Designing Indicators for a System to Produce Equitable Health and Well-Being

Perspectives on the purpose and use of leading health indicators

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Our health and well-being rely on a system designed long ago
Diseases of Disarray

• Hardening of the categories
• Tension headache between treatment and prevention
• Hypocommitment to training
• Cultural incompetence
• Political phobia
• Input obsession


Looking Through the Macroscope

“The macroscope filters details and amplifies that which links things together. It is not used to make things larger or smaller but to observe what is at once too great, too slow, and too complex for our eyes.”

-- Joël de Rosnay
Design Principles

1. Counter disarray with a macroscopic, system view

2. Differentiate personal health and well-being from vital conditions and urgent services
Two Ways of Seeing Health & Well-Being

- **PERSONAL**
  Individual perspectives and experiences that affect how we think, feel, and function and how we evaluate our lives as a whole.

- **SURROUNDINGS**
  Urgent Services
  Services that anyone under adversity might need temporarily to regain health and well-being

  Vital Conditions
  Properties of places and institutions that we all need all the time to reach our full potential

  Rises and falls, from birth to death

  Legacies that persist over generations
Dynamics of the Ecosystem for Health and Well-Being

Threats to Well-Being

- Relying
  - Investments to Assure Vital Conditions
  - Pressure to Maintain Urgent Services
  - Services to Address Urgent Needs

- Enhancing
  - Pressure to Enhance Vital Conditions
  - Services to Address Urgent Needs

- Caring
  - Enhancing
  - Threats to Well-Being

LEGEND
- Rectangles represent current states of well-being and vital conditions.
- Ramps depict the rate of inflow into current conditions; drains represent the rate of outflow.
- Arrows are causal connections, with a positive or negative direction. Positive links move in the same direction (i.e., if one element goes up, so will the other); negative links travel in opposite directions (i.e., if the first element rises, then the other element falls, and vice versa).

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- Investments to Assure Vital Conditions
- Pressure to Enhance Vital Conditions
- Services to Address Urgent Needs
- Threats to Well-Being
Dynamics of the Ecosystem for Health and Well-Being

- **VITAL CONDITIONS**
  - Investments to Assure Vital Conditions
  - Pressure to Maintain Urgent Services
  - Services to Address Urgent Needs

- **Relying**
  - Pressure to Enhance Vital Conditions

- **Enhancing**
  - Improving Vital Conditions
  - Enhancing Well-Being

- **Caring**
  - Eroding Vital Conditions
  - Threats to Well-Being
  - Declining Well-Being

[Diagram showing the dynamics of the ecosystem for health and well-being, including various factors and their relationships through cycles of enhancing, relying, and caring.]
A Practical Portfolio

URGENT SERVICES (N=6)
1. Acute care for illness or injury
2. Addiction treatment
3. Criminal justice
4. Environmental cleanup
5. Homeless services
6. Unemployment and food assistance

Services that anyone under adversity may need temporarily to regain or restore health and well-being

A Practical Portfolio

Properties of places and institutions that all people need regularly to reach their potential for health and well-being

VITAL CONDITIONS (N=7)
1. Basic needs for health and safety
2. Lifelong learning
3. Meaningful work and wealth
4. Humane housing
5. Thriving environment
6. Reliable transportation
7. Belonging and civic muscle
A Practical Portfolio

Belonging and Civic Muscle

Vital Conditions
- Meaningful Work and Wealth
- Lifelong Learning
- Basic Needs for Health and Safety
- Humane Housing
- Thriving Environment
- Reliable Transportation

Urgent Services
- Acute Care for Illness or Injury
- Addiction and Recovery Services
- Criminal Justice, Violence, and Emergency Services
- Environmental Clean up
- Unemployment and Food Services
- Homeless Services
Curated Profiles
The ADI is comprised of 17 indicators that include measures of: socioeconomic status (Income, education, poverty), household conditions (employment, single parent households, households without a telephone or vehicle), and housing stock (home value, rent, home ownership).
### Easy to Crosswalk Using Common Data

<table>
<thead>
<tr>
<th>Vital Conditions</th>
<th>Selected Threats</th>
<th>CHR Metric</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Basic Needs for Health &amp; Safety</strong></td>
<td>No health insurance</td>
<td>Uninsured age &lt;65</td>
</tr>
<tr>
<td></td>
<td>Inadequate routine care</td>
<td>Diabetic not monitored</td>
</tr>
<tr>
<td></td>
<td>Unhealthy diet</td>
<td>Vegetable less than daily</td>
</tr>
<tr>
<td></td>
<td>Physical inactivity</td>
<td>No exercise past month</td>
</tr>
<tr>
<td></td>
<td>Obesity</td>
<td>Self-report BMI 30+</td>
</tr>
<tr>
<td></td>
<td>Smoking</td>
<td>Smoke past month</td>
</tr>
<tr>
<td></td>
<td>Addiction</td>
<td>Drug OD deaths per 100,000</td>
</tr>
<tr>
<td></td>
<td>Violent crime</td>
<td>Violent crimes per 100,000</td>
</tr>
<tr>
<td><strong>Lifelong Learning</strong></td>
<td>Limited education</td>
<td>Not on-time HS graduation</td>
</tr>
<tr>
<td><strong>Meaningful Work &amp; Wealth</strong></td>
<td>Poverty</td>
<td>Households below FPL</td>
</tr>
<tr>
<td><strong>Humane Housing</strong></td>
<td>Severe housing stress</td>
<td>Inadequate facilities or &gt;50% cost</td>
</tr>
<tr>
<td><strong>Thriving Environment</strong></td>
<td>Air pollution</td>
<td>PM 2.5 mcg per cubic meter</td>
</tr>
<tr>
<td><strong>Reliable Transportation</strong></td>
<td>No metric available in CHR*</td>
<td></td>
</tr>
<tr>
<td><strong>Belonging &amp; Civic Muscle</strong></td>
<td>Inadequate social support</td>
<td>Lacking social-emotional support</td>
</tr>
<tr>
<td><strong>Summary Measures</strong></td>
<td>Fair-poor health</td>
<td>Self-report fair/poor health</td>
</tr>
<tr>
<td></td>
<td>Acute illness/death</td>
<td>Years of potential life lost before age 75 per 100,000</td>
</tr>
</tbody>
</table>

* CHR metrics address the experience of transit (time, driving alone), not transit options per se

### Examples of Potential Interventions

<table>
<thead>
<tr>
<th>Vital Condition Area</th>
<th>Selected Threats</th>
<th>Examples of Potential Interventions*</th>
</tr>
</thead>
</table>
| Basic Needs for Health & Safety | No health insurance                                   | - Expand insurance eligibility and outreach for enrollment  
                                    |                                        | - Reduce the cost of insurance (e.g., avoid unnecessary services, negotiate lower prices, or streamline admin) |
|                               | Inadequate routine care                                | - Enable health care providers to adhere to guidelines for preventive and chronic care  
                                    |                                        | - Support self-care for routine and non-urgent conditions  
                                    |                                        | - Reduce the wait time for primary care services |
|                               | Unhealthy diet                                         | - Increase access to and affordability of fruits and vegetables  
                                    |                                        | - Reduce easy availability of junk foods high in sugar, salt, and calories |
|                               | Physical inactivity                                     | - Enable active transportation            
                                    |                                        | - Reduce screen time and interrupt sedentary tasks through brief physical activities |
|                               | Smoking                                                | - Enact fully-funded comprehensive tobacco control policies and programs  
                                    |                                        | - 12-step and other relapse prevention programs |
|                               | Addiction                                              | - Prevent child maltreatment  
                                    |                                        | - Teach nonviolent conflict resolution strategies |
|                               | Violent crime                                           | - Strengthen community policing  
                                    |                                        | - Strengthen community capacity for conflict resolution |
| Lifelong Learning             | Limited education                                      | - Tutoring by peers or by adult mentors  
                                    |                                        | - Coaching by consultants and professional mentors |
|                               | Poverty                                                | - Establish tax credits, subsidies, and living wage policies  
                                    |                                        | - Increase college attendance rates |
|                               | Severe housing stress                                  | - Preserve and improve existing affordable housing sources  
                                    |                                        | - Establish inclusionary zoning requirements  
                                    |                                        | - Offer housing subsidies or low income housing tax credits |
| Stable Natural Environment    | Air pollution                                          | - Reduce toxic emissions  
                                    |                                        | - Reduce car travel and emissions |
|                               | No appropriate metric available for this analysis      | - Create and incentivize alternative transportation options  
                                    |                                        | - Assure equitable, low cost, and community-connected options |
|                               | Inadequate social support                               | - Strengthen civic associations and civic participation  
                                    |                                        | - Expand youth mentoring, youth leadership, and activity programs for older adults  
                                    |                                        | - Develop trauma-informed approaches to community building |
|                               |                                                        | - Dismantle structures of racism, sexism, and other forms of discrimination or social exclusion |

### Intervention Repositories
- U.S. Task Force on Community Preventive Services
- County Health Rankings and Roadmaps
- California Healthy Places Index Policy Actions
- Washington State Institute for Public Policy
- Centers for Disease Control and Prevention
  - Hi-5 Recommendations
  - 6|18 Recommendations
- Community Health Improvement Navigator
- What Works for America’s Communities
- Center on Budget and Policy Priorities
  - Health Affairs Policy Briefs
Design Principles

1. Counter disarray with a macroscopic, system view
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3. Use data to tell a larger story
4. Inspire effort to fulfill widely-shared norms
Well-Being Trends Across the U.S.

State-Level Well-Being

- 2017 was the worst year for well-being on record
- First time in a decade, no state had a significant increase in well-being
- 21 states had a significant drop
Community-Level Well-Being

- Mixed trajectories across 186 metro areas
- Metro scores do not always correlate with the wider state
- Locally driven efforts can succeed even in struggling states, and vice versa.

Celebrating Success & Confronting Challenges

“The test of a first-rate intelligence is the ability to hold two contradictory thoughts at the same time and still function.”
- F. Scott Fitzgerald

• Some places are making great progress, and
• We also face mortal threats.

The first belief should empower us to act on the second

Design Principles

1. Counter disarray with a macroscopic, system view
2. Differentiate personal health and well-being from vital conditions and urgent services
3. Use data to tell a larger story
4. Inspire effort to fulfill widely-shared norms
5. Celebrate success and confront unfinished work