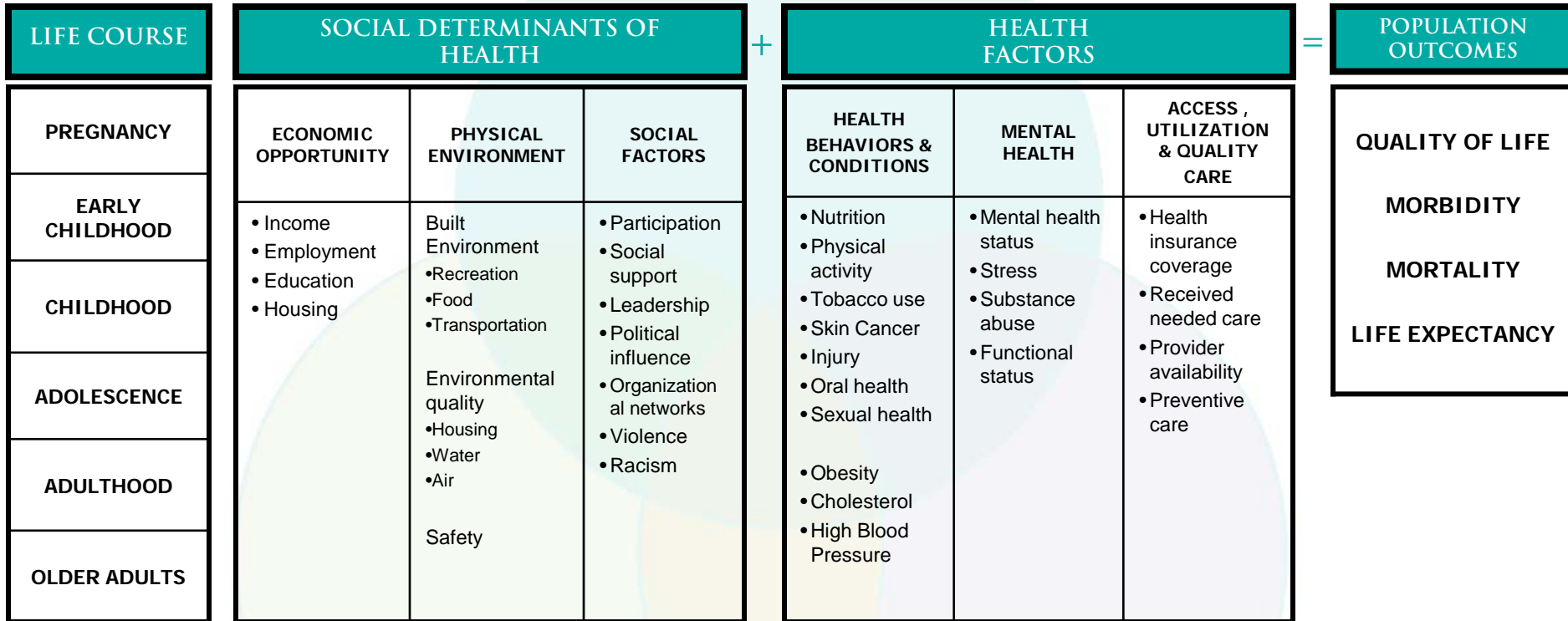


Health Equity

AN EXPLANATORY MODEL FOR CONCEPTUALIZING THE SOCIAL DETERMINANTS OF HEALTH



**NATIONAL INFLUENCES
GOVERNMENT POLICIES
U.S. CULTURE & CULTURAL NORMS**



Public Health's Role in Addressing the Social Determinants of Health

- Advocating for and defining public policy to achieve health equity
- Coordinated interagency efforts
- Creating organizational environments that enable change
- Data collection, monitoring and surveillance
- Population based interventions to address health factors
- Community engagement and capacity building

SOCIAL DETERMINANTS OF HEALTH

Achieving health equity, by addressing the Social Determinants of Health, so that no one is disadvantaged from achieving their full potential because of socially determined circumstances.

The Social Determinants of Health Framework

Definition

Social determinants of health (SDoH) are life enhancing resources whose distribution across populations effectively determines length and quality of life. (S. James, Promoting Health Equity, CDC, 2008)

Life Course Perspective

Stages of Development

By directing attention to how the SDoH operate at each stage, more targeted approaches can be determined, so that the cumulative effects of inequalities can be ameliorated.

The Social Determinants (CDC)

- Economic Opportunity
- Physical Environment
- Social Factors

In order to affect health equity and improve the larger population health outcomes, the public health system must do

its part to define and identify public policy that leads to more equitable distribution of social determinants/indicators for everyone

Individual Factors

This is where current public health work focuses. Through population-based approaches, the public health system has an obligation to deliver culturally appropriate interventions to improve health behaviors and reduce risk factors. Although this is a necessary component to improving health outcomes it focuses on individual changes. A more macro level approach of that includes the SDoH through policy is needed.

Population Health Outcomes

In general, the goal of any public institution is to improve quality of life. By increasing coordinated interagency efforts and building awareness and engagement to address the SDoH, measures of overall health outcomes can improve.

Public Health's Role in Addressing the Social Determinants of Health

Addressing the Social Determinants of Health through Healthy Public Policy to Achieve Health Equity Among All Coloradans

The Public Health System can affect population health outcomes by addressing the social determinants of health (SDoH) through a life course perspective. By directing attention to how policies can positively change the SDoH, how they operate at every level of development and continuing our work on individual factors, changes can be made to Colorado's health outcomes.

Advocating for and Defining Public Policy to Achieve Health Equity

Local and state policy that is focused on the social determinants of health, such as economic development (education & adequate income), physical environment (built environment & transportation) and the social factors (social support, leadership and racism), have the greatest effect on making the changes needed to achieve health equity.

Coordinated Interagency Efforts

In order to ensure that awareness and engagement is built around the social determinants of health across all state agencies and public health partners, there must be coordinated interagency efforts. With this engagement comes a stronger voice to make the policy changes necessary to achieve equity.

Creating Supportive Environments that Promote Health Equity Work

Changes need to happen internally within organizations. Work on the social determinants of health is a shift in how we currently address public health issues.

Data Collection, Monitoring and Surveillance

The social determinants framework requires that we look for and look at data in new ways. By engaging system partners in data sharing and learning how to appropriately analyze and interpret data from fields such as education, transportation, and housing, the social determinants framework provides a rich and robust view of health. This type

of data synthesis will lead to a deeper understanding of the many issues that ultimately affect the health and health behaviors of people in families, neighborhoods and communities.

Population Based Interventions to Address Individual Factors

Although addressing the social determinants of health means working more deliberately to include the social determinants of health, population based interventions of the current public health system are still needed.

Community Engagement and Capacity Building

Community members must be engaged and informed in order to move policy change forward. Communities are the most important participants in identifying the problem and educating decision makers on changes that can benefit all. With proper support, such as knowledge, skills and tools, communities can champion solutions that result in long term changes to the social determinants of health.

SOCIAL DETERMINANTS OF HEALTH: EDUCATION

“One of the best ways for us to improve the health of the whole population is to focus on evidence-based policies that optimize both early childhood development and education. In one critical sense, they are the same thing; adequate social and cognitive development in childhood is a necessary foundation for success in education, which in turn is necessary for health and success in life.”

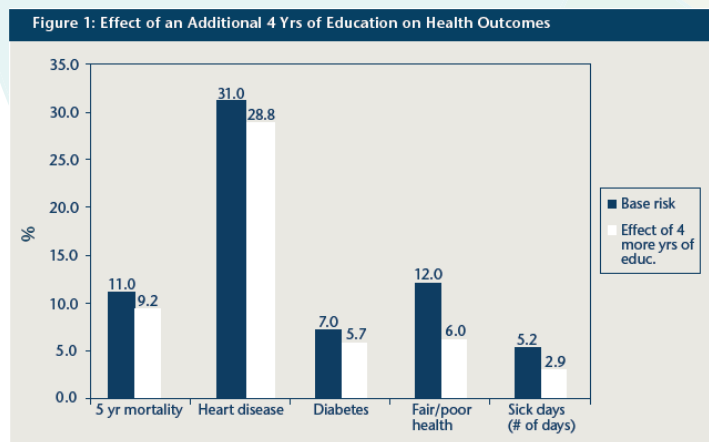
<http://virtualmentor.ama-assn.org/2006/11/pfor1-0611.html>

An individual’s education level has a direct correlation to their income. Education and income are both strong social determinants of health. The high school graduation rate for Colorado in 2007 was 75 percent, according to the Colorado Department of Education. That means one of every four students in the K-12 system in Colorado does not graduate from high school. This has a direct impact on many aspects of a community, from economics to health. The 2008 CSAP scores show students who qualify for free and reduced lunch score 30 percent lower in all subject areas than those who don’t. Baca County, one of the poorest in Colorado, has the lowest proficiency scores in reading, writing and math at the 3rd grade and 8th grade level. Health Statistics Region Six, also the poorest in Colorado, has some of the worst health outcomes in the state, including high teenage pregnancy, adult smoking rates and teenage motor vehicle deaths.

SUMMARY

Education is a social determinant of health that is already showing strong negative health outcomes in parts of Colorado with low levels of educational achievement. It is imperative that measures be taken to protect the health outcomes of children and youth while working to support adults who do not have a strong educational foundation.

- Invest in programs that decrease the dropout rate
- Increase high school graduation rates
- Increase access and opportunities for quality early childhood education
- Increase access and opportunities for higher education



David M. Cutler and Adriana Lleras-Muney. Education and Health: Evaluating Theories and Evidence. National Poverty Center, June 2006.

Adjusting for race and gender, figure 1 shows the effects of four or more years of education (high school is the baseline) on health outcomes among Americans (data comes from the National Health Interview Survey). An additional four years of education lowered the five year mortality rate (death five years after the interview) by 1.8 percentage points. Among the other health outcomes, the biggest effects can be seen that those with more education are less likely to report being in fair/poor health.

REFERENCES & READING

2009 KidsCount in Colorado!

“Within the state of Colorado, student achievement is unequal by race or ethnicity and income.”

<http://www.coloradokids.org/includes/downloads/kidscount2009forweb.pdf>

Diplomas Count 2009: Broader Horizons – The Challenge of College Readiness for All Students

“Diplomas Count 2009 contains the latest original analysis of high school completion conducted by the Editorial Projects in Education Research Center.”

<http://www.edweek.org/ew/toc/2009/06/11/index.html>

Education and Education Policy as Social Determinants of Health

“Health practitioners need to pay attention to risk factors of inequality and offer their patients the information and resources they need to enroll in appropriate economic, education and child care programs that benefit families living in poverty.”

<http://virtualmentor.ama-assn.org/2006/11/pfor1-0611.html>

SOCIAL DETERMINANTS OF HEALTH: BUILT ENVIRONMENT

Features of physical and social environments often overlap, but together they can create vastly different opportunities to be healthy. Our homes and our communities have enormous impact on our health. Living in unhealthy homes and communities can severely limit choices and resources. To improve health we must promote health where we live, learn, work and play.

Healthy environments—including safe, sanitary housing and neighborhoods with sidewalks, playgrounds and full-service supermarkets—encourage healthy behaviors and make it easier to adopt and maintain them. Neighborhoods where residents know and feel connected to each other also tend to promote better health.

However, the reality is that housing quality varies dramatically by social and economic circumstances. Healthy homes and communities are out of reach for many families. Substandard housing is much more of a risk for some families than others.

People are more likely to be active when they live in neighborhoods with better resources for exercise, such as parks and walking or jogging trails; with less litter, vandalism and graffiti; and with streets that are pedestrian-friendly (1). Car-centric communities, the result of suburban sprawl and zoning that segregates residential and commercial areas, offer few opportunities for exercise and increase air pollution.

WHAT IS A HEALTHY COMMUNITY?

- Safe, high-quality, affordable housing for all residents;
- Safe streets, sidewalks and places for children to play and adults to exercise;
- Clean air, water and protection from exposure to chemical and structural hazards;
- Limits on the exposure of residents, particularly children, to promotion and sale of hazardous substances including alcohol and tobacco.

A HEALTHY COMMUNITY PROMOTES THE HEALTH OF ITS RESIDENTS BY HAVING:

- Full-service grocery stores located nearby that offer affordable, healthy foods;
- Safe, attractive and accessible indoor and outdoor places for children to play and adults to exercise, including green spaces;
- Places for people to gather and interact, including

SUMMARY

Where we live, learn, work and play can have a greater impact on how long and well we live than medical care.

- Our zip code may be more important to our health than our genetic code
- A person's health and chances of becoming sick and dying early are greatly influenced by powerful social factors such as education, income, nutrition, housing and neighborhoods
- There is more to health than health care

places of worship and activities bringing people together to promote the common good;

- Convenient and affordable public transportation to access services and opportunities that are important for health but are not available within walking distance, reduce pollution and encourage walking.

(1) Heinrich K, Lee R, Suminski R, et al. "Associations Between the Built Environment and Physical Activity in Public Housing Residents." *International Journal of Behavioral Nutrition and Physical Activity*, 4(1):56, 2007; Giles-Corti B and Donovan RJ. "The Relative Influence of Individual, Social and Physical Environment Determinants of Physical Activity." *Social Science and Medicine*, 54(12): 1793-1812, 2002

REFERENCES & READING

Bishaw A. *Areas with Concentrated Poverty*: 1999. Washington: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau, 2005. Available at: www.census.gov/prod/2005pubs/censr-16.pdf

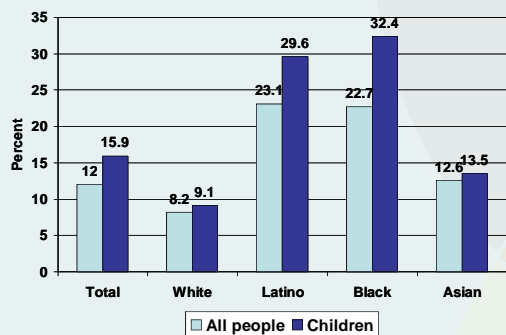
Excerpts taken from the Robert Wood Johnson Foundation Commission to Build a Healthier America Report: *Beyond Health Care: New Directions to a Healthier America*: www.commissiononhealth.org/Report.aspx?Publication=64498

SOCIAL DETERMINANTS OF HEALTH: RACE & ETHNICITY

Colorado's major racial and ethnic groups, on average, have the worst health outcomes, the lowest high school graduation rates, the highest unemployment rates and the lowest median income levels.

THE FACTS:

Racial and ethnic groups are disproportionately burdened by poor health outcomes and common indicators of poor social determinants, including poverty (Fig. 1), lack of insurance, unemployment and high school graduation rates.



More than 40 percent of Latinos, who make up nearly 20 percent of all Coloradans, have no health insurance. Nearly 34 percent of Native Americans are uninsured. Latinos also have the most members living below the federal poverty level, the highest diabetes mortality rate (Fig. 2) and the highest obesity rate among both adults and children.

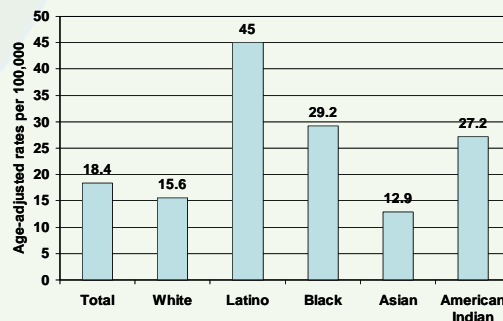
American Indians have the highest unemployment rates, the second lowest high school graduation rates and the highest rate of tobacco use. Blacks make up almost 4 percent of the state's population and rank highest in poverty, infant mortality rates, overall cancer mortality rates and incidence rates of diabetes, high blood pressure and heart disease.

Although Asian Americans have the highest high school graduation rate in Colorado, their poverty levels are higher than their White counterparts, as are their unemployment rates. Asian Americans also have nearly double the rate of tuberculosis when compared to African Americans (over 20 times more than Whites). Asian women die from cervical cancer more than any other group. (2)

SUMMARY

"Health equity cannot be achieved without addressing the health of all racial and ethnic groups. There is a powerful link between social factors and health. Social and economic policies have a direct impact on the health and wellbeing of those who live and work under those policies. Interventions and policies that purport to promote health must be based on evidence and result in action, and they must address daily living conditions and issues related to power, money, and resources." (3)

The place you live, work and play is a major component of social determinants that affect your health outcomes. Latinos and Black populations generally live in urban areas that are nearby industrial centers, major highways, and high-crime pockets within Colorado's most densely populated neighborhoods (1).



- 1 - 2000 Census block groups
- 2 - 2009 Colorado report on Racial and Ethnic Health Disparities, released by the Office of Health Disparities at the Colorado Department of Public Health & Environment; <http://www.cdphe.state.co.us/ohd/>
- 3- 2010 National Plan for Action: Changing Health Outcomes-Achieving Health Equity; National Partnership for Action, U.S. Department of Health & Human Services; <http://raceandhealth.hhs.gov/npa/templates/browse.aspx?lvl=1&lvlID=31>

SOCIAL DETERMINANTS OF HEALTH: POVERTY

“Poverty, relative deprivation and social exclusion have a major impact on health and premature death. The chances of living in poverty are loaded heavily against some social groups,” according to the World Health Organization. In Colorado, areas of high poverty align with health statistics regions with the highest number of poor health indicators.

<http://www.euro.who.int/DOCUMENT/E81384.pdf>

According to KidsCount in Colorado!, there were 87,000 more children living in poverty in Colorado in 2007 than there were in 2000. The life course perspective model informs us that circumstances in early life have a profound effect on health at all ages. Therefore, the growth in the number of children in poverty will have an extreme impact on the health outcomes of the state over time. In fact, in some of the state’s poorest counties, it already has. Health statistics from six of the state’s 12 poorest counties (Baca, Bent, Crowley, Huerfano, Otero and Prowers) show the following:

- Highest percentage of births resulting from an unintended pregnancy
- Highest percentage of births where Medicaid paid for prenatal care
- Fourth highest fertility rate of women ages 15-17
- Third highest percentage of low birth weights
- Highest motor vehicle death rate for teens 15-19
- Highest percentage of adult smokers
- Highest percentage of adults who are physically inactive
- Highest percentage of adults with diagnosed diabetes

SUMMARY

Poverty is a social determinant of health that is already showing strong negative health outcomes in impoverished parts of Colorado. Children are the fastest growing poverty group. It is imperative that measures be taken to protect the health of poor children and youth, while also working to support adults facing poverty.

- Invest in programs that fight childhood poverty
- Increase asset-building opportunities for working poor families
- Advocate for the self-sufficiency standard to be used in determining family eligibility for necessary services
- Support comprehensive approaches to reducing poverty that incorporate work preparation, education, housing, transportation, child care, safety and other supportive services

REFERENCES & READING

2009 KidsCount in Colorado!

“The number of children living in poverty has increased 85 percent since 2000, with more than 192,000 children living in poverty in 2007, compared to 104,000 in 2000.”

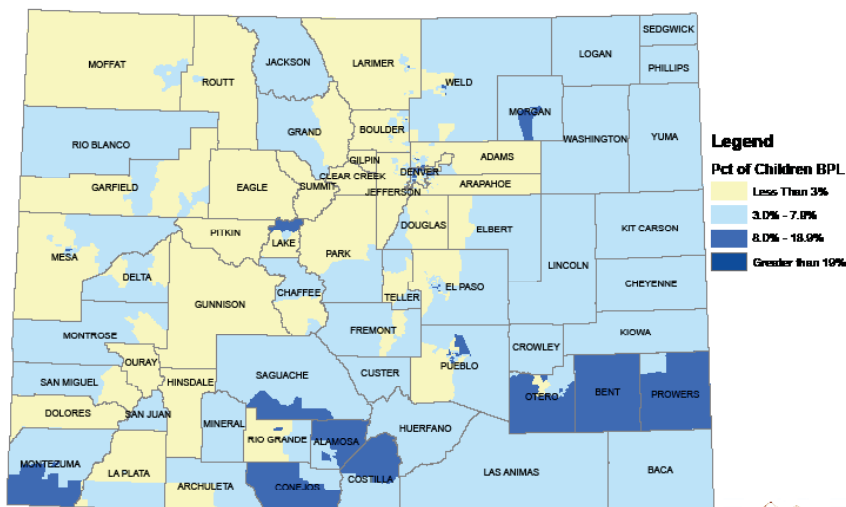
<http://www.coloradokids.org/includes/downloads/kidscount2009forweb.pdf>

The Self-Sufficiency Standard for Colorado 2008: A Family Needs Budget

“The Self-Sufficiency Standard measures how much income is needed for a family of a certain composition in a given place to adequately meet their basic needs—without public or private assistance.”

http://www.cclponline.org/pubfiles/SelfSufficiency08_FinalProof.pdf

**Percent of Children Below Poverty
By Census Tract, 2000 Census**



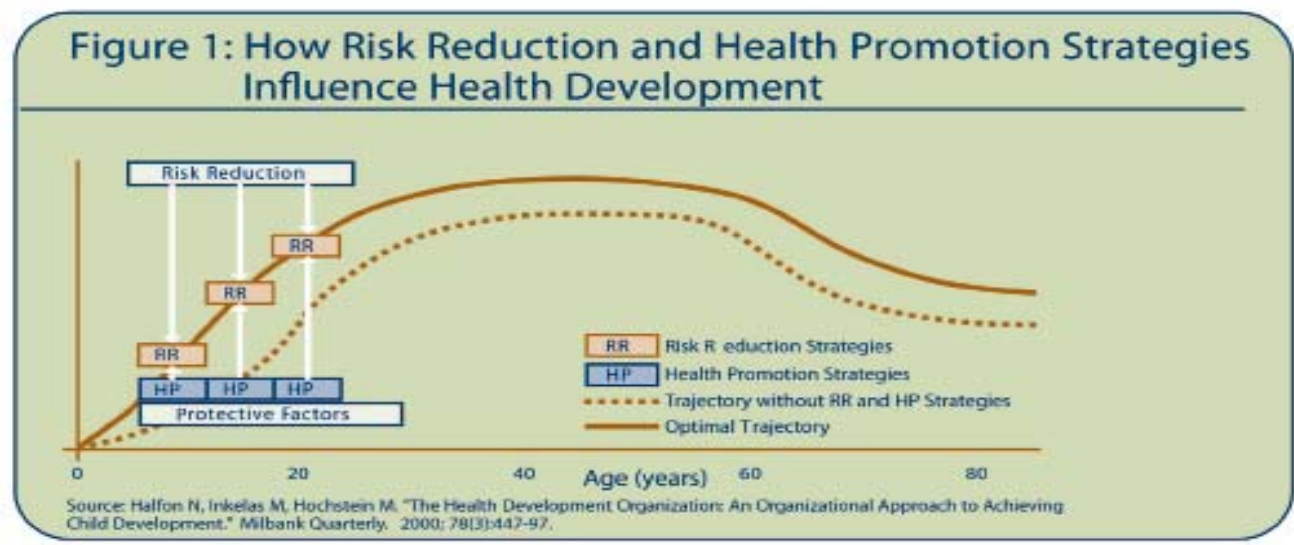
Source: U.S. Census Bureau, 2000 Census Summary File Three



SOCIAL DETERMINANTS OF HEALTH: LIFE COURSE

Life course is an approach to health development that addresses social determinants specific to developmental periods — early childhood, childhood, adolescence and adulthood — that have a cumulative affect during a person's life span.

The life course approach breaks down social determinants into risk and protective factors at the individual, relationship, community and societal levels. Risk and protective factors help to identify the most effective public health strategies for optimal health development.



"The life course approach to conceptualizing health care needs and services evolved from research documenting the important role early life events play in shaping an individual's health trajectory. The interplay of risk and protective factors — socioeconomic status, toxic environmental exposures, health behaviors, stress and nutrition — influence health throughout one's lifetime." ¹

"Low income and inadequate educational opportunities have been associated with inactivity, weight problems, tobacco use and a greater reliance on health services in older age. A growing number of studies demonstrate that health at middle and older age reflects health and social conditions experienced early in life. For example, evidence exists that mental health across a life course is supported by successful negotiation of life changes and developmental tasks, and protected by supportive, tolerant communities." ²

Improving health outcomes and reducing health care costs will require population-based services that target the "upstream" determinants of health at family, community and societal levels. It also means addressing risk and protective factors at the earliest possible developmental stages. ³

REFERENCES & READING

1. The Life Course Approach, Health Resources and Services Administration, Maternal and Child Health Bureau: <http://mchb.hrsa.gov/lifecourseresources.htm>
2. Queensland Health, 2002. A strategic policy framework for children's and young people's health 2002-2007: http://www.health.qld.gov.au/health_professionals/childrens_health/framework.asp
3. NICHM Foundation, Life Course Health Development, Neal Halfon MD, MPH, Director, UCLA Center for Healthier Children, Families and Communities: http://nihcm.org/pdf/ExpertVoices_Halfon_FINAL.pdf