

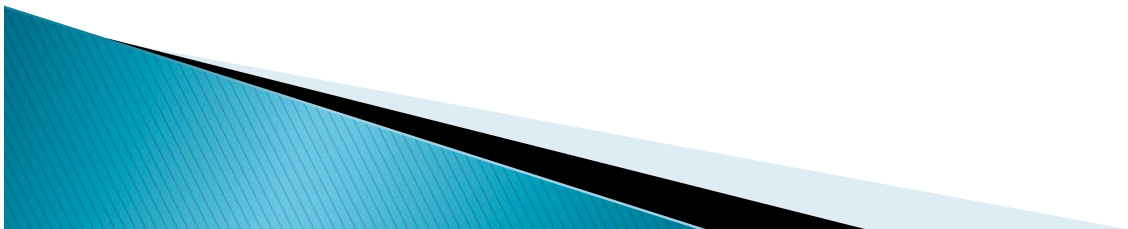
Using Data to Improve Health Care

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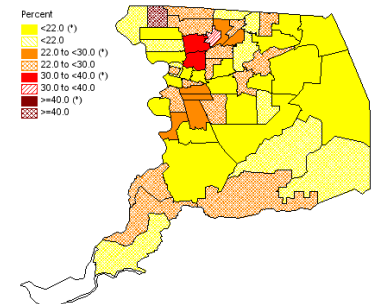
Improving Health Care

- ▶ “Health Care” typically refers to the delivery system of health care
- ▶ Many quality initiatives underway to improve the delivery system (CMS, AHRQ, HRSA, etc.)
- ▶ EHRs and HIE play key roles in supporting quality initiatives
- ▶ Yet ... to improve outcomes and health we must look beyond the delivery system

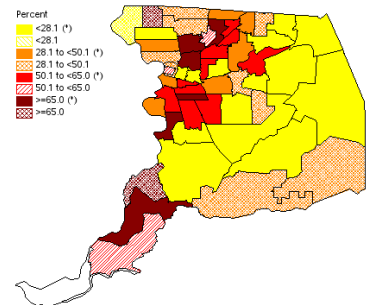


Health is tied to Place

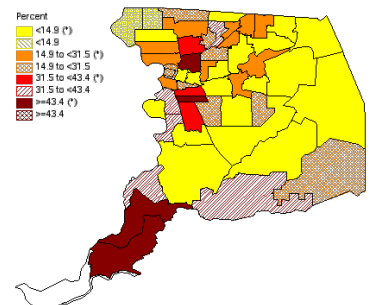
- ▶ Percent of Births with Late Entry into Prenatal Care, Sacramento County, 2006–2008
- ▶ Percent of Births with Medi-Cal as Primary Payer, Sacramento County, 2006–2008
- ▶ Percent of Births to Mothers with No High School Degree, Sacramento County, 2006–2008
- ▶ Infant Mortality Rate, Sacramento County, 2005–2007



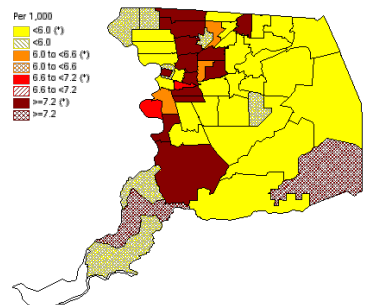
The star in parenthesis after the legend entry indicates a statistically significant percent compared to the Healthy People 2020 Objectives (alpha=0.01, two-tailed test). For white areas in the map, no data are available. #PDF-CCFR Sacramento, 1/1/26, 2011



The star in parenthesis after the legend entry indicates a statistically significant percent compared to the California average (alpha=0.01, two-tailed test). For white areas in the map, no data are available. #PDF-CCFR Sacramento, 1/1/26, 2011



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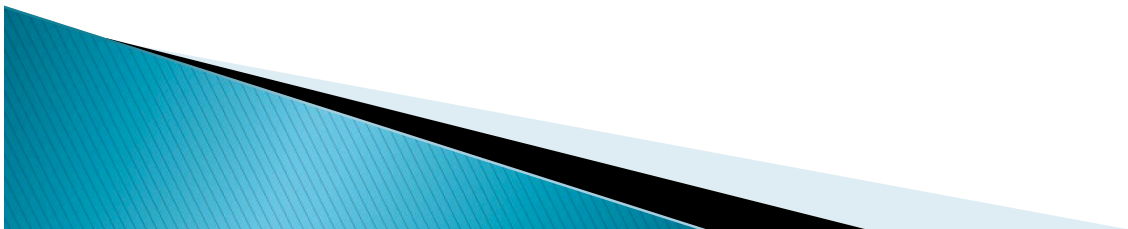
Understanding the Community

- ▶ Today ... the data we use comes from:
 - Vital Records (Birth and Death)
 - Reporting Registries (Cancer, Birth Defects, Communicable Disease, National Health Safety Network, Hospital Discharge and Emergency Departments, etc.)
 - Telephone Surveys (Behavioral Risk Factor Survey, California Health Interview Survey, etc.)
- ▶ In the Future ... the data we use may also come from:
 - EHRs in ambulatory as well as hospital-based settings
 - Patient managed data and health histories
 - Community services



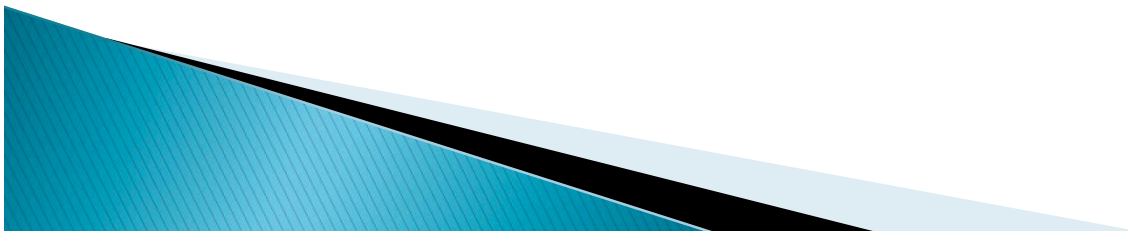
HITECH as the Foundation ...

- ▶ Health Information Technology for Economic and Clinical Health (HITECH) Act
- ▶ Signed into legislation on February 17, 2009 as part of the American Recovery and Reinvestment Act (ARRA)
- ▶ Lays the basis and framework for activities in the Affordable Care Act
- ▶ Represents the seed that is growing into a revolution that is transforming health care
 - New expectations from patients ... for providers ... for vendors ... for government
 - The challenge ...
Build the trust environment for transformation to occur



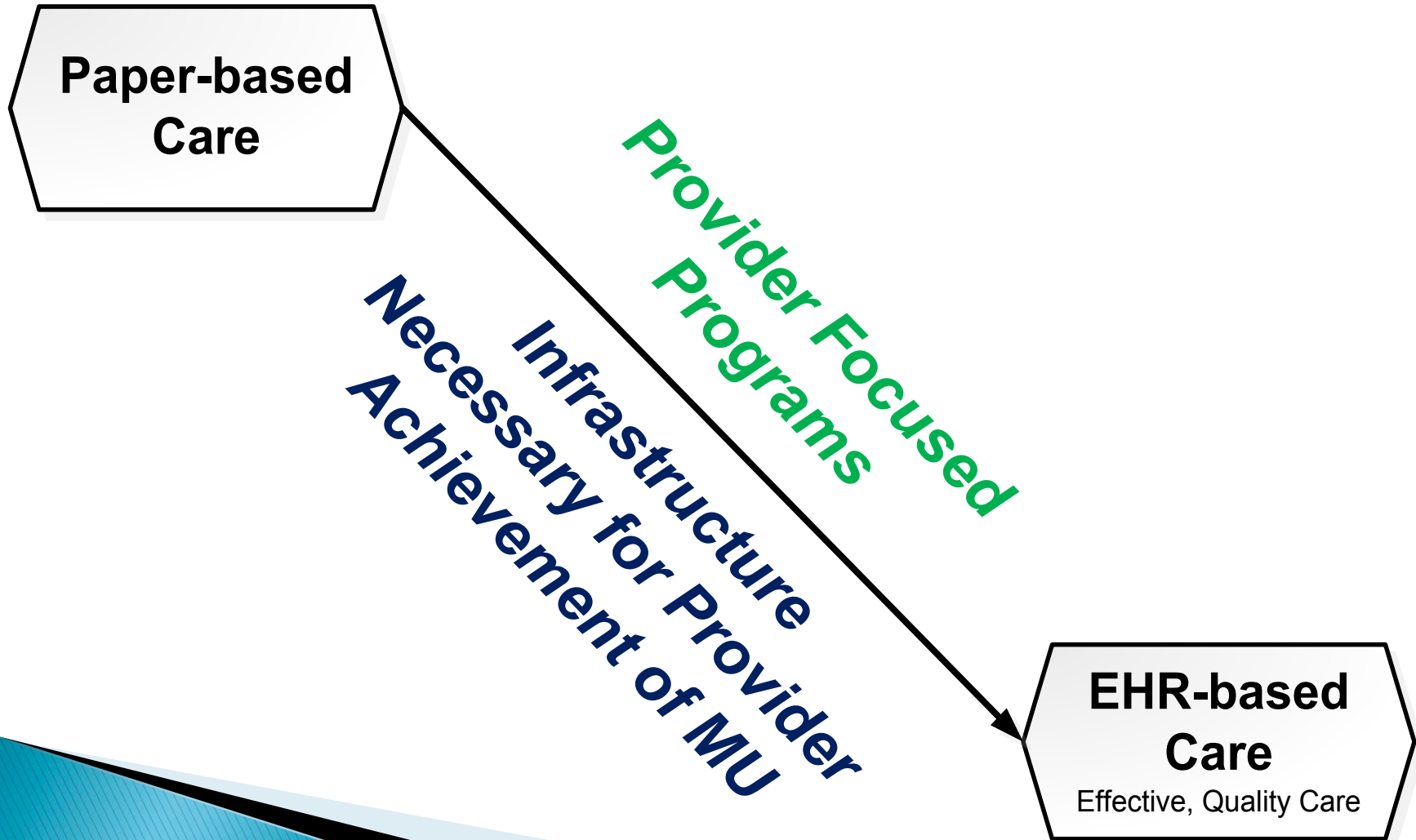
CMS EHR Incentive Program: Health Outcome Policy Priorities

- 1) Improving quality, safety, efficiency and reducing health disparities.
- 2) Engage patients and families in their healthcare.
- 3) Improve care coordination.
- 4) Improving population and public health.
- 5) Ensure adequate privacy and security protections for personal health information.



What is an EHR World?

Re-engineering business processes

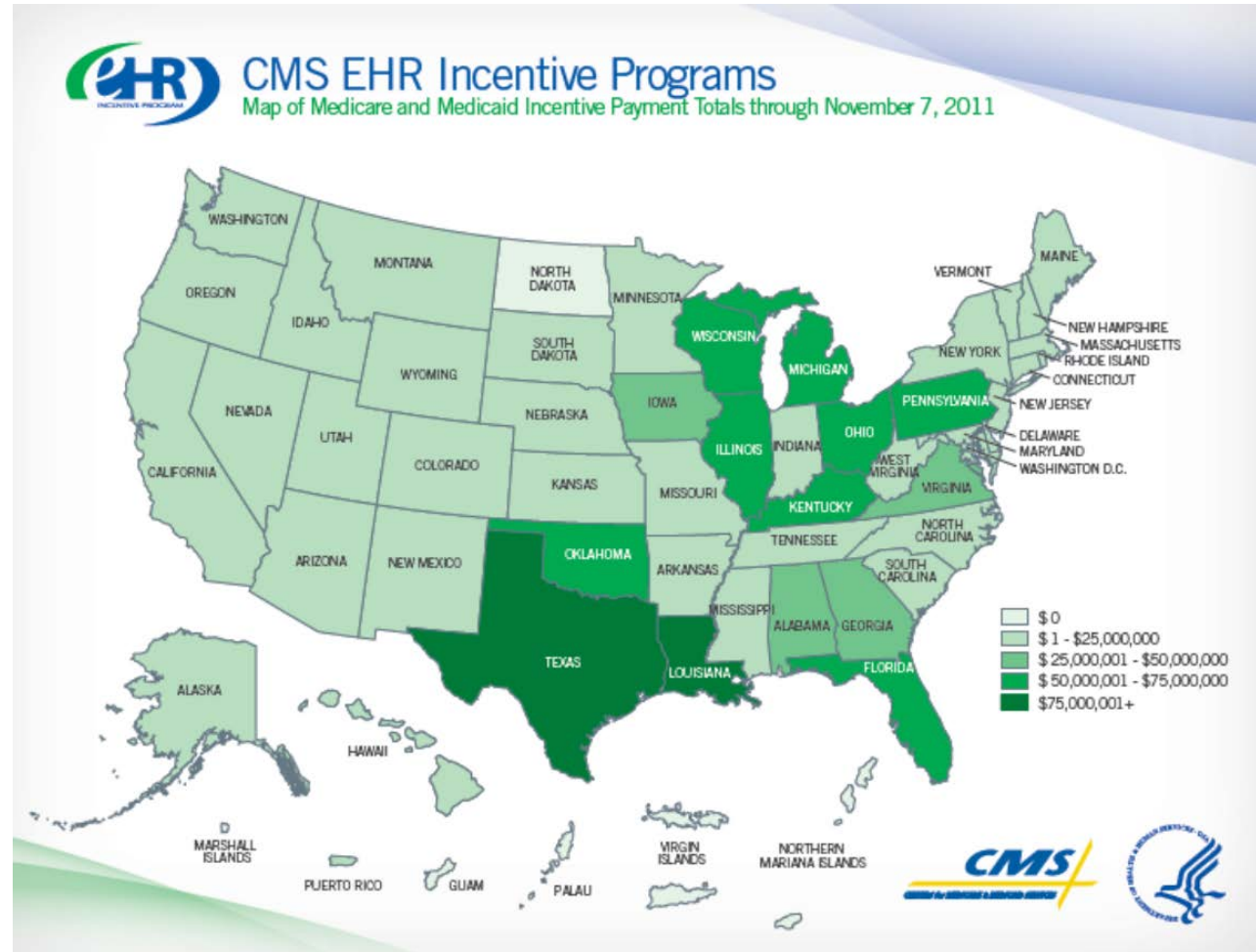


EHR Incentive Payments by State

November 2011

Total
Payments
in Nation:
**\$1.239
Billion**

*All payments
are federal
funding under
ARRA-HITECH*

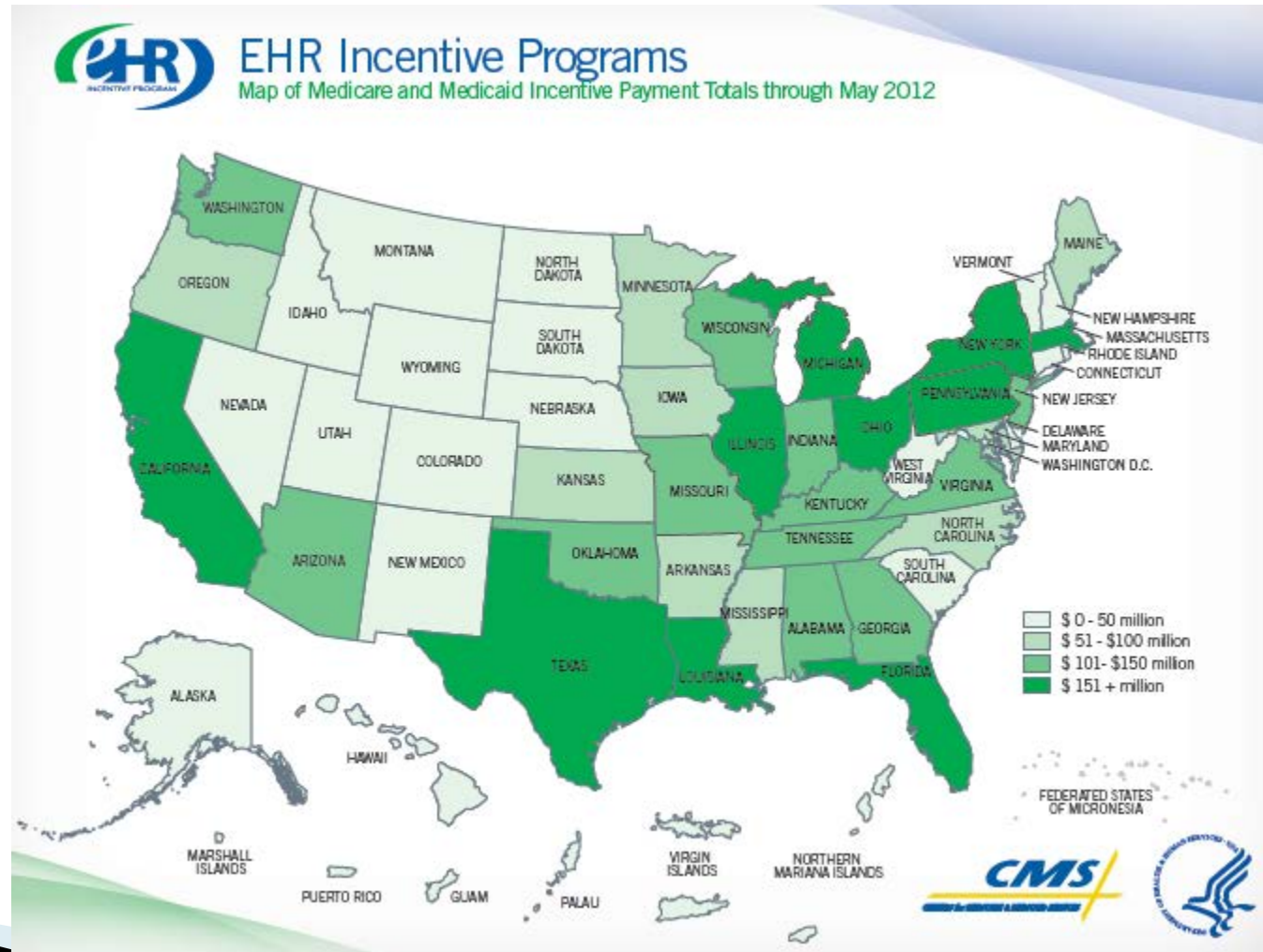


EHR Incentive Payments by State Through May 2012

Total Payments in Nation: **\$5.571 Billion**

102,380 providers and hospitals paid

All payments are federal funding under ARRA-HITECH



Top Payers – \$151 million +

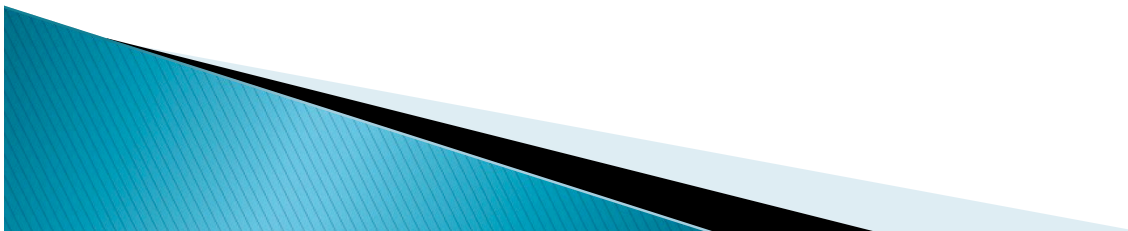
- ▶ Texas – \$539,203,452 (\$312,837,369 Medicaid)
- ▶ **California – \$413,459,380 (\$227,909,436 Medi-Cal)**
- ▶ Florida – \$404,073,481 (\$171,793,080 Medicaid)
- ▶ Pennsylvania – \$291,529,248 (\$121,224,130 Medicaid)
- ▶ New York – \$276,168,518 (124,008,020 Medicaid)
- ▶ Ohio – \$255,682,134 (\$114,084,593 Medicaid)
- ▶ Illinois – \$209,063,161 (\$64,351,978 Medicaid)
- ▶ Michigan – \$178,007,069 (\$80,639,455 Medicaid)
- ▶ Massachusetts – \$173,544,908 (\$78,481,795 Medicaid)
- ▶ Louisiana – \$158,614,304 (\$113,722,056 Medicaid)

** Seven States have not made Medicaid payments as of May 2012



EHRs leading to connections ...

- ▶ With EHRs in hand, organizations want to conduct business electronically
- ▶ Enterprise/Private HIE is meeting the business needs of the organizations
- ▶ Public/Community HIEs are meeting reporting needs
- ▶ Need clear standards, specifications, and processes so that the HIEs will meet



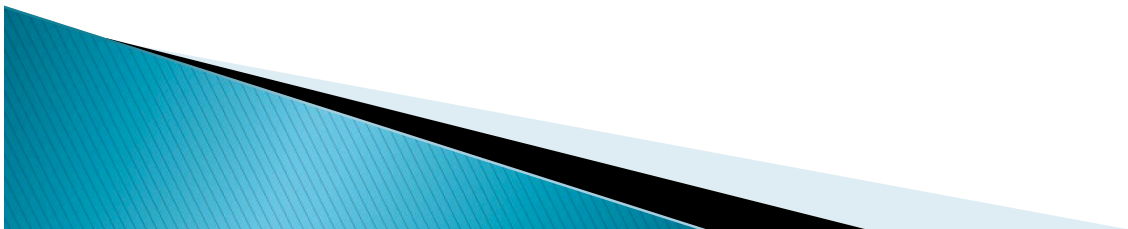
Using Data to Improve Health

- ▶ Meaningful Use pushes EHRs to collect structured sharable data
- ▶ With structured data, populations may be evaluated and compared:
 - Provider's patient panel
 - Clinic's patient panel
 - Health system's population served
 - Local Community (Neighborhood, City, County)
 - State's population
 - Nation's population



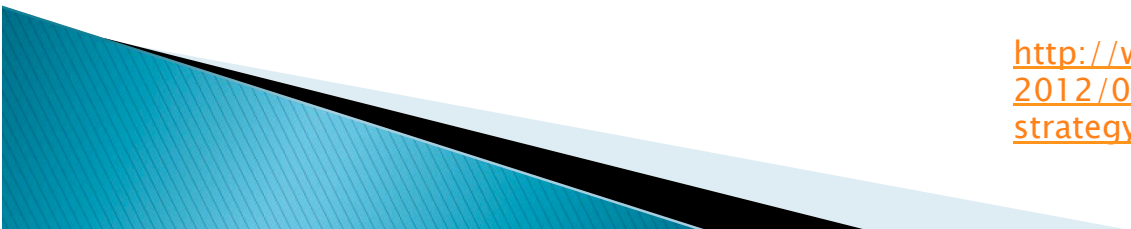
Extending the Norm Change

- ▶ EHR Incentive Program is changing the health care delivery system
- ▶ Payment models are being tested through CMS programs
 - Accountable Care Organizations
 - Dual Eligible Pilots
 - Delivery System Reform Incentive Payments (DSRIP)
- ▶ National Quality Strategy is focusing on outcomes
- ▶ National Prevention Strategy is going beyond the health care setting



National Quality Strategy

- ▶ **Better Care:**
Improve the overall quality, by making health care more patient-centered, accessible, and safe.
- ▶ **Healthy People/Healthy Communities:**
Improve the health of the U.S. population by supporting proven interventions to address behavioral, social and, environmental determinants of health in addition to delivering higher-quality care.
- ▶ **Affordable Care:**
Reduce the cost of quality health care for individuals, families, employers, and government.



<http://www.healthcare.gov/news/factsheets/2012/04/national-quality-strategy04302012a.html>

National Prevention Strategy

The Strategic Directions are the foundation for all prevention efforts:

- ▶ Healthy and Safe Community Environments
- ▶ Clinical and Community Preventive Services
- ▶ Empowered People
- ▶ Elimination of Health Disparities

The Strategy's Priorities –recommendations that have the greatest potential to reduce the leading causes of preventable death and major illness:

- ▶ Tobacco Free Living
- ▶ Preventing Drug Abuse and Excessive Alcohol Use
- ▶ Healthy Eating
- ▶ Active Living
- ▶ Injury and Violence Free Living
- ▶ Reproductive and Sexual Health
- ▶ Mental and Emotional Well-Being

<http://www.healthcare.gov/prevention/nphpphc/2012-npc-action-plan.pdf>

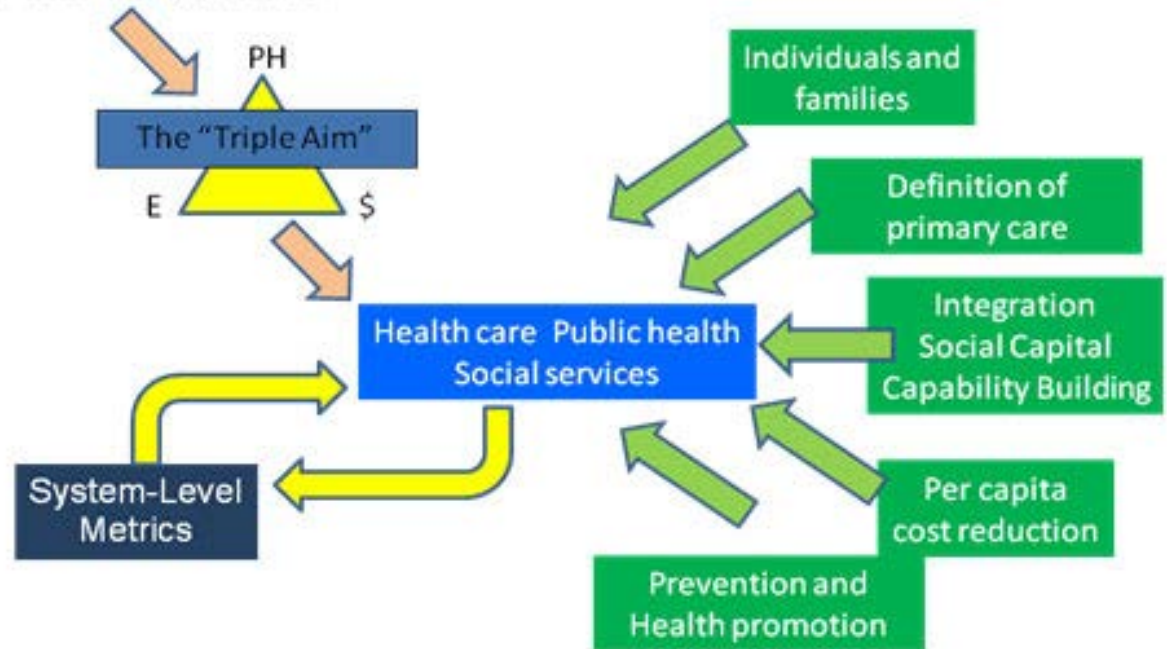
IHI Triple Aim Initiative

<http://www.ihl.org/offerings/Initiatives/TripleAim/Pages/default.aspx>

- Improving the patient experience of care (including quality and satisfaction)
- Improving the health of the populations
- Reducing the per capita cost of health care

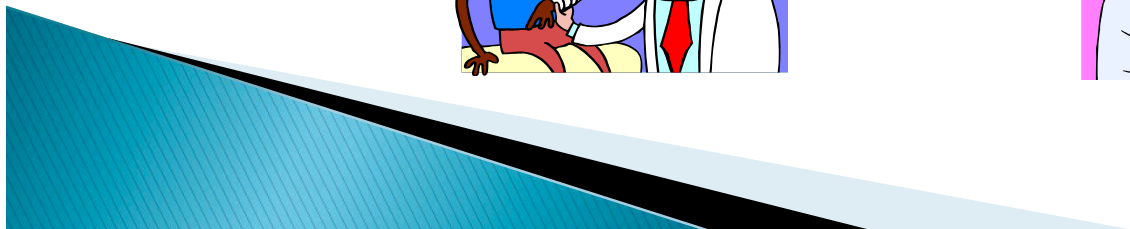
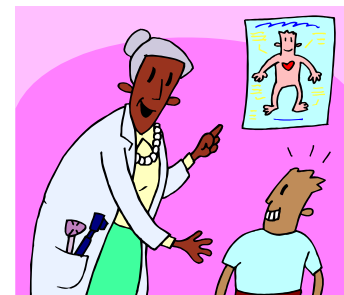
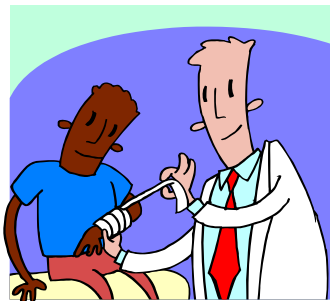
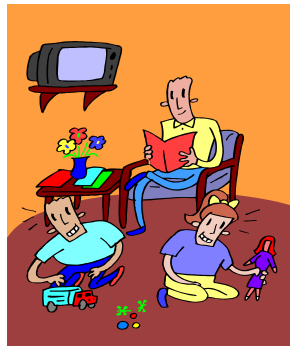
Design of a Triple Aim Enterprise

Define "Quality" from the perspective of an individual member of a defined population





*California:
Connecting Health
With Human
Services*



The Outcomes ...

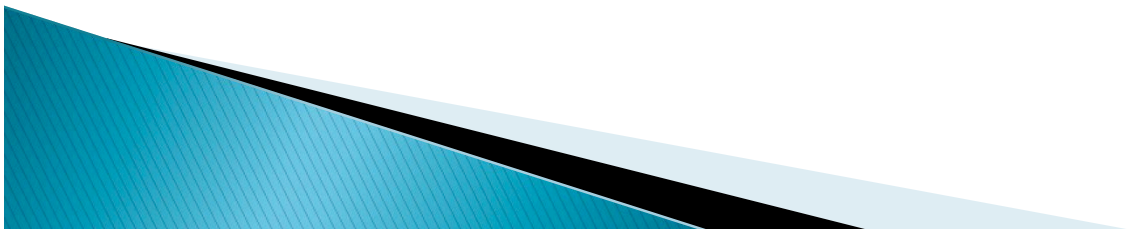
- ▶ Success of health care has dependencies with determinants of health outside of health care
- ▶ Human services extend the influence of the provider's care
- ▶ Transitions happen
- ▶ What will be the measurable outcomes?
 - Improve care delivered
 - Improve population health
 - Decrease cost
- ▶ **Data is essential to improve health care in focused and measurable ways**



Achievements of the Last Century

Ten Great Public Health Achievements: United States, 1900–1999 (CDC)

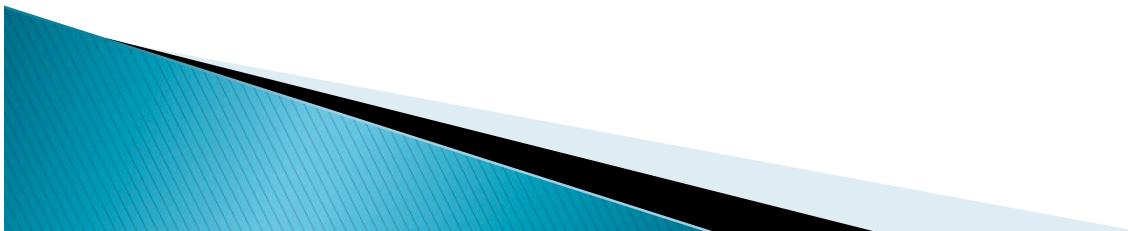
- ▶ Vaccination
- ▶ Motor–vehicle safety
- ▶ Safer workplaces
- ▶ Control of infectious diseases
- ▶ Decline in deaths from coronary heart disease and stroke
- ▶ Safer and healthier foods
- ▶ Healthier mothers and babies
- ▶ Family planning
- ▶ Fluoridation of drinking water
- ▶ Recognition of tobacco use as a health hazard



What will be the Achievements of this Century?

Data driven improvements that result in:

- ▶ Evidence-based decisions
- ▶ Quality improvement as the norm
- ▶ Prevention to address determinants of health
- ▶ Reduction in community disparity
- ▶ Decrease cost of care
- ▶ Other ?????



Thank you!

For more information:

- ❖ <http://ehealth.ca.gov>
- ❖ <http://healthit.hhs.gov>
- ❖ <https://www.cms.gov/Regulations-and-Guidance/Legislation/EHRIncentivePrograms>