

# **POPULATION HEALTH**

## **House Health Committee Testimony**

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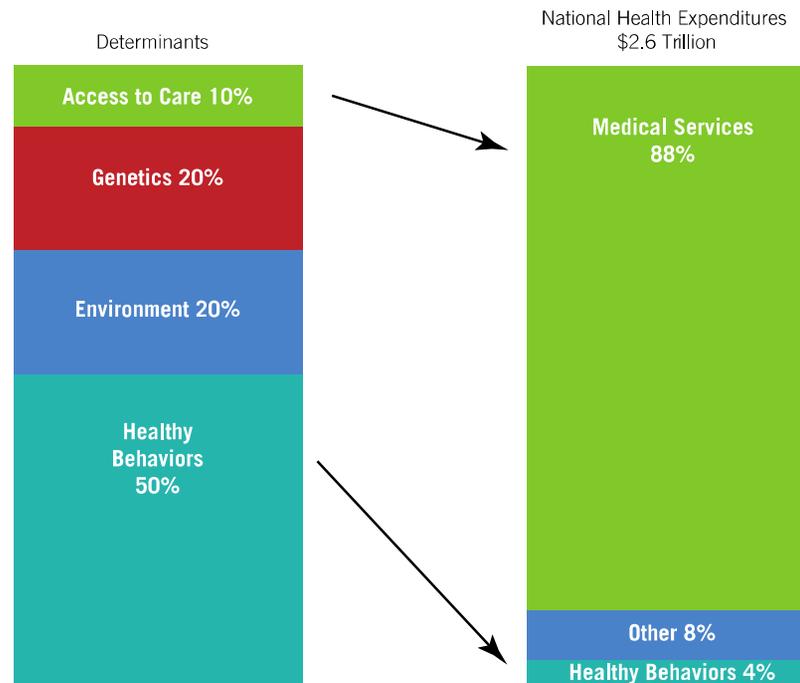
**February 12, 2014**

# POPULATION HEALTH IN VERMONT

- What is population health? How does it differ from public health?
- How does Population Health help Vermont achieve 2 goals of moderating cost and improving health?
- What is GMCB's role in Act 48 regarding population health?
- What does the SIM (VHCIP) grant specify?
- What prevention activities could be scaled up to improve health?

# MISMATCH

## Spending Mismatch: Health Care and Other Key Determinants of Health



Source: NEHI. 2012.

# POPULATION HEALTH DEFINITION

## SIMPLE DEFINITION: Health of a group

*Population Health is "the health outcomes of a group of individuals, including the distribution of such outcomes within the group" (Kindig and Stoddart, 2003).*

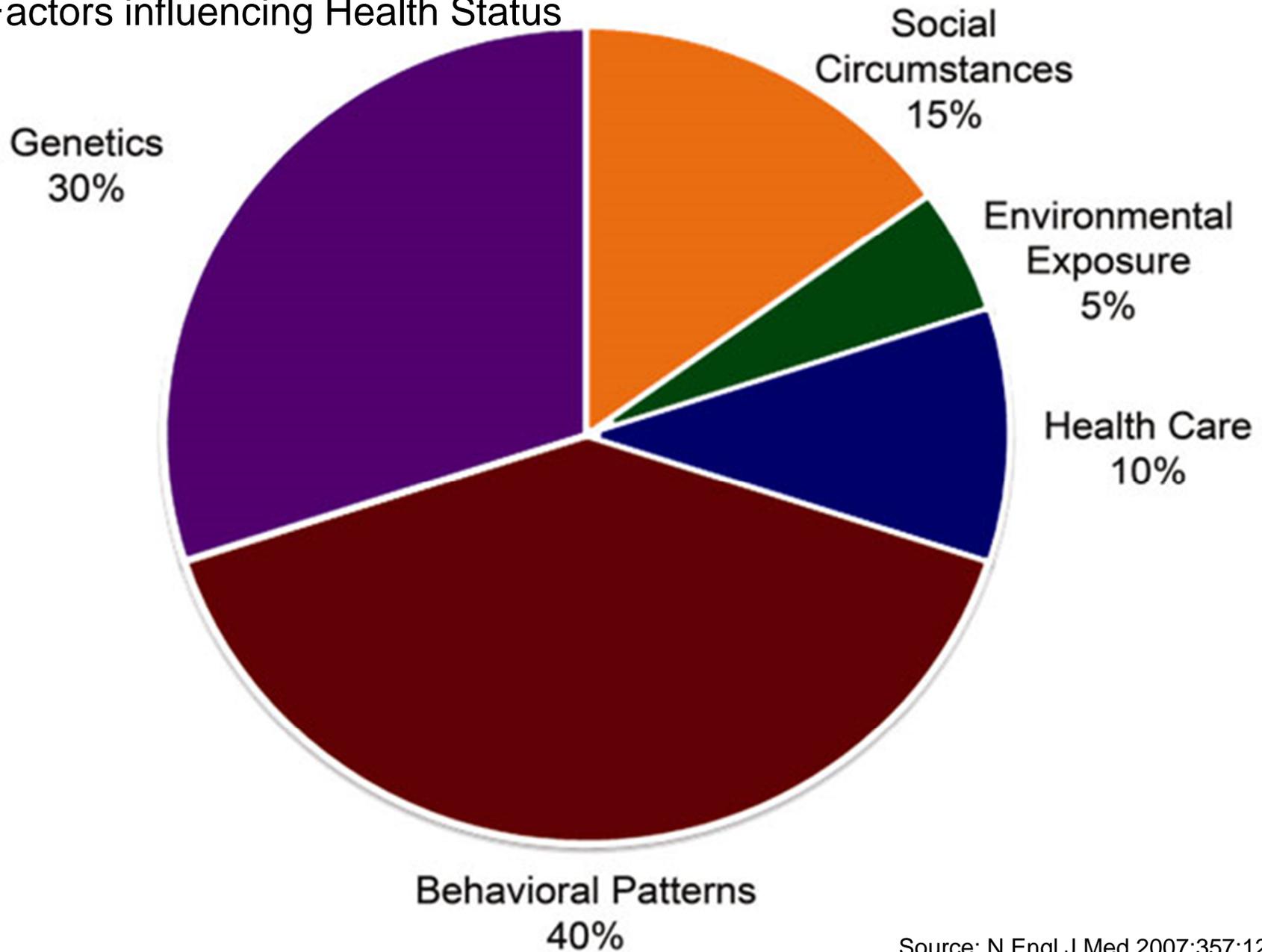
While not a part of the definition itself, it is understood that such population health outcomes are the product of multiple determinants of health, including medical care, public health, genetics, behaviors, social factors, and environmental factors.

Kindig, D., and G. Stoddart. 2003. What is population health? *American Journal of Public Health* 93(3):380-383.

Working Definition of Population Health, Institute Of Medicine, Roundtable on Population Health Improvement <http://www.iom.edu/Activities/PublicHealth/PopulationHealthImprovementRT.aspx>

# Determinants of Health

Factors influencing Health Status

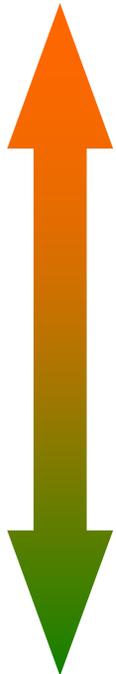


Source: N Engl J Med 2007;357:1221-8.

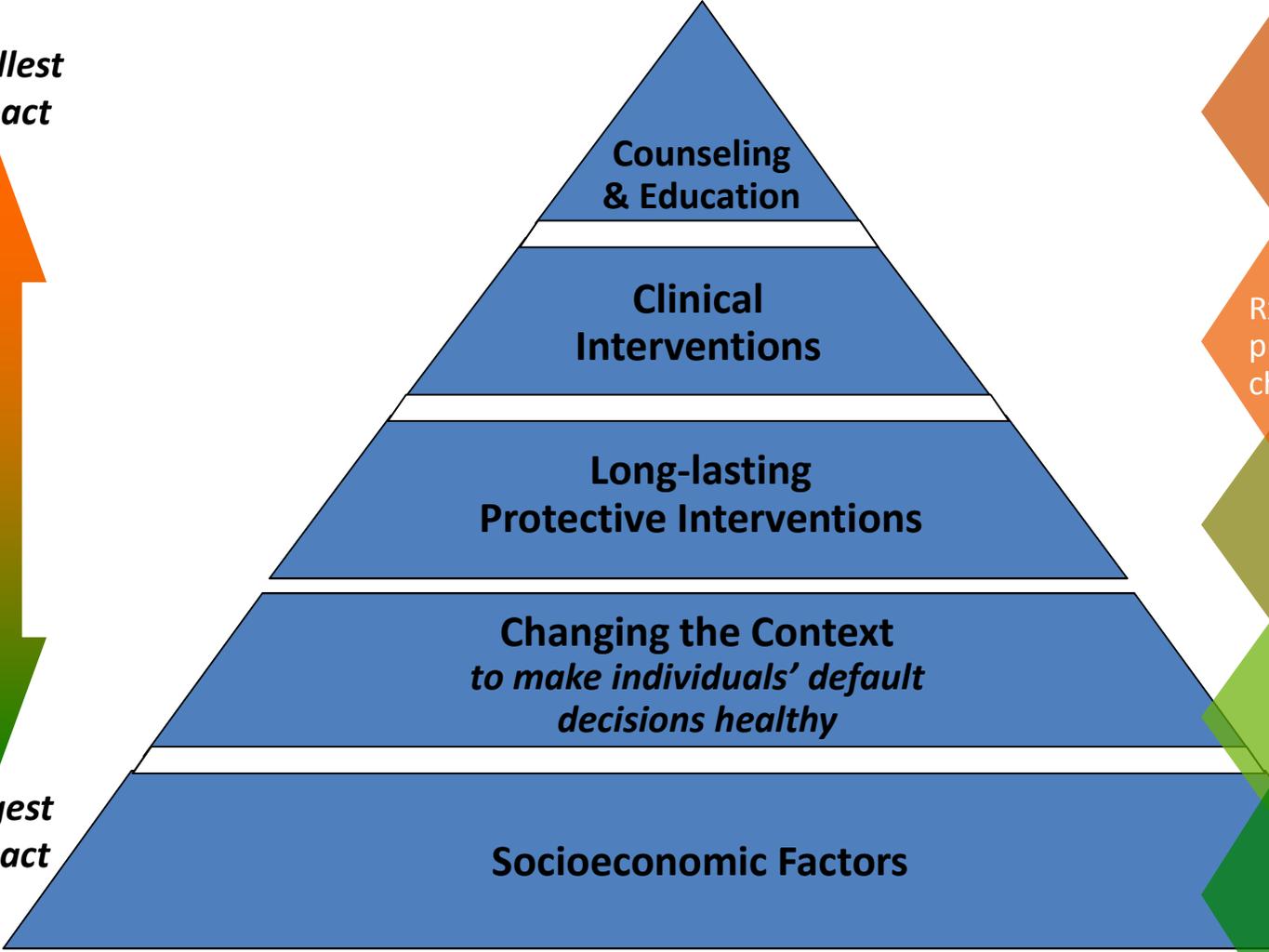
What are best ways to influence the 90% non-clinical determinants of health?

# CDC Health Impact Pyramid

*Smallest Impact*



*Largest Impact*

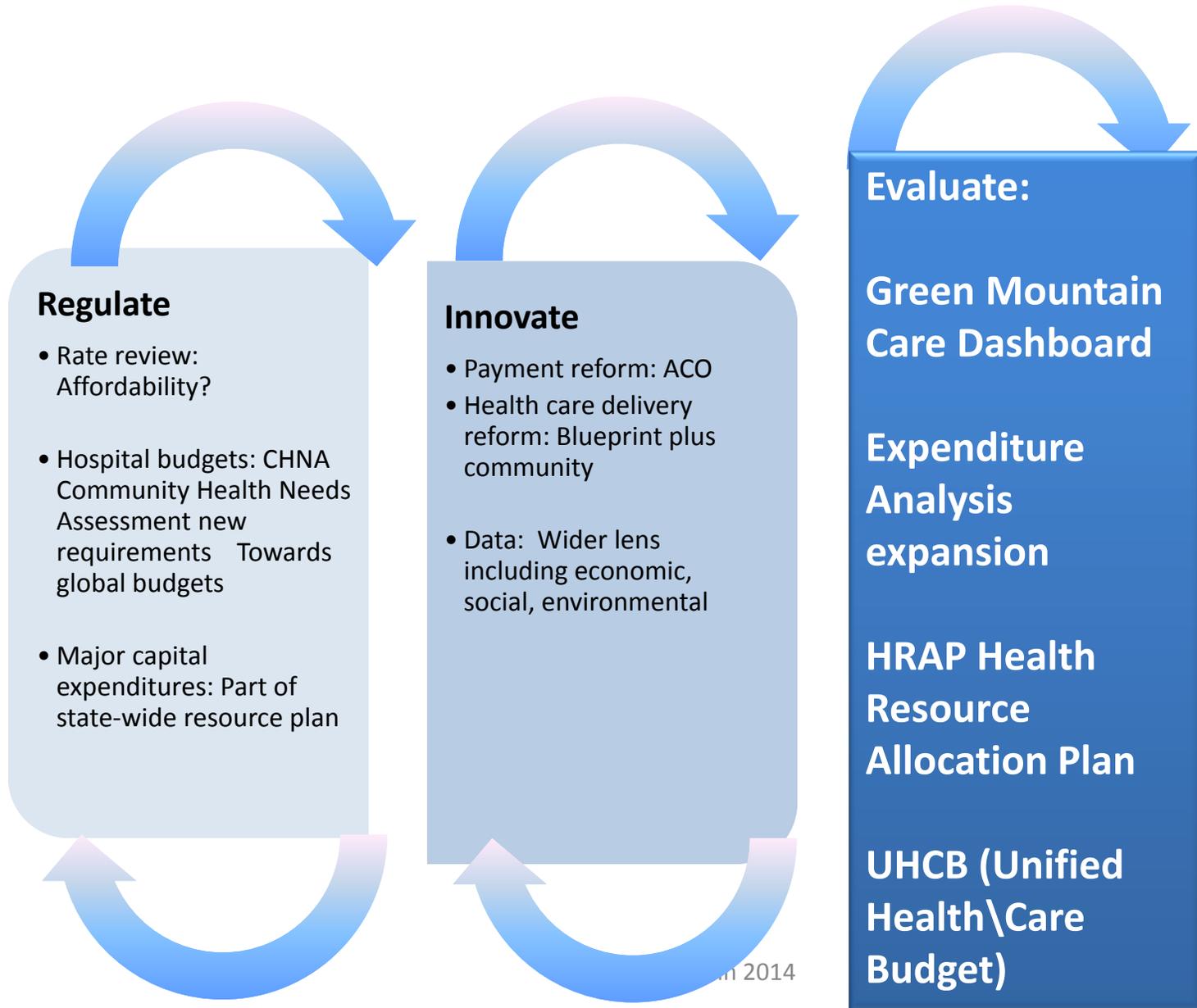


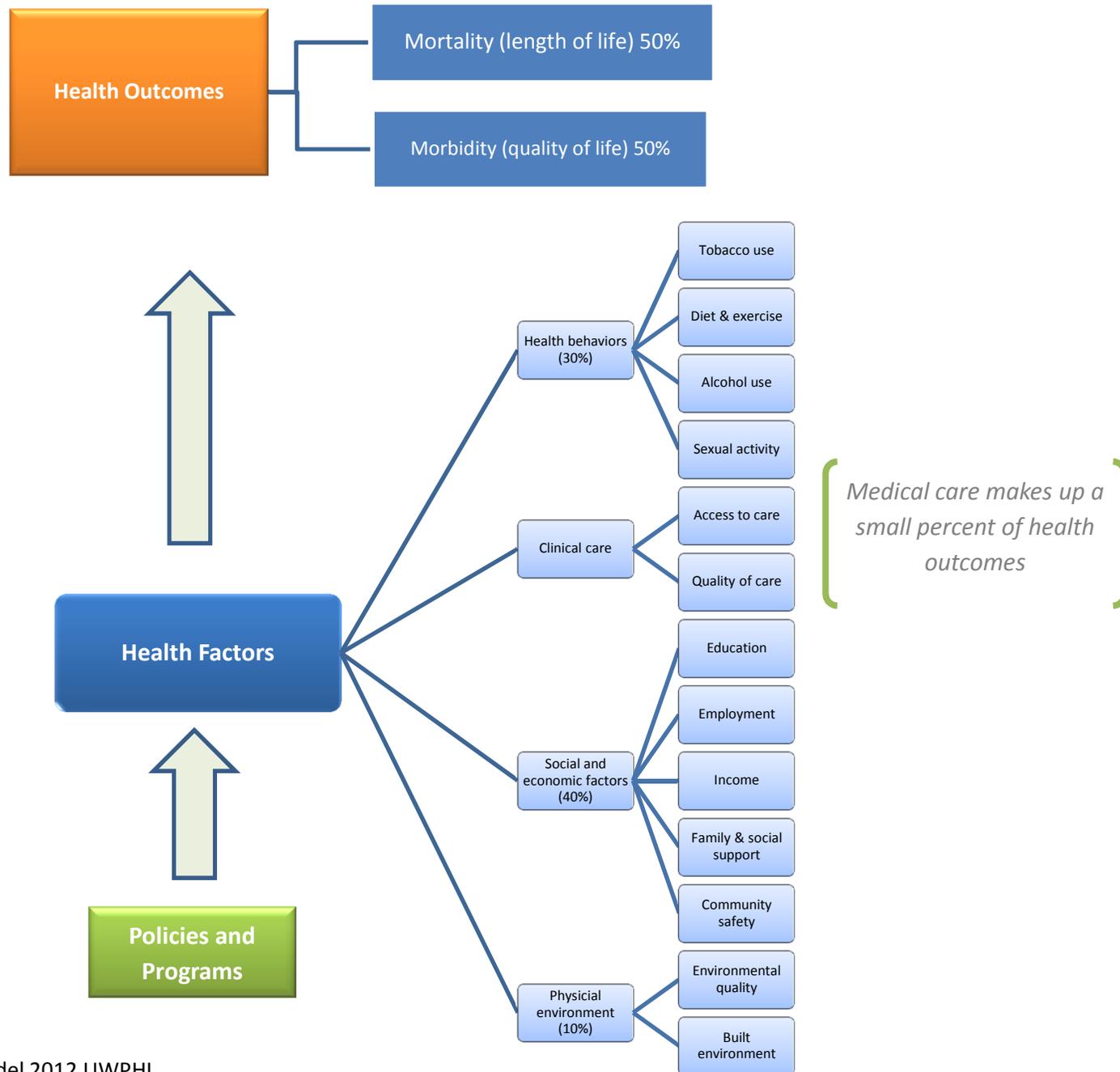
## Examples

- Eat healthy, be physically active
- Rx for high blood pressure, high cholesterol, diabetes
- Immunizations, brief intervention, cessation treatment,
- Fluoridation, trans fat, smoke-free laws, tobacco tax
- Poverty, education, housing, inequality



# Green Mountain Care Board





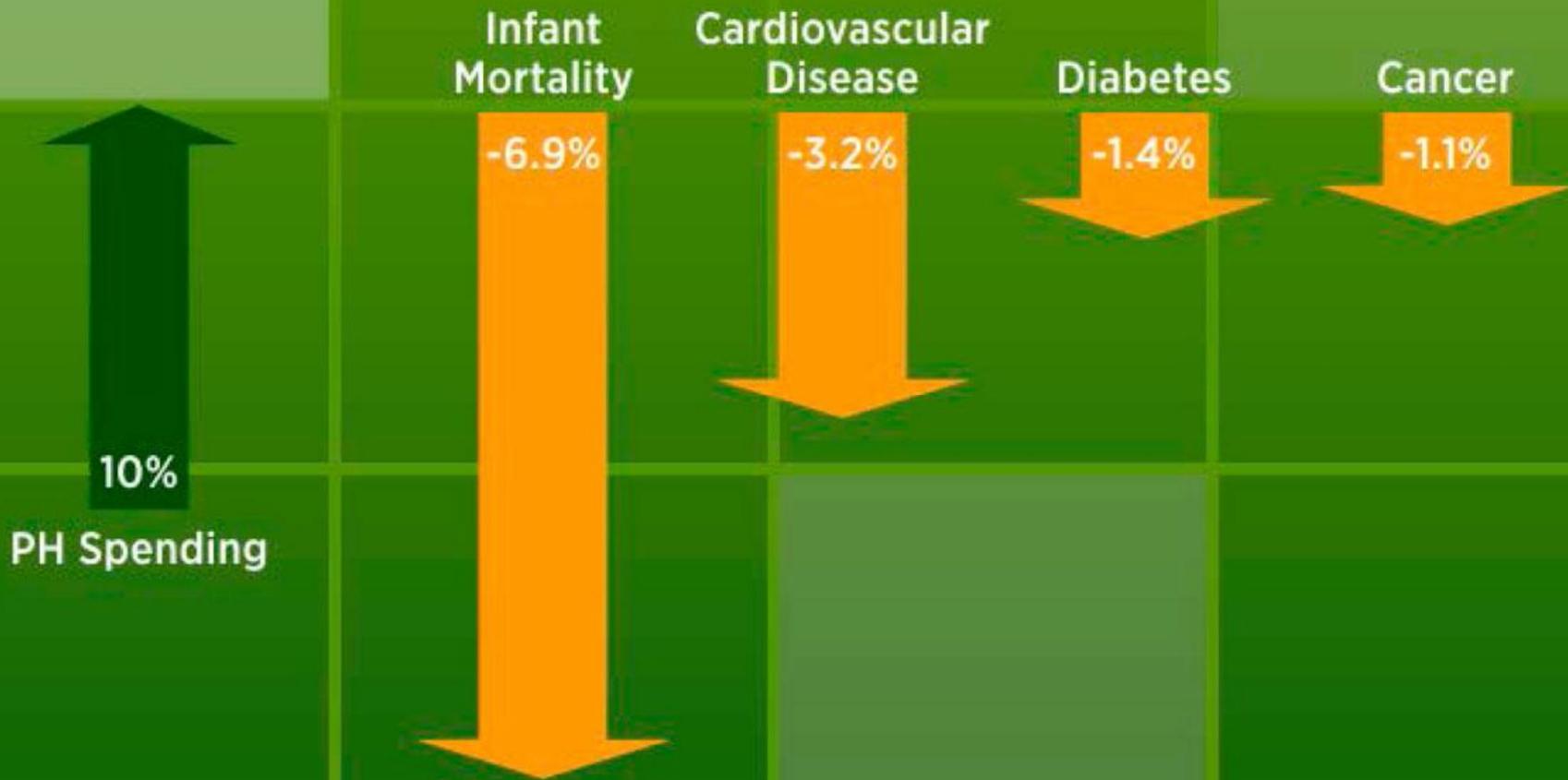
# SIM GRANT

## VHCIP Vermont Health Care Improvement

### **Population Health Workgroup priorities:**

- Measures of population health (ACO)
- Financing options for paying for population health and prevention ('balanced portfolio')
- Exemplars from Vermont and elsewhere of effective community-focused interventions including ACC's (Accountable Care Communities such as Rethink Health of the Upper Valley)

# Evidence



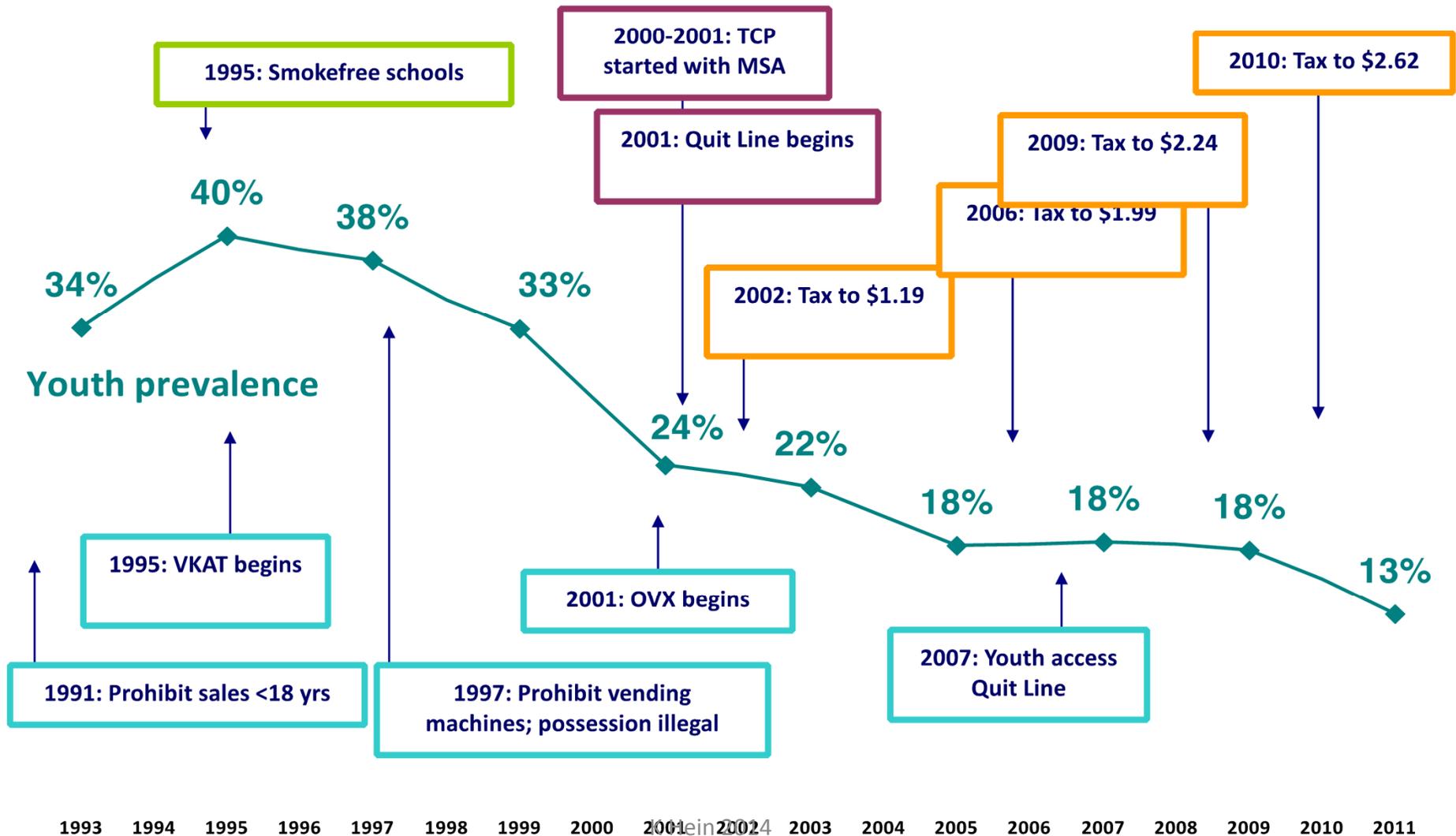
Source: Mays, Glen P., and Sharla A. Smith. 2011. "Evidence Links Increases in Public Health Spending to Declines in Preventable Deaths." *Health Affairs* doi: 10.1377/hlthaff.2011.0196

Klein 2014

Robert Wood Johnson Foundation

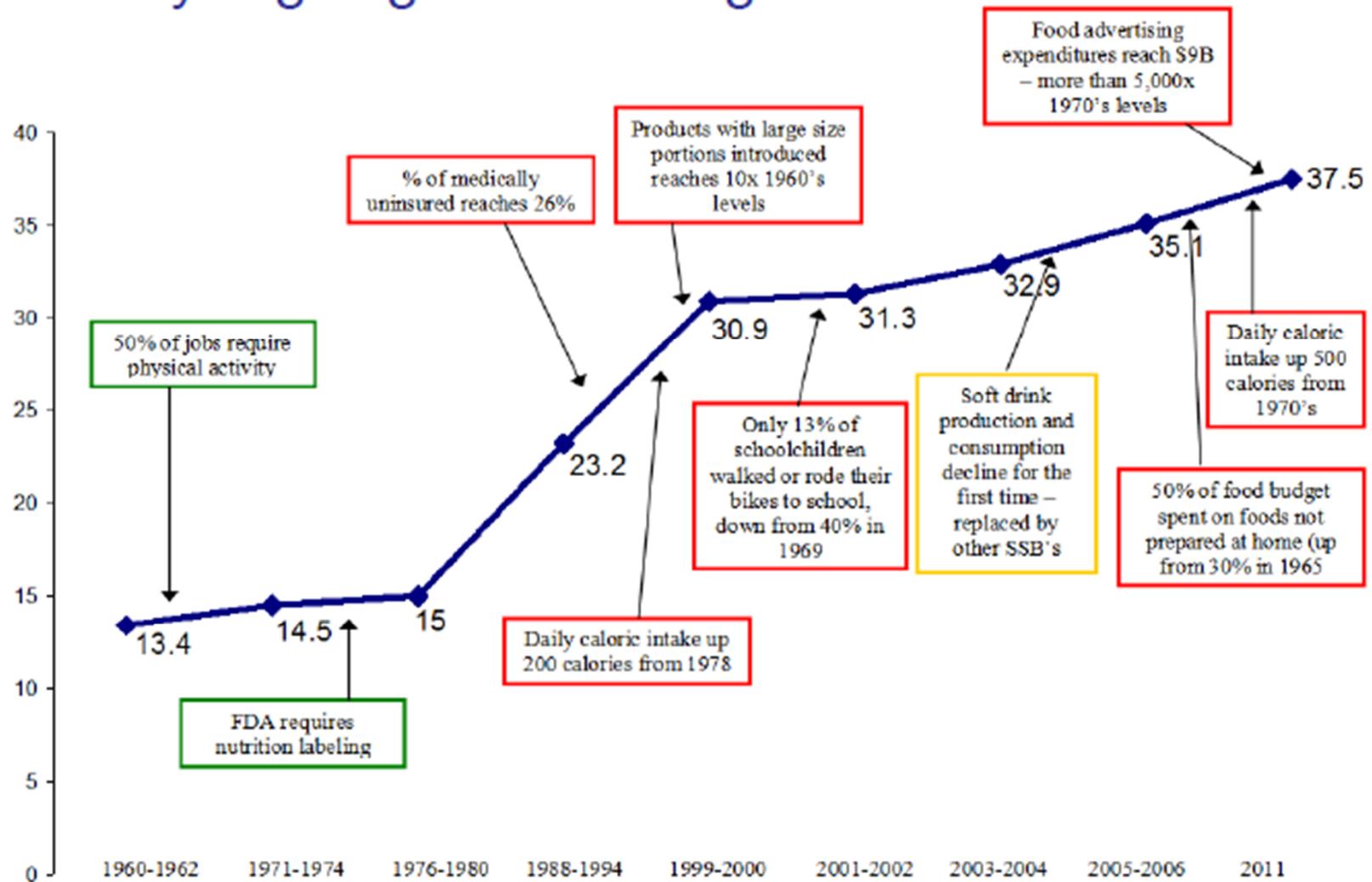


# What we know from Tobacco...



# The Vermont Department of Health

## ...Obesity is going in the wrong direction



# Diabetes Prevention Program

- 1 in 4 Vermonters have pre-diabetes
  - Drivers are obesity and inadequate physical activity
- Diabetes Prevention Program is an evidence-based program soon to be offered in 11/14 health services areas – need to scale to all 14 and **need to promote this benefit among potential participants and providers**

# Partnership with Medicaid to support Asthma Education and Obesity Counselling

- Vermont has highest rate of asthma in the country – 11% of adults, 10% of children
- Medicaid recipients disproportionately affected
- Asthma education improves health outcomes including ER visits, hospitalization, improved self management
- ACA allows for reimbursement of asthma education as of Jan 2014
- Return on Investment - \$5.30 - \$14.00 for every dollar invested
- Medicaid can also support obesity counselling reimbursement
- VDH and Medicaid exploring ways to work together to **promote these benefits among patients and healthcare providers and community partners**

# Early investments matter

- Universal pre K – strong starts lead to better health outcomes
- Early child care guidelines for better nutrition
- Home visiting - voluntary, in home prevention programs to support new parents in building skills and confidence to nurture the health growth of their baby including the child's physical, emotional and social development

# Home Visiting - Evidence-based to Improve Outcomes

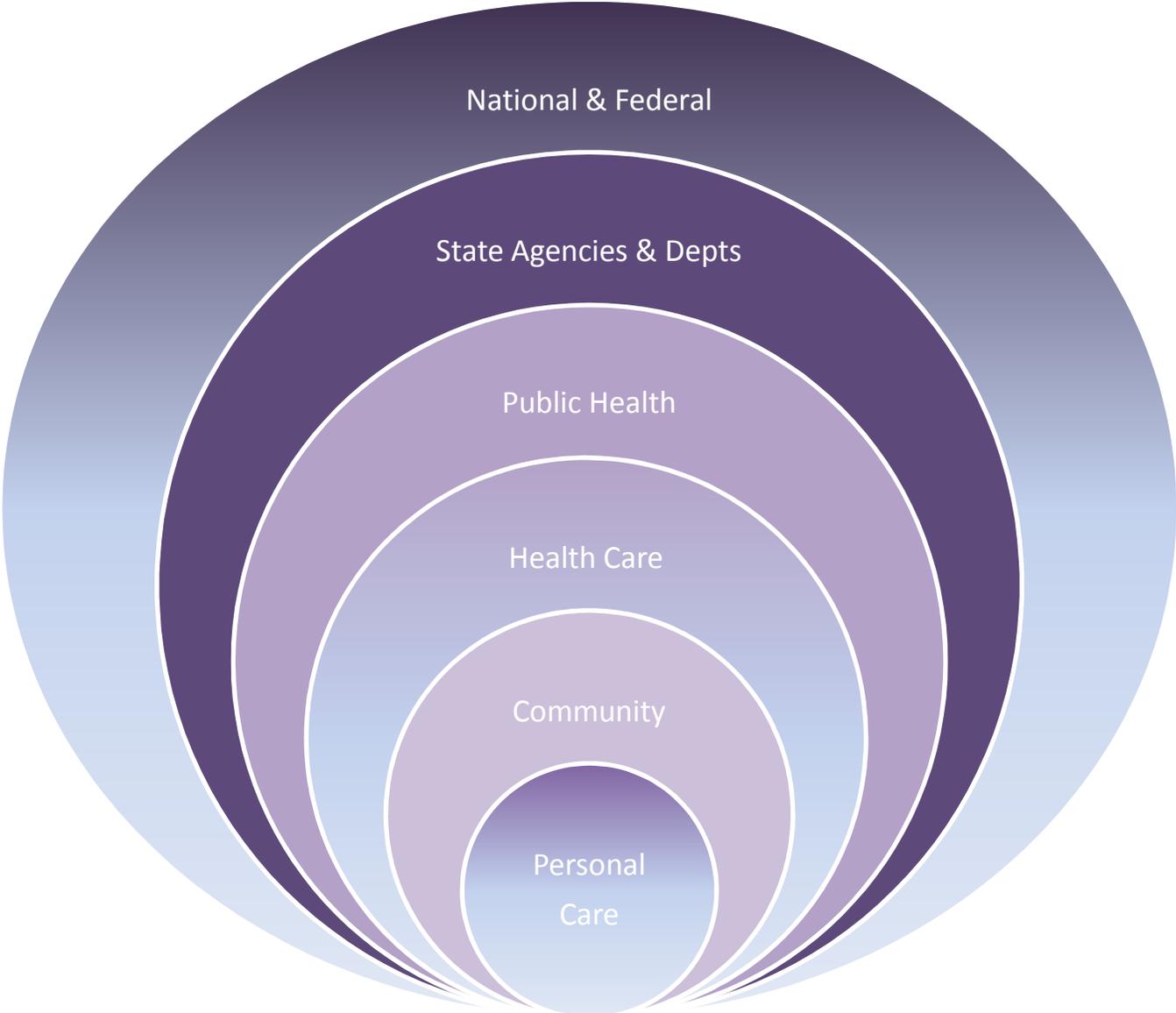


- ❑ Maternal and infant health
- ❑ Non-accidental and accidental injury prevention
- ❑ Domestic violence prevention
- ❑ Kindergarten readiness
- ❑ Economic self-sufficiency
- ❑ Referral to community resources

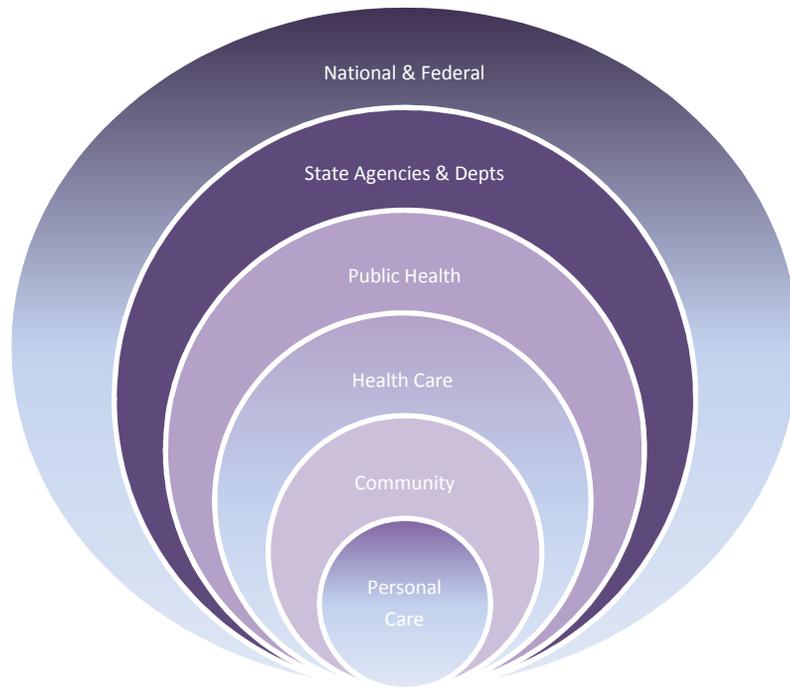
# Home Visiting: Coordination of Models

- **Early Head Start**
- **Maternal , Infant and Early Childhood Home Visiting (MIECHV): Nurse Family Partnership**
- **Linking Action for the Unmet Needs in Children's Health (LAUNCH): Parent as Teachers**
- **Race to the Top**
  - ▣ **Maternal Early Childhood Sustained Home visiting (MECSH): Home Health Agencies**
  - ▣ **Early Start (New Zealand): Vermont's Parent Child Centers**

# Vermont Unified Health Budget



# Identifying sources for constructing unified health budget



- Expenditure analysis
- Public Health budget
- Evidenced-based programs in Vermont Depts (Agriculture, Education, Labor, Transportation)
- Community investments in health
- Federal & Foundation investments in Vermont

# COMPONENTS OF PUBLIC HEALTH & POPULATION HEALTH FUNDING

- **Dept of Education**—school based services, health education, nutrition programs, recreation;
- **Dept of Labor**—workplace safety, workplace wellness;
- **Dept of Transportation**—highway safety, constructed environment (e.g. bike paths);
- **Dept of Corrections**—mental health & substance abuse;
- **AHS**— Children, youth & families; DAIL; Mental Health; housing (SASH);

# Population Health

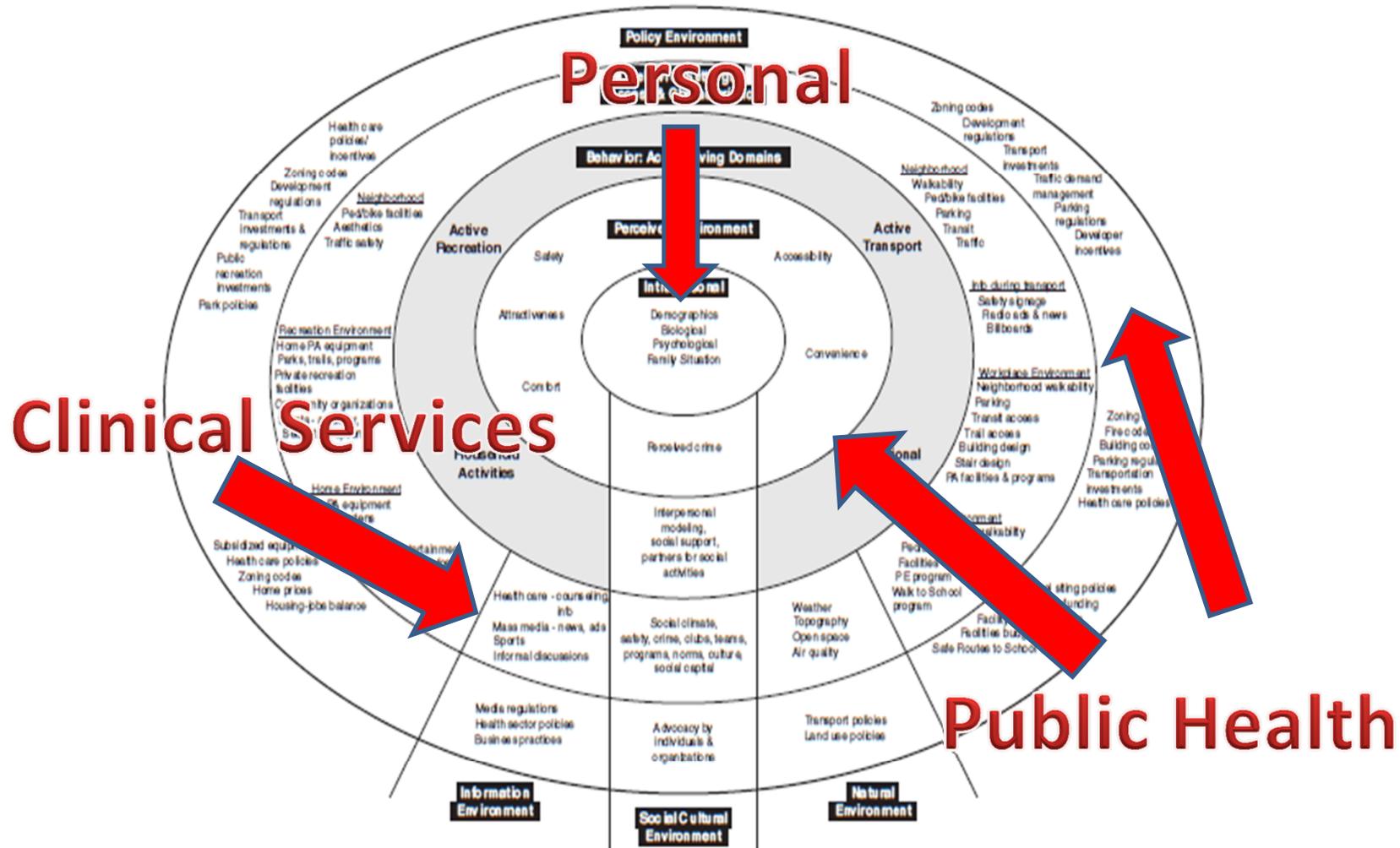


FIGURE 2-1 Ecological model of four domains of active living.

NOTES: PA = physical activity; PE = physical education; ped = pedestrian.

SOURCE: Sallis et al., 2006. Annual Review of Public Health Copyright 2005 by ANNUAL REVIEWS, INC. Reproduced with permission of ANNUAL REVIEWS, INC. in the format Other book via Copyright Clearance Center.

# SUMMARY

## POPULATION HEALTH IN VERMONT

- What is population health? How does it differ from public health?  
Wider view including non-medical contributors to health; “system-ness,” disparities and how parts fit together to improve health and moderate cost
- How does Population Health help Vermont achieve 2 goals of moderating cost and improving health?  
Can’t be achieved without population health approaches (which include the major non-medical contributors to health and cost)!
- What is GMCB’s role in Act 48 regarding population health?  
Part of our regulatory, innovative AND EVALUATIVE roles (GMC Dashboard, Unified Health/Care Budget, Health Resource Allocation Plan and Expanded Expenditure Analysis)
- What does the SIM (VHCIP) grant specify regarding Population Health?  
One of 3 major goals of SIM (and of the “Triple Aims”) is to improve Population Health
- What are examples of ‘scalable’ activities?  
Range from those closely related to clinical activities to state-wide policy interventions such as “health in all policies” approach