Community Needs Assessment

Models & Measures
Community Needs Assessment Process

People
- Build interest group
- Work collaboratively
- Report extensively
  - Educate core group
  - Inform community
  - Develop stories
  - Create identifier

Measures
- Identify Issues
  - Focus groups
  - Surveys
  - Dialogs
  - Town hall meetings
- Create indicators
  - Secondary Data
  - Primary Data
    - Interviews
    - Surveys
    - Focus Groups
Our Focus today is on the measures...
Davenport’s Health Issues

Our health concerns are…….

- People’s diets especially that of our children, including school nutrition programs
- Opportunities to live active lifestyles, especially in the younger years and when confined by schools
- Access to dental care when on T-19
- Mental health service access – few qualify and have long waits when they do qualify
- Prevention screening
Community Change Model

- Measures of a healthy community
- Systems – definitions & measures
- Factors that influence health
- Determinants of health

Communities / Systems

Growth Process

- Levels of planning
- Who should be involved
- How to make decisions
- Definitions
  - Conversations
  - Decisions
  - Planning
  - Implementation

Models / Roadmap

- Handouts
- How to pick a model
- Community planning framework
Populuation Health Framework

- Biological Endowment
- Gene-Environment Interactions
- Physical & Social Environmental Exposures

Forces:
- Political
- Social
- Cultural
- Economic

Health Outcomes

Most Public Health Interventions

Most Health Care

Institute of Population and Public Health (IPPH)
Analyze Health

Issue

Inventory

Resources

Develop health

Improvement Strategy

Identify

Accountability

Develop

Indicator Set

Implement

Strategy

Monitor Process and Outcomes

Inventory Resources

Develop health Improvement Strategy

Identify Accountability

Develop Indicator Set

Analysis & Implementation Cycle

Problem ID & Prioritization Cycle

Form Community Health Coalition

Prepare & Analyze Community Health Profiles

Identify Critical Health Issues

Health Issue

Prepare & Analyze Community Health Profiles

Identify Critical Health Issues

Health Issue

Health Issue

IOM - CHIP 1998
Form Community Health Coalition

Problem Identification & Prioritization Cycle

Prepare and Analyze Community Health Profiles

Identify Critical Health Issues
Analyze Health Issue

Monitor Process and Outcomes

Implement Strategy

Develop Indicator Set

Inventory Resources

Develop Health Improvement Strategy

Identify Accountability

Analysis & Implementation Cycle
Models Available for Use

- PDSA/PDCA
- PATCH
- Home Town Health
- CHANGE
- Community Change Planning Model
- “Big Picture” Planning Model
- APEX – PH
- MAPP
- Institute of Medicine
- Determinants of Health – Woodbury County Drey Model
Community Health Improvement Steps

1. **Build your team and gather resources**
2. **Engage community partners**
3. **Collect data – Primary and Secondary**
4. **Analyze Data**
5. **Present to Primary Stakeholders**
6. **Set Priorities**
7. **Present Results Publicly**
8. **Take Action (and track data, impacts, etc.)**
Health Indicators

Targets for your outcome
Measures of your process
Factors that Influence Health and Community Well-Being

- Spiritual Environment
- Social Environment
- Built Environment
- Community Safety
- Health/Well-Being & Substance Issues
- Arts/Culture/Heritage & Recreation
- Transportation/Mobility
- Economy/Employment
- Education
- Government/Politics
- Housing
- Natural Environment
- Cultural Diversity

Genetics 20%
Medical Delivery system 10%
Environment 20%
Lifestyle 50%

Source: DCNHS

© Tyler Norris 2002
Social Determinants of Health

- The social gradient
- Stress
- Early life
- Social exclusion
- Work
- Unemployment
- Social support
- Addiction
- Food
- Transport

World Health Organization Europe
Determinants of Health

Why Are Some People healthy and Others Not?
Evans, R.G. & Stoddart, G. L., De Gruyter, New York, 1994

- Social environment
- Physical environment
- Genetic endowment
- Individual response
- Health care
- Disease
- Health & function
- Well-being
- Prosperity
A Model of the Determinants of Health

Social Environment

Physical Environment

Genetic Endowment

Individual Response
  • Behavior
  • Biology

Health and Function

Disease

Health Care

Well-Being

Prosperity

• Evans & Stoddartd, 1990 Producing Health, Consuming Healthcare - “The Field Model”
Measures

Health Indicators
Indicator Sets
Top 10 causes of death

- Heart disease
- Cancer
- Stroke
- Chronic obstructive pulmonary disease
- Unintentional injuries (including MVC)
- Pneumonia/influenza
- Diabetes
- Alzheimer’s disease
- Infectious/parasitic diseases
- Suicide

Vital Statistics:  http://www.idph.state.ia.us/apl/vital_stats.asp
Top 10 causes of death in IA 2004

![Top 10 causes of death in IA 2004](http://www.idph.state.ia.us/apl/vital_stats.asp)
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<tr>
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<td>Cerebrovascular Disease</td>
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<td>Chronic Lower Respiratory Diseases</td>
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<td>Unintentional Injuries</td>
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<td>Other Diseases of Circulatory System</td>
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<td>Suicide</td>
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<td>Essential Hypertension and Hypertensive Renal Disease</td>
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<td>Nephritis, Nephrotic Syndrome, and Nephrosis</td>
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<td>122</td>
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<td>1,924</td>
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From an Epidemiologist’s Perspective

- Tobacco: 400,000 (19%)
- Diet/Activity: 300,000 (14%)
- Alcohol: 100,000 (5%)
- Microbial Agents: 90,000 (4%)
- Toxic Agents: 60,000 (3%)
- Firearms: 35,000 (2%)
- Sexual behavior: 30,000 (1%)
- Motor vehicles: 25,000 (1%)
- Illicit use of drugs: 20,000 (<1%)

Source: ODPHP
Health Field Conceptual Model: Influence of Factors on Health Status

- 50% Lifestyle & Behavior
- 20% Human biology
- 20% Environment
- 10% Medical Care

Robert Wood Johnson Foundation, Canadian Health Ministry © Tyler Norris 2002
Health Indicators

...Measures or sets of measures that allow intimations about health status of a target population.
Health Indicators

**Indicator Measures**
- Death rates
- Disease Incidence and prevalence
- Birth Rate
- Marriage/Divorces
- Communicable disease
- Treatment efficacy

**Indicator Sets**
- Kids Count - 21
- Health Status
  - Health
  - Quality of Life
  - Functional Status
- Healthy Communities
  - Health Systems
  - Nutritional Access
  - Healthy environments
  - Quality of Care
Dubuque

**Indicator**
- Teen abortions last year
- Teen pregnancies last year

**Context Measure**
- Teen pregnancy trends over 10 years
- Teen abortions over 10 years
- School sex education program
Community Indicator Sources

- Institute of Medicine
- HEDIS
  (Health Plan Employer Data & Information Set)
- Kids Count
- Vital Statistics
- Census
Proposed Indicators for a Community Health Profile

- Socio-demographic Characteristics
- Health Status
- Health Risk Factors
- Quality of Life
- Health Care Resource Consumption
- Functional Status
Socio-demographic Characteristics

- Age & race/ethnicity distribution
- Size of groups with access problems such as migrants, homeless or non-English speaking
- Number of people without HS education
- Ratio of # graduating to number who entered HS 3 years prior
- Median household income
- Unemployment rate
- # & distribution of single parent families
- Proportion of children in poverty
- # & proportion of people without health insurance.

State Data Center of Iowa:  [http://www.iowadatacenter.org/](http://www.iowadatacenter.org/)
Health Status

- Infant mortality rate by race/ethnicity
- Deaths & age-adjusted death rate for motor crashes, work related injuries, suicide, homicide, lung cancer, breast cancer, cardiovascular diseases, and all causes by age, race and gender as appropriate
- Incidence of AIDS, measles, tuberculosis, and primary & secondary syphilis, by age, race, and gender as appropriate
- Births to adolescents (ages 10-17) as a proportion of total live births
- Number & rate of confirmed abuse and neglect cases among children

Vital Statistics: http://www.idph.state.ia.us/apl/vital_stats.asp
The System of Health Care

- Provides Accessibility
- Is Productive
- Offers Quality Care
- Contains Costs

Planning for Community Oriented Health Systems, James Rohrer, 1996
Health Status Indicators as Measures of System Performance

- YPLL
- Lost wages & costs due to illness
- Mortality rates
  - infant, neonatal, perinatal
  - maternal
  - heart attacks
  - trauma
- Life expectancy
- Quality-adjusted life years/ well years
- Morbidity rates
  - acute conditions
  - chronic conditions
  - disability days & activity restrictions
- Preventable Diseases
- Provider based measures
  - case fatality
  - hospital readmission
# Tables

## Trends in Health and Aging > Chronic Conditions

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So You’ve Got Indicators…

Now What?
Healthy Community Principles

Build true collaboration between:

- Business
- Government
- Non-profit
- Citizens
Resource Inventory

○ Community Based Asset Assessment
  ● Identifies resources
  ● Builds internal capacity
  ● Negates need for external rescue
  ● Expands community capacity over time
  ● Community Capitals

Ft Dodge Town Hall Meeting, 2007
NA Indicator Sets

- Vital Statistics
  - Top 10 Mortality Measures
  - Births/deaths
  - Provider supply
- Preventable Deaths
  - YPLL
  - Disease incidence/prevalence
  - Chronic Disease Management
- Safety/Violence
  - Abuse
  - School violence
  - Arrests
NA Indicator Sets

○ Resources
  ● Providers
  ● Insurance Coverage
  ● Employers Providing Insurance
  ● EMS
  ● Home Care/Chore Service/etc.

○ Social Measures
  ● Employment
  ● Impoverishment
  ● Community Disparities
  ● Housing and home ownership
  ● Savings
NA Indicator Sets

- Profile of the People
  - Age
  - Education
  - Income (wage and transfer payments as well as interest income and dividends)
  - Employment
  - Chronic Diseases
  - Nutrition and diet
  - Physical Activity
  - Insurance
  - Un-served population
  - Self-employed
NA Indicator Sets

- Culture
  - Bullying in schools and out
  - Smoking in public places
  - Events – fairs, parades
  - Arts
  - Charity and charity care
  - Strength of Religious Community
  - Games, clubs, general activity of community
  - Support for people in need or disenfranchised groups
Relationship between household income and self-reported health status, U.S., 1996

Source: National Center for Health Statistics.
Examples

- Social capital is strongly and negatively associated with income inequality.

- The lower the trust between citizens, the higher the average mortality rate.

- A 10% higher level of trust was associated with an 8% lower death rate from all causes.

This is Not New

“The fact is, poverty is the greatest problem in public health. A living wage is essential to a healthful standard of living.”

American Journal of Public Health, 1918
Alternative Tips for Better Health

Don’t be poor. If you can, stop. If you can’t, try not to be poor for long.
Don’t have poor parents.
Have transportation.
Don’t work in a stressful, low paid manual job.
Have a job with benefits.
Don’t live in damp, low quality housing.

Adapted from David Gordon, University of Bristol, 1999
Models to be Discussed

- PDSA/PDCA
- PATCH
- Home Town Health
- Logic
- Community Change Planning Model
- “Big Picture” Planning Model
- APEX – PH
- MAPP
- Institute of Medicine
- Determinants of Health – Woodbury County Drey Model
The PDSA Cycle for Learning and Improvement

- Act
  - State objective of cycle
  - Make predictions
  - Develop a plan to carry out

- Plan
  - Carry out the test
  - Document problems / unexpected outcomes
  - Begin data analysis

- Study
  - Complete Analysis
  - Compare to prediction
  - Summarize learning

- Do
  - What modifications to make?
  - What is next cycle?
Planned Approach to Community Health (PATCH)

- Mobilizing the Community
- Collecting and Organizing Data
- Choosing Health Priorities
- Developing a Comprehensive Intervention Plan
- Evaluating PATCH
Exploratory Meeting

Steering Committee

Community Stakeholders

Town Meeting

Identify Issues

Action Planning

Present Plan

Carry Out Plan

Follow Up Meeting

Home Town Health
Who Should Be Involved?

- Agriculture
- Industry
- Banks
- Chamber of Commerce
- Extension
- Churches
- Local Health Department
- Civic organizations
- Providers
- Patients
- Stakeholders
- Parents
- Caregivers
- Social support
- Educators
- Schools

*Hometown Health, 1998*
Mobilizing for Action Through Planning and Partnership (MAPP)
MAPP - Your Community Roadmap to Health!

Evaluate, Implement, Plan

Action Cycle

Formulate Goals and Strategies
Identify Strategic Issues
Community Health Status Assessment
Local Public Health System Assessment
4 MAPP Assessments
Forces of Change Assessment
Community Themes & Strengths Assessment

Our Vision
Organize for Success / Partnership Development
Community Change Model

SEVEN PRINCIPLES
- Use a broad definition of health and community
- Create a shared vision from community values
- Address quality of life for everyone
- Build diverse citizen participation and community ownership
- Focus on "system change"
- Build capacity using local assets and resources
- Benchmark and measure progress and outcomes

- Setting Direction for Change:
  Fine-tuning our aim

- Implementing Change:
  Making it last!

- Assessing Readiness:
  Identifying choices

- Energizing the Community:
  Building knowledge for action

- Energizing Ourselves:
  Building & equipping a leadership team

- Early Wins:
  Getting to work

Leading
Learning
Communicating

Source: Tyler Norris
Never Doubt…

....that a small, committed group can change the world, it is the only thing that ever has.

M. Meade