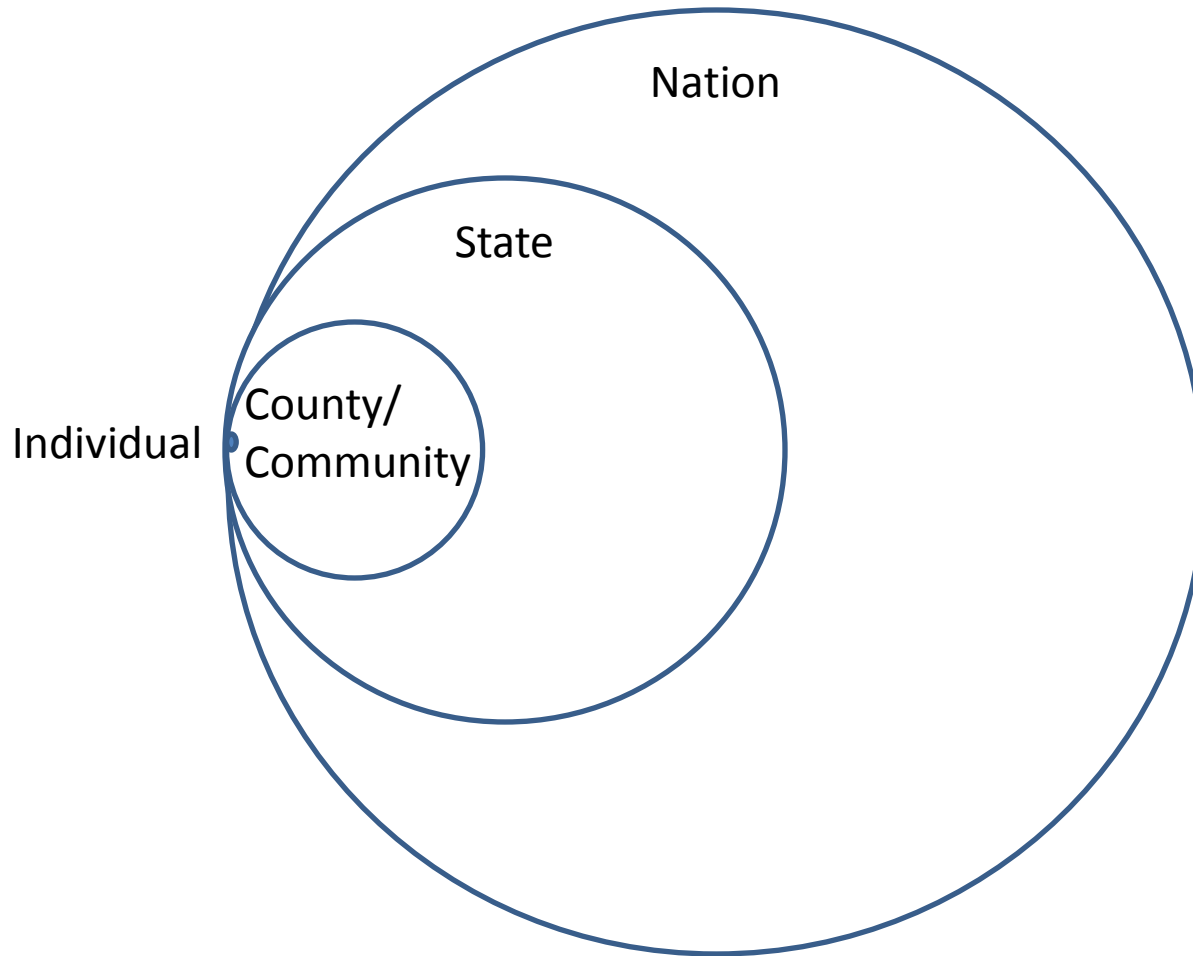


# Public Health Perspectives

Ned Calonge, MD, MPH

The Colorado Trust

# Public health and population medicine



# Ten essential public health services

- Monitor health status to identify and solve community health problems
- Diagnose and investigate health problems and health hazards in the community.
- Inform, educate, and empower people about health issues
- Mobilize community partnerships and action to identify and solve health problems
- Develop policies and plans that support individual and community health efforts
- Enforce laws and regulations that protect health and ensure safety
- Link people to needed personal health services and assure the provision of health care when otherwise unavailable
- Assure competent public and personal health care workforce
- Evaluate effectiveness, accessibility, and quality of personal and population-based health services
- Research for new insights and innovative solutions to health problems

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ADD from public health history:

- Venereal disease control
- Tuberculosis control

# Ten essential public health services

- Inform, educate, and empower
- **A**ssure competent workforce
- **M**onitor health status to identify and solve community health problems
- **V**enereal disease control
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- **T**uberculosis control

# Ten essential public health services

- I
- A
- M
- V
- O
- L
- D
- E
- M
- O
- R
- T

# Ten essential public health services

I

AM

VOLDEMORT

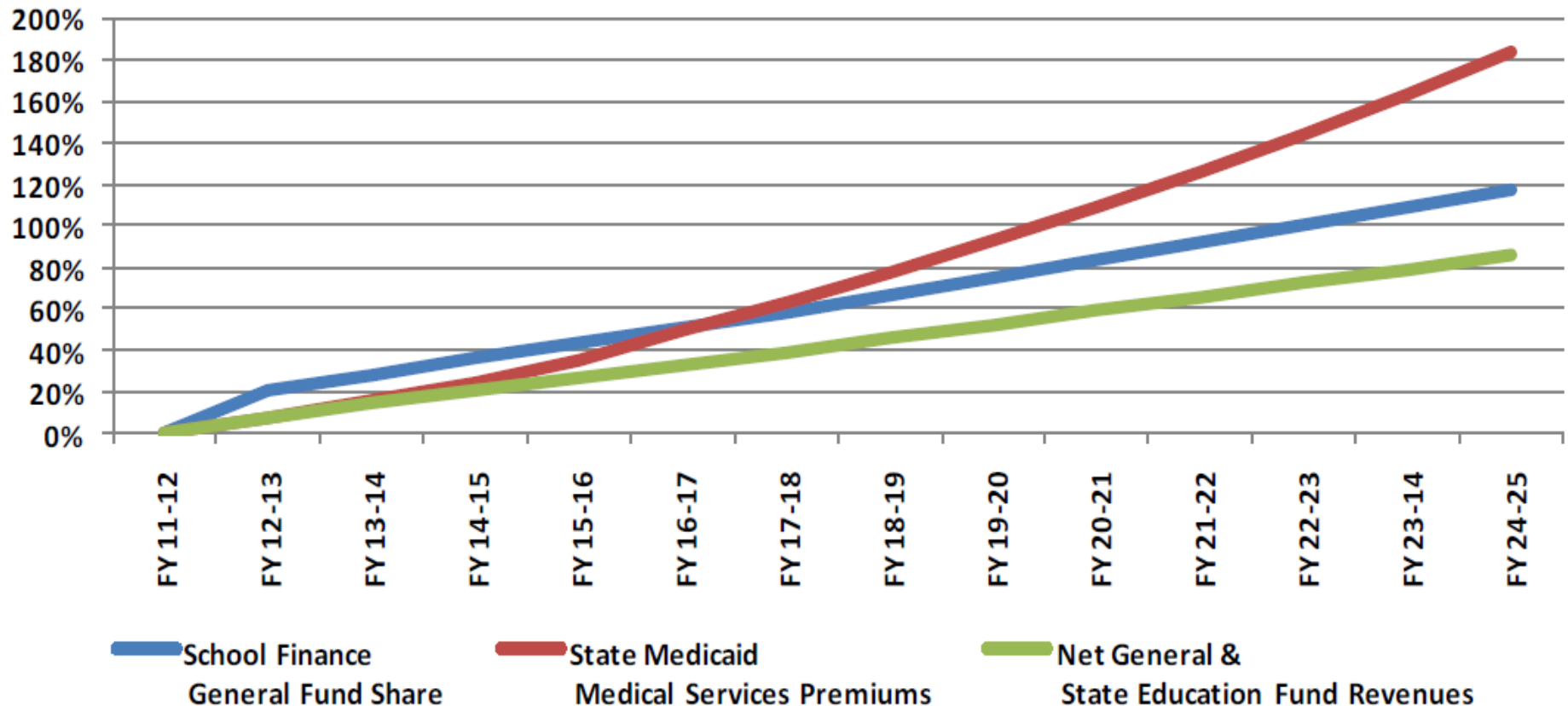
# Cross-walk to workshop research questions

- 1. Methodologies to evaluate across platforms for risk assessment for various conditions
- 3. Determining if and how genomic/sequence information modifies provider and patient behavior
- 7. Potential for disparities from genomic medicine, including applicability of information to minority populations and SES disadvantages
- 8. Proper use of family history to guide medical decision making
- 9. Determination of relative contribution of environment on outcomes
- 10. When should genomic sequencing be integrated
- 16. Need for evidence base development
- 22. Divergence of economic assessment models in public health, clinical care, and academics
- 23. In the setting of a disruptive technology and a zero sum game/shrinking pool of resources what/who will be replaced and how to fund genomic interventions?

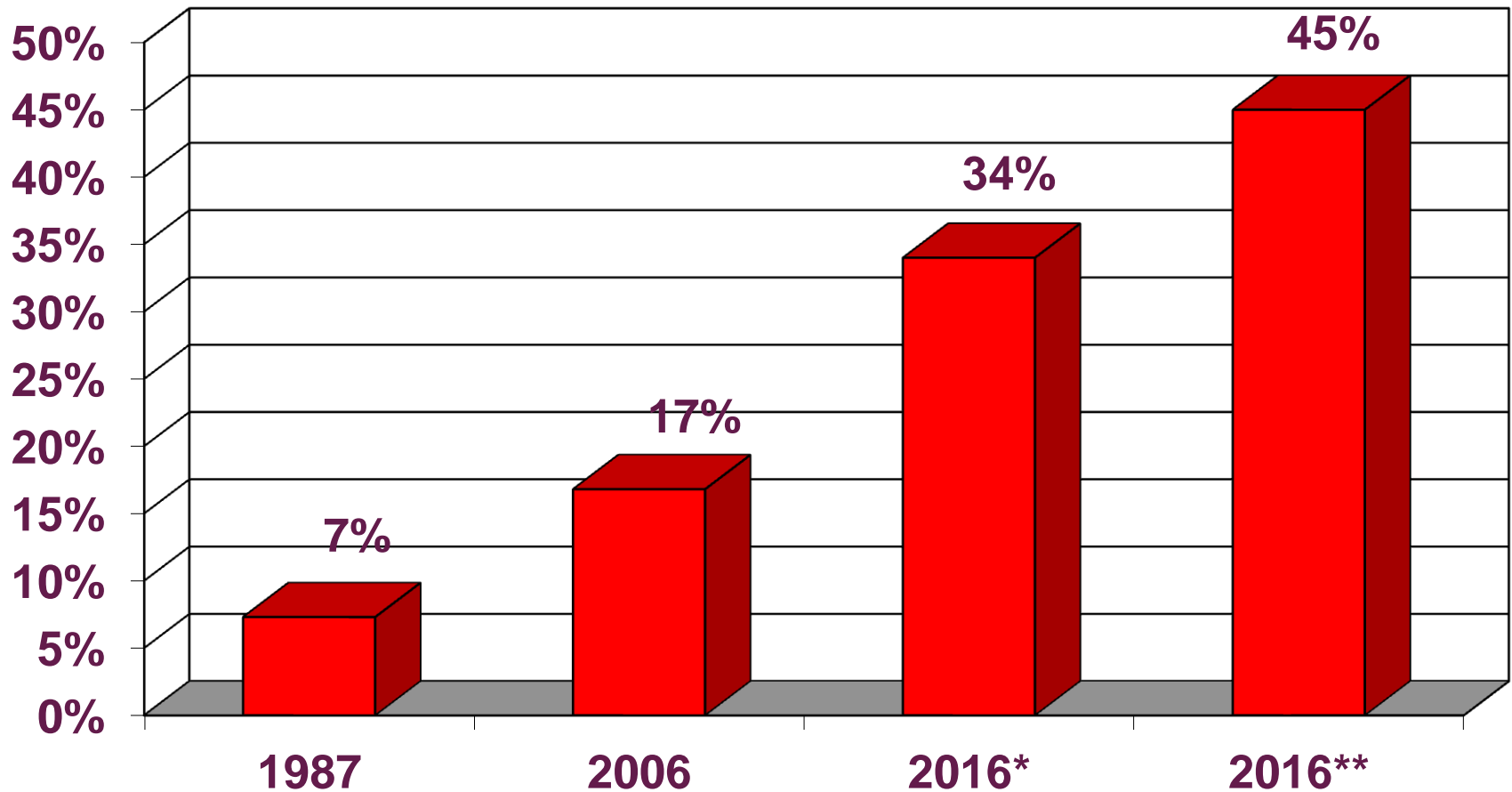


# Colorado's fiscal outlook

**Cumulative Growth Rates from FY 2011-12:  
School Finance & Medicaid Appropriations  
vs. General Fund Revenues**

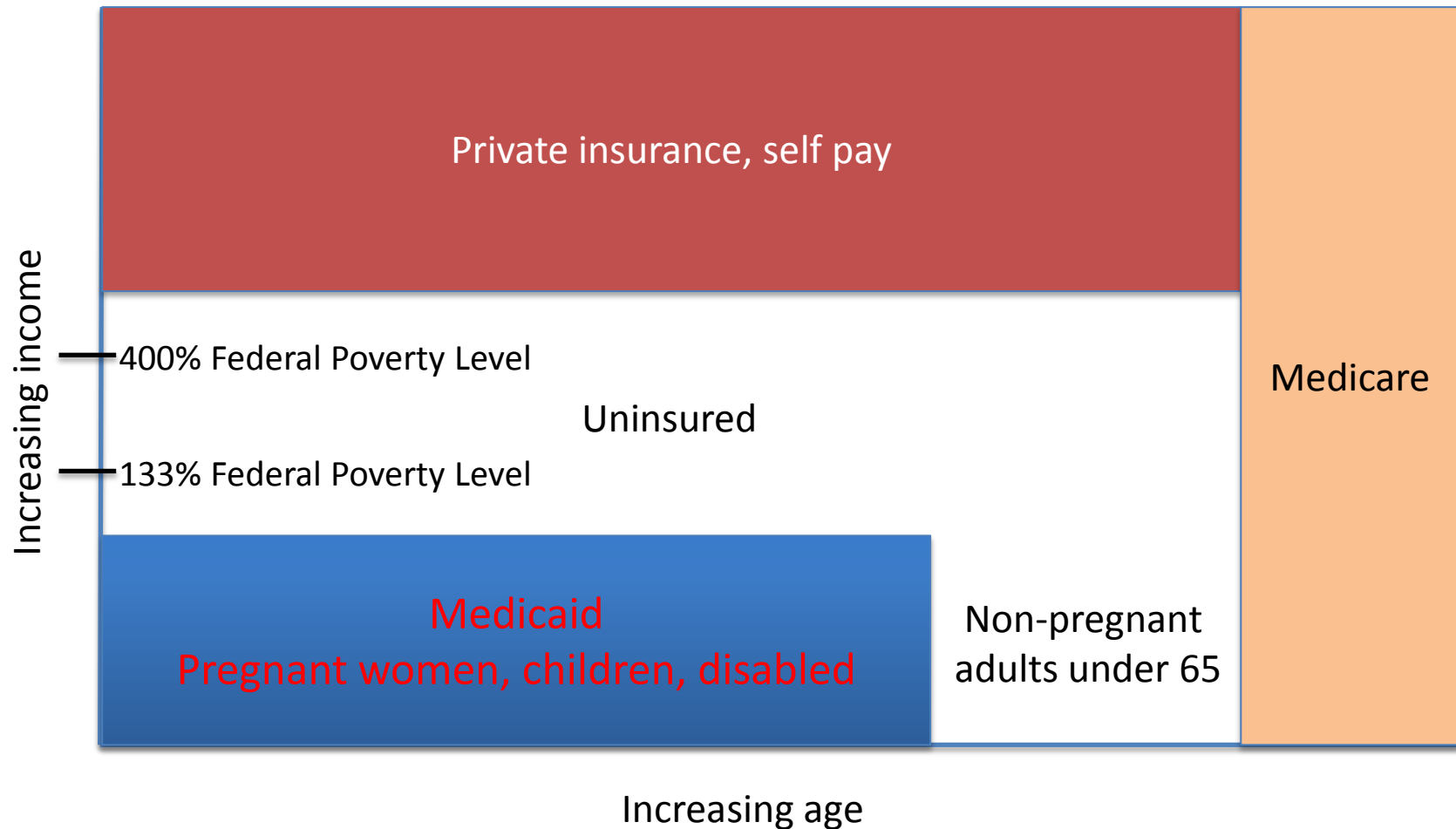


# Percent of median family income required to purchase family health insurance



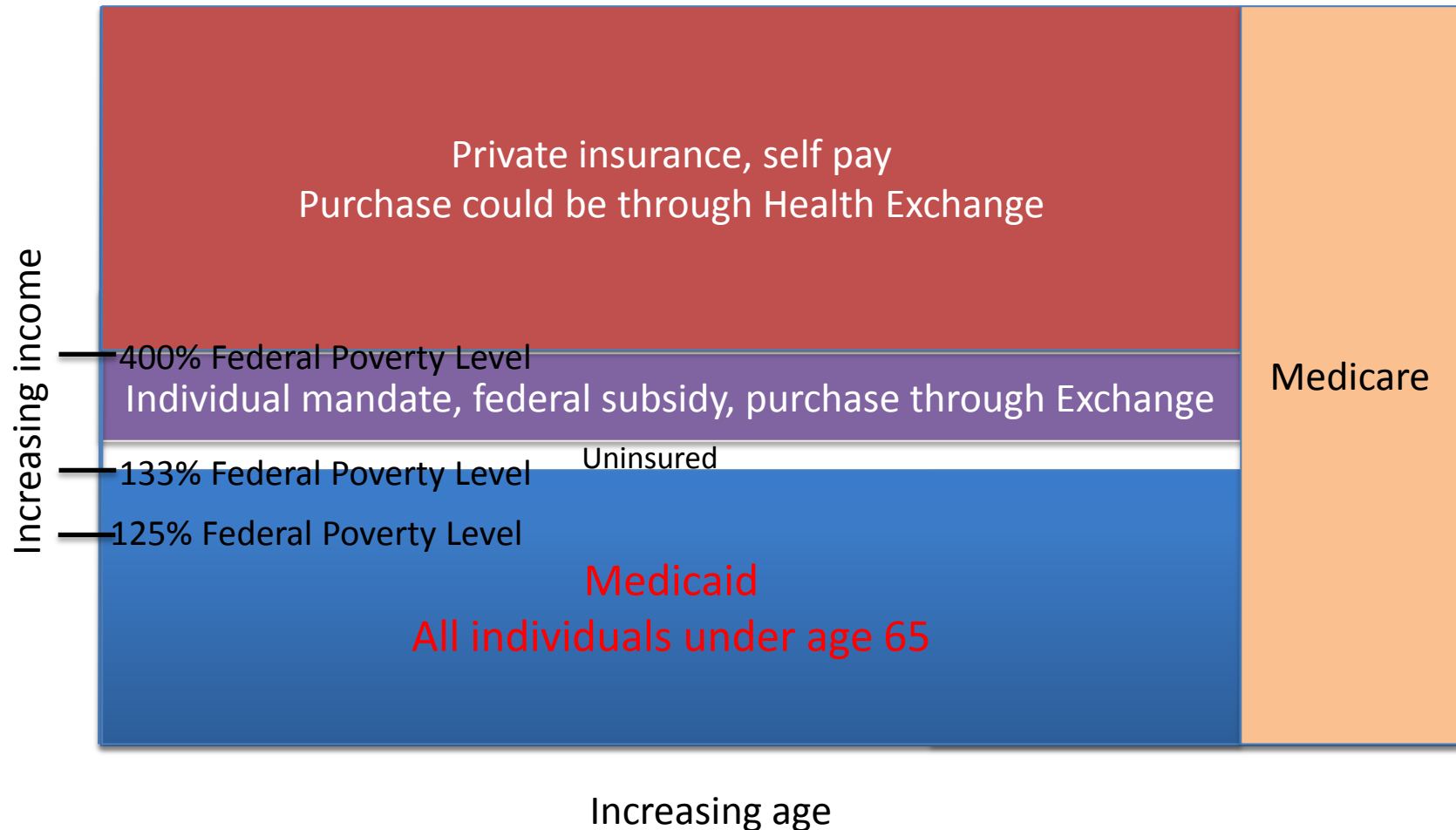
Source: Len Nichols, "After the Law Has Passed: Making Real Health Reform Work," presentation for the Colorado Medical Society Conference, May 1, 2010. Note: Percent includes employee and employer contribution.

# Pre-ACA Coverage Map



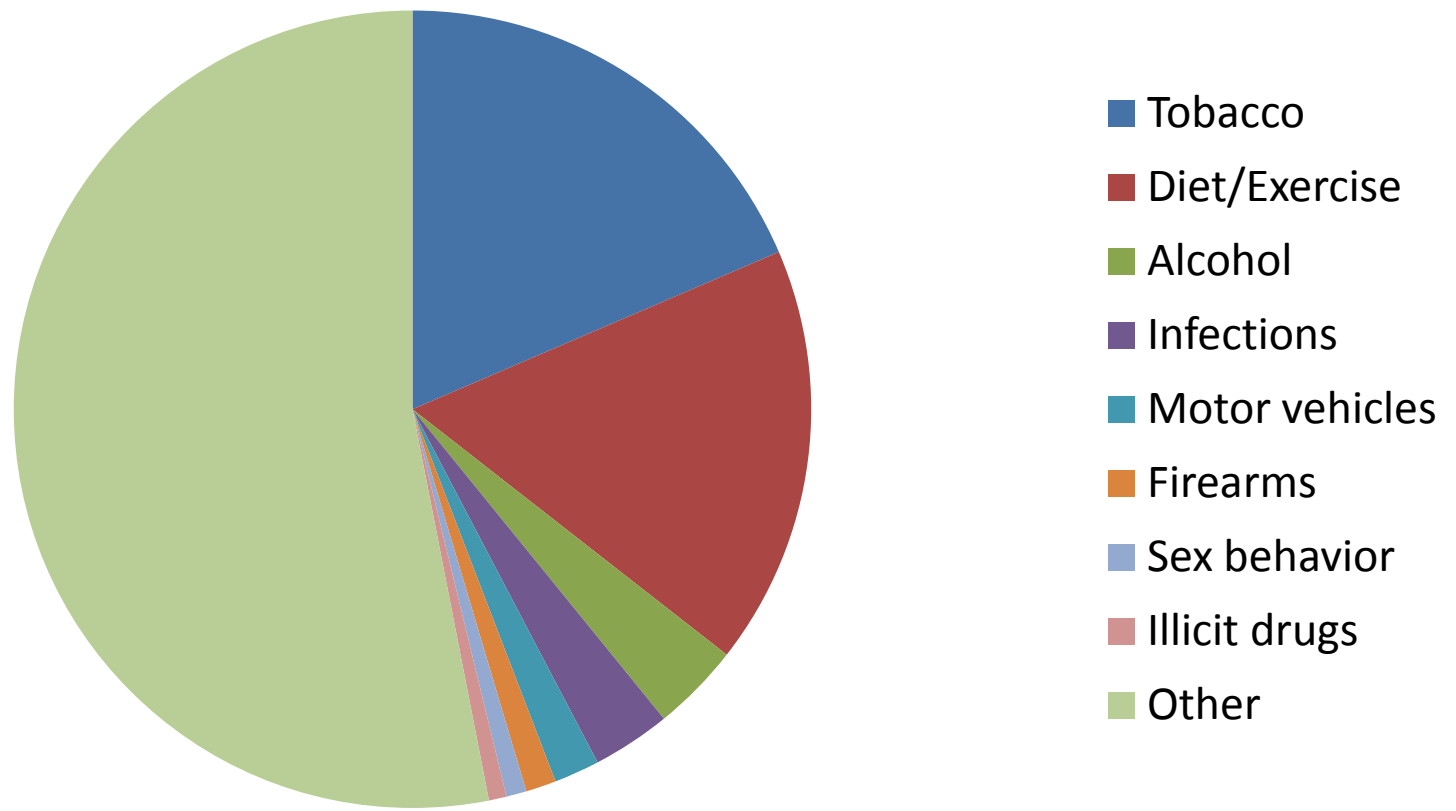
**Every 1% increase in average insurance rates is correlated with another 1500 uninsured Coloradans**

# ACA Coverage Map



# Actual Causes of Death

**% of Deaths in US, 2000**



# Colorado Mortality

- 30,000 total deaths annually
- 6,500 cardiovascular disease deaths
- 1,500 stroke deaths
- 6,500 cancer deaths
  - 1,500 lung cancer
  - 500 colon cancer
  - 500 breast cancer
  - 40 cervical cancer

# Preventable Colorado lives lost

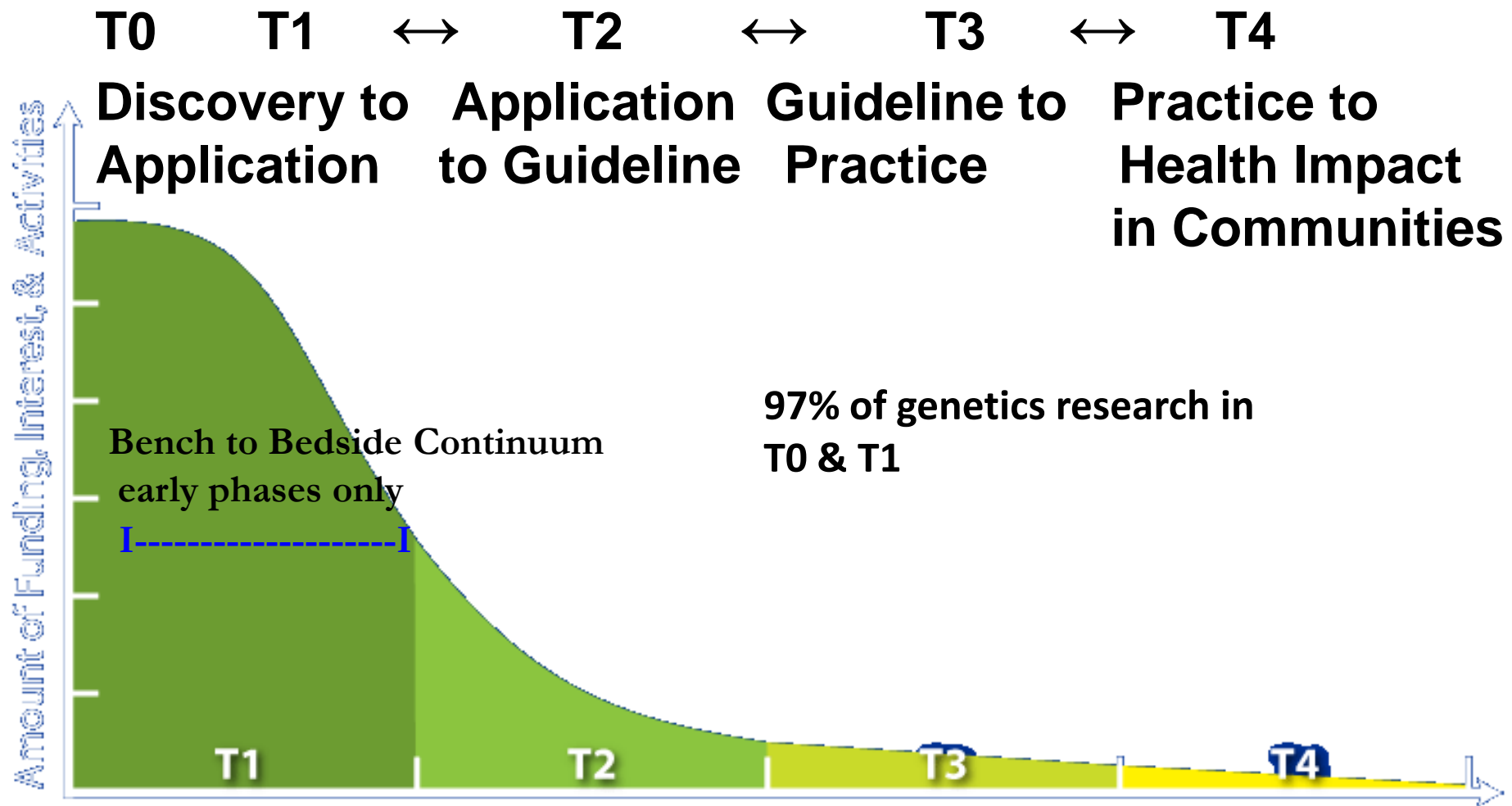
• Tobacco:	6,450
• Obesity:	5,000
• Cholesterol:	2,200
• Hypertension:	2,200
• Colon cancer	300
• Breast cancer	150
• Cervical cancer	38
<b>TOTAL</b>	<b>16,338</b>

# Colorado life-years left on the table

• Smoking:	75,000
• Obesity:	55,000
• Cholesterol:	35,870
• Hypertension:	34,360
• Colo-rectal cancer	4,890
• Breast cancer	3,140
• Cervical cancer	800



# Limited Research on Either Public Health Challenge: Complete Evaluation, Implementation



**Khoury Genet Med 2007;9:665; IOM The Future of the Public's Health in the 21<sup>st</sup> Century, 2003; Woolf JAMA 2008;299:211; IOM Clinical Research Roundtable- Sung JAMA 2003**

# Public health and research questions

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