Religious Health Asset Mapping: Connecting Faith Communities and Health Care Systems

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Abstract

Title: GIS to help pastors understand their membership and communities they serve

Faith and Health have long been partners in healing individuals and communities. Geographic Information Systems (GIS) was used to design a health management system for faith communities. The platform will help pastors and their congregations be more informed of their communities and resources. The identification of health assets and community resources that are in close proximity to their places of worship and neighborhoods are important to understanding geographic determinants, and population health.
Objectives

OVERVIEW
• DESCRIBE FAITH COMMUNITY AND ASSET MAPPING
• WHAT CAN FAITH COMMUNITIES AND HEALTH CARE SYSTEMS DO TOGETHER?
• THE ROLE OF GIS IN MAKING GOOD DECISIONS FOR YOUR FAITH COMMUNITY
• CONNECTING PEOPLE TO SERVICES

GAIN GIS KNOWLEDGE & SKILLS
• INTEGRATING HEALTH AND GEOGRAPHIC DATA
• HOW GIS CAN BE LEVERAGED TO ANALYZE MEMBERSHIP AND HEALTH-RELATED INFORMATION FOR THE COMMUNITIES THEY SERVE?
• WHAT ARE THE KEY PUBLIC AND PRIVATE ENTITIES/ORGANIZATIONS THAT INFLUENCE HEALTH AND WELL-BEING IN YOUR AREA?
• WHAT ARE THE MOST IMPORTANT WAYS THAT RELIGION AND RELIGIOUS ENTITIES CONTRIBUTE TO HEALTH IN YOUR AREA AND SPECIFICALLY TO A TARGETED HEALTH CONDITION’S TREATMENT, CARE AND PREVENTION?
PARTNER WITH INDIVIDUALS, FAMILIES, AND COMMUNITY AGENCIES

Whole Community Care

Built & National Environment

Social Determinants

Health Systems

Schools

Whole Community Care
Faith and Health Initiative

• Faith and Health have long been partners in healing individuals and communities.
• Creating new forms of faith-based collaborations for health in our communities
• Familiarize congregates with our health care system
• Increase the number of faith communities interested in health and wellness by a coordinated effort of identifying programs, publicizing programs among the faith communities, and coordinating efforts in geographical locations.
Built Environments

http://www.krusekronicle.com/
The Geography of Hunger in America

More kids live in food-insecure homes in Los Angeles than anywhere else in the United States.

EMILY BADGER | Jun 13, 2013 | 23 Comments

http://www.citylab.com/housing/2013/06/geography-hunger-america/5894/
San Bernardino County

- POPULATION: OVER 2 MILLION
- PROJECTED TO REACH 3.6 MILLION BY 2050
- OVER 20,000 SQUARE MILES OF LAND
- EAST VALLEY, WEST VALLEY, MOUNTAIN, & DESERT REGIONS

Leading Causes of Death in the 20th Century

<table>
<thead>
<tr>
<th>Californias Leading Cause of Death 2012</th>
<th>Number</th>
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</thead>
<tbody>
<tr>
<td>1 Diseases of Heart</td>
<td>59,052</td>
</tr>
<tr>
<td>2 Malignant Neoplasms (Cancer)</td>
<td>57,514</td>
</tr>
<tr>
<td>3 Cerebrovascular Diseases (Stroke)</td>
<td>13,453</td>
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<tr>
<td>4 Chronic Lower Respiratory Diseases</td>
<td>12,922</td>
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<tr>
<td>5 Alzheimer's Disease</td>
<td>11,630</td>
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<tr>
<td>6 Accidents (Unintentional Injuries)</td>
<td>10,750</td>
</tr>
<tr>
<td>7 Diabetes Mellitus</td>
<td>7,877</td>
</tr>
<tr>
<td>8 Influenza and Pneumonia</td>
<td>5,820</td>
</tr>
<tr>
<td>9 Chronic Liver Disease and Cirrhosis</td>
<td>4,645</td>
</tr>
<tr>
<td>10 Hypertension and Renal Disease</td>
<td>4,498</td>
</tr>
</tbody>
</table>
The New Analytical Imperatives
Patients “place” becomes clinically relevant

Federal Poverty level < 200%

Asthma ED Visits (Age < 18 yrs)

Health Care Spending X Asthma ED Visits

Short Term and Long Term Diabetes
Religious Health Asset Mapping

Community Health Plan Strategies
- Whole Child Care
- Whole Cancer Care
- Whole Chronic Disease Care
- Whole Sickle Cell Care
- Whole Aging Care
- Whole Rehabilitation Care
- Health Care Pipelines
- Whole Behavioral Health Care

Please see community health plan strategies for full description of programs.

Tools: ESRI ArcGIS Online, Layers (ESRI, Census, SB County, CA Education)
Understanding Our Community

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
API Scores and Drop Out Rates

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
Air Quality and Asthma
Loma Linda University Health
ER Visits, 2012

Source: http://krusekronicle.com/
Poverty and High School Drop out Rates

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
Population Proximity by Income

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
Unemployment Rates

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
High School Dropout Rates and Crime

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
Age Demographics (< 18 years)

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
Age Demographics (Ages 18 to 64 years)

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
Age Demographics (> 65 years)

http://esrit3g.maps.arcgis.com/home/webmap/viewer.html?webmap=094757d505b44c6982c0799e093e28e0
How Safe Is your Community?

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Tools: ESRI ArcGIS Online, Layers (ESRI, Census, SB County, CA Education)
Cash Contributions to Churches (Religious Org)

Tools: ESRI ArcGIS Online, Community Analyst, Layers (ESRI, Census, SB County, CA Education)
Partnering with 211: Linking to Community Resources

HELP STARTS HERE

2-1-1 is a free and confidential service that helps people across North America find the local resources they need. We’re here for you 24 hours a day, seven days a week.

HUMAN TRAFFICKING  CRISIS + EMERGENCY

DISASTER ASSISTANCE  FOOD  HEALTH

HOUSING UTILITIES  JOBS + SUPPORT  REENTRY

CROSSWALK COMMUNITY ASSETS

Services
About

[Map and navigation interface]
Faith and health have long been partners in healing individuals and communities. Geographic Information Systems (GIS) was used to design a health management system for faith communities. The platform will help pastors and their congregations be more informed of their communities and resources. The identification of health assets and community resources that are in close proximity to their places of worship and neighborhoods are important to understanding geographic determinants, and population health.

CrossWalk is located at the corner of Loma Linda, San Bernardino and Redlands CA. We believe that God has placed us here not simply to worship Him and create a space for us, but to create a space for all those who seek to find hope, peace, health, forgiveness, grace and purpose in our vicinity. We seek to be the ecclesial center of our little part of the world. We delineate our neighborhood by approximately a one mile radius around our facility, and our outreach is focused on this area, with the exception of our Adopt-a-School program in connection with Dominguez Elementary in San Bernardino.

Tools: ESRI ArcGIS Online, Layers (ESRI, Census, SB County, CA Education)
Connecting Faith Communities and Health Care Systems

OUTREACH is an important part of the CrossWalk community. From Blue Jeans Sabbath, to working with Helping Hands Pantry, there have always been opportunities to serve. As CrossWalk continues to grow, we also continue to grow our outreach strategy as well. To do so, we have begun collaborating with Loma Linda University Health, Southeastern California Conference of Seventh-day Adventists, and other local partners to see where the CrossWalk community can be most effective in its outreach efforts.

1. Assessment. CrossWalk is working closely with Loma Linda University’s School of Public Health in order to assure that assessment of the local community takes place. We do this in order to make sure that our Outreach efforts are relevant to our neighbors. We are also working closely with the LLUH Medical Center and their Faith and Health Liaison to ensure that our assessment is geotagged in order to create robust maps that allow us to see where the work can most effectively be done. As well, assessing the community assets, the CrossWalk Community Assets, and the present resources already available for those living on the margins will create a better understanding of what gaps CrossWalk can fill.

2. Program Development. After the initial assessment phase, CrossWalk will partner with public health professionals, other not-for-agencies, as well as other faith communities in order to develop programs that will target specific disparities in the region. This program development (called ministries in churches) will happen in parallel to the partnership with Dominguez Elementary which includes health fairs, mentoring needs, and staff support. We will also continue to serve at Helping Hands Pantry every 4th Sabbath of the month.

3. The Ecclesial Center. The dream is to build ministries that fill the gaps in service for those who are marginalized by lack of access to education, healthcare, and jobs. But through this work in the community, they begin to see our organization as a place of...
Impact of GIS

- Improve awareness and access to health care resources and establishing trust among health systems and faith communities.

- Creating new forms of faith-based collaborations for health in our communities, which will help enhance existing services, and outcomes through resource allocation, improving processes, quality of care, and the implementation of innovative new technology.
Utilization of GIS technologies can be used to benefit the decision making process, and policy development throughout the County, which will result in the improvement of the health, safety, and quality of life of its citizens.
Network, collaborate, innovate

Work toward a healthier community