

My School - MY RX for Health: Story Map

Connecting Schools, Communities, Families For Health

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Community Health Management System (CHMS)

Vision:

Create a real-time community health management system to provide geographically enabled health utilization information to influence strategic resource, patient care, and population health decisions.

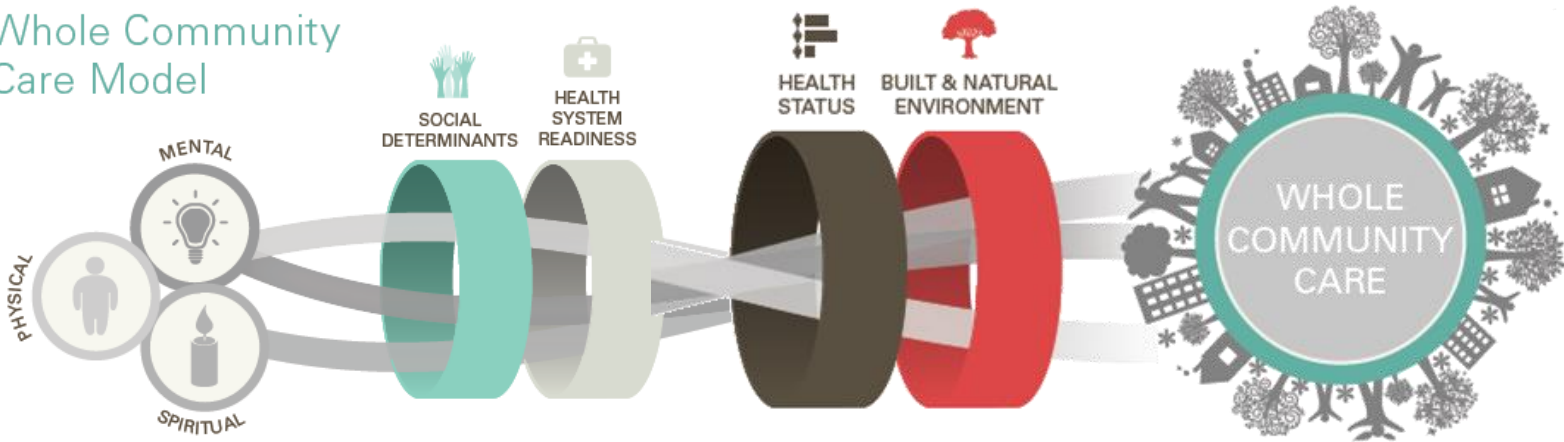


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GIS Behind the Scenes

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

Whole Community Care Model



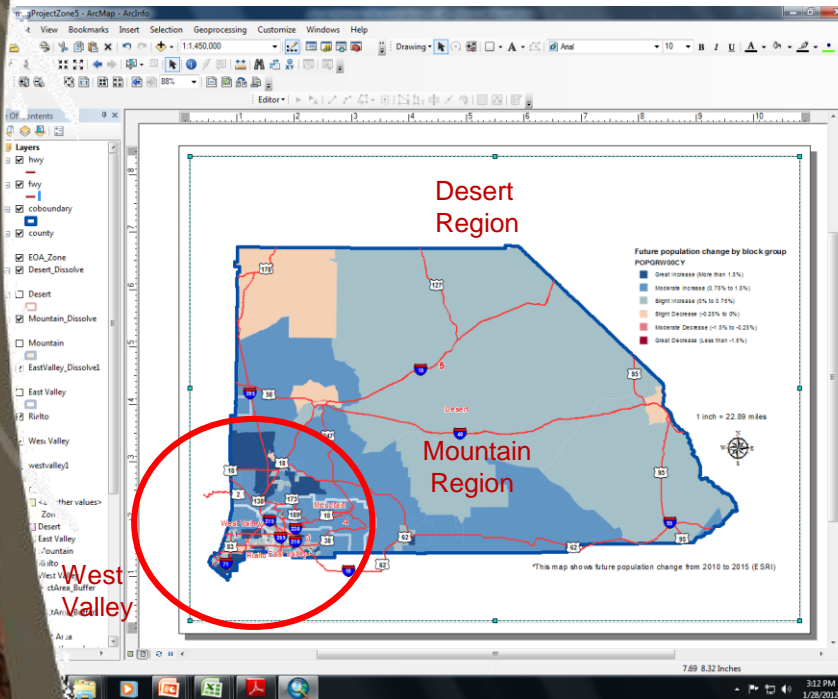
The New Analytical Imperatives

- ① The “place” of children growing becomes clinically relevant.
- ② Community health and wellness begins long before admission.
- ③ Geography becomes the new information “glue”.
- ④ Understanding the space and resources trumps everything else.



San Bernardino County

- POPULATION: OVER 2 MILLION, 5TH RANKING COUNTY IN CA
- PROJECTED TO REACH 3.6 MILLION BY 2050
- OVER 20,000 SQUARE MILES OF LAND
- EAST VALLEY, WEST VALLEY, MOUNTAIN, & DESERT REGIONS



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Children of San Bernardino County

- MEDIAN **31.7 years**
- POPULATION
 - < 20 YEARS OF AGE **32%**
 - 0-9 YEARS **15%**
 - 10-19 YEARS **17%**
- HOUSEHOLDS POVERTY **28%**
- **ADOPT A SCHOOL PROJECT**



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Wonderful World of Technology



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Obese Preschool Children

STUDY: 3,600 children
3-6 years, Texas

FINDINGS:

Normal Lipid Panel
Elevated Markers for Heart
Disease
C-Reactive Protein

* Cardiovascular disease risk factors
among obese preschool children,



Sept 2012, Obesity Journal



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Education and Regular Exercise

CDC REPORT

“who engages in regular exercise?”

- 61% any college
- 50% high school diploma
- 37% no high school diploma



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Agency for Healthcare and Quality: AHRQ Study 2013

FACT:

1 IN 3 CHILDREN ARE
OVERWEIGHT OR OBESE

34,500 articles reviewed, 131 fit criteria

- High income country
- Randomized trials
- Children 2-18 years of age
- Outcome followed 6-12 months



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Agency for Healthcare and Quality:

AHRQ Study : 2013 Conclusions

- **School-based programs** involving dietary or physical activity interventions are most effective in preventing childhood obesity.
- **Combining** a home or community component with a school-based program also works, adds benefit.
- **Limitations** show magnitude of effects appears to be modest, although the heterogeneity in study interventions, outcomes, and duration make it difficult to estimate a precise effect size.

Wang Y, Wu Y, Wilson RF, et al. AHRQ Comparative Effectiveness Review No. 115.

www.effectivehealthcare.ahrq.gov/child-obesity-prevention.cfm.



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“Back to School” Note for Parents

Researchers found that:

- Programs at schools to help children eat healthy and be physically active can keep children from becoming overweight or obese.
- Along with school programs, additional steps at home and in the community can also help.
- More research is needed to know which particular programs or steps work the best.



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Health Happens Where Children

L I V E



- Health arena for a child is their family, school and community.
- Hospitals are the safety net forwhen health fails.
- Physicians/health systems need engage to help bridge the gap to connect with communities as this is the beginning.



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“WHOLE CHILD”

- Schools and Health have long been partners for families and communities.
- Creating new forms of collaborations for health in our schools and communities
- Familiarize schools and families with resources that encompass
 - ~ NUTRITION AND FOOD
 - ~ PHYSICAL ACTIVITY AND HEALTHY LIVING
 - ~ HEALTH ACCESS
 - ~ CREATE A SCHOOL STORY MAP



Maps: School Resources

Tutoring
Mentoring
Preschools
**School
dashboards**



<https://luh.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=d51506f06c894d35b8ca066dffc363>

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Maps: Healthy Foods / Physical Activity

Health food shopping

WIC offices

Fast food activity

farmer markets

food banks

bike paths

green spaces

free foods

walking zones

<https://lluh.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=22ef5d8642644617ac44ab1cfbb26609>



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Maps: Health Care Access

Pharmacies

Clinics

Dental offices

Health care provider
offices

Hospitals

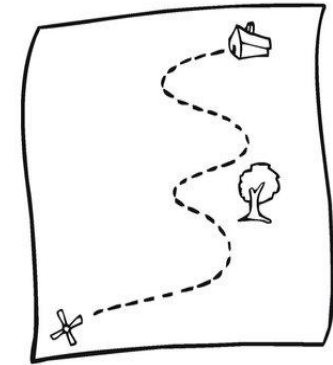
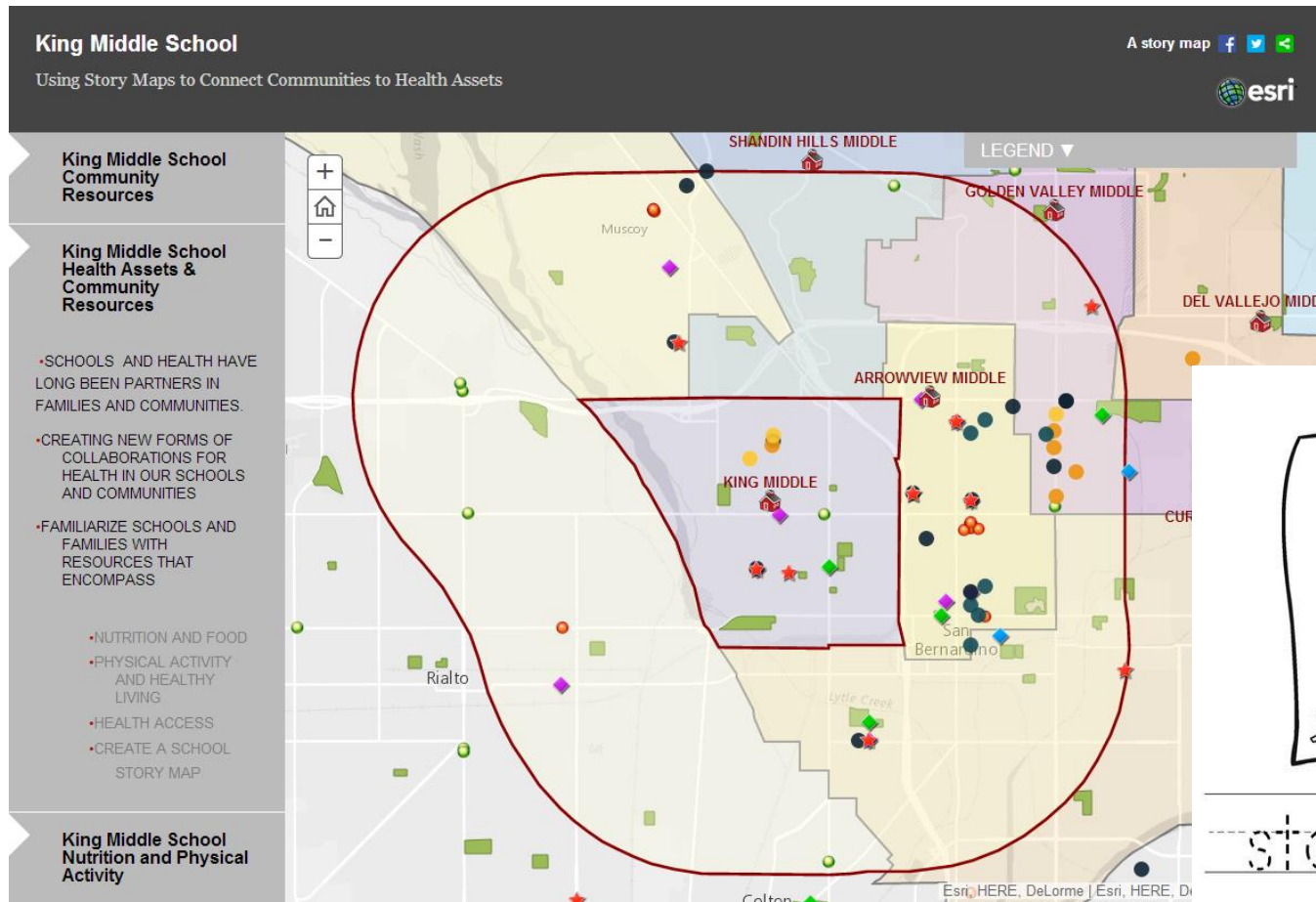


<https://lilh.maps.arcgis.com/apps/OnePane/basicviewer/index.html?appid=060f07b2f58b4775813402183995030c>



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Interactive Story maps



story map

**Maps that tell stories
about the community
and resources**

<http://134.173.236.104/KingMiddle/>



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Phases

Phase I - Completed

- Mapping concept for school district. Presented September 2014

Phase II – Process

- School nurses of county for 1 mile walking area from school entrance for San Bernardino County School District
- Pediatric residents – one local school district for mapping
- Development of walking/school

Phase III – 2015

- School posting on website for San Bernardino County Medical Society, San Bernardino County Schools, Loma Linda University, etc.
- Complete mapping for the county schools
- Education among clinicians
- Message among school users



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Creating a Healthier, Educated Generation ... From Cradle



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Creating a Healthier, Educated Generation. . . . To Careers



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Thank You

Community Schools and Partners

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 - ~ San Bernardino City Unified School District, School Nurse Division
- » Loma Linda University Health,
 - ~ Center for Strategy and Innovation
 - ~ Community Health Development
- » *Huge Thanks!*
- » *James Martinez, MPH, EDD, who created the Story Maps*



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Response:
Change requires the impact of all hands



Whole Community
Care Model



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Objectives

»CREATE A RESOURCE CONNECTION FOR SCHOOLS AND HEALTH CARE CENTERED AROUND SCHOOL COMMUNITIES USING GIS MAPPING

- ~ What is it that schools want to know to assist families
- ~ What are the existing strengths/assets of each school area
- ~ What are the missing pieces needed for health
- ~ How do we create health in the community

~Story Map for schools



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