Community Health Planning: Theory and Practice
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Community Health Assessments

- Data collection and analysis used to identify and prioritize the health needs of a community
- Supports the allocation of resources for program and policies to address the most pressing health needs
- Often required by states of local health departments/health districts
- Required by federal government of not-for-profit hospitals to maintain their 501(c)3 tax-exempt status.

Health Assessments can be Variable

Depends on

- Who is leading the assessment?
  - Public: local health departments, heath districts
  - Private: hospitals or community health centers
- Area assessed
- Perspective of stakeholders engaged in the process
- Availability of secondary data
- Other strategies to obtain data
  - Surveys
  - Focus Groups
- Resources available to conduct the assessment

Process for Conducting a Community Health Assessment

- Identify and engage the stakeholders
- Define the area of analysis
- Identify the resources available to conduct the assessment
- Identify data sources
- Analyze data and identify key issues
- Select priorities
- Develop strategies to address prioritized needs

Defining the Area for Assessment

- Community Health Assessments may be based on
  - Defined geographic boundaries
    - County
    - Cities and towns
    - Zip Codes
  - Less formally defined boundaries
    - Neighborhoods
    - Service areas
    - May target high need populations within an area

Data Collection

- Identify available data
- Determine the geographic level of and years covered by the data
- Data of interest
  - Population demographics
  - Community health status indicators
  - Health care system
  - Education
  - Economic
  - Environmental

Population Demographics

- Total population
- Age distribution
- Education level
- Gender
- Citizenship status
- Language spoken
- Mode of personal transportation
- Per capita income
- Poverty level (100%, 200%)
- Race/ethnicity
- Single parent households

Source of Demographic Data

- Decennial Census
- American Community Survey
  - 1, 3, or 5 years
- http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml
- Summary Charts
  - DP-1 – Profile of General Population and Housing Characteristics (Decennial)
  - DP02 – Selected Social Characteristics
  - DP03 – Selected Economic Characteristics
  - DP04 – Selected Housing Characteristics
  - DP05 – ACS Demographic and Housing Estimates

Community Health Status Indicators

OVERALL OUTCOMES

- Mortality
- Hospitalizations
- Emergency department visits

DATA SOURCES

- State health departments
- Hospitals
- Local health departments/health districts

Community Health Status Indicators (Con't)

MATERNAL AND CHILD OUTCOMES

- Birth outcomes & rates
- Childhood disease hospitalizations/incidences
- Maternal Mortality
- Prenatal care rates
- Vaccination rates

DATA SOURCES

- State health departments
- Hospitals
- Local health departments/health districts

Community Health Status Indicators (Con't)

BEHAVIORS/STATUS

- Behaviors
- Diagnoses
- Exercise/eating
- Health insurance
- Regular source of care

DATA SOURCES

- Behavioral Risk Factor Surveillance Survey (BRFSS)
- Local community health surveys

Availability of Health Care

- Type of health care providers
  - Facilities/agencies
  - Private practitioners
  - Public health
- Location and hours of operation
- Services available
- Shortage Areas
  - HPSAs: http://hpsafind.hrsa.gov/
  - MUAs/MUPs: http://muafind.hrsa.gov/

Barriers to Accessing Health Care Services

- Insurance status
  - Uninsured/underinsured
  - Medicaid eligible
- Provider
  - Lack of providers
  - Hours of providers
  - Cultural differences between population and providers
- Environment
  - Geographic barriers
  - Lack of public transportation

Educational and Economic Data

EDUCATIONAL

- Drop out rate
- Free/reduced lunch
- Graduation rate

DATA SOURCES

- State education departments
- School districts

ECONOMIC

- Employment sectors
- Unemployment rate
- Occupations

DATA SOURCES

- State labor departments
- Workforce improvement boards
- http://www.bls.gov/data/

Environmental Data

- Availability of green space/walkable neighborhoods
- Crime (property and violent)
- Housing stock
- Environmental conditions – smog, run-off
- Motor vehicle speeding/accidents
- Public transportation
- Roads
- Sanitation
- Water supply

SOURCES

- Local health departments/health districts
- Census
- Environmental conservation
- Criminal justice

Useful Data Sources for CHAs

- Area Health Resources File: http://ahrf.hrsa.gov/
- BRFSS: http://www.cdc.gov/brfss/
- County Rankings: http://www.countyhealthrankings.org/
- National Center for Health Statistics: http://www.cdc.gov/nchs/
- New York State Prevention Agenda: http://www.health.ny.gov/prevention/prevention_agenda/2013-2017/?utm_source=doh&utm_medium=hp-button&utm_campaign=prev_agenda

ARHN Case Study

Identifying and Engaging the Stakeholders

Round 1

- Focused on rural public health reporting needs
- Used committee structure to make decisions and share information
- Conducted telephone survey of area residents
- Identified transportation and EMS services as high need
- Informed various stakeholders of process – including legislators

Round 2

- Increased involvement of hospitals and community based organizations
- Conducted kickoff meeting of over 30 organizations
- Community based focus groups facilitated by committee members

Round 3

- Created Community Health Planning Committee includes four subcommittees: Public Health, Hospitals, Community Based groups, and Data

Community Engagement

- Key is building trust and allowing the Committee to work autonomously
- Movement from just partnering and information sharing to collaboration … creating something by working together.
- Open to new players at the table, realizing we are working in a turbulent system
- All must actively participate, share information, resources, comments, etc.
- Balance between structure to achieve the work at hand and flexibility to ensure all are validated and respected
- Requires skill to manage discussion, research gaps in information/knowledge in order to reach consensus

Data Collection

- Qualitative - Community Stakeholder Survey
  - Surveyed community service providers regarding the populations they serve to identify areas of need
- Quantitative – Multiple Data Sources, formal analysis by CHWS
  - NYSDOH (Community Health Indicator Reports, BRFSS)
  - NYSDOCJ Crime
  - Traffic Safety
  - U.S. Department of Agriculture
  - County Rankings
- Other stakeholder input

Methodology for Identifying Most Pressing Needs

- Compared against prevention agenda, upstate New York, or New York State benchmarks.
- Determined percentage of those worse than the benchmark based on quartile rankings.
- Determined percentage of those in the third or fourth quartiles, i.e., 50% or worse than their respective benchmarks.
- Assessment based on both
  - Focus areas
  - Individual data elements

Injuries, Violence & Occupational Health Analysis

All ARHN Counties: Revised 4/3/2013 Page 2 of 17	Average Rate, Ratio or Percentage for the Listed Years	Comparison Regions/Data			Comparison to Benchmark	Quartile Ranking				Quartile Score	Severity Score
		Upstate NY	New York State	2017 Prevention Agenda Benchmark		Q1	Q2	Q3	Q4		
Focus Area: Injuries, Violence, and Occupational Health											
Prevention Agenda Indicators											
1. Rate of Hospitalizations due to Falls for Ages 65 Plus per 10,000, '08-10	208.4	215.8	202.1	**204.6**	Worse	X					
2. Rate of ED Visits due to Falls for Children Ages 1 - 4 per 10,000 Children Ages 1 - 4, '08 - 10	515.5	511.9	476.4	**429.1**	Worse	X					
3. Rate of Assault-Related Hospitalizations per 10,000 Population, '08-10	1.6	2.7	4.7	**4.3**	Meets/Better						
4. Ratio of Black, Non-Hispanic Assault-Related Hospitalizations to White, Non-Hispanic Assault Related Hospitalizations, '08-10	N/A	N/A	7.28	**6.69**	Less than 10						
5. Ratio of Hispanic/Latino Assault-Related Hospitalizations to White, Non-Hispanic Assault Related Hospitalizations, '08-10	N/A	N/A	3.00	**2.75**	Less than 10						
6. Ratio of Assault-Related Hospitalizations for Low-Income versus non-Low Income Zip Codes, '08-10	N/A	N/A	3.26	**2.92**	Less than 10						
7. Rate of ED Occupational Injuries Among Working Adoloscents Ages 15 - 19 per 10,000 Population Ages 15 - 19, '08 - 10	56.1	51.8	36.7	**33.0**	Worse			X			
Quartile Summary for Prevention Agenda Indicators						2	0	1	0	42.9%	33.3%

Injuries, Violence & Occupational Health Analysis

Other Indicators											
1. Rate of Hospitalizations for Falls for Children Ages Under 10 per 100,000 Children Ages Under 10 , '08-10	6.5	**8.5**	10.0	N/A	Meets/Better						
2. Rate of Hospitalizations for Falls for Children Ages 10 - 14 per 100,000 Children Ages 10 - 14, '08-10	4.2	**6.1**	7.1	N/A	Meets/Better						
3. Rate of Hospitalizations for Falls for Individuals Ages 15 - 24 per 100,000 Individuals Ages 15 - 24, '08-10	6.3	**6.3**	6.9	N/A	Worse	X					
4. Rate of Hospitalizations for Falls for Adults Ages 25 - 64 per 100,000 Adults Ages 25 - 64, '08-10	17.7	**18.7**	18.7	N/A	Meets/Better						
5. Rate of Violent Crimes per 100,000, '07 - 11	128.0	**251.3**	395.7	N/A	Meets/Better						
6. Rate of Property Crimes per 100,000, '07 - 11	1,669.5	**2,088.7**	1,938.4	N/A	Meets/Better						
7. Rate of Total Crimes per 100,000, '07 - 11	1,797.4	**2,340.0**	2,334.1	N/A	Meets/Better						
8. Rate of Malignant Mesothelioma Cases, Ages 15 Plus, per 100,000 Population Ages 15 Plus, '07 - 09	1.5	**1.7**	**1.3**	N/A	Meets/Better						
9. Rate of Pneumonconsis Hospitalizations, Ages 15 Plus, per 10,000 Population Ages 15 Plus, '08 - 10	1.8	**1.9**	1.4	N/A	Meets/Better						
10. Rate of Asbestosis Hospitalizations, Ages 15 Plus, per 10,000 Population Ages 15 Plus, '08 - 10	14.8	**2.1**	1.3	N/A	Worse				X		
11. Rate of Work-Related Hospitalizations, Employed Ages 16 Plus per 10,000 Individuals Employed Ages 16 Plus, '08 - 10	19.1	**21.1**	16.8	N/A	Meets/Better						
12. Rate of Elevated Blood Lead Levels Ages 16 Plus Employed per 10,000 Employed Individuals Ages 16 Plus, '08 - 10	2.6	**2.4**	2.3	N/A	Worse	X					
13. Rate of Total Motor Vehicle Crashes per 100,000, '09 - 11	2,126.9	**2,104.5**	1,607.0	N/A	Worse	X					

Injuries, Violence & Occupational Health Analysis

All ARHN Counties: Revised 4/3/2013 Page 3 of 17	Average Rate, Ratio or Percentage for the Listed Years	Comparison Regions/Data			Comparison to Benchmark	Quartile Ranking				Quartile Score	Severity Score
		Upstate NY	New York State	2017 Prevention Agenda Benchmark		Q1	Q2	Q3	Q4		
14. Rate of Pedestrian-Related Accidents per 100,000, '09 - 11	26.0	**45.0**	82.4	N/A	Meets/Better						
15. Rate of Speed-Related Accidents per 100,000, '09 - 11	310.9	**225.1**	146.4	N/A	Worse		X				
16. Rate of Motor Vehicle Accident Deaths per 100,000, '08 - 10	10.1	**8.2**	6.2	N/A	Worse	X					
17. Rate of TBI Hospitalizations per 10,000, '08 - 10	7.2	**10.0**	9.9	N/A	Meets/Better						
18. Rate of Unintentional Injury Hospitalizations per 10,000 Total Population, '08 - 10	70.7	**72.7**	69.2	N/A	Meets/Better						
19. Rate of Unintentional Injury Hospitalizations Ages 14 and Under per 10,000 Population Ages 14 and Under , '08 - 10	16.9	**21.0**	24.5	N/A	Meets/Better						
20. Rate of Unintentional Injury Hospitalizations Ages 65 Plus per 10,000 Population Ages 65 Plus, '08 - 10	273.3	**276.6**	260.9	N/A	Meets/Better						
21. Rate of Poisoning Hospitalizations per 10,000 '08 - 10	11.6	**10.3**	10.5	N/A	Worse	X					
Quartile Summary for Other Indicators						5	1	0	1	33.3%	14.3%
Quartile Summary for Focus Area Injuries, Violence, and Occupational Health						7	1	1	1	35.7%	20.0%

Regional Emerging Trends
The problem and who needs help.

- Many emerging issues identified; no clear consensus
- High concern with poverty as a driver of emerging health issue
- Children & adolescents, the poor are target groups

Emerging Theme	Percent
Growing obesity, childhood obesity, and related ailments	25.5
Substance abuse (alcohol, drugs, prescriptions)	16.2
Mental health issues	15.8
Lack of service availability, lack of insurance	13.1
Aging population / need for senior care	10.8
Increase in chronic diseases	5.4
Increasing STI/STD cases in community	5.4
Other	34.7

Population group in need of targeting	Percent selecting
People living at or near poverty level	56.5
Children/adolescents	53.7
People with mental health issues	42.8
Seniors/elderly	39.6
People with substance abuse issues	37.5
People with disabilities	27.4
Women of reproductive age	26.3
Specific health condition or disease	22.5
Specific racial or ethnic groups	10.5
Migrant workers	5.3
Farmers	3.9
Everyone *	3.9
Other	3.9
Don't know	1.8

* Dominant write-in selection under other.

Regional Survey Results
The major findings in a nutshell.

- **Top emerging health trend**: Growth in obesity (and related ailments like diabetes)
- **Most important agenda area**: Chronic disease
- **Least important agenda area:** HIV/STIs/vaccine-preventable diseases
- **Technology prioritization**: Majority support tech improvement as a priority area for the region
- **Biggest concern:** Agencies worry about future funding and reimbursement

Adirondack Rural Health Network Prioritization Process

Two suggested methods for identifying priorities

- Dot method (qualitative)
- Weighted method (qualitative and quantitative)
- Assessed
  - Need
  - Feasibility
  - Impact
  - Based on both numbers and stakeholder input

Prioritizing

Criterion	Question(s)/Source	Relative Weight	Scoring (5 = High, 3 = Medium, 1 = Low, 0 = Not applicable)	
NEED				
Quartile/ Severity Score	Use the quartile or severity score, whichever is higher, from the individual county analysis "Quartile Summary for Focus Area …" row.	2.0	5	Quartile or severity score is ≥67%.
			3	Quartile or severity score is 34% - 67%.
			1	Quartile or severity score is ≤33%.
Stakeholder Survey	Use the results of the ARHN stakeholder survey of the perceived need in the community/county.	0.5	5	≥36% of stakeholders indicated the focus/priority area is an issue.
			3	21% -35% of stakeholders indicated the focus/priority area is an issue.
			1	≤ 21% of stakeholders indicated the focus/priority area is an issue.
Perceived need for additional interventions	What is your perceived need for more interventions or programs to address the focus area/issue?	1.5	5	Substantial additional interventions or programs are needed
			3	There are some but more interventions or programs are needed.
			1	There are many interventions or programs and no additional assistance is needed.
			0	Not Applicable for this focus area or issue.

Prioritizing

FEASIBILITY				
Is funding for the intervention available and sustainable?	Consider these sources: • property tax dollars • reimbursement – government or billable services • grants	1.0	5	Funding/revenue are readily available. Sustainability is not an issue.
			3	Funding/revenue are available. May have long-term problems sustaining the program.
			1	Funding/revenue not available or insufficient. Support for intervention or program start-up and sustainability are major issues. Substantial additional assistance is needed.
			0	Not applicable for the focus area.
Are evidence based interventions available for implementation?	Consider sources: • New York State Department of Health prevention agenda proposed interventions • other evidence-based interventions listed in literature or research	1.0	5	A large number of evidence-based interventions are readily available.
			3	Some evidenced-based interventions are available.
			1	There are little or no evidence-based interventions available.
			0	Not applicable for the focus area or issue.
What is capacity of the stakeholders to implement interventions to address the focus are or issue?	Consider: • county, hospital, or other community stakeholders capacity or expertise to implement an intervention • how well the potential interventions align with existing organizational priorities	1.5	5	There is ample knowledge or expertise in the counties, hospitals, and community stakeholders to implement a strategy.
			3	There is some knowledge or expertise in the counties, hospitals, and community stakeholders to implement a strategy but more is needed.
			1	There is no county, hospital, or community stakeholder capacity or expertise to implement an intervention.
			0	Not applicable for the focus area or issue.

Prioritizing

IMPACT				
What is the effectiveness of current strategies to address the focus area?	Consider: • the ability of the current strategies to reach the target audience • the ability of the current strategies to achieve the desired results	1.0	5	Interventions or programs are not effective enough in addressing the focus area or issue. Substantial additional assistance is needed.
			3	Interventions or programs are somewhat effective in addressing the focus area or issue but additional assistance is needed.
			1	Interventions or programs are highly effective in addressing the focus area or issue. There is little or additional assistance needed.
			0	Not applicable for the focus area or issue.
Are there multiple health benefits from making this a priority?	Consider: • how the focus area or issue affects overall quality of life • impact on other health indicators • whether the focus area has long-term impact on health status for the individuals affected	1.5	5	Substantial long-term health benefits result from addressing the focus area or issue. There are many overlapping health care benefits from addressing this focus are or issue.
			3	There are some long-term health benefits from addressing the focus area or issue. There are some other overlapping health care benefits from addressing this focus area or issues.
			1	There are no long-term benefits from addressing this focus area or issue. There are little or no overlapping health care benefits from addressing this focus area.
			0	Not applicable for the focus area or issue.

		NEED			FEASIBILITY			IMPACT	
	Priority Score	Quartile/ Severity Score (How Severe is the Problem?)	Stakeholder Survey (What is the Perceived Community Need?)	Perceived Need for Additional Resources	Is Funding Available and Sustainable?	Availability of Evidenced-based Interventions	Capacity of Stakeholders to Implement Potential	Effectiveness of Current Stategies	Are There Multiple Health Benefits?
		2.0	0.5	1.5	1.0	1.0	1.5	1.0	1.5
IMPROVE HEALTH STATUS AND REMOVE HEALTH DISPARITIES									
Health Disparities	0								
PROMOTE A HEALTHY AND SAFE ENVIRONMENTAL									
Injuries, Violence, and Occupational Health	0								
Outdoor Air and Water Quality	0								
Built Environment	0								
PREVENTING CHRONIC DISEASE									
Obesity in Children and Adults	0								
Tobacco Use and Secondhand Smoke Exposure	0								
Chronic Disease Preventive Care and Mgmt	0								
PROMOTING HEALTHY WOMEN, INFANTS, AND CHILDREN									
Maternal and Infant Health	0								
Preconception and Reproductive Health	0								
Child Health	0								
PREVENT HIV/STDS, VACCINE-PREVENTABLE DISEASES, AND HEALTH-CARE ASSOCIATED DISEASES									
Sexually Transmitted Diseases	0								
Vaccine Preventable Diseases	0								
PROMOTE MENTAL HEALTH AND PREVENT SUBSTANCE ABUSE									
Substance Abuse and Mental, Emotional, and Behavioral Health	0								

Using the Data to Create Strategies

- Top priorities in 2009 were chronic diseases and obesity, resulting in the Committee choosing Physical Activity and Nutrition as the focus area for a multi-year initiative that included:
  - Convening a PANTF workgroup
  - National level speaker on Complete Streets
  - Mini- grants for community gardens, tennis court repairs, walking trails, bike paths etc.
  - Resource directory of community based organizations and support groups to improve physical activity and nutrition – i.e. location of Farmers Markets, YMCA programs.
  - Training committee members on various evaluation methods for consideration
  - Evaluation of program outputs and process completed by the School of Social Welfare, SUNY UAlbany

What Worked

- Learning collaborative
- Sharing:
  - process
  - templates and other resources
  - experiences ……. informal best practices identified
- Region as a whole working on a key issue

What Can Be Improved Upon

- A broad initiative has many impactors – that vary at the local level
- Engagement of additional health care providers and community based organizations to:
  - assess the entire population's health
  - utilize trend analysis to provide evidence of what is working
  - address social determinants of health
- Data analysis and presentation so “even my grandmother could understand why “this” matters”

Conclusion

- Systematic, data-driven approach to determining the health status, behaviors and needs of residents in a defined region
- The information is used to formulate strategies to improve community health and wellness
- NYS Department of Health Mandate every four years (2010-2013)
- Designed around the Prevention Agenda Toward the Healthiest State
- Provides the collaborative structure to define priorities of most concern