determining eligibility for providing discounted care? If “Yes,” indicate which of the following was the family income limit for eligibility for discounted care:</td>
</tr>
<tr>
<td></td>
<td>□ 200% □ 250% □ 300% □ 350% □ 400% □ Other %</td>
</tr>
<tr>
<td></td>
<td>c. If the organization used factors other than FPG in determining eligibility, describe in Part VI the criteria used for determining eligibility for free or discounted care. Include in the description whether the organization used an asset test or other threshold, regardless of income, as a factor in determining eligibility for free or discounted care.</td>
</tr>
<tr>
<td>4</td>
<td>Did the organization’s financial assistance policy that applied to the largest number of its patients during the tax year provide for free or discounted care to the “medically indigent”?</td>
</tr>
<tr>
<td>5a</td>
<td>Did the organization budget amounts for free or discounted care provided under its financial assistance policy during the tax year?</td>
</tr>
<tr>
<td>5b</td>
<td>b. If “Yes,” did the organization’s financial assistance expenses exceed the budgeted amount?</td>
</tr>
<tr>
<td>5c</td>
<td>c. If “Yes” to line 5b, as a result of budget considerations, was the organization unable to provide free or discounted care to a patient who was eligible for free or discounted care?</td>
</tr>
<tr>
<td>6a</td>
<td>Did the organization prepare a community benefit report during the tax year?</td>
</tr>
<tr>
<td>6b</td>
<td>b. If “Yes,” did the organization make it available to the public?</td>
</tr>
</tbody>
</table>

Complete the following table using the worksheets provided in the Schedule H instructions. Do not submit these worksheets with the Schedule H.
Quick Facts About CHNAs

• The community health needs assessment must be made widely available to the public.

• An action plan must be developed by the hospital that identifies how the assessment findings are being implemented in a strategic plan.

• If the findings are not being utilized in a strategic plan, documentation must be included as to why they are not being addressed at this time.
BRIEF

IRS revokes hospital nonprofit status for the first time
CHNA Process
CHNA Guidance

1. Define the community
2. Identify partners
3. Gather available data
4. Seek community perspective
5. Aggregate data
6. Analyze and prioritize
7. Document and disseminate
8. Adopt and implement a plan to address issues
Community Health

- Socioeconomic (e.g., Racial, Income Inequities)
- Safety (e.g., Homicide Rate, Motor Vehicle Crash Death Rate)
- Health Behaviors (e.g., Smoking, Obesity, Binge Drinking)
- Health Care Access (e.g., Primary Care, Clinics)
- Safety and Resiliency

COMMON GOALS

Hospital Utilization

- Preventable Hospitalizations (e.g., Diabetes, Asthma)
- Readmissions (e.g., CHF, COPD)
- Service Lines
- Health Care Access (e.g., Primary Care, Clinics)
- Other Factors ...

POPULATION HEALTH STRATEGY

BETTER HEALTH...BETTER CARE...LOWER COSTS
Readmissions - Community Health

The Community

Providers across the continuum of care
- Acute care hospitals
- Clinics
- Home health/hospice organizations
- Long-term care facilities
- Assisted living facilities
- Local public health departments
- Patients and/or patient advocates
- Other community partners

Evidence from Medicare's Quality Improvement Organizations (QIOs), the Institute for Healthcare Improvement (IHI) and AHRQ suggests that **enhancing post-acute follow up can reduce preventable readmissions.**

Here, the discharge planner or care coordination nurse plays a critical role in encouraging engagement when the patient leaves hospital care.
How to Identify Community Health Needs

- Prior CHNA
- Secondary Data
- Community Surveys
- Hospital Data
- Key Stakeholder Interviews
- Focus Groups
Criteria for Setting Priorities

- IRS requirement: Hospitals are required to have a prioritization methodology for the issues identified in their CHNA.

<table>
<thead>
<tr>
<th>Criteria</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Magnitude of Problem</td>
<td>The health need affects a large number of people in the community.</td>
</tr>
<tr>
<td>Severity of the Problem</td>
<td>The health need has serious consequences (morbidity, mortality and/or economic burden) for those affected.</td>
</tr>
<tr>
<td>Health Disparities</td>
<td>The health need disproportionately impacts the health status of one or more vulnerable population groups.</td>
</tr>
<tr>
<td>Community Assets</td>
<td>The community can make a meaningful contribution to addressing the health need because of its relevant expertise and/or assets as a community, and because of an organizational commitment to addressing the need.</td>
</tr>
<tr>
<td>Ability to Leverage</td>
<td>Opportunity to collaborate with existing community partnerships working to address the health need, or to build on current programs, emerging opportunities, etc.</td>
</tr>
</tbody>
</table>
CHNA Implementation Plan

1. Planning for the implementation strategy
2. Developing goals and objectives per the priority issues
3. Consider approaches to address prioritized needs
4. Select approaches
5. Integrate the implementation strategy accordingly
6. Develop a written implementation strategy
7. Adopt and report the implementation strategy
8. Update and sustain the implementation strategy
# CHNA Implementation Plan Template

## Community Health Improvement Implementation Plan – Diabetes

<table>
<thead>
<tr>
<th>Strategies to Achieve Goal</th>
<th>Specific Actions to Achieve Strategies</th>
<th>Specific Partners and Roles for Each Strategy</th>
<th>Specific Three-Year Process Measure(s) for Each Strategy</th>
<th>Specific Three-Year Outcome Measures for Strategies (should align with SMART Goal for Health Issue)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Example of key strategies</td>
<td>Example of key actions</td>
<td>Example of key partners</td>
<td>Example of key process measures</td>
<td>Example of key outcome measures</td>
</tr>
<tr>
<td>Promotion of an active lifestyle with weight reduction or maintenance, access to low-cost fitness classes and sponsorship of community walking/running/biking events for individuals and families</td>
<td>Sponsor annual day of dance community event, promoting fun exercise options and free screenings, reaching at least 1,000 attendees</td>
<td>Medical group physicians, American Heart Association, American Diabetes Association, Health department, Area employers, i.e., hospitals, schools and other employers as needed, Chamber of Commerce, County government</td>
<td>Increased level of physical activity, Increased access to screenings, Increased fitness events, Increased weight management educational offerings</td>
<td>Decreased BMI among adults leading to better health outcomes related to morbidity, mortality, life expectancy, health care expenditures, health status and functional limitations</td>
</tr>
<tr>
<td>Resources to the community related to weight management are provided, along with community education classes promoting a healthy lifestyle to impact risk reduction for chronic conditions associated with obesity</td>
<td>Offer low-cost weight management courses three times/year with participants' average weight loss of at least 3%</td>
<td>Area employers, i.e., hospitals, schools and other employers as needed</td>
<td>Please include baseline and target for each strategy.</td>
<td>Please include baseline and target for each outcome.</td>
</tr>
</tbody>
</table>

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**Contributing FACTORS to Health Issue #1 (including social determinants):** Lifestyle and diet-related (environmental factors/food/education/community and social context factors)

**Three-Year GOAL for Improvement (SMART objective):** Specific, Measurable, Achievable, Realistic, Time bound

Example: Decrease the percentage of adults in [Missouri county] reporting a BMI >30 from 20% to 19.5% by 2019.

**BUDGET for Health Issue #1 (consider direct and indirect costs):** Money allocated by hospital for this health issue.
### CHNA Plan — Working Document

#### Health Issue: Obesity and Sedentary Lifestyle — Diabetes

**SMART Goal:**
Example: Decrease the percentage of adults in [Missouri county] reporting a BMI >30 from 20% to 19.5% by 2019.

**Strategy:** Promote an active lifestyle with weight reduction or maintenance, access to low-cost fitness classes and sponsorship of community walking/running/biking events for individuals and families. Resources to the community related to weight management are provided, along with community education classes promoting a healthy lifestyle to impact risk reduction for chronic conditions associated with obesity.

<table>
<thead>
<tr>
<th>Activities/Tactics</th>
<th>Person Responsible</th>
<th>Met or Not Met</th>
<th>Barriers Identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Activities to be completed in 1-3 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Activities to be completed in 3-6 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activities to be completed in 6-9 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
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<tr>
<td>3.</td>
<td></td>
<td></td>
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<tr>
<td>Activities to be completed in 9-12 months</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
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<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 2 activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Year 3 activities</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Partners involved in this goal:** Medical group physicians, American Heart Association, American Diabetes Association, health department, area employers, Chamber of Commerce, county government
Data Analytics - Excel 101

Using data to drive improvements
Control Chart Analysis

- To analyze the control charts, it is important to remember that the data is represented over six standard deviations. There are three standard deviations from the mean line to the upper control limit and three from the mean to the lower control limit. To help analyze the charts, it is important to divide the chart area into six sections; A, B, and C representing the standard deviations.
Control Chart Zones

![Diagram of Control Chart Zones]

- **UCL=41.9**
- **LCL=10.6**
- **Average=26.2**

**Zones:**
- ZONE A
- ZONE B
- ZONE C

**Day Number:**
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25
Resources

1. Healthy People 2020

2. “Additional Requirements for Charitable Hospitals; Community Health Needs Assessments for Charitable Hospitals; Requirement of a Section 4959 Excise Tax Return and Time for Filing the Return; Final Rule,” 79 FR 78953 [December 31, 2014], pp. 78953-79016


5. Internal Revenue Service – IRS

6. Missouri Hospital Association
Stephen Njenga, MPH, MHA, CPHQ, CPPS
Director of Performance Measurement Compliance
Missouri Hospital Association
snjenga@mhanet.com
573/893-3700, ext. 1325
Missouri ZIP Code Health Rankings

Deriving Sub-County Level Population Health Indices with Hospital Discharge Data Using the County Health Rankings Framework

Mat Reidhead, Vice President of Research and Analytics
October 4, 2017
Project Background

• County Health Rankings & Roadmaps 2015 Research Grant
  – Washington University School of Medicine and Missouri Hospital Association
  – Advisory committee: academic/health disparities, community benefit, health foundation, local public health

• Project Aim:
  – Extend CHR&R conceptual model to the ZIP-level using widely-available data
    • Inform Community Health Needs Assessments
    • Target scarce community intervention resources
County Health Rankings & Roadmaps

- County-level health ranking system for 50 states and DC
- Population health model causal order:
  - Health policies and programs result in health factors that determine health outcomes
- Rankings confined to intrastate-level
  - No national/interstate rankings
- Hundreds of measures compiled from 20+ national data sources into health factors and health outcomes domains
  - CDC, Census, BLS, USDA, FBI, HRSA, Dartmouth, etc.
- Overarching Goal: Promote action by raising awareness of multiple factors influencing health differently across counties
  - Prioritize → Intervene → Evaluate → Repeat
CHR&R Measurement

Measures → Model → Standardize & Weight → 2 Ranked Domains

- **Z-Scores**
  \[ Z = \frac{Z_i - \bar{Z}}{\sigma} \]

- **Weights**
  - 50%
  - 50%
  - 30%
  - 20%
  - 40%
  - 10%
Our Approach

• Based on underlying CHR&R population health model

• Uses data available at ZIP-level
  – 3yrs hospital IP/OP/ED discharges (health factors)
  – Nielsen-Claritas (socioeconomic/demographic/environmental factors)

• ZIP-level indices fit to CHR&R domains

• Weighted aggregation at county-level for comparison to CHR&R results

• Scalable to other states
Data & Methods

• Data
  – HIDI FY 2012-2014 Inpatient, Outpatient & ED Discharges for Missouri Residents
    • 36,176,000 Records
    • Health Factors & Outcomes Identified with diagnosis, CCS, MDC, Disposition & Expected Payer Codes
    • Aggregated at County & ZIP Levels
  – Nielsen-Claritas 2015 PopFacts Premier for Missouri Counties and ZIP Codes
    • Health Factors—Socioeconomic, Clinical Access & Environmental Factors

• Methods
  – Candidate variables screened evaluated at county-level with pairwise correlations and stepwise regression
  – Model refined using principle components analysis & multilevel modeling
    • Standardized ZIP data → principal components → multilevel regression * ZIP to county weighting file
  – Derived county-level results compared with 2015 CHR&R Ranks with using pairwise correlation and weighted kappa methods
  – Proportion of variation at sub-county level assessed with model-based intra-class correlations and visually depicted using mapping methods
Comparative Results: County to County

**Health Factors:**
- Weighted Kappa = 0.66
- Correlation = 0.87
- Percent of Counties in:
  - Same Quintile = 48%
  - Within One Quintile = 93%

**Health Outcomes:**
- Weighted Kappa = 0.54
- Correlation = 0.83
- Percent of Counties in:
  - Same Quintile = 49%
  - Within One Quintile = 83%
Comparative Results: County to ZIP Code

Sub-County Variation:
• Approximately half of the variation in derived health factors and outcomes scores observed at the ZIP code level.

Health Factors:
• 38.9% of ZIP codes in same quintile as parent county.
• 15.9% of ZIP codes in top two CHR&R county quintiles in bottom two ZIP quintiles.
• 18.2% of ZIP codes in bottom two CHR&R county quintiles in top two ZIP quintiles.

Health Outcomes:
• 36.4% of ZIP codes in same quintile as parent county.
• 20.5% of ZIP codes in top two CHR&R county quintiles in bottom two ZIP quintiles.
• 22% of ZIP codes in bottom two CHR&R county quintiles in top two ZIP quintiles.
Comparative Results: County to ZIP Code

Sub-County Variation:
- Approximately half of the variation in derived health factors and outcomes scores observed at the ZIP code level

Health Factors:
- 38.9% of ZIP codes in same quintile as parent county.
- 15.9% of ZIP codes in top-two CHR&R county quintiles in bottom-two ZIP quintiles.
- 18.2% of ZIP codes in bottom-two CHR&R county quintiles in top-two ZIP quintiles.

Health Outcomes:
- 36.4% of ZIP codes in same quintile as parent county.
- 20.5% of ZIP codes in top-two CHR&R county quintiles in bottom-two ZIP quintiles.
- 22% of ZIP codes in bottom-two CHR&R county quintiles in top-two ZIP quintiles.
Sub-County Variation: Rural and Urban Examples

### Rural Franklin County, Missouri

ZIP Ranking Range: 158 to 828 (of 976)

### Top-Ranked ZIP Codes

<table>
<thead>
<tr>
<th>ZIP</th>
<th>Name</th>
<th>Statewide Rank of 976</th>
<th>Top Health Determinant</th>
<th>Top Social Determinant</th>
</tr>
</thead>
<tbody>
<tr>
<td>63068</td>
<td>New Haven</td>
<td>158</td>
<td>Smoking</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63055</td>
<td>Labadie</td>
<td>165</td>
<td>Mental Health</td>
<td>Childhood Poverty</td>
</tr>
<tr>
<td>63090</td>
<td>Washington</td>
<td>180</td>
<td>Smoking</td>
<td>Unemployment</td>
</tr>
</tbody>
</table>

### Bottom-Ranked ZIP Codes

<table>
<thead>
<tr>
<th>ZIP</th>
<th>Name</th>
<th>Statewide Rank of 976</th>
<th>Top Health Determinant</th>
<th>Top Social Determinant</th>
</tr>
</thead>
<tbody>
<tr>
<td>63077</td>
<td>Saint Clair</td>
<td>828</td>
<td>Smoking</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63080</td>
<td>Sullivan</td>
<td>810</td>
<td>Mental Health</td>
<td>ED Visits</td>
</tr>
<tr>
<td>63041</td>
<td>Grubville</td>
<td>753</td>
<td>Premature Deaths</td>
<td>Childhood Poverty</td>
</tr>
<tr>
<td>63072</td>
<td>Robertsville</td>
<td>686</td>
<td>Smoking</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63037</td>
<td>Gerald</td>
<td>649</td>
<td>Kidney Disease</td>
<td>Preventable ED Visits</td>
</tr>
<tr>
<td>63060</td>
<td>Lonedell</td>
<td>645</td>
<td>Smoking</td>
<td>Unemployment</td>
</tr>
</tbody>
</table>

Sources: Author’s Calculations, 2016 County Health Rankings, and Roadmaps and U.S. Census Bureau QuickFacts

### Urban St. Louis City & County, Missouri

ZIP Ranking Range: 2 to 964 (of 976)

### Top-Ranked ZIP Codes

<table>
<thead>
<tr>
<th>ZIP</th>
<th>Name</th>
<th>Statewide Rank of 976</th>
<th>Top Health Determinant</th>
<th>Top Social Determinant</th>
</tr>
</thead>
<tbody>
<tr>
<td>63005</td>
<td>Chesterfield</td>
<td>2</td>
<td>Asthma</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63038</td>
<td>Glencoe</td>
<td>4</td>
<td>Asthma</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63040</td>
<td>Grover</td>
<td>5</td>
<td>Asthma</td>
<td>Single Parent Household</td>
</tr>
</tbody>
</table>

### Bottom-Ranked ZIP Codes

<table>
<thead>
<tr>
<th>ZIP</th>
<th>Name</th>
<th>Statewide Rank of 976</th>
<th>Top Health Determinant</th>
<th>Top Social Determinant</th>
</tr>
</thead>
<tbody>
<tr>
<td>63107</td>
<td>North City E.</td>
<td>964</td>
<td>Asthma</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63113</td>
<td>The Ville</td>
<td>963</td>
<td>Asthma</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63115</td>
<td>North City W.</td>
<td>962</td>
<td>Asthma</td>
<td>Unemployment</td>
</tr>
<tr>
<td>63133</td>
<td>Pagedale-Wellston</td>
<td>942</td>
<td>Asthma</td>
<td>Single Parent Household</td>
</tr>
<tr>
<td>63136</td>
<td>Jennings</td>
<td>929</td>
<td>Asthma</td>
<td>Single Parent Household</td>
</tr>
<tr>
<td>63134</td>
<td>Berkeley</td>
<td>914</td>
<td>Asthma</td>
<td>Single Parent Household</td>
</tr>
</tbody>
</table>

Sources: Author’s Calculations, 2016 County Health Rankings, and Roadmaps and U.S. Census Bureau QuickFacts
Peer Review

American Public Health Association, Annual Convention—Presentation (October, 2016)

Journal of Public Health Management & Practice, May 2017

Measuring Subcounty Differences in Population Health Using Hospital and Census-Derived Data Sets: The Missouri ZIP Health Rankings Project

Elna Nagasako, MD, PhD, MPH; Brian Waterman, MPH; Mathew Reidhead, MA; Min Lian, MD, PhD; Sarah Gehlert, PhD, MA, MSW

Abstract

Context: Measures of population health at the subcounty level are needed to identify areas for focused interventions and to support local health improvement activities.

Objective: To extend the County Health Rankings population health measurement model to the ZIP code level using widely available hospital and census-derived data sources.

Design: Retrospective administrative data study

Outpatient, and emergency department discharge encounters (N = 86,674) were observed between the ZIP code-level population health rankings, population health, public health surveillance, small-moments.
Next Steps

• Collaboration with the Missouri Foundation For Health
  – Co-develop an interactive CHNA data platform powered by the University of Missouri, Center for Applied Research and Environmental Systems (CARES) Community Commons engine
Explore MO Health Platform Mockup

- Coming January, 2018
Appendix

- Health Factors and Outcomes domain and subdomain data mapping
Data Map: Health Outcomes

- **CHR&R**
  - Years of Potential Life Lost (NCHS)

- **WU/MHA** (HIDI)
  - Number of hospital deaths before age 75
  - -or- Hospital deaths in years before age 75

- **CHR&R**
  - Self-Reported Health (3x CDC-BRFSS)
  - Low Birthweight (NCHS)

- **WU/MHA** (HIDI)
  - IP/ED/OP hospital utilization
  - Infant LBW/preterm/light for date/malnutrition/growth retardation/immaturity diagnoses
  - Psychiatric/mental health related diagnoses
  - Chronic condition diagnoses (11x)
Data Map: Health Factors—Behaviors

CHR&R
- Adult Smoking (CDC-BRFSS)
- Excessive Drinking (BRFSS)
- STIs (CDC)

WU/MHA (HIDI)
- Primary/secondary smoke diagnoses
- Alcohol-Impaired Driving Deaths (FARS)
- Alcohol/substance abuse diagnoses

CHR&R
- Adult Obesity (CDC)
- Food Environment Index (USDA)
- Physical Inactivity (CDC)
- Access to Exercise (Census)

WU/MHA (HIDI)
- Obesity diagnoses

CHR&R
- Teen Births (NCHS)

WU/MHA (HIDI)
- STI diagnoses (8x)
- Teen births
Data Map: Health Factors—Clinical Care

CHR&R
- Uninsured (Census)
- PCPs & Dentists (HRSA)
- MHPs (CMS)

WU/MHA (HIDI)
- Potentially preventable ED visits (HIDI/NYU)
- Uninsured hospital utilization (HIDI)
- After-hour ED visits (HIDI)
- Civilian population employed in HC practitioner/technician sector (Nielsen)

CHR&R
- Preventable hospital stays (Dartmouth)
- Diabetic monitoring (Dartmouth)
- Mammography Screening (Dartmouth)

WU/MHA
- Prevention Quality Indicators (PQIs x14) (HIDI/AHRQ)
- High-risk mammography diagnoses (HIDI)
Data Map: Health Factors—SES Factors

**CHR&R** (Census)
- Violent crimes (FBI)
- Injury deaths (CDC)

**WU/MHA** (HIDI)
- Assault diagnoses
- Deaths with injury diagnoses

**CHR&R** (Census)
- Children in single-parent households
- Social associations

**WU/MHA** (Nielsen)
- Average household size
- Female headed households

**CHR&R** (Census)
- HS Grad; Some College

**WU/MHA** (Nielsen)
- Age 25+ <HS; HS Grad; Some College

**CHR&R** (BLS)
- Unemployment

**WU/MHA** (Nielsen)
- Unemployment
- Blue collar occupation

**CHR&R** (Census)
- Income inequality
- Income inequality = white median HHY : black median HHY (Nielsen)

**WU/MHA** (Nielsen)
- Median household income
- Median home value
- Rate of Medicaid hospital utilization (HIDI)
Data Map: Health Factors—Environmental

**CHR&R**
- Air pollution-particulate matter (NCES)
- Drinking water violations (SDWIS)
- **WU/MHA** (HIDI)
  - Hospital utilization for asthma

**CHR&R**
- Severe housing problems (CHAS)
- Drive alone to work (Census)
- Long commute driving alone (Census)
- **WU/MHA** (Nielsen)
  - Vacant housing units
  - Renter occupied housing units
Questions?
Mat Reidhead, M.A.
Vice President of Research and Analytics
Hospital Industry Data Institute
mreidhead@mhanet.com
573/893-3700, ext. 1331
2017 Key Strategies and Initiatives Update
# MHA Project Timelines

<table>
<thead>
<tr>
<th>Project</th>
<th>Timeline</th>
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<tbody>
<tr>
<td>HIIN PROGRAM</td>
<td>Oct-16</td>
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<tr>
<td>ASP Immersion Project</td>
<td>Nov-16</td>
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<tr>
<td>MHA SafeCulture Accelerator</td>
<td>Dec-16</td>
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<tr>
<td>Project</td>
<td>Jan-17</td>
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<tr>
<td>HLQAT Leadership Culture Survey</td>
<td>Feb-17</td>
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<tr>
<td>Readmissions Immersion Project</td>
<td>Mar-17</td>
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<td>Sepsis Immersion Project</td>
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<td>LEAN/Six Sigma Immersion Project</td>
<td>May-17</td>
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<td>STRIVE</td>
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<td>FLEX</td>
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**TO BE DETERMINED**
Readmissions Reduction/Care Transitions Immersion Project – Cohort 2

- Project timeline — August 15, 2017 – September 7, 2018
- Hospitals committed — 12

<table>
<thead>
<tr>
<th>Hospital Name</th>
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<tbody>
<tr>
<td>Cooper County Memorial Hospital</td>
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<tr>
<td>Golden Valley Memorial Healthcare</td>
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<tr>
<td>Hannibal Regional Hospital</td>
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<tr>
<td>Mercy Hospital Washington</td>
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<tr>
<td>Poplar Bluff Regional Medical Center</td>
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<td>Samaritan Hospital</td>
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<tr>
<td>Southeast Hospital</td>
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<tr>
<td>Scotland County Hospital</td>
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<tr>
<td>Mercy Hospital St. Louis</td>
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<tr>
<td>Citizens Memorial Hospital</td>
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<tr>
<td>CoxHealth</td>
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<tr>
<td>Perry County Memorial Hospital</td>
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</tbody>
</table>
Sepsis Immersion Project - Cohort 2

- Registration — October 2–November 3
- Project timeline — November 29, 2017–September 18, 2018
- Limited to 20 Missouri hospital participants
- HIIN-participating hospitals receive complimentary registration
- Non-HIIN-participating hospitals can contract through Quality Works® to participate according to the fee schedule
  - Readiness Assessment
  - Intent to Participate
LEAN Six Sigma Green Belt Project

- Available exclusively to HIIN-participating hospitals
- Informational webinar — October 19
- Application process beginning November 2017
- Topic focused
  - Patient throughput
  - ICU harm reduction
  - Unused medical supplies/eliminating waste
  - Errors in medication reconciliation
Qualaris Audit Tool Projects

- Hand Hygiene
- Culture of Safety Rounding
- Sepsis
- Readmissions/Care Transitions

MHA Overview/Audit Tool Demo
2017 Top 20 Best Practice Recipient for Excellence in Quality Award

- Congratulations goes to Lafayette Regional Health Center!
Monthly Newsletter

Quality News

September 2017

Join the Conversation
Find us on LinkedIn.

Upcoming Events
Excellence in Clinical Care Series — Patient Safety, Quality Improvement, Infection Prevention
Sept. 26-29
Camden on the Lake
Lake Ozark, Mo. Click here to register

In This Issue
MHA Initiatives and Programming Update
Announcements
Resources
Quality Reporting News
Regulatory News
Quality and Population Health News

Spotlight
Health Care-Acquired Infections — Focus on Urine Culture Practices
Urinary tract infections are one of the most common infections, accounting for nearly 10 million health care visits and 100,000 hospitalizations annually. A subset of UTIs — catheter-associated UTIs — account for up to 25 percent of health care-acquired infections, with more than 35,600 events reported by acute care hospitals to the National Healthcare Safety Network in 2013. Three factors often lead to adverse...
MHA Trajectories

“Population Health: Models and Pillars for Success”
The Opioid Crisis

Interactive Toolkit

Understanding the Issue

- Background
- Research

Strategies to Reduce Opioid Misuse

- Prevention
  - Missouri Prevention Resources
  - Prescribing Guidelines: Emergency Department
  - Managing Pain

- Assessment & Treatment
  - Assessment
  - Treatment

- Patient Education
  - Addiction
  - Pain Management
  - Understanding Use and Disposal of Narcotics

- Policy Changes
  - Prescription Drug Monitoring Database
  - Payers
  - Access to Treatment

Website resources
Additional Opioid Resources

- **Unemployment and Opioids, an Unexpected Connection**
- **Overdose Deaths, Hospital Visits and Unfilled Jobs: The Opioid Crisis in Missouri and Kansas**
Additional Opioid Resources

- Opioid Patient Education Flyer #1: Disposal (View Spanish Version)
- Opioid Patient Education Flyer #2: Prescribing (View Spanish Version)
- Opioid Patient Education Flyer #3: Pain Management (View Spanish Version)
Antibiotic Stewardship Program Resources for Small/ Critical Access Hospitals

• The Centers for Disease Control and Prevention published a special implementation guide — Antibiotic Stewardship for Small and Critical Access Hospitals

• On May 15, HRET HIIN presented a webinar focused on antibiotic stewardship in rural hospitals and CAHs. The recording and slides can be found here.
FLEX MBQIP Regional Meetings

- **Thursday, Oct. 5**
  - Hampton Inn
  - Clinton, Mo.
  - Click [here](#) to register

- **Wednesday, Oct. 11**
  - Comfort Inn
  - Chillicothe, Mo.
  - Click [here](#) to register

- **Wednesday, Oct. 18**
  - Holiday Inn Express & Suites
  - Festus, Mo.
  - Click [here](#) to register
Upcoming Educational Opportunity


Featuring:
Brian Uridge, MPA, CPP
Promoting Safe Environments of Care

October 11-13
The Lodge of Four Seasons
Lake Ozark, Mo.
Upcoming Events

95th Annual Missouri Hospital Association Convention & Trade Show

• Tan-Tar-A Resort, Osage Beach
• November 1-3
• Register here
Community Health Needs Assessment Webinar Series

- **Secondary Data Collection & Analysis**
  - Wednesday, October 25
  - 11-11:30 a.m.

- **Community Engagement & Primary Data Analysis**
  - Tuesday, November 7
  - 11-11:30 a.m.

- **Case Study(ies)**
  - Tuesday, November 21
  - 11-11:30 a.m.

- **Compliance/Legal**
  - Tuesday, December 5
  - 11-11:30 a.m.

- **Community Health Implementation, Planning & Deployment**
  - Tuesday, December 19
  - 11-11:30 a.m.
Upcoming Virtual Events

- **PSO Safety: Direct Oral Anticoagulants**
  (Vizient™ PSO members only)
  - Tuesday, October 10
  - 1 p.m.

- **PSO Officer Training: Crew Resource Management**
  (Vizient™ PSO members only)
  - Thursday, October 19
  - 1 p.m.

- **HIIN Huddle**
  - Tuesday, October 24
  - 2 p.m.
Upcoming Virtual Events

• **PSO Safety Webinar: Opioid Safety**  
  (Vizient™ PSO members only)  
  ▶ Wednesday, October 25  
  ▶ 1 p.m.

• **Culture in Action: Developing Meaningful Action Plans with Safety Culture Survey Results**  
  (Presented by Beterra Health, Inc.)  
  ▶ Thursday, October 26  
  ▶ 1 p.m.

• **What’s Up Wednesday**  
  ▶ Wednesday, November 15  
  ▶ Noon
Educational Resources Provided by MHA Health Institute

For additional webinar/seminar opportunities click [here](#)
Thank You for Joining Us!

- Questions?
- See you at noon Wednesday, November 15
  - Sepsis, presented by Jessica Stultz, Director of Clinical Quality
  - Click here to register
Contact Information

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