Social Determinants of Health: Service & Policy Implications

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The University of Texas at Austin

I. Introduction:
Story
Implications
Assumptions
Definitions
Data

II. Programs & Policies
“While there are rich resources – literally decades of research and volumes of scholarly articles – to document health disparities and the importance of social determinants, much of this work has been unfamiliar to leaders outside of public health and related fields.”

Robert Wood Johnson Foundation, 2009
Implications of the Story

- Linear attribution/prediction theory – risk
- Causal hypothesis – race, age & disease
- Absence of treatment or prevention - inevitability
- Delayed help seeking – elastic boundaries
- Increased risk of chronic disease - disparity
- Dependent on crisis emergency care
- Increased health care costs
What Business are You In?

• Most non-profit, governmental, and private health services are in the “disparities” business: (1) assessing, treating, solving, preventing, lessening, ameliorating, reducing, predicting, and (2) explaining a variety of human conditions that occur disproportionately [over decades] in the same populations or groups [women, Blacks, Hispanics, poor Whites, First Nation, some Asians].
Behavioral Health Issues 2000 -2012

- 1. Major source of disability and lost productivity
- 2. 25%-50% of population affected
- 3. Families are the major caregivers
- 4. Continued stigma
- 5. More people obtaining services –
- 6. State power waning – New State Hospitals
- 7. No Change in IMD Exclusion Policy
- 8. Systems remain fragmented
- 9. Pervasive Sense of Doubt & Uncertainty
- 10. An absence of science: causation, prevention & cure
- 11. 21% Increase in State Hospital Populations
- 12. Majority of MH Care Occurs in Primary Care Settings
- 15. Suicides in Military Tripled
- 16. Research Dollars for Mental Health -
- 17. Medicaid is Major Funder of Mental Health Services
- 18. Managed Behavioral Health Care
- 19. Social Work is Major Manpower in MH
- 20. Delayed Help Seeking by Minorities
- 21. Federally Qualified Health Centers
- 22. Transformation is Federal Policy
- 23. SMI in Jail and Prison
- 24. Replication of ECA Study
- 25. SG Report on Race & Culture
- 26. Trial of Andrea Yates
- 27. Increased Use of EBPs
- 28. Decline in State Revenue
- 29. Decline in Foundation Support
- 30. Killings at Virginia Tech
- 31. NASHPD Report on Deaths of SMI
- 32. IOM Report on Discrimination & MI
- 33. Increase in Homeless Mentally Ill
- 34. Changes (3) in SAMHSA Directors
- 35. New Directors at MHA & NAMI
- 36. Affordable Care Act
My Working Assumptions

No community or group voluntarily chooses poverty
No community or group voluntarily chooses hunger
No community or group voluntarily chooses danger or fear
No community or group voluntarily chooses early death or suicide
No community or group voluntarily chooses homelessness
No community or group voluntarily chooses mental illness
No community or group voluntarily chooses disease
No community or group voluntarily chooses crime or prison
No community or group voluntarily chooses addiction
No community or group voluntarily chooses abuse!
Things our Mothers Told Us!

• People cause their own problems!
  • People cannot change!
• If you help them, they will not learn!
  • Teach a man to fish!
• Most of them drink anyway!
• They really do not want to work!
Preliminary Conclusions

• Target Populations [markets] of color are increasing
• There are significant differences in the way that groups of Americans experience illness and health.
• There are important differences in the way that groups of Americans are treated once they seek or obtain services.
• These differences produce, increase and sustain disparities and financial costs!
• Populations served by multiple agencies are the same
Cost Conclusion

- Organizations in the United States waste billions of dollars in lost production, human energy, and stability due to our inability to solve problems of how we perceive, interpret, respond to, and manage complex social determinants.

- Without understanding and change in how we do business, disparities and costs will continue to increase. Approx: $250 billion per year!
Percent Change in Population 1980-2000

Figure 3-7.

Social determinants are multiple factors and conditions operating within a social environment that collectively influences the health status, behavior, choices, risks, and mortality of individuals and groups within a specific geographical area [nation, region, county, neighborhood, or community].

Davis, 2012
Disparity

Measurable, not assumed, differences between two or more populations, groups, people, regions, neighborhoods, communities, or an absence of parity or equality between them on various indicators.

King Davis, 2009
Disparity

“…should be viewed as a train of events leading to a difference in:
Access to, utilization of, or quality of care
Health status, or
Health outcome
…..that deserves scrutiny.”

Pearcy & Keppel 2009
## Examples of Some Disparities

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poverty</td>
<td>Mental Illness, Accidents</td>
</tr>
<tr>
<td>Disability</td>
<td>Breast Cancer, Alcoholism</td>
</tr>
<tr>
<td>Transportation</td>
<td>Arrests, Suicide</td>
</tr>
<tr>
<td>Addiction</td>
<td>School Dropout, Abortions</td>
</tr>
<tr>
<td>Heart Disease</td>
<td>Unemployment, Flu Shots</td>
</tr>
<tr>
<td>Homelessness</td>
<td>Violence, Prostate Cancer</td>
</tr>
<tr>
<td>Infant Deaths</td>
<td>Mortality Rates, HIV/AIDS</td>
</tr>
</tbody>
</table>

*King Davis, 2009*
What Causes [correlates with] Disparities?

Social Policies

Community Characteristics

Genetics

Social Determinants

Individual

Family
Critical Policies

- HIV/AIDS Testing in Prisons
- Needle Exchanges
- Sex Education
- Domestic Violence Policy
- Integrated Care
- National Health Care
- Managed Medicaid

- Medicaid Exp
- Planned Parenthood
- Nutrition Labels
- Physical Ed
- Condom Distribution
- TANF
- Fee for Service
System Disparities

Admissions  Involuntary Commitments
Length of Stay  Absence of Insurance
Recidivism Rates  Diagnosis of SMI
Use of Police  Access to Outpatient Care
Homelessness  Use of Medication –
Mortality Rates  Accuracy of Diagnosis
Use of EBPs  Cost Per Person by State
Fragmentation  Location of Services

King Davis, 2009
Summary of Findings of Admissions to the Public Mental Hospitals in Virginia 1990-1999

<table>
<thead>
<tr>
<th>Group</th>
<th>Group’s Percent of Total Virginia Pop.</th>
<th>Hospital Admissions</th>
<th>Percentage of Total Admissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo-Americans</td>
<td>76.19</td>
<td>68,653</td>
<td>63.54*</td>
</tr>
<tr>
<td>American Indians</td>
<td>.24</td>
<td>135</td>
<td>.12*</td>
</tr>
<tr>
<td>Asian Americans</td>
<td>2.53</td>
<td>579</td>
<td>.54*</td>
</tr>
<tr>
<td>African Americans</td>
<td>18.49</td>
<td>37,872</td>
<td>35.05*</td>
</tr>
<tr>
<td>Latino Americans</td>
<td>2.55</td>
<td>811</td>
<td>.75*</td>
</tr>
</tbody>
</table>
### Diagnosis by Race in Virginia State Mental Hospital Admissions 1990-1999

<table>
<thead>
<tr>
<th>Racial Group</th>
<th>Paranoid Schizophrenia</th>
<th>Schizo-affective</th>
<th>Schizophrenia Undifferentiated</th>
<th>Psychotic Disorder</th>
</tr>
</thead>
<tbody>
<tr>
<td>African American</td>
<td>6979 (48% of Total)</td>
<td>7540 (46% of Total)</td>
<td>6316 (47% of Total)</td>
<td>3872 (49% of Total)</td>
</tr>
<tr>
<td>Euro-American</td>
<td>7473 (51% of Total)</td>
<td>8828 (54% of Total)</td>
<td>6928 (52% of Total)</td>
<td>3892 (50% of Total)</td>
</tr>
<tr>
<td>Chi-Square</td>
<td>DF=18</td>
<td>P-value&lt;.0001</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Community Determinants</strong></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Delayed Help Seeking</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Elastic Boundaries</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Policy Involvement</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Letter Writing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Organizations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliance on Church</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Myth, Fear &amp; Beliefs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health Literacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low Voluntary Participation</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Limited Legislative Calls</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Limited Contributions</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stigma &amp; Embarrassment</td>
<td></td>
<td></td>
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<td></td>
</tr>
</tbody>
</table>

King Davis, 2009
### Black-White Comparison of Cumulative Proportions of Cases making Treatment Contact by Selected Years After Disorder Onset

<table>
<thead>
<tr>
<th># years after disorder onset</th>
<th>1</th>
<th>2</th>
<th>5</th>
<th>10</th>
<th>15</th>
<th>20</th>
<th>30</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Major Depression</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>27.2</td>
<td>31.7</td>
<td>39.0</td>
<td>46.4</td>
<td>57.4</td>
<td>64.3</td>
<td>77.6</td>
</tr>
<tr>
<td>White American</td>
<td>39.5</td>
<td>44.4</td>
<td>51.1</td>
<td>58.2</td>
<td>64.7</td>
<td>70.3</td>
<td>78.0</td>
</tr>
<tr>
<td><strong>Bipolar Disorder</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>African American</td>
<td>17.3</td>
<td>19.5</td>
<td>24.5</td>
<td>33.0</td>
<td>38.1</td>
<td>38.1</td>
<td>43.9</td>
</tr>
<tr>
<td>White American</td>
<td>40.5</td>
<td>44.3</td>
<td>49.8</td>
<td>58.2</td>
<td>70.5</td>
<td>71.3</td>
<td>79.4</td>
</tr>
</tbody>
</table>

The Uninsured: Rates By State And Congressional District

The Census Bureau reports that 17 percent of the U.S. population under age 65 was without health insurance last year. Texas had the highest rate at 26.5 percent, and Florida was second at 24.8 percent. Massachusetts had the lowest uninsurance rate of those under 65 — 4.0 percent. The uninsurance rate for children under 18 ranged from 20.2 percent in Nevada to 2.1 percent in Massachusetts. Most Americans over age 65 have publicly funded Medicare insurance.

About this map
This map shows the percentages by state and congressional district of those under 65 and children under age 18 who did not have health insurance in 2008. To find the uninsured rates for a particular congressional district or state, move your mouse over the area.

Source: NPR analysis of U.S. Census Bureau data
Table 17. Death rates for homicide by sex, race, and Hispanic origin 1990 and 2004

Age-adjusted death rates per 100,000 resident population

<table>
<thead>
<tr>
<th>Race/Cohort</th>
<th>1990</th>
<th>2004</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td>Black or African American</td>
<td>63.1</td>
<td>12.5</td>
</tr>
<tr>
<td>American Indian or Native</td>
<td>16.7</td>
<td>04.6</td>
</tr>
<tr>
<td>Asian or Pacific Islander</td>
<td>07.3</td>
<td>02.8</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>27.4</td>
<td>04.3</td>
</tr>
<tr>
<td>White, not Hispanic or Latino</td>
<td>05.3</td>
<td>02.5</td>
</tr>
</tbody>
</table>
Figure 2. Percentage of Households with Zero (or Negative) Wealth, Ages 18-64, 2007.
Figure 2-1

State and Federal Prisoners (1925–2004)

<table>
<thead>
<tr>
<th>Year</th>
<th>State Hospital Residents</th>
<th>No. of State Hospital Beds</th>
<th>Beds Per 100,000 U.S. Population</th>
<th>Jailed and In Prison</th>
<th>Homeless</th>
<th>Prison Population Non-MI</th>
</tr>
</thead>
<tbody>
<tr>
<td>1955</td>
<td>600,000</td>
<td>559,000</td>
<td>339</td>
<td>Minimal</td>
<td>Minimal</td>
<td>188,000</td>
</tr>
<tr>
<td>2000</td>
<td>56,000</td>
<td>59,403</td>
<td>22</td>
<td>309,997 (16%)</td>
<td>200,000</td>
<td>1,084,625</td>
</tr>
</tbody>
</table>
SMI by Race and Ethnicity 2005
Mental Health, Health, Mortality and Race

Individuals with a diagnosis of severe mental illness die an average of 25-32 years earlier than individuals without mental illness. Arizona is reported to be the highest in the US.

Death rates from all causes are significantly higher for African Americans.

What are the implications for people of color with severe mental illness?

What healthcare strategies can be offered to prevent or reduce the rate of deaths?
1. Social Determinants
2. Social Support
3. Social Network
4. Help-seeking
Social determinants are multiple factors and conditions operating within a social environment that collectively influences the health status, behavior, choices, risks, and mortality of individuals and groups within a specific geographical area [nation, region, county, neighborhood, or community].

Davis, 2012
## Definitions of Social Determinants

<table>
<thead>
<tr>
<th>Method</th>
<th>Key Terms &amp; Approach</th>
</tr>
</thead>
<tbody>
<tr>
<td>Glasgow</td>
<td>Gradient &amp; Inverse Relationship</td>
</tr>
<tr>
<td>Whitehall Study</td>
<td>Gradient &amp; Frequency</td>
</tr>
<tr>
<td>Woolf &amp; Braveman</td>
<td>Root Cause &amp; Upstream/Downstream Factors</td>
</tr>
<tr>
<td>South Australia Council</td>
<td>Well being &amp; Dahlgren’s Rainbow</td>
</tr>
<tr>
<td>WHO</td>
<td>Policy Links &amp; Ten Factors</td>
</tr>
<tr>
<td>Marmot</td>
<td>8 Defining Factors</td>
</tr>
<tr>
<td>RWJ</td>
<td>Disparities &amp; Knowledge of Policy/Decision Makers</td>
</tr>
</tbody>
</table>
Social Determinants - Community

- Food Deserts
- Safety
- Transportation
- Climate
- Policies
- Crime
- School Quality
- Poverty
- Housing
- Noise
- Water Quality
- Clean Air
- Social Service
- Discrimination
- Jobs
- Fairness
- Police Services
- Neighborhoods
- Cost of Living
<table>
<thead>
<tr>
<th>Social Determinants - Providers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outreach</td>
</tr>
<tr>
<td>Workforce</td>
</tr>
<tr>
<td>Discrimination</td>
</tr>
<tr>
<td>Volunteers</td>
</tr>
<tr>
<td>Errors</td>
</tr>
<tr>
<td>Profit Sharing</td>
</tr>
<tr>
<td>Pre-care</td>
</tr>
</tbody>
</table>
Social Determinants

• Smoking  Television  Online  Alcohol
• Driving  Substances  Housing  Neighborhood
• Education  Information  Stigma  Air conditioning
• Obesity  Diet  Income  Literacy
• Myths  Sexual risks  Church  Help seeking
• Work  Recreation  Access  Discrimination
• Isolation  Social Capital Priorities  Activity Level
Risks

• Individualism – as Causation
• Delimited Government -
• Community Exhaustion -
• Societal Exceptionalism –
• Mis-understanding Help-Seeking
• Raised Expectations –
Social Support

- **Social support** is a type [measurable, implied] and degree [frequency, amount] of help that is provided from others to a person, group, neighborhood, city, organization, or community throughout the lifespan. There is a relationship between social support, maintenance of well-being, and the ability to manage crisis, illness, recovery, loss, or the influence of negative social determinants.
Well-being & Recovery

Emotional Support
Appraisal Support
Informational Support
Instrumental Support

Social Network/Capital

Social Determinants

Family
Media
Organizations
Neighbors
Leaders
Friends
Providers
Churches

History & Tradition
## Train of Events

<table>
<thead>
<tr>
<th>Help Seeking</th>
<th>Science</th>
<th>Workforce Composition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stigma</td>
<td>Research</td>
<td>Involuntary Commitment</td>
</tr>
<tr>
<td>Religion</td>
<td>Collaboration</td>
<td>University Education</td>
</tr>
<tr>
<td>Family Burden(?)</td>
<td>Ethics</td>
<td>First Responders</td>
</tr>
<tr>
<td>Participation</td>
<td>Public Policy</td>
<td>Court/Police Involvement</td>
</tr>
<tr>
<td>Myth &amp; Fear</td>
<td>Resources</td>
<td>Discrimination/Bias</td>
</tr>
<tr>
<td>Cultural Beliefs</td>
<td>Licensure</td>
<td>Media Portrayals</td>
</tr>
<tr>
<td>History</td>
<td>Standards</td>
<td>Fragmentation/Integration</td>
</tr>
<tr>
<td>MH Literacy</td>
<td>Location/Hours</td>
<td>Use of Institutions</td>
</tr>
<tr>
<td>Multiple Problems</td>
<td>Service Design</td>
<td>Cost of Insurance</td>
</tr>
</tbody>
</table>

*Davis 2009; IOM 2005; HHS 2001*
<table>
<thead>
<tr>
<th>Help-Seeking by People of Color</th>
</tr>
</thead>
<tbody>
<tr>
<td>Delayed</td>
</tr>
<tr>
<td>Self-Medication</td>
</tr>
<tr>
<td>Low-Expectations</td>
</tr>
<tr>
<td>Reliance on Friends</td>
</tr>
<tr>
<td>Cost Conscious</td>
</tr>
<tr>
<td>Emergency Based</td>
</tr>
<tr>
<td>Court-Ordered</td>
</tr>
<tr>
<td>Police Involvement</td>
</tr>
<tr>
<td>Crisis Based</td>
</tr>
<tr>
<td>Limited Info</td>
</tr>
<tr>
<td>Negative</td>
</tr>
<tr>
<td>Complex</td>
</tr>
<tr>
<td>Spiritual</td>
</tr>
<tr>
<td>Religious Based</td>
</tr>
<tr>
<td>Family Focused</td>
</tr>
<tr>
<td>Uncertain</td>
</tr>
<tr>
<td>Social Service Referred</td>
</tr>
<tr>
<td>Hospital Involved</td>
</tr>
</tbody>
</table>
Help Seeking
(among those with a problem)

87% went for informal help
49% went for professional help

- emergency room: 10.6%
- physician’s office: 10.9%
- social services: 3.8%
- mental health center: 1.9%
- psychiatrist/psychologist: 2.5%
- minister: 9.2%
Help Seeking Barriers

Fear of Hospitalization
Fear of Treatment
Sense of Self-Reliance
Racist History
Stigma & Shame
Better without Service
Absence of Insurance
Low Mental Health
Literacy
Location of Services
Community Characteristics

- Ministers as first responders/advisors
- Delayed help seeking – Elastic Boundaries
- Higher Priority on Service vs. Research
- Minimal Participation in Consumer Groups
- Minimal Participation in Advocacy Groups
- Low Participation in Research - History
- High Level of Community Stigma
- High Level of Community Mistrust -
- Significant Language Differences
- Limited Sources of information -
## Hospital Admissions for MI 2004

<table>
<thead>
<tr>
<th></th>
<th>Total Admissions</th>
<th>Depression</th>
<th>Schizophrenia</th>
<th>Cognitive Disorders</th>
<th>Anxiety Disorders</th>
<th>Personality Disorders</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>MH Primary</strong></td>
<td>1.4 million</td>
<td>730,000</td>
<td>380,000</td>
<td>131,000</td>
<td>76,000</td>
<td>4,800</td>
</tr>
<tr>
<td><strong>MH as Secondary</strong></td>
<td>7.1 million</td>
<td>3.0 million</td>
<td>453,000</td>
<td>1.7 million</td>
<td>1.3 million</td>
<td>244,000</td>
</tr>
</tbody>
</table>

Saba, 2008
First Set of Conclusions

• State governments, the major historical providers of mental health care, are financially, politically, and structurally unable to meet the demand for services. The federal government provides reimbursements of costs through Medicaid and Medicare but incentivizes reductions in state hospital housing and increases in homelessness.
III. Ten Solutions

1. Integrated Collaborative Care – Hogg Fd.
2. Sweetwater Foundation -Milwaukee
3. Cultural Competence
4. Multi-Service Centers – New Orleans
5. Major Shift in Policy
6. Tele-Medicine – UT Galveston
7. Galt Visiting Scholar – Virginia
8. Ethnic Advocacy Groups – NAMBHA
9. Community Services Act – Virginia
10. Affordable Care Act 2010 – Federal
Bottom Line

• Prevention – Public Health
• Increase Help Seeking – Early
• Increase Informational Support
• Increase Network – via Churches
• Decrease Multiple Applications – Single Portal
• Market Orientation – cheap/quality control/sites
Actions

• Closure of state hospitals en masse
• Closure of state departments of mental health
• What if behavioral health closed immediately – would we create the same system?
• Changes in licensure requirements
• Changes in the training and re-training requirements
• Shift in control to communities as opposed to professionals
• Greater involvement and responsibility for service design by recipients of service
• Shift in services to prevent dependency
Actions

• Develop & Support Community Organizations
• Training for Peer Support
• Establish Referral Networks with Churches & Primary Care Providers
• Availability of Technology
• Techniques for Increasing Community Involvement
• Techniques for Involvement in Decision-making
• Voting & Office Holding
Changing Help Seeking

• 1. Information – Mental Health Literacy
  – A. Good source
  – B. Accuracy
  – C. Signs/Symptoms
  – D. Potential Causes
  – E. Effective Treatment

2. Direction and Guidance – Where to Go

3. Clear Choices of Help

4. Giving Meaning to the Illness

5. De-blaming – Finding Fault

6. False Beliefs about Treatment
Changing Help Seeking

• 7. Accept Integrating Care in Primary Health
• 8. Networking Between MH and the Church
• 9. Participation in Research Projects
• 10. Participation in Advocacy Organizations
  – A. NAMI
  – B. Mental Health America
  – C. National Leadership Council
  – D. Professional/Mental Health Organizations
  – E. Consumer Organizations
  – F. Mental Health Ministry
Responses to Disparities?

- Service System
- Public Policies
- Academic Training & Education Programs
- Genetic Engineering
- Help-Seeking Behaviors
Re-Defining Cultural Competence

• Market-Based Definition
• Cultural competence is the integration and transformation of knowledge, information, and data about individuals and groups of people into specific clinical standards, skills, service approaches, techniques, policies, participation, organizations, and marketing programs that match the individual’s culture and increase the quality of health care and outcomes (Davis, 2011).
Comprehensive Community [Behavioral] Health

- Primary Care
- Mental Health
- Substance Abuse
- Pastoral Care
- Justice/Courts
- Transportation
- Nutrition
- Housing/Welfare
- School Health
- Dental Care
- Employment Services
Ending Questions & Issues

1. What business(s) are you in and how does that definition differ from what you thought before coming today? What changed?

2. How do we develop a coalition from the groups here today?

3. If there were a clean slate [no services] what would you create in its place?
• 4. How do we find support for innovative changes to the businesses you are in?

• 5. What are creative ways to reduce mistrust that was described earlier in consumer groups?