



Community Health Assessment at Essentia Health

Dr. M. Nawal Lutfiyya

Senior Research Scientist

Essentia Institute of Rural Health

email: mlutfiyya@eirh.org



Essentia Health

Here with you

What is community health assessment?

- Community health assessment is a process involving the identification of problems, setting priorities, developing action plans, measuring progress, evaluating whether or not the actions have been/are effective, modifying the actions if necessary, and then re-evaluating the community's problems and priorities.

A Social Justice Component to Community Health Assessment

- Assessing the health of the community is an ongoing activity and is often grounded in a concern with social justice that recognizes that:

ALL LIVES HAVE EQUAL VALUE

- and that:

EVERYONE DESERVES TO LIVE A HEALTHY LIFE

- The social justice component of community health assessment introduces health disparities as an important aspect of the health-focused assessment process.

Health Disparities and Community Health Assessment

- In general, health disparities refer to differences between groups of people that impact how frequently a disease affects a group, how many people get sick, or how often the disease causes death.
 - Many different populations are affected by disparities. These may include:
 - Racial and/or ethnic minorities
 - Residents of rural areas
 - People of lower socio-economic status
 - Populations with health service deficits

United States Public Law 106-525

- In 2000 the *Minority Health and Health Disparities Research and Education Act* authorized the National Center for Minority Health and Health Disparities as part of the National Institutes of Health.
 - This act also provided the current legal definition of health disparities for the United States:
 - A population is a health disparity population if there is a significant disparity in the overall rate of disease incidence, prevalence, morbidity, mortality or survival rates in the population as compared to the health status of the general population.*

* Minority Health and Health Disparities Research and Education Act
United States Public Law 106-525 (2000), p. 2498

Essentia and Community Health Assessment

- Essentia Health is in the process of developing a community health assessment strategy that encompasses social justice concerns and a health disparities focus in order to develop community-based interventions to improve the health of the people in the communities and states where we work.
 - Assessing the health of communities always begins with the analysis of health-related data.
 - These data may come from a wide variety of sources including: population-based surveys, Vital Statistics or Health System Data Warehouses.

IOM Community Health Improvement Process (CHIP)

Improving Health in the Community, IOM, 1997

- The community's health depends on the interaction of many factors, entities, organizations, and interests
- Community health is a shared responsibility
 - Community health assessment is inherently a community engagement process
- Specific entities in the community must be accountable for the actions that they can take to improve community health
 - Entity-specific performance measures must be developed and monitored

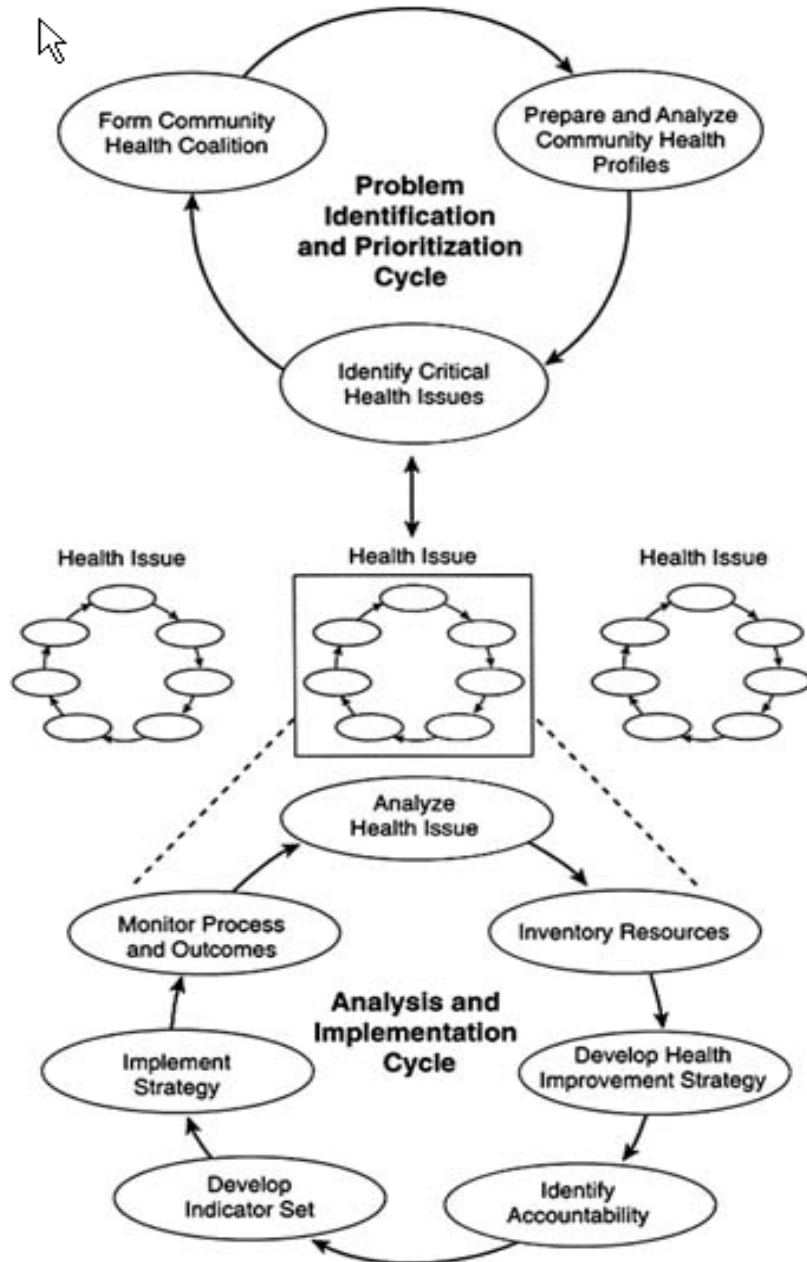
Performance Measurement

- **Steps for developing measures**
 1. Clarify the purpose of measurement
 2. Identify the concepts to be measured
 3. Identify specific indicators of these concepts
 4. Assess validity, reliability, practicality, and utility

Concepts vs. indicators

CONCEPT	INDICATOR or MEASURE
Mortality	Disease specific mortality rate
Presence of disease	Disease prevalence rate
Health risks	Risk factor prevalence rate
Costs	Treatment costs per patient
Quality	Patient satisfaction ratings
Access	Percent of population with health insurance

The Community Health Assessment Process



In this model, adapted from the Institute of Medicine, the set of health-related indicators for a community health profile might include measures of:

- Sociodemographic characteristics (e.g., educational attainment, annual household income, age distribution)
- Health risk factors (e.g., immunization coverage, adult smoking rate, and obesity prevalence)
- Health services indicators (e.g., lack of health insurance, deferring medical care because of cost)
- Health status variables (e.g., diabetes by race/ethnicity, smoking prevalence by SES, or asthma prevalence by HSD)
- Functional status, such as the proportion of adults defining their health as good to excellent.

Population Demographics for States Where Essentia Has a Presence

Measures		2009 BRFSS Data (Crude Prevalence)			
		Idaho	Minnesota	North Dakota	Wisconsin
Sex	Male	50.0	49.4	49.9	49.3
	Female	50.0	50.6	50.1	50.7
Age Ranges	18-34 Years	32.8	30.1	32.9	29.5
	35-64 Years	50.8	53.3	47.8	52.8
	>=65 Years	16.5	16.6	19.2	17.7
Annual Household Income	<\$35,000	40.7	26.0	33.3	37.9
	>=\$35,000	59.3	74.0	66.7	62.1
Educational Attainment	<High School	9.8	4.1	8.4	6.1
	Completed High School	60.4	54.5	59.9	63.8
	College Graduate	29.8	41.4	31.7	30.1
Marital Status	Married Or Living With Partner	70.1	68.2	66.8	66.2
	Unmarried And Not Living With A Partner	29.9	31.8	33.2	33.8
Race/Ethnicity	Caucasian	88.4	91.5	89.8	89.0
	African American	.2	2.5	.6	3.0
	Hispanic	6.7	1.9	2.0	3.1
	Other/Multiracial	4.7	4.1	7.6	4.9
At Least 1 Child In Household		45.9	43.1	39.7	39.6
Socioeconomic Status	Low SES	37.1	22.1	29.1	35.5
	Middle SES	49.5	52.3	55.6	49.3
	High SES	13.4	25.6	15.3	15.3
At Least 1 Health Service Deficit		56.8	42.8	50.4	44.2
Population In State Rural		36.3	29.2	61.0	30.6

Health service deficits, entailed a lack of health insurance, not having a healthcare provider, deferring medical care because of cost and having had no routine medical exam

SES is a composite or computed variable comprised of two categorical variables: education and income.

Population Demographics for States Where Essentia Has a Presence Stratified by Geographic Locale (Rural/Non-Rural)

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural
Sex	Male	49.7	50.5	50.0	47.8	50.2	49.8	49.2	49.4
	Female	50.3	49.5	50.0	52.2	49.8	50.2	50.8	50.6
>=65 Years		15.8	17.7	14.5	21.7	17.9	20.0	16.7	20.2
Household Income <\$35,000		36.9	47.4	22.7	34.4	27.7	37.0	35.3	43.8
Education	<High School	8.5	12.2	3.6	5.3	5.9	10.1	5.9	6.6
	High School or GED	58.5	63.8	50.2	65.0	55.9	62.4	59.5	73.3
	College Graduate	33.1	24.0	46.2	29.7	38.2	27.5	34.5	20.1
Unmarried and Not Living With A Partner		30.4	29.0	32.4	30.4	33.9	32.7	33.9	33.5
Race / Ethnicity	Caucasian	88.9	87.6	89.6	96.1	93.8	87.2	86.8	94.2
	African American	.2	.1	3.5	.2	1.1	.3	4.4	.0
	Hispanic	5.8	8.3	2.2	1.2	.9	2.8	3.9	1.2
	Other/Multiracial	5.1	4.0	4.8	2.6	4.2	9.8	4.9	4.7
At Least 1 Child In Household		47.2	43.5	44.8	39.2	41.1	38.9	40.3	37.9

Population Demographics for States Where Essentia Has a Presence Stratified by Race/Ethnicity

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian
Sex	Male	49.1	56.5	49.2	51.2	50.2	48.0	49.5	47.4
	Female	50.9	43.5	50.8	48.8	49.8	52.0	50.5	52.6
Age Ranges	18-34 Years	31.1	45.5	27.9	53.9	30.4	55.6	27.4	46.3
	35-64 Years	51.7	43.2	54.6	39.3	49.3	34.5	54.3	40.6
	>=65 Years	17.1	11.3	17.5	6.8	20.3	9.9	18.3	13.1
Household Income <\$35,000		37.3	67.9	24.4	43.7	30.5	60.0	34.9	62.4
Education	<High School	7.2	30.3	3.8	6.9	7.2	19.7	5.1	14.6
	Completed High School	61.6	51.1	54.7	52.4	59.7	61.0	63.7	64.0
	College Graduate	31.2	18.6	41.5	40.7	33.1	19.3	31.1	21.5
Unmarried and Not Living With A Partner		28.8	38.3	30.3	48.4	30.6	55.7	32.3	46.2
At Least 1 Child In Household		44.7	55.2	41.1	64.7	37.3	61.4	38.4	49.6
Non-Rural		64.0	61.1	69.4	86.6	40.8	23.6	67.6	83.7
Rural		36.0	38.9	30.6	13.4	59.2	76.4	32.4	16.3

Population Health Service Information for States Where Essentia Has a Presence

Measures		2009 BRFSS (Crude Prevalence)			
		Idaho	Minnesota	North Dakota	Wisconsin
Do not Have Personal HCP		27.0	20.8	23.9	15.2
Last Routine Medical Check-up	Within Last 12 Months	56.3	70.9	62.7	64.5
	Longer Than 12 Months Ago	43.7	29.1	37.3	35.5
Self-Defined Health Status	Good To Excellent	84.8	89.9	88.4	88.1
	Fair To Poor	15.2	10.1	11.6	11.9
Do Not Have Health Insurance		18.7	8.0	10.7	10.3
Deferred Medical Care Because Of Cost		14.2	10.3	6.2	10.0

Population Health Service Information for States Where Essentia Has a Presence Stratified by Geographic Locale (Rural/Non-Rural)

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural
Do Not Have Personal HCP		26.2	28.4	21.3	19.6	20.6	26.1	14.2	17.5
Do Not Have Health Insurance		16.8	22.0	7.6	8.9	8.3	12.3	9.0	13.2
Last Routine Medical Check-up	Within Last 12 Months	57.5	54.3	70.0	73.1	64.0	61.8	65.3	62.7
	Longer Than 12 Months Ago	42.5	45.7	30.0	26.9	36.0	38.2	34.7	37.3
Deferred Medical Care Because of Cost		13.3	15.9	10.9	8.8	5.3	6.8	9.8	10.4

Population Health Service Information for States Where Essentia Has a Presence Stratified by Race/Ethnicity

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian
Do Not Have Personal HCP		25.0	42.2	19.8	31.5	22.5	36.5	13.9	25.9
Last Routine Medical Check-up	Within Last 12 Months	57.3	48.7	71.4	65.8	62.9	61.0	64.7	62.8
	Longer Than 12 Months Ago	42.7	51.3	28.6	34.2	37.1	39.0	35.3	37.2
No Health Insurance		16.5	35.9	7.6	11.8	9.0	26.3	9.2	19.1
Deferred Medical Care Because of Cost		13.3	21.8	8.9	24.3	5.2	14.7	8.6	21.6

Population Risk Factors and Disease Status for States Where Essentia Has a Presence

Measure		2009 BRFSS (Crude Prevalence)			
		Idaho	Minnesota	North Dakota	Wisconsin
Got Seasonal Flu Shot		35.5	50.2	42.6	42.6
Overweight or Obese	BMI 25-<30	36.2	37.9	37.8	36.4
	BMI >=30	25.1	25.4	28.4	29.2
Physically Inactive		42.5	47.3	47.7	47.2
Diabetes		8.0	6.4	7.5	8.2
Hypertension		26.1	22.3	27.1	28.1
Hyperlipidemia		37.2	33.9	34.8	35.8
Asthma		12.7	9.6	12.0	13.7
Arthritis		23.7	20.9	27.4	25.2

Population Risk Factors and Disease Status for States Where Essentia Has a Presence Stratified by Geographic Locale

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural
Self-Defined Health Status	Good To Excellent	86.2	82.4	91.1	86.8	90.2	87.2	88.7	86.9
	Fair To Poor	13.8	17.6	8.9	13.2	9.8	12.8	11.3	13.1
Overweight or Obese	BMI 25-<30	35.6	37.3	38.0	37.5	38.7	37.2	36.3	36.8
	BMI >=30	24.9	25.5	23.7	29.3	23.8	31.3	29.7	28.2
Physically Inactive		42.5	42.5	45.7	51.2	47.0	48.1	47.3	46.9
Diabetes		7.7	8.4	5.8	7.7	6.6	8.1	8.1	8.6
Hypertension		25.4	27.5	20.8	26.0	24.9	28.5	27.3	29.8
Hyperlipidemia		36.5	38.7	32.7	36.8	34.5	34.9	36.2	34.8
Asthma		12.8	12.5	10.3	7.7	11.2	12.5	14.8	11.4
Arthritis		22.2	26.4	18.7	26.3	25.1	28.9	24.3	27.1

Population Risk Factors and Disease Status for States Where Essentia Has a Presence Stratified by Race/Ethnicity

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian
Self-Defined Health Status	Good To Excellent	86.4	72.9	90.0	88.7	89.4	79.6	88.7	83.8
	Fair To Poor	13.6	27.1	10.0	11.3	10.6	20.4	11.3	16.2
Overweight or Obese	BMI 25-<30	36.5	33.4	37.5	41.4	38.5	31.6	36.6	34.9
	BMI >=30	24.5	30.6	25.0	29.2	27.2	39.2	28.1	38.5
Physically Inactive		41.7	48.5	47.0	49.8	48.2	43.7	47.1	48.2
Diabetes		7.7	10.0	6.4	6.4	7.2	10.0	8.3	7.6
Asthma		12.5	14.0	8.9	16.6	11.3	17.7	12.9	20.4

Population Based Information on Health Service Deficits and Socioeconomic Status for States Where Essentia Has a Presence Stratified by Geographic Locale (Rural/Non-Rural)

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural	Non-Rural	Rural
At Least 1 Health Service Deficit		55.4	59.1	43.6	40.7	46.7	52.9	42.4	48.3
Socioeconomic Status	Low	33.8	42.8	19.0	29.8	23.0	33.1	32.7	41.7
	Middle	50.0	48.7	50.6	56.4	54.9	56.0	48.9	50.0
	High	16.3	8.4	30.4	13.8	22.0	10.9	18.4	8.3

Population Based Information on Health Service Deficits and Socioeconomic Status for States Where Essentia Has a Presence Stratified by Race/Ethnicity

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian	Caucasian	Non-Caucasian
Socioeconomic Status	Low SES	33.3	67.4	20.8	35.5	26.4	54.2	32.8	57.2
	Middle SES	52.1	28.2	53.1	42.9	57.5	37.8	51.0	34.6
	High SES	14.5	4.5	26.0	21.6	16.1	8.1	16.1	8.2
At Least 1 Health Service Deficit		55.1	69.5	41.5	56.3	48.9	64.0	43.4	50.6

Examination of a Specific Health Issue: The Case of Smoking

Measure		% Idaho		% Minnesota		% North Dakota		% Wisconsin	
		Current Smoker	Do Not Smoke	Current Smoker	Do Not Smoke	Current Smoker	Do Not Smoke	Current Smoker	Do Not Smoke
Overall State Prevalence		16.3	83.7	16.8	83.2	18.6	81.4	18.8	81.2
Race/Ethnicity Prevalence	Caucasian	16.1	83.9	16.1	83.9	16.1	83.9	17.8	82.2
	Non-Caucasian	17.5	82.5	23.6	76.4	40.6	59.4	26.6	73.4
Geographic Locale Prevalence	Non-Rural	15.1	84.9	16.5	83.5	13.3	86.7	18.5	81.5
	Rural	18.4	81.6	17.4	82.6	22.0	78.0	19.4	80.6
Socioeconomic Prevalence	Low	27.7	72.3	31.8	68.2	30.8	69.2	29.6	70.4
	Middle	11.2	88.8	15.7	84.3	16.6	83.4	16.3	83.7
	High	4.3	95.7	6.2	93.8	7.7	92.3	4.8	95.2
Service Deficit Prevalence	No HSD	10.6	89.4	12.7	87.3	13.5	86.5	13.4	86.6
	At Least 1 HSD	20.3	79.7	22.4	77.6	23.6	76.4	25.6	74.4