

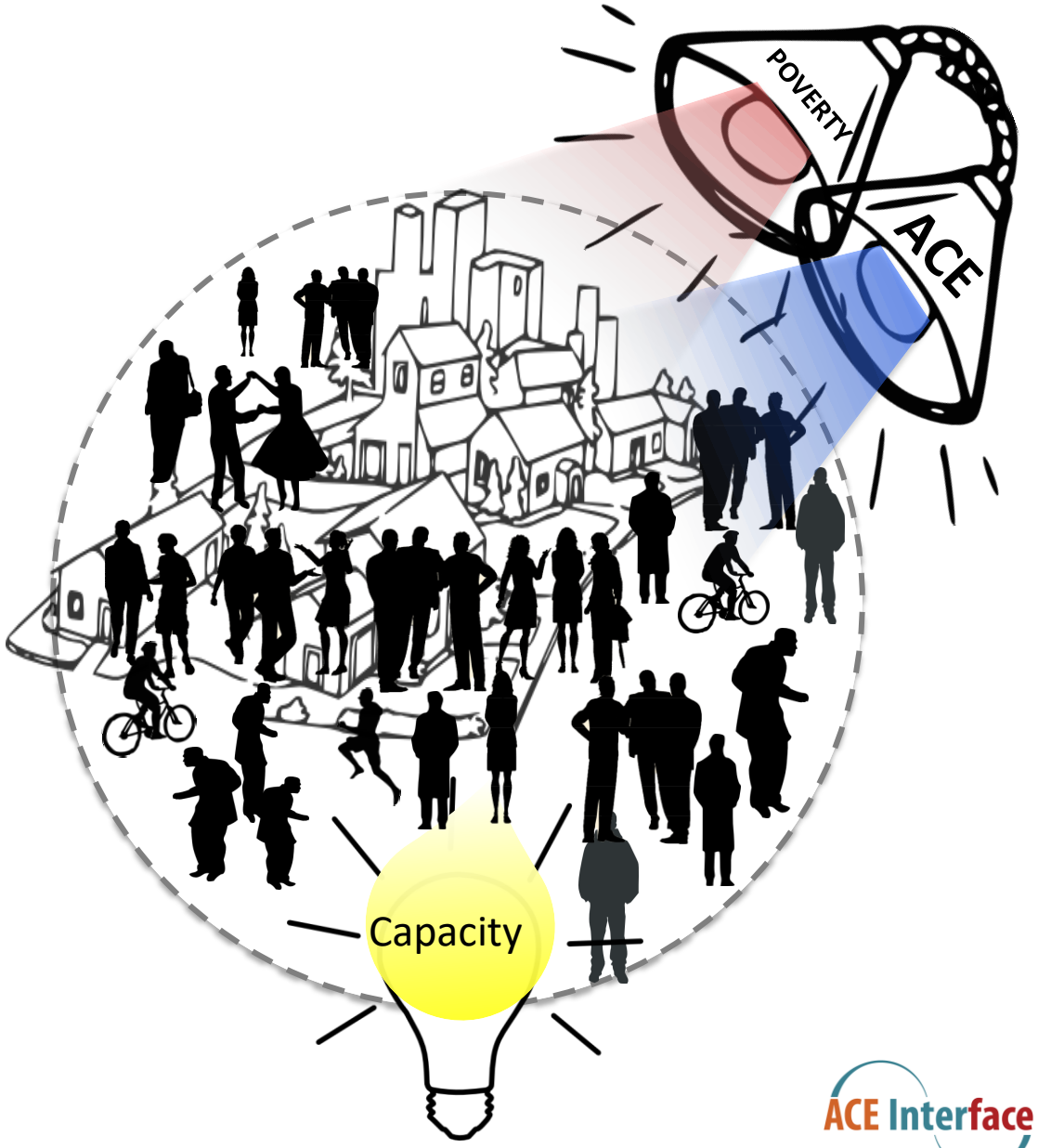

The Magnitude of the Solution

Financing Community-Based ACE Prevention

ACE Interface

Purposes Today:

1. Consider future financing potential: bonds or risk pooling
2. Understand focus on strategic needs: prevent ACE transmission to next generation; stop progression of adversity across life course
3. Learn about current service provider and community responsibilities that can support adequate financing in the future



ACE Interface

Paying for Public Health: Begging, Bonding, or Pooling

A "municipal bond" is a debt obligation issued by government entities. When you buy a municipal bond, you are loaning money to the issuer in exchange for a set number of interest payments over a predetermined period. At the end of that period, the bond reaches its maturity date, and the full amount of your original investment is returned to you with interest.

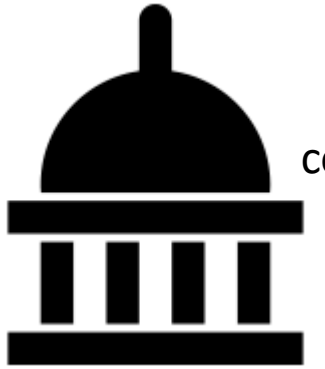
1. General obligation bonds – pay for immediate expenses; and are issued on the strength of the taxing authority of the issuer.
2. Revenue bonds pay for projects that will generate their own revenue to pay back the bonds (usually infrastructure)

A "social impact bond" is an innovative and emerging financial instrument that leverages private investment to support high-impact social programs. Some call these "Pay for Success". They are not traded on the bond market; instead they are contractual agreements that engage the private sector to finance innovation or proven services.

A "risk pool" is a group of public entities that join together in a cooperative agreement that essentially "pools" their resources as well as their risks. The organizations participating in the pool are referred to as "members". Risk-sharing pools are owned and controlled by their members. These pools are not-for-profit and are expressly operated to mitigate risk and maximize safety.

ACE Interface

1. Government and investors establish contract: societal impact will result in principle & interest payments in specified time.



2. Investors provide operating funds for actions focused to deliver cost avoidance in entitlement services.

6. Principle & interest payment from cost avoidance.

5. Fewer people need entitlement programs; government avoids costs.

4. People get healthier, safer, more productive.

3. Community & service providers focus on reducing root causes of costly problems; monitor, innovate, improve.

ACE Interface

Potential Challenges of Social Impact Bonds

Flexibility for Innovation -- If investor money is tied to a specific direct service program, providers could have less incentive, or less authority for innovation, even after the provider has exhausted the potential benefit of the program and is working to improve results among a population that hasn't responded to the program.

Administrative Burden -- If funders and intermediaries demand a role in design and delivery of interventions, the providers might have more oversight and additional administrative burdens that reduce resource for helping customers.

Outcomes Attribution – Since repayment is determined by outcomes that save government money, outcome measurement is vital to success. Complex community initiatives are notoriously difficult to evaluate. A constellation of outcomes is the result of a constellation of actions. Repaying investors from realized cash savings may require aggregating SIB benefits across multiple agencies and programs as well as different levels of government. This could prove challenging. We have to be careful, also, that service providers don't use creaming or other unethical strategies for asserting cost avoidance.

Profit Incentive – If the funders are engaged with design and delivery of interventions, that could represent a fundamental shift in the social contract – rather than focusing on changing the circumstances of residents with needs, residents could be considered commodities used to generate profit.

Informed by: Stanford Social Innovation Review, May 2018; From Potential to Action, Bringing Social Impact Bonds to the US, McKinsey, May 2012

ACE Interface

Bond Rating = Assessment of Risk

Aaa' or 'AAA' for the most creditworthy issuers to 'Ca', 'C', 'D', 'DDD', 'DD', or 'D' for those in default.

30% of risk is local economy

70% is a combination:

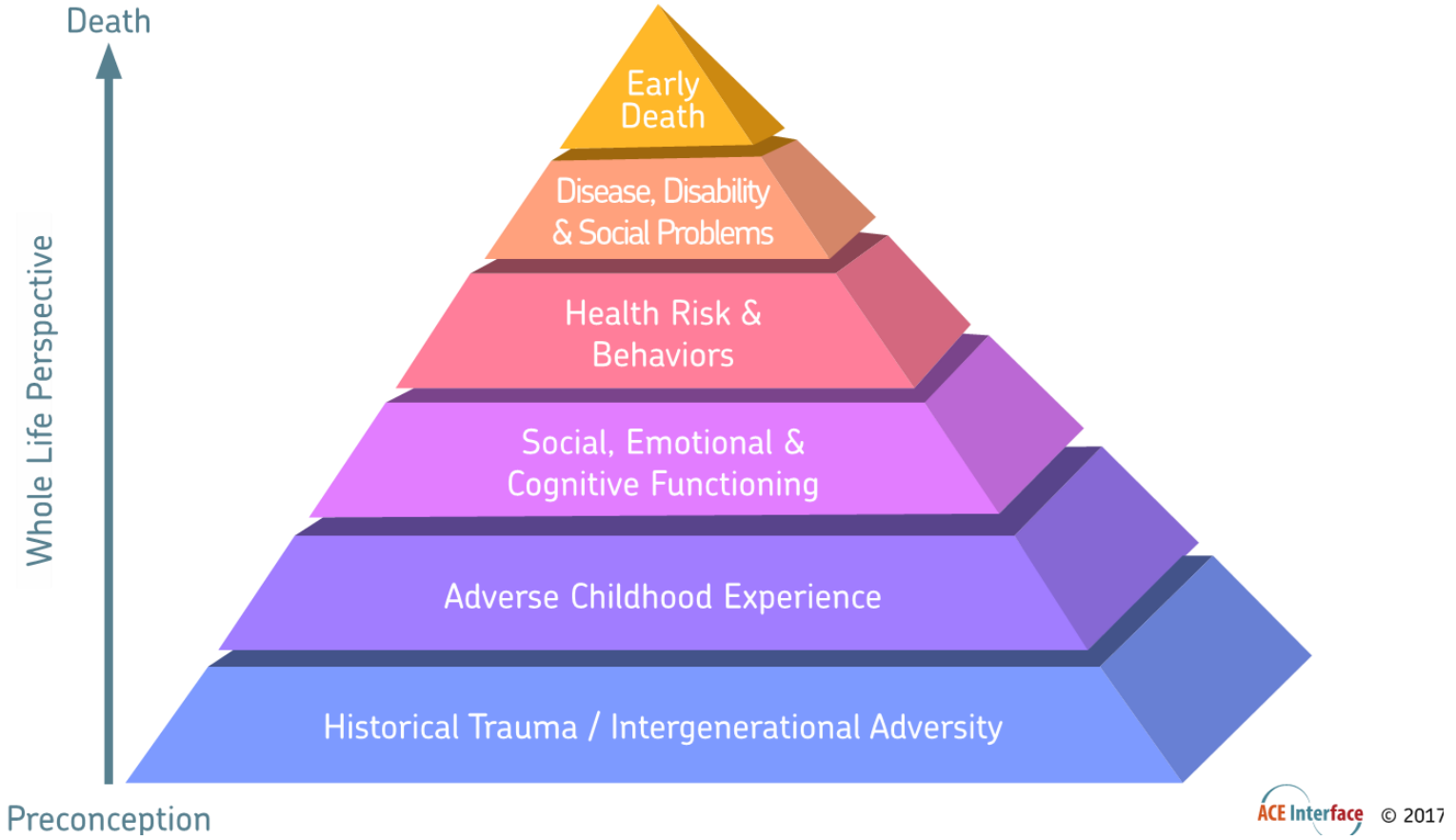
- Size, diversity, strength of local tax base
- Ability to generate revenue through property, sales, income tax
- Management, budgetary performance and flexibility
- Contingent liabilities (e.g.: pensions)

"Issuers and investors have yet to agree on the benefits both could experience through the use of a more comprehensive risk framework"

The Kresge Foundation, Feb. 2017

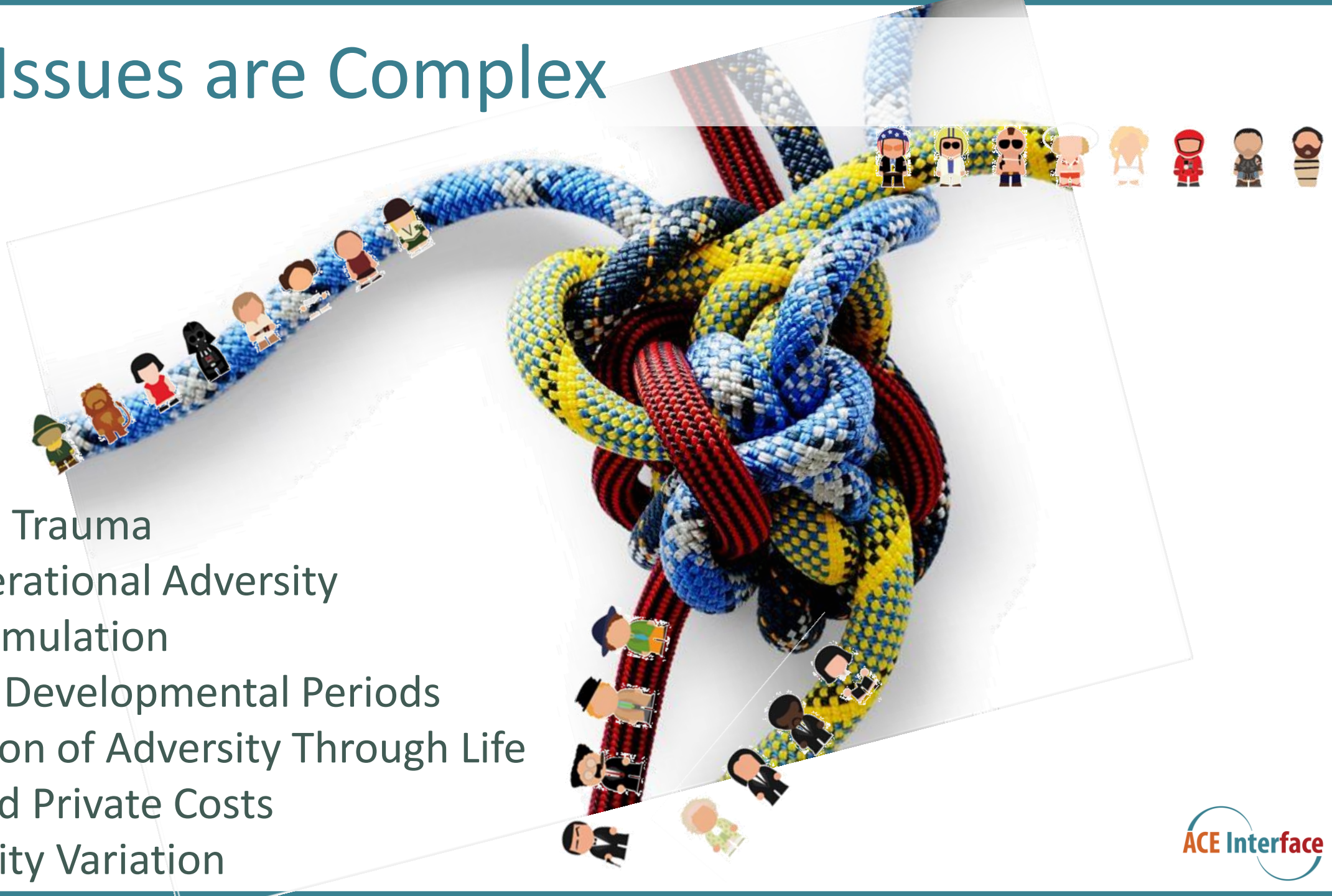
ACE Interface

Adverse Childhood Experience Perspective on Risk



ACE Interface

The Issues are Complex



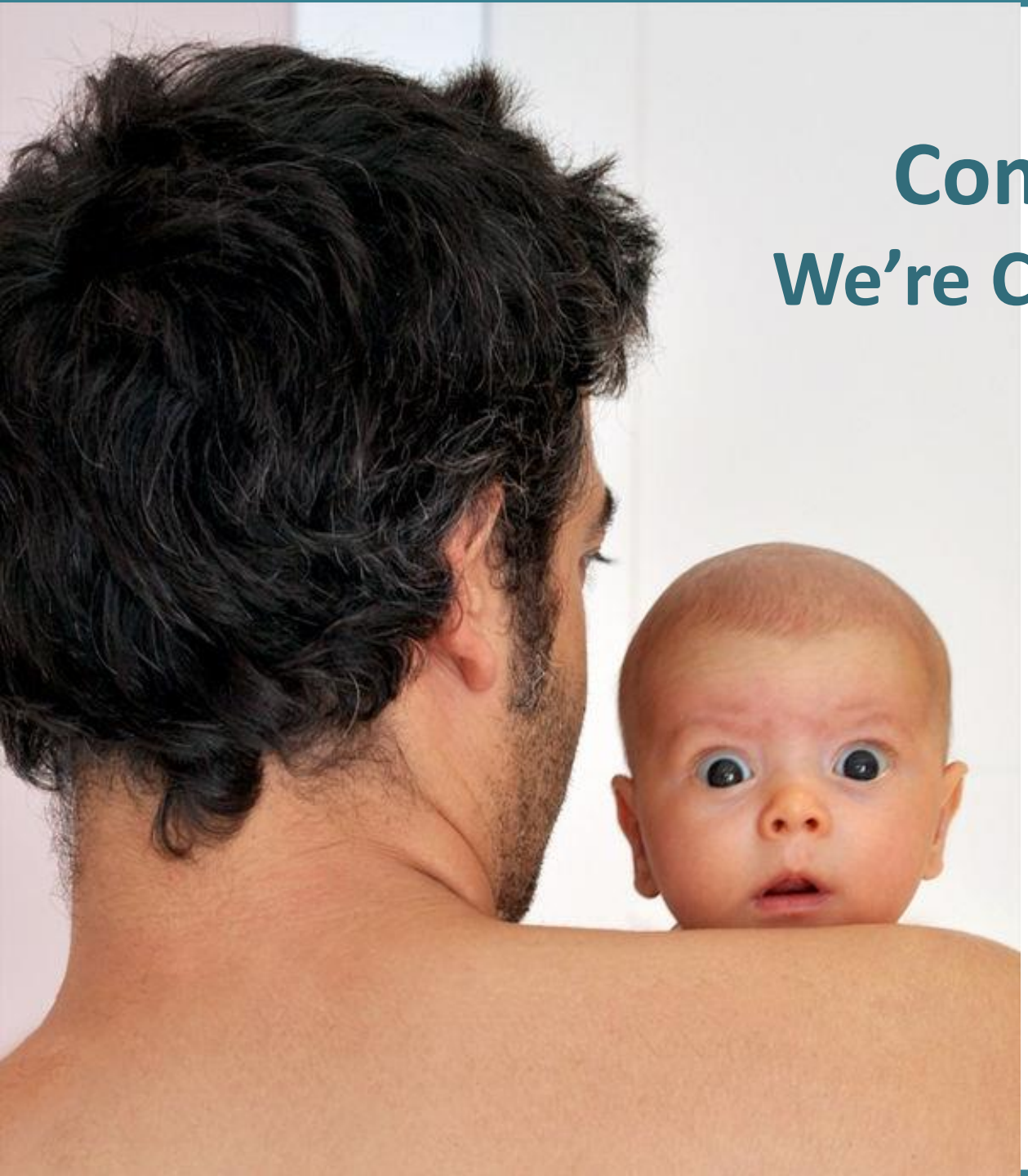
Historical Trauma
Intergenerational Adversity
ACE Accumulation
Sensitive Developmental Periods
Progression of Adversity Through Life
Public and Private Costs
Community Variation

ACE Interface

Resources are Finite

We need solutions that address the complexity of problems … and foster measurable change in different community environments at modest costs

ACE Interface

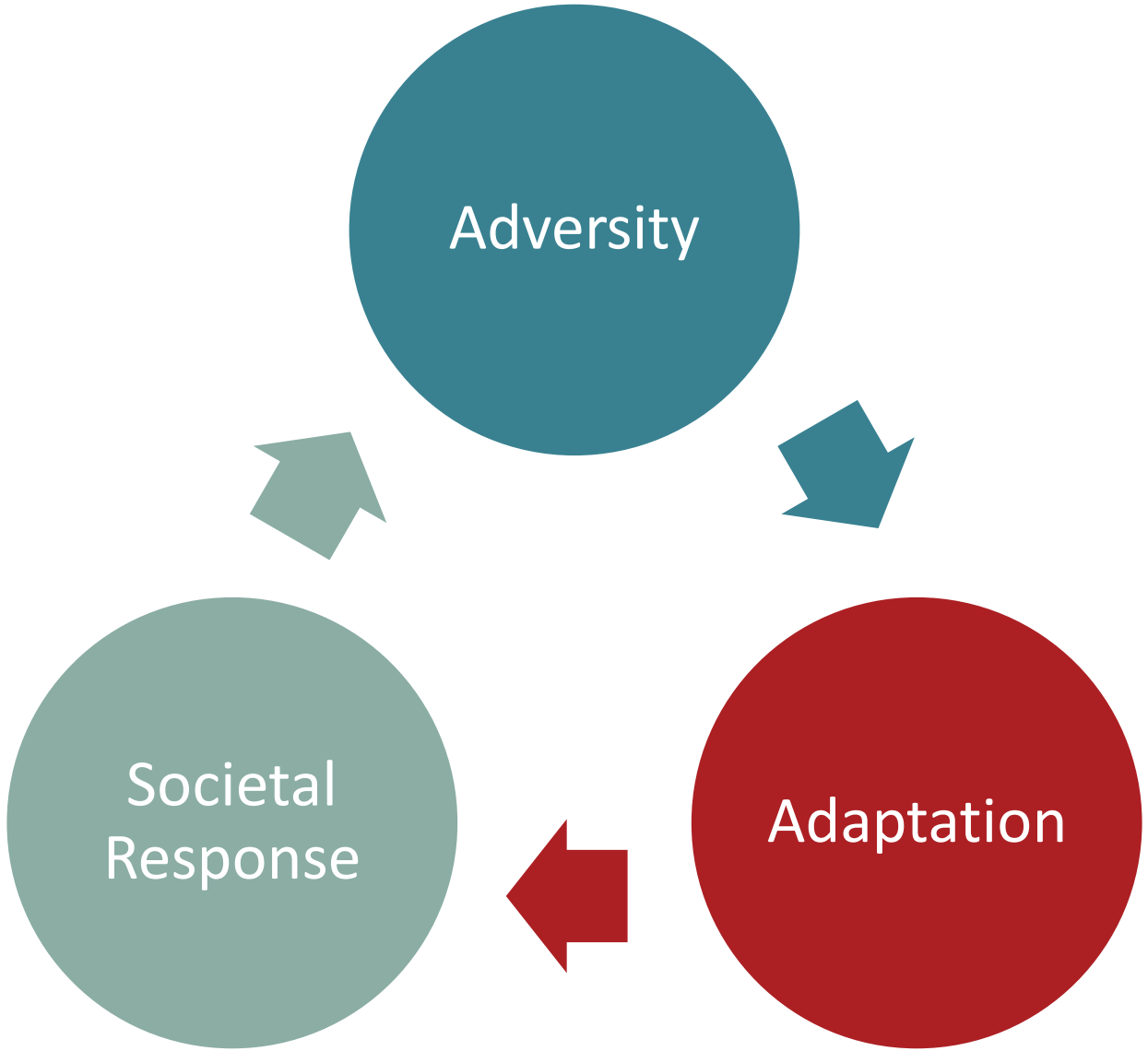


Communities are Powerful
We're Creating a Culture of Wellbeing

"Community is a living, spiritual entity, supported by every responsible adult."

Gregory Cajete

ACE Interface



ACE Interface

Important for Self-Healing Communities

1) Tell everyone, enlist everyone who wants to help. Ask them to act in their own sphere.

2) Focus on dynamics that sustain problems.

3) Use learning communities to fuel innovation.

4) Foster a results-orientation: periodically step back to reflect; make decisions based on the future we desire.

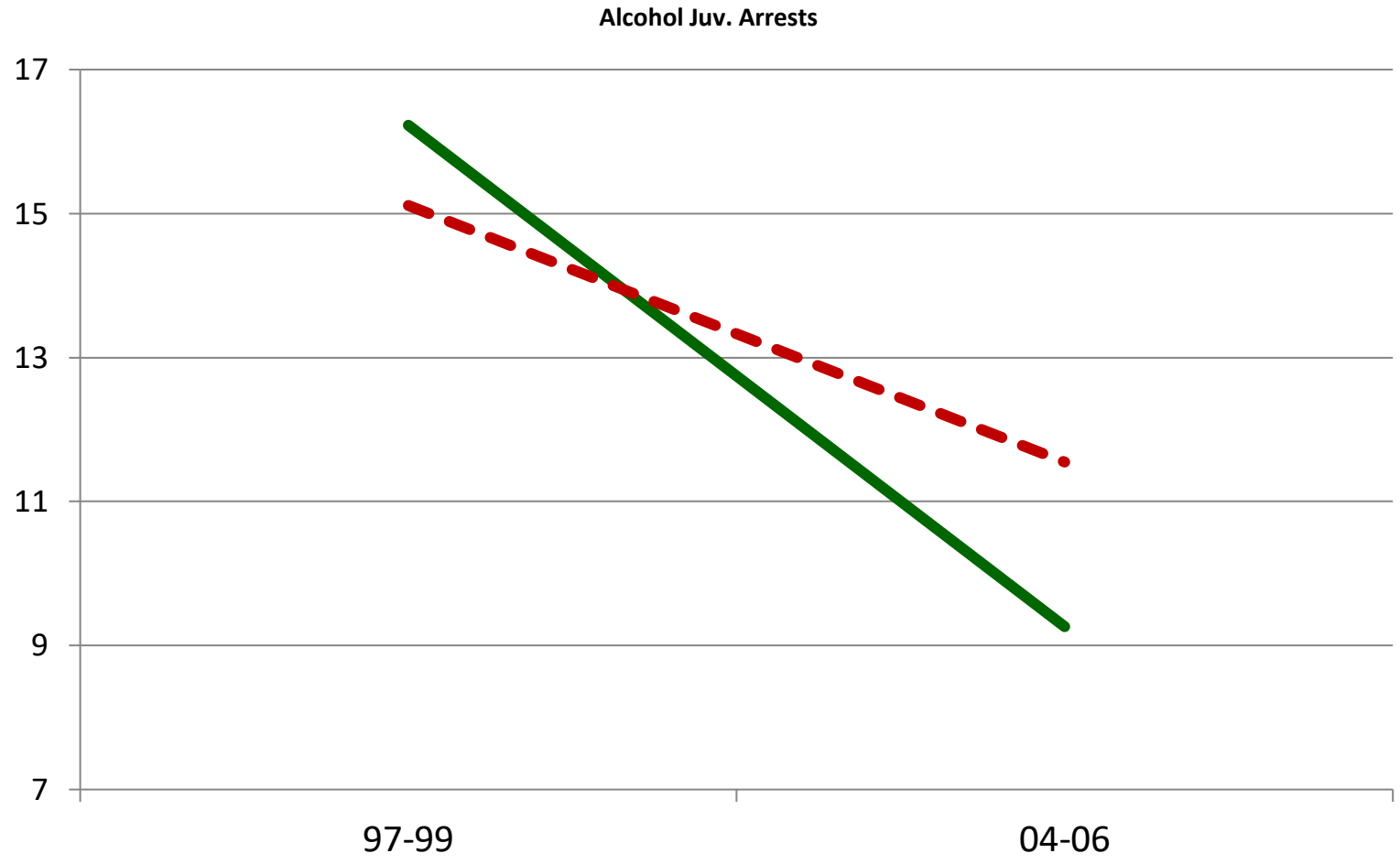
ACE Interface

Communities Using Self-Healing Partnerships, Principles, Process

- Improved the rates of major social problems
- Reduced public costs in real time
- Generated lower-than-expected ACE Scores in youth aging into adulthood
- Produced long-term savings for public and private sectors

ACE Interface

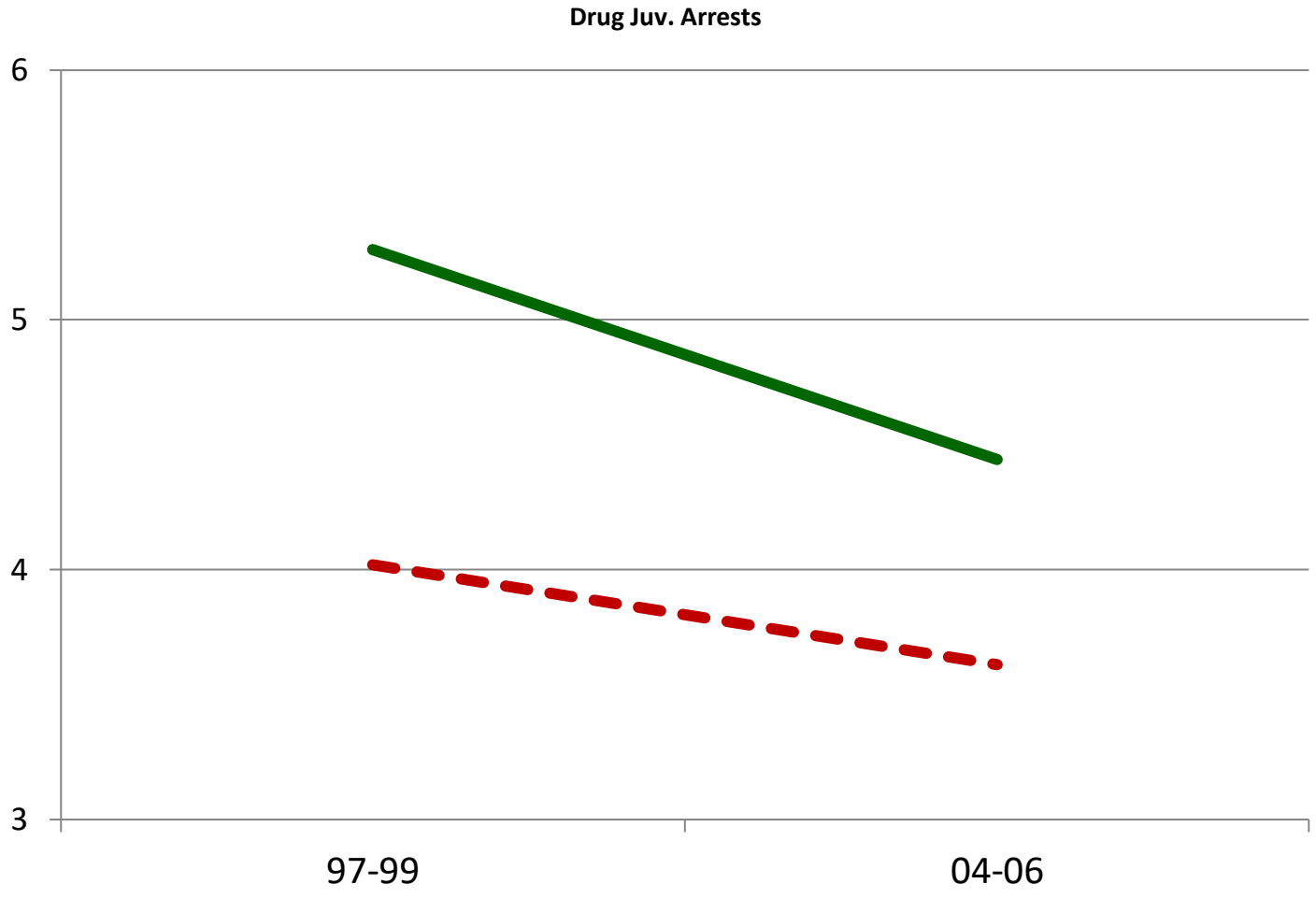
Juvenile Alcohol Arrests



Alcohol Juv. Arrests	97-99	04-06
FPC Funded (n=28)	16.23	9.26
Non-Funded (n=10)	15.11	11.55

ACE Interface

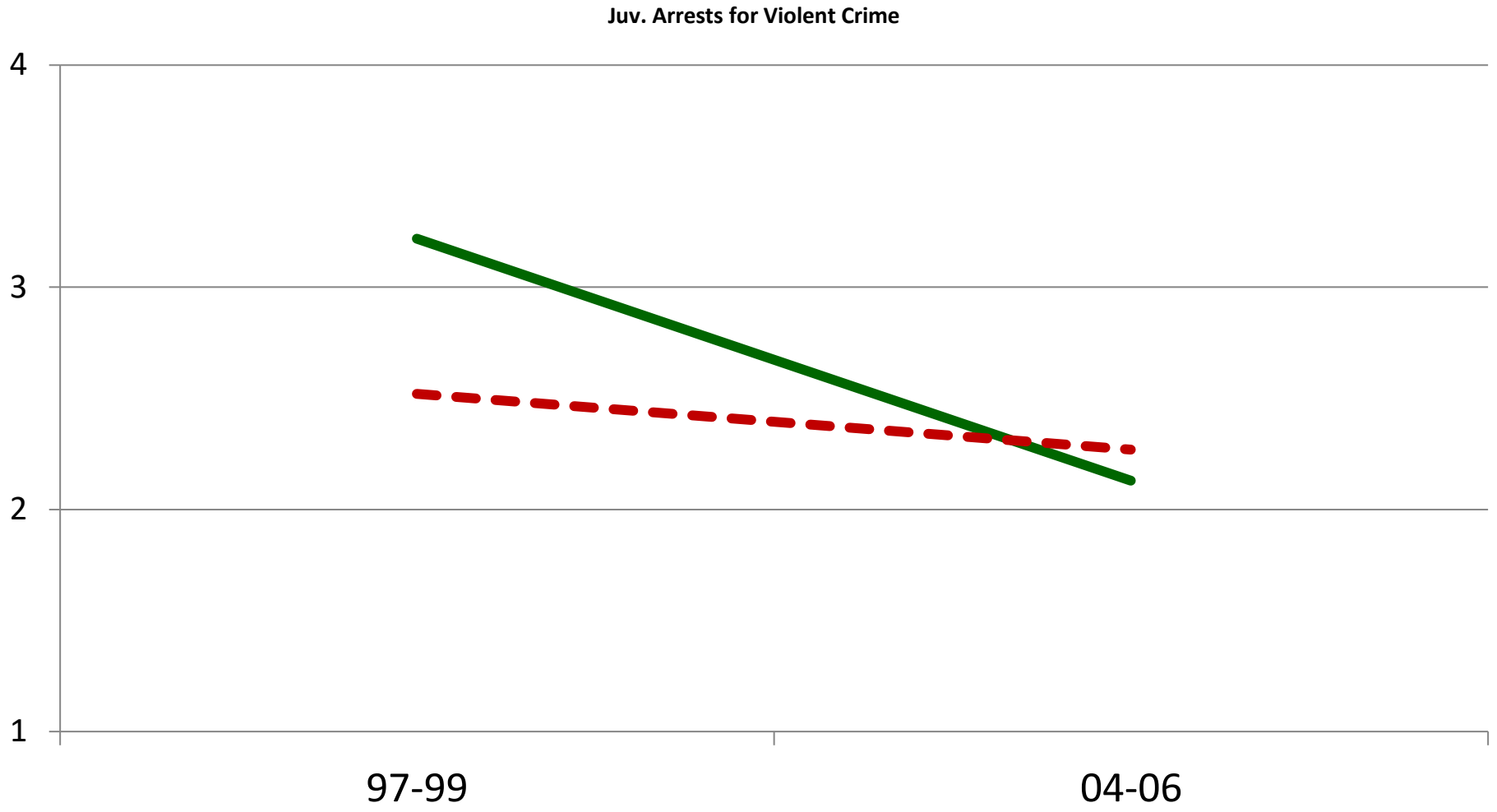
Juvenile Drug Arrests



Drug Juv. Arrests		
	97-99	04-06
FPC Funded (n=28)	5.28	4.44
Non-Funded (n=10)	4.02	3.62

ACE Interface

Juvenile Arrests for Violent Crime

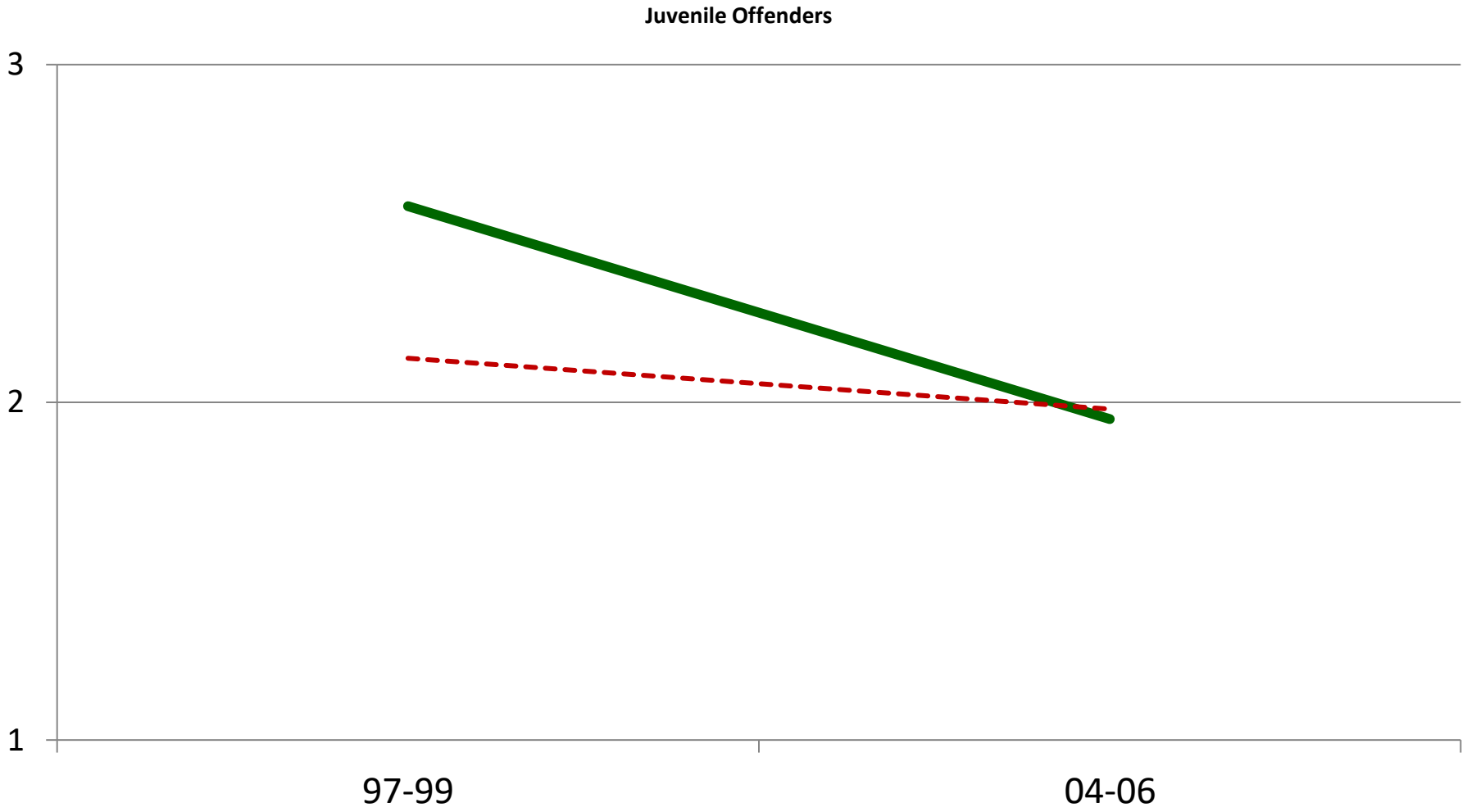


Juv. Arrest for Violent Crime

	97-99	04-06
FPC Funded (n=28)	3.22	2.13
Non-Funded (n=10)	2.52	2.27

ACE Interface

Juvenile Crime

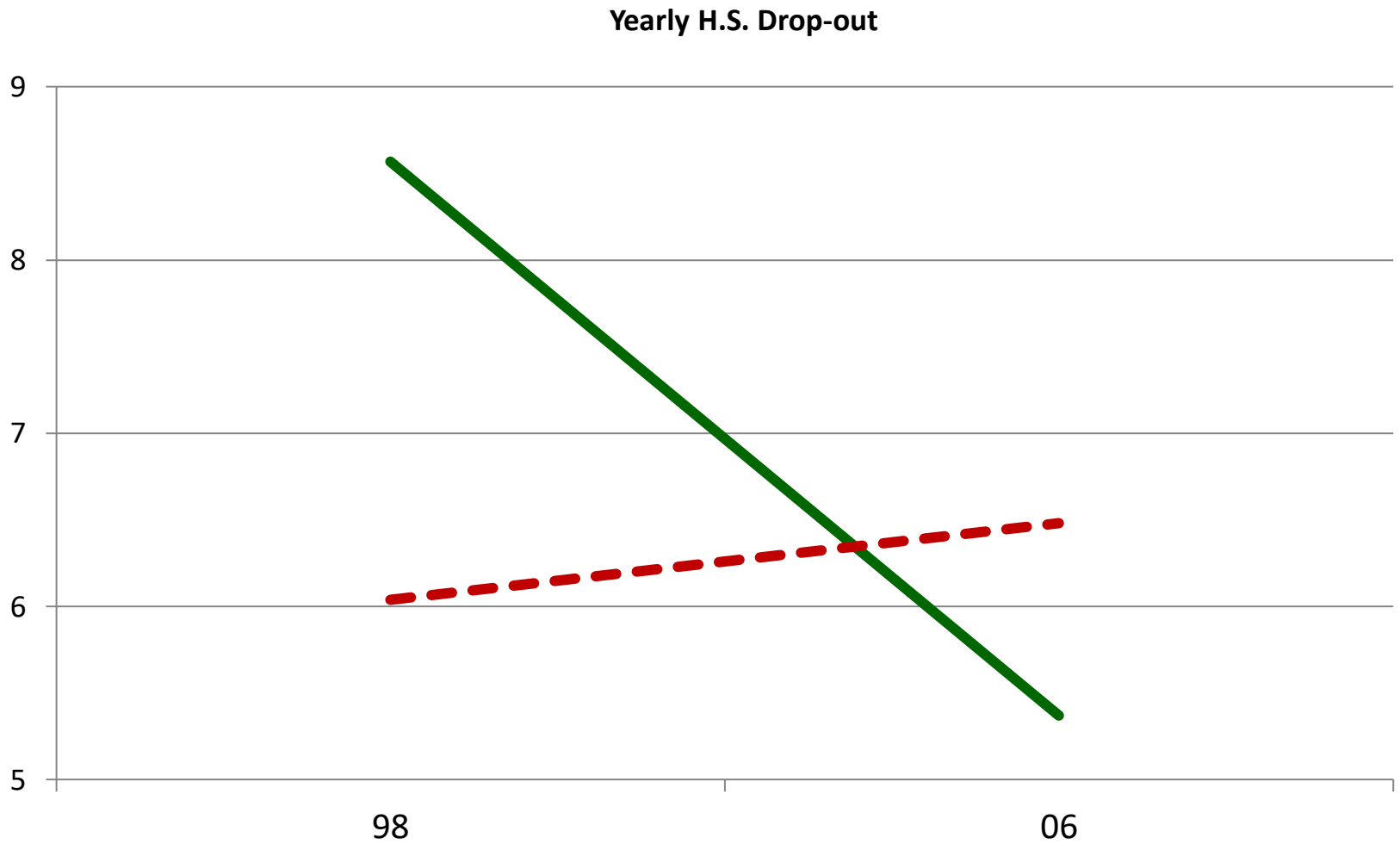


Juvenile Offenders

	97-99	04-06
FPC Funded (n=28)	2.58	1.95
Non-Funded (n=10)	2.13	1.98

ACE Interface

Dropping Out of High School

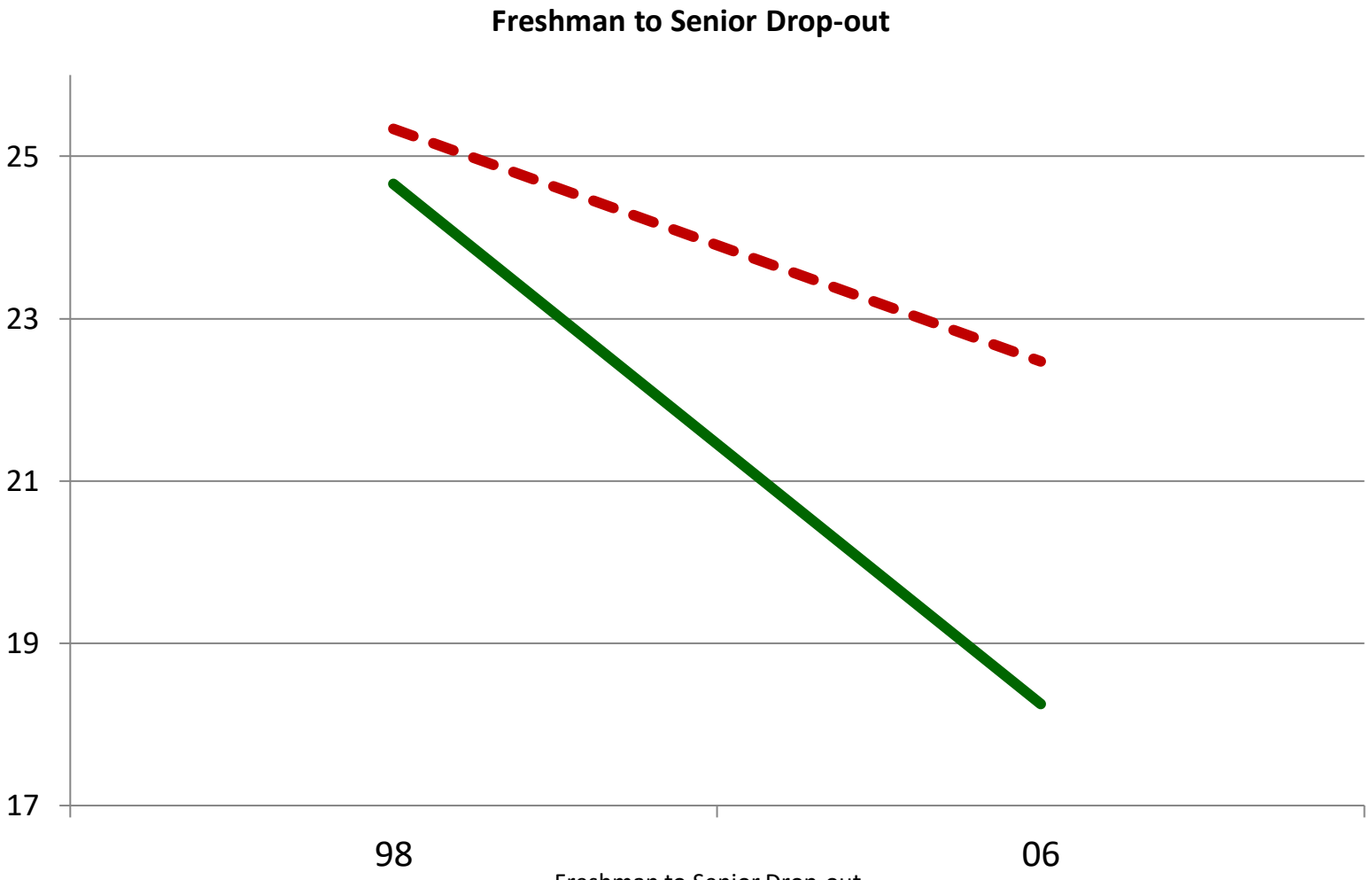


Yearly H.S. School Drop-out

	98	06
FPC Funded (n=28)	8.57	5.37
Non-Funded (n=10)	6.04	6.48

ACE Interface

Dropping Out During High School

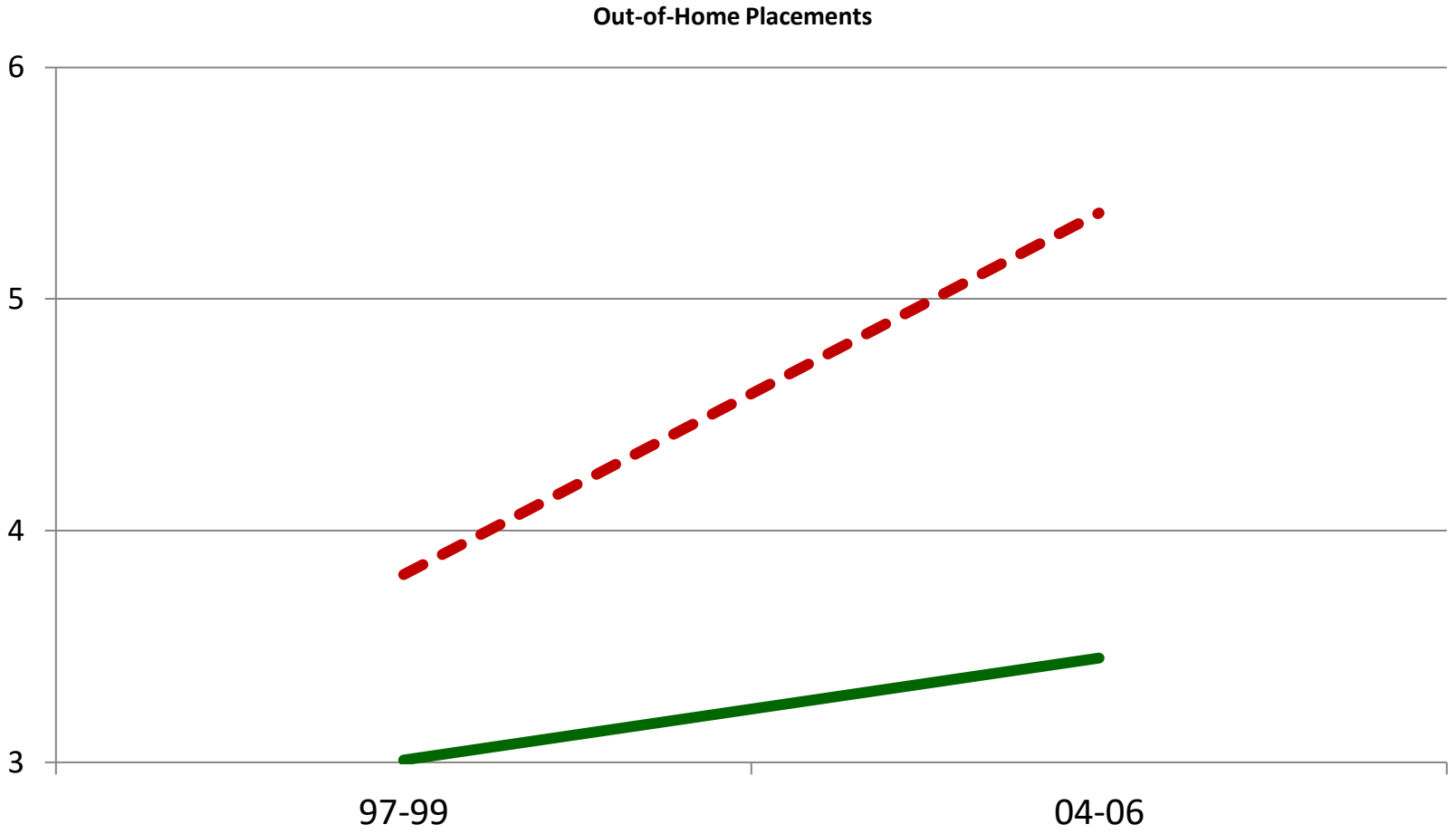


Freshman to Senior Drop-out

	98	06
FPC Funded (n=28)	24.66	18.25
Non-Funded (n=10)	25.34	22.47

ACE Interface

Child Out-of-Home Placements

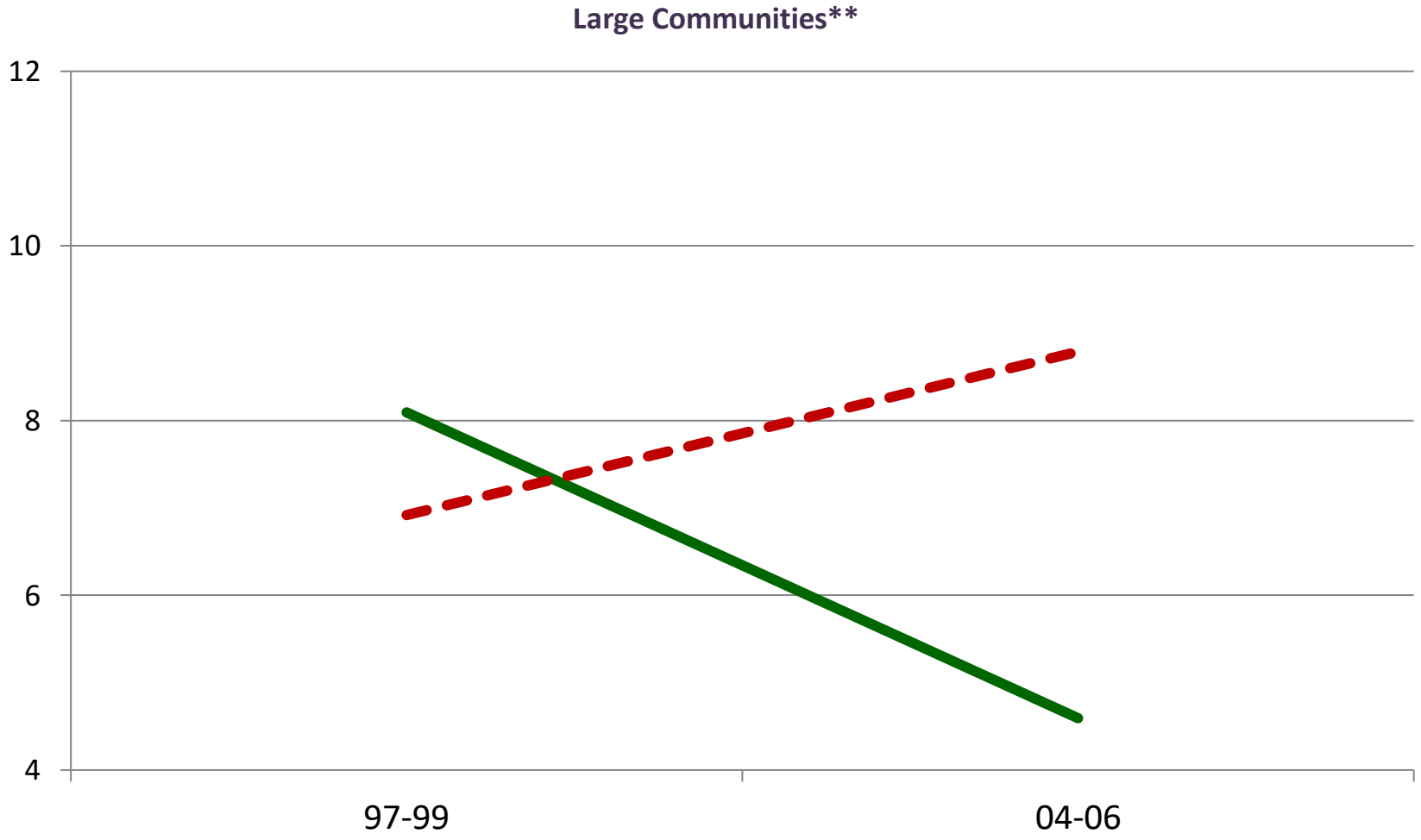


Out-of-Home Placements

	97-99	04-06
FPC Funded (n=28)	3.01	3.45
Non-Funded (n=10)	3.81	5.37

ACE Interface

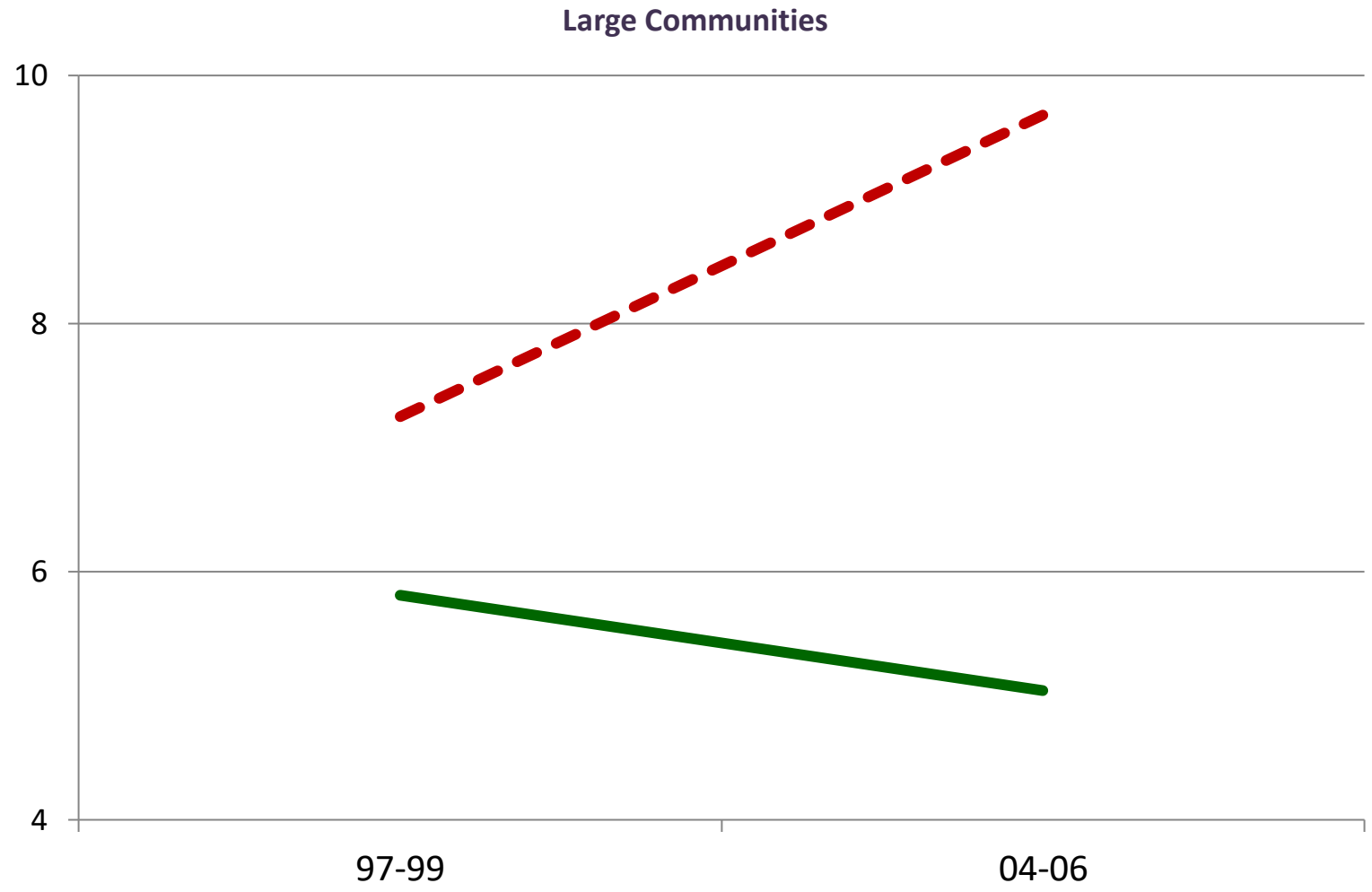
Births to Teen Mothers



Large Communities**	97-99	04-06
FPC Funded (n=28)	8.09	4.59
Non-Funded (n=10)	6.92	8.79

ACE Interface

Child Suicide



Large Communities		
	97-99	04-06
FPC Funded (n=28)	5.81	5.04
Non-Funded (n=10)	7.25	9.68

ACE Interface

Public Sector Savings

For a state-wide investment of $4m/year

Conservative estimate for only

- Pregnancy ages 10-17
- Dropping out of high school
- Out of home placement
- Juvenile Felony crime

$56m Biennial Savings ($1/$7 current biennium savings)

Long term savings: $296m; Long term cost/cost avoidance $1/$37

ACE Interface

Felt Needs

What needs to be done in order to address deficiencies from the past.

Strategic Needs

What needs to be done in order to move to a desired future.

ACE Interface

Adverse Childhood Experience Study

- Largest Study of its Kind
- Over 17,000 participants
- Both Retrospective and Prospective
- Over 100 Peer-Reviewed Journal Articles
- Helps Us Understand Drivers of Population Health and Wellbeing
- Shifting the Paradigm of Global Health Promotion

ACE Interface

Adverse Childhood Experiences

ACE Score = Number of Categories

Abuse

1. Child physical abuse (28%)
2. Child sexual abuse (21%)
3. Child emotional abuse (11%)

Neglect

4. Physical Neglect (10%)
5. Emotional Neglect (15%)

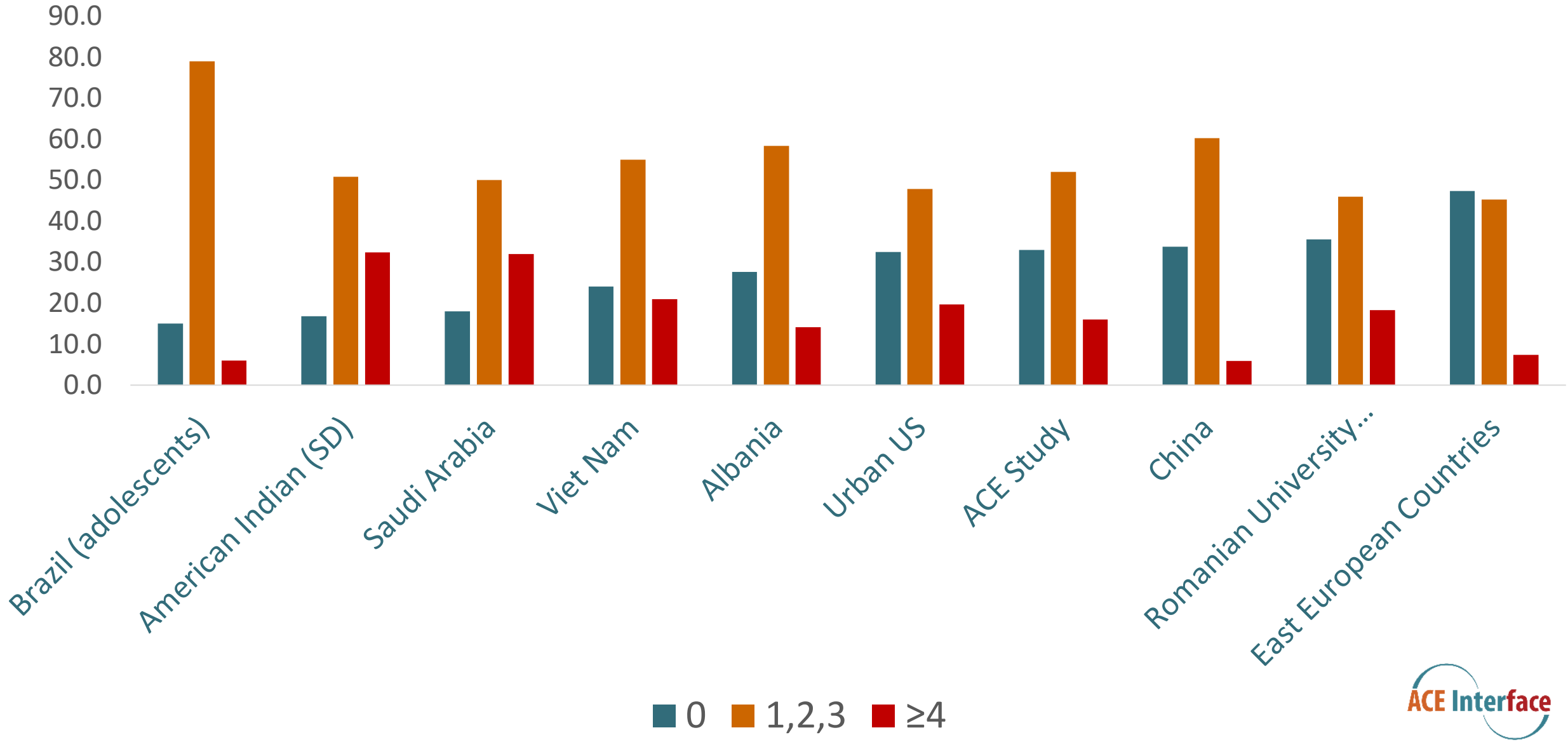
Indicators of Family Dysfunction

6. Mentally ill, depressed or suicidal person in the home (19%)
7. Drug addicted or alcoholic family member (27%)
8. Parental discord – indicated by divorce, separation (23%)
9. Witnessing domestic violence against the mother (13%)
10. Incarceration of any family member (5%)

ACE Interface

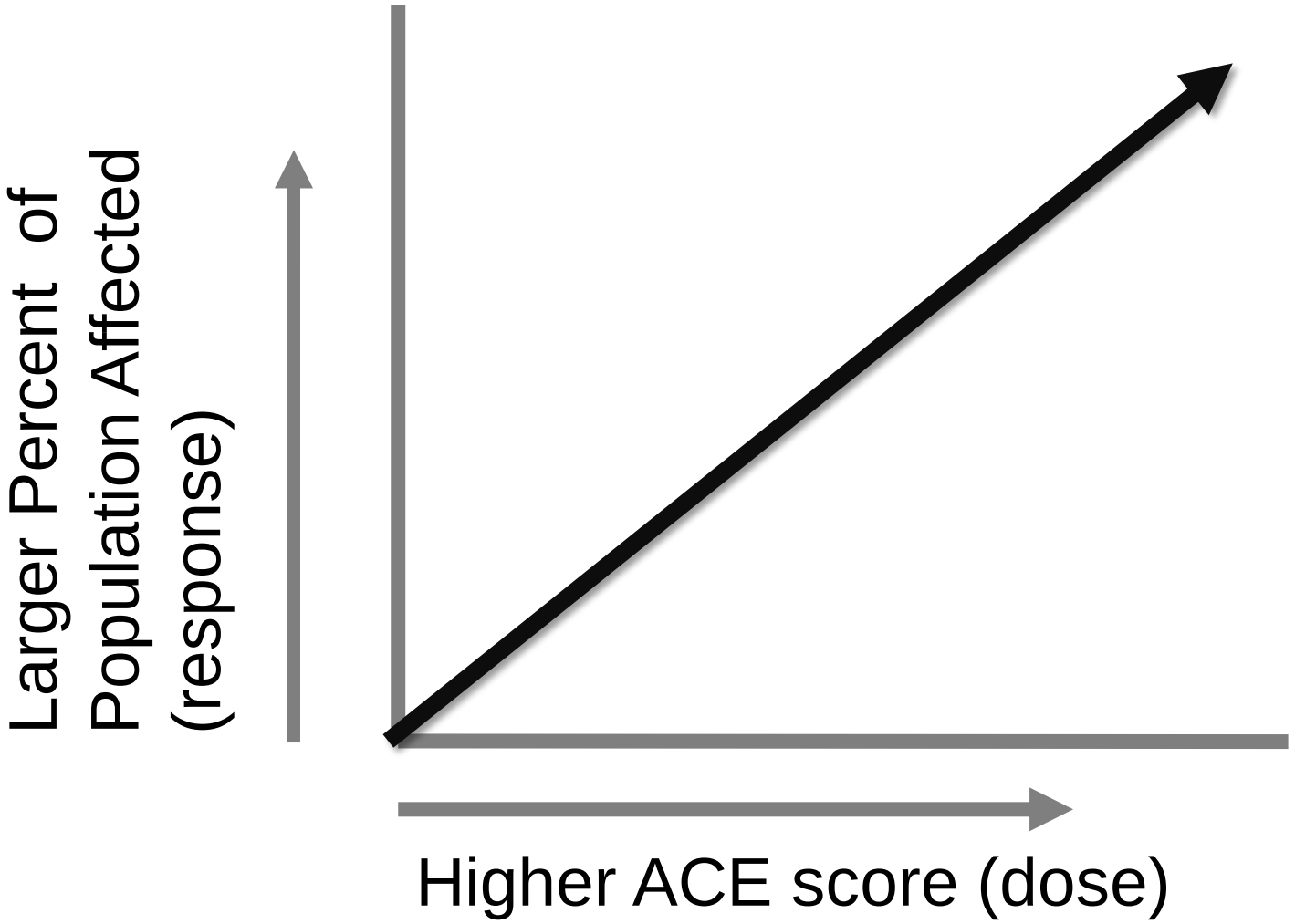
ACEs are Common Across the Globe

1-3 range: 45-79%; ≥4 range: 6-32%



ACE Interface

ACE: Cumulative Effect



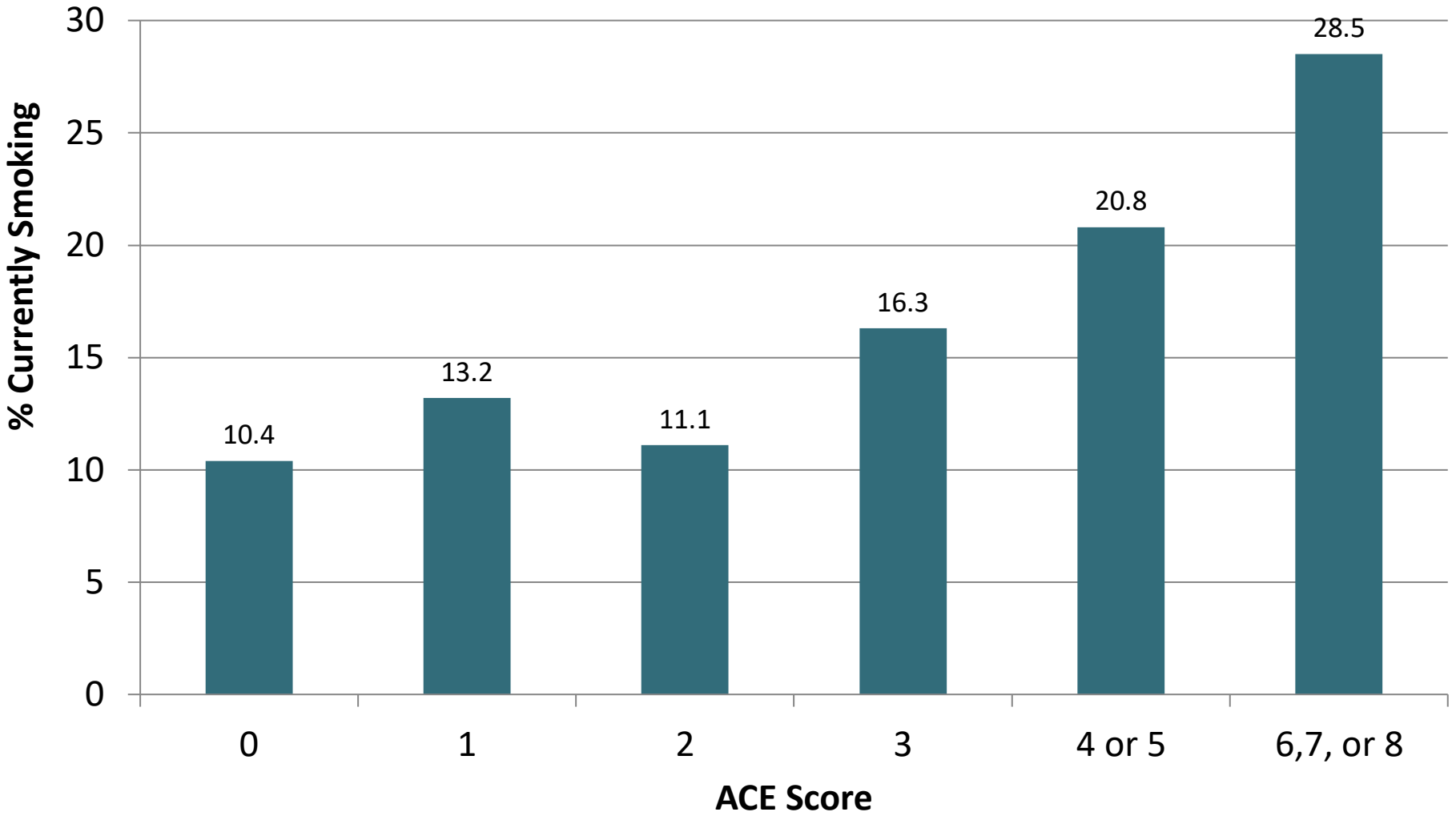
Dose-response is a direct measure of cause and effect.

A classic causal relationship
More ACE = more health problems

ACE Interface

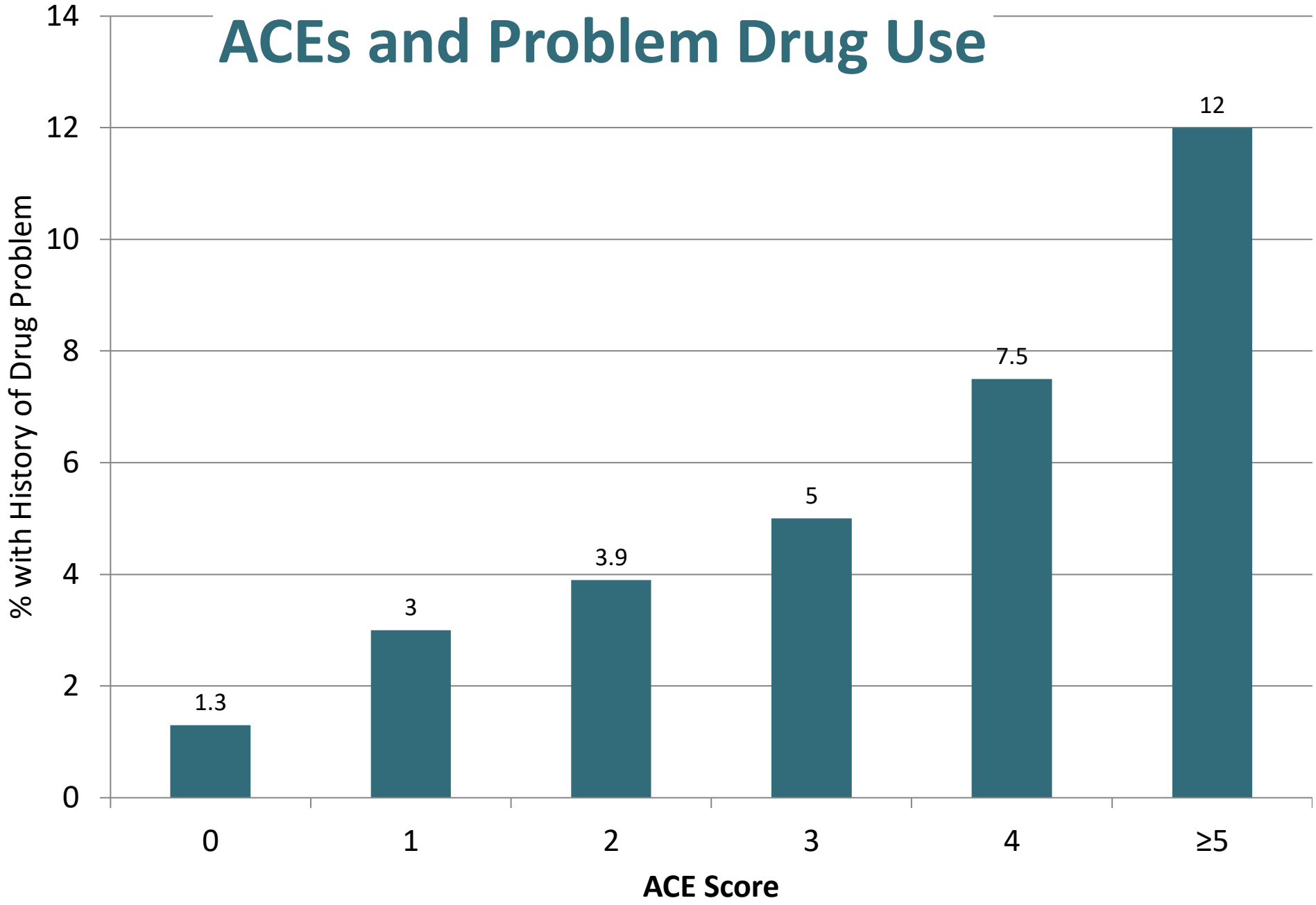
ACEs & Risk

Smoking



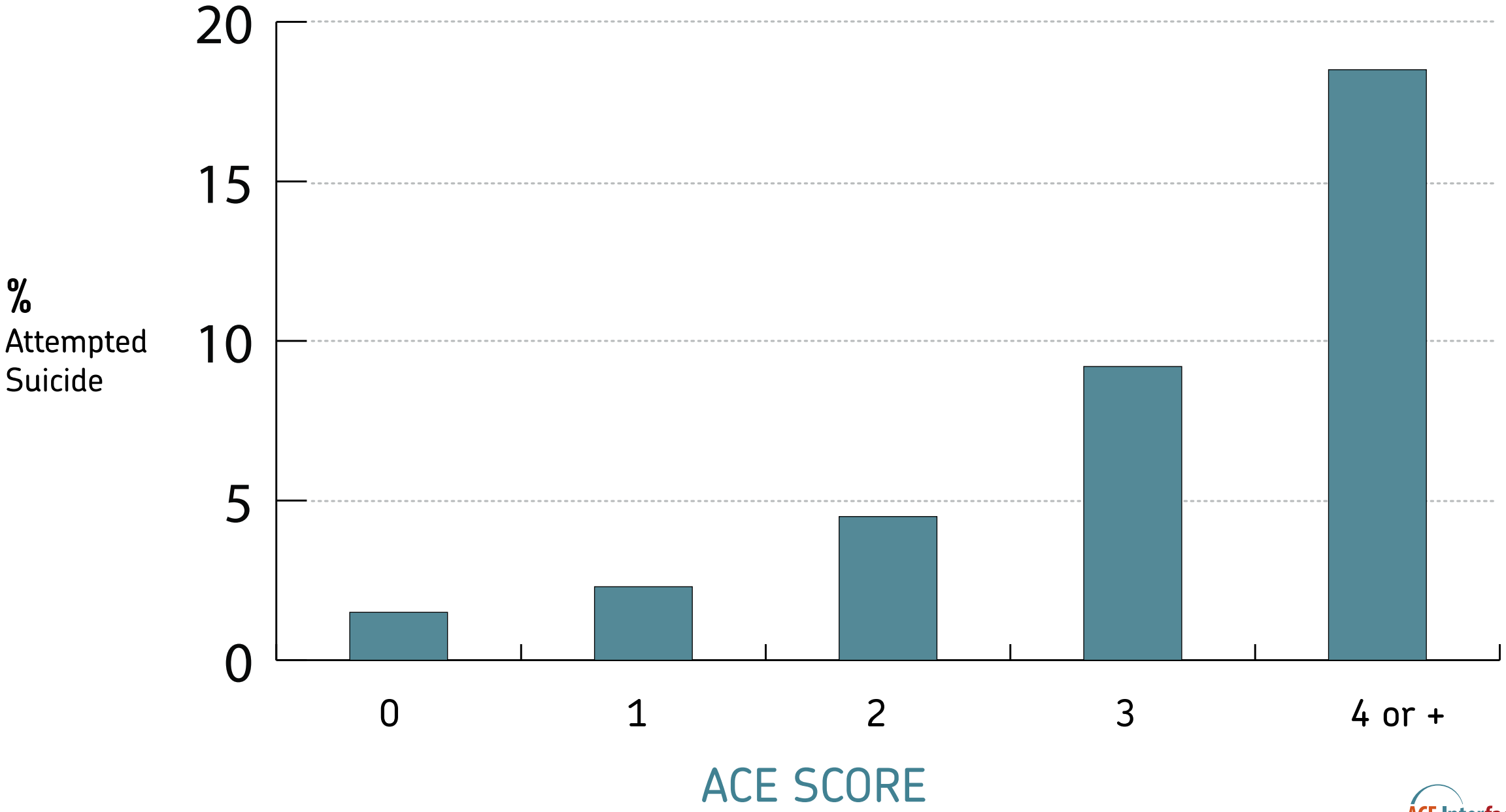
ACE Interface

ACEs and Problem Drug Use



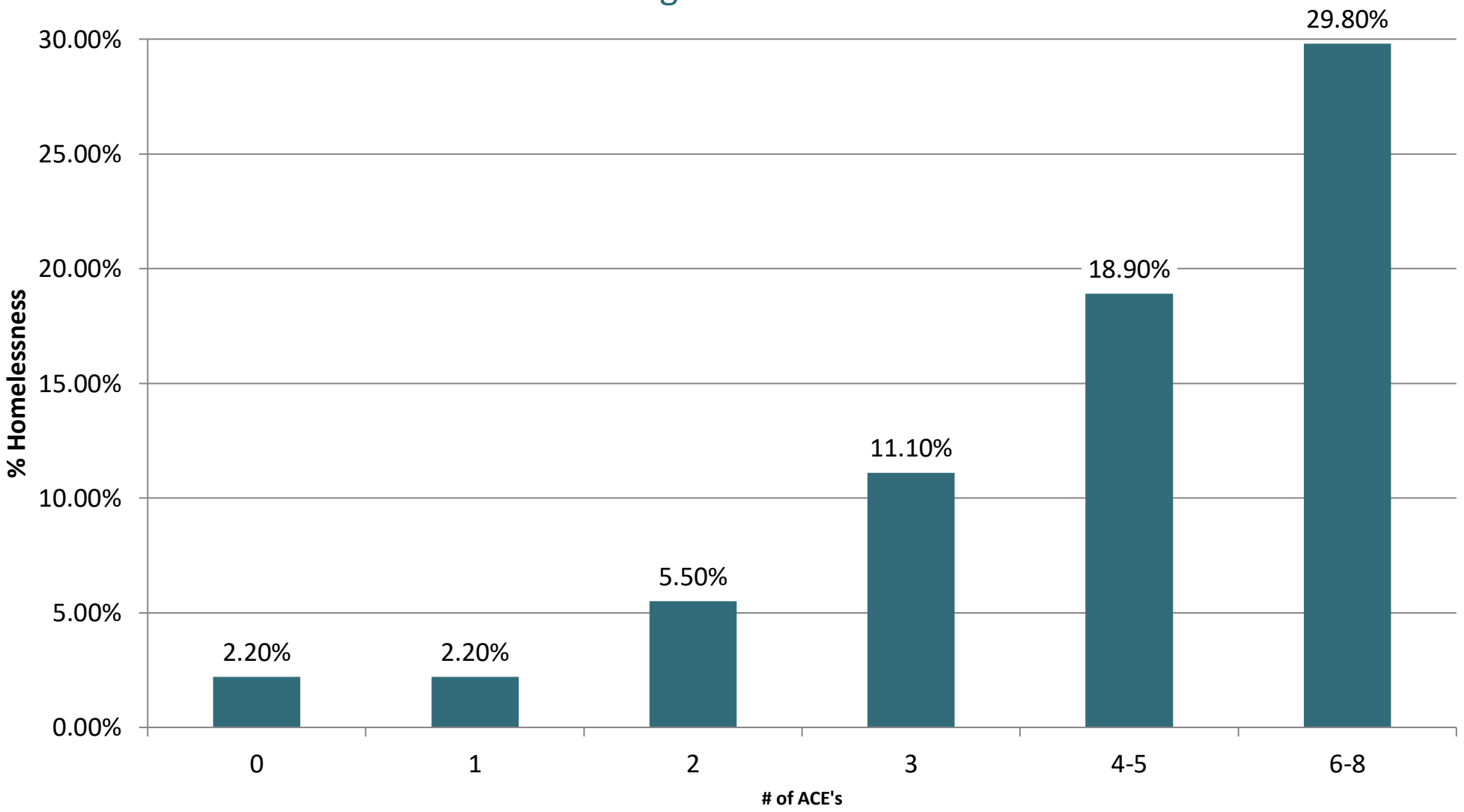
ACE Interface

ACEs & Suicide Attempt



ACEs & Homelessness

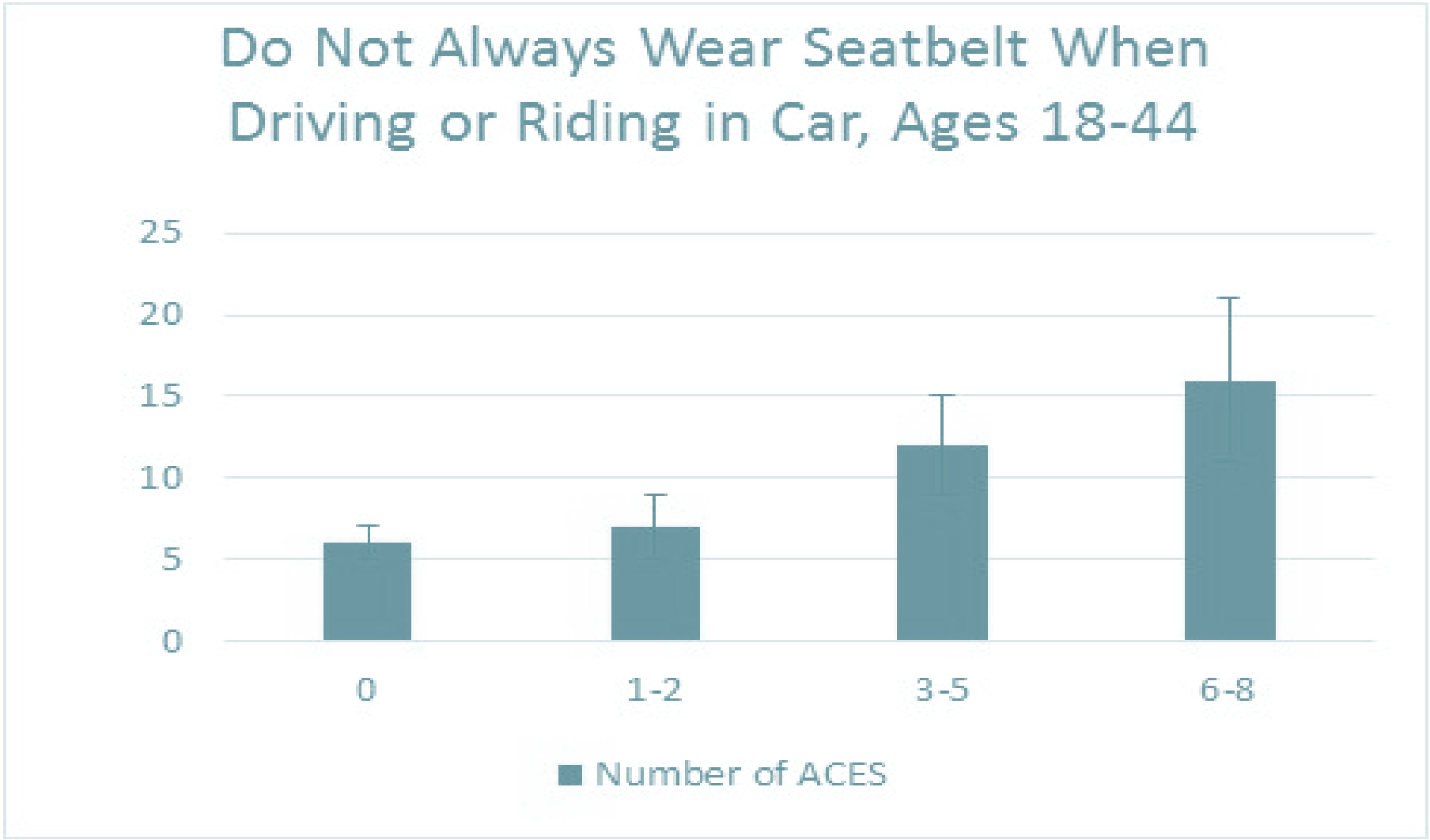
Ages 25-54



2010 WA BRFSS – Preliminary; Based on < Full Year of Data

ACE Interface

Seatbelt Use



ACE Interface

ACEs Drive Expensive Health Conditions

The most expensive health conditions:

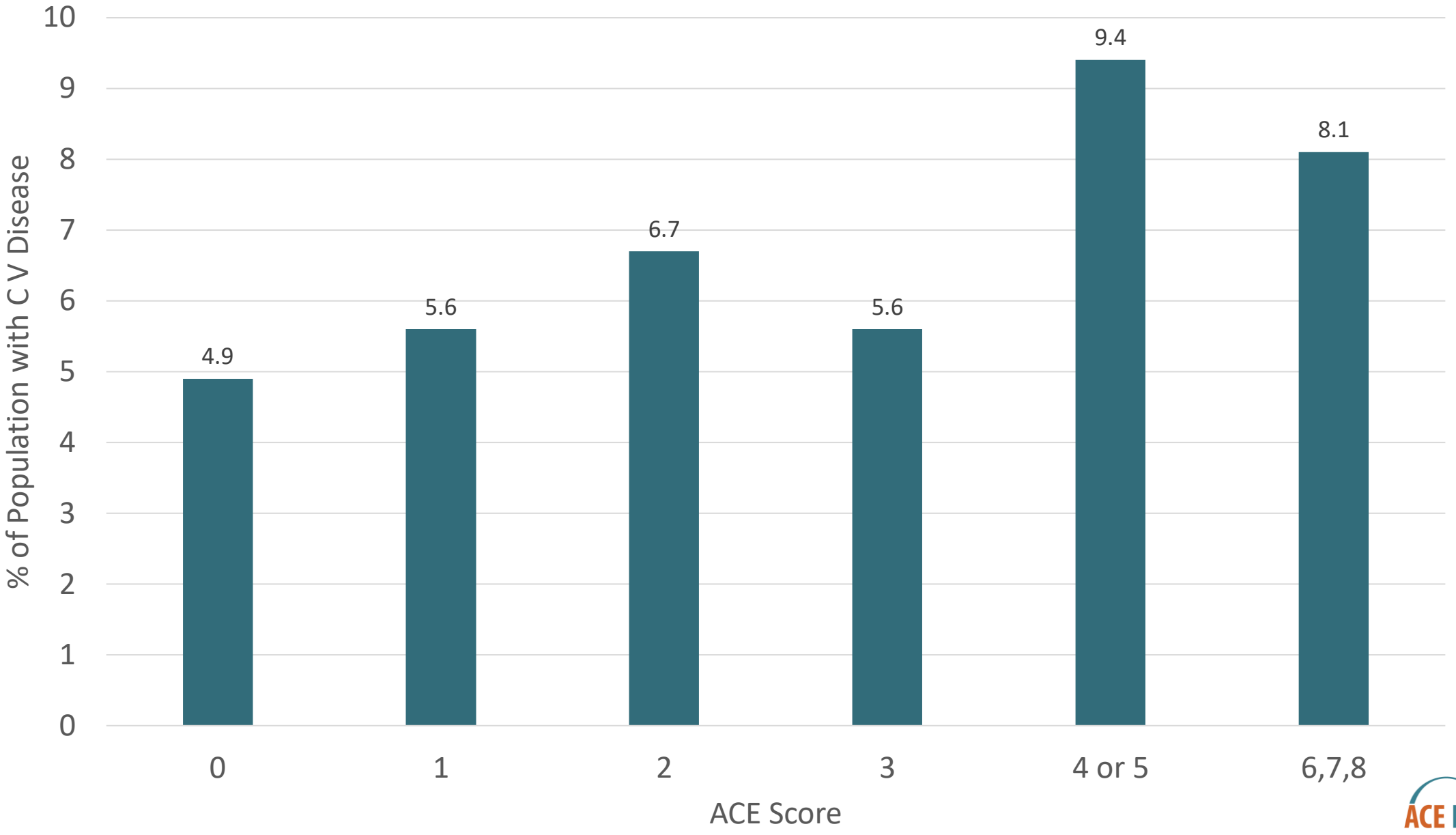
1. Heart disease
2. Cancer
3. Trauma
4. Mental disorders
5. Pulmonary conditions

Heart disease and trauma ranked 1st and 2nd for total spending

Cancer ranked 1st, heart disease 2nd highest for per-person costs

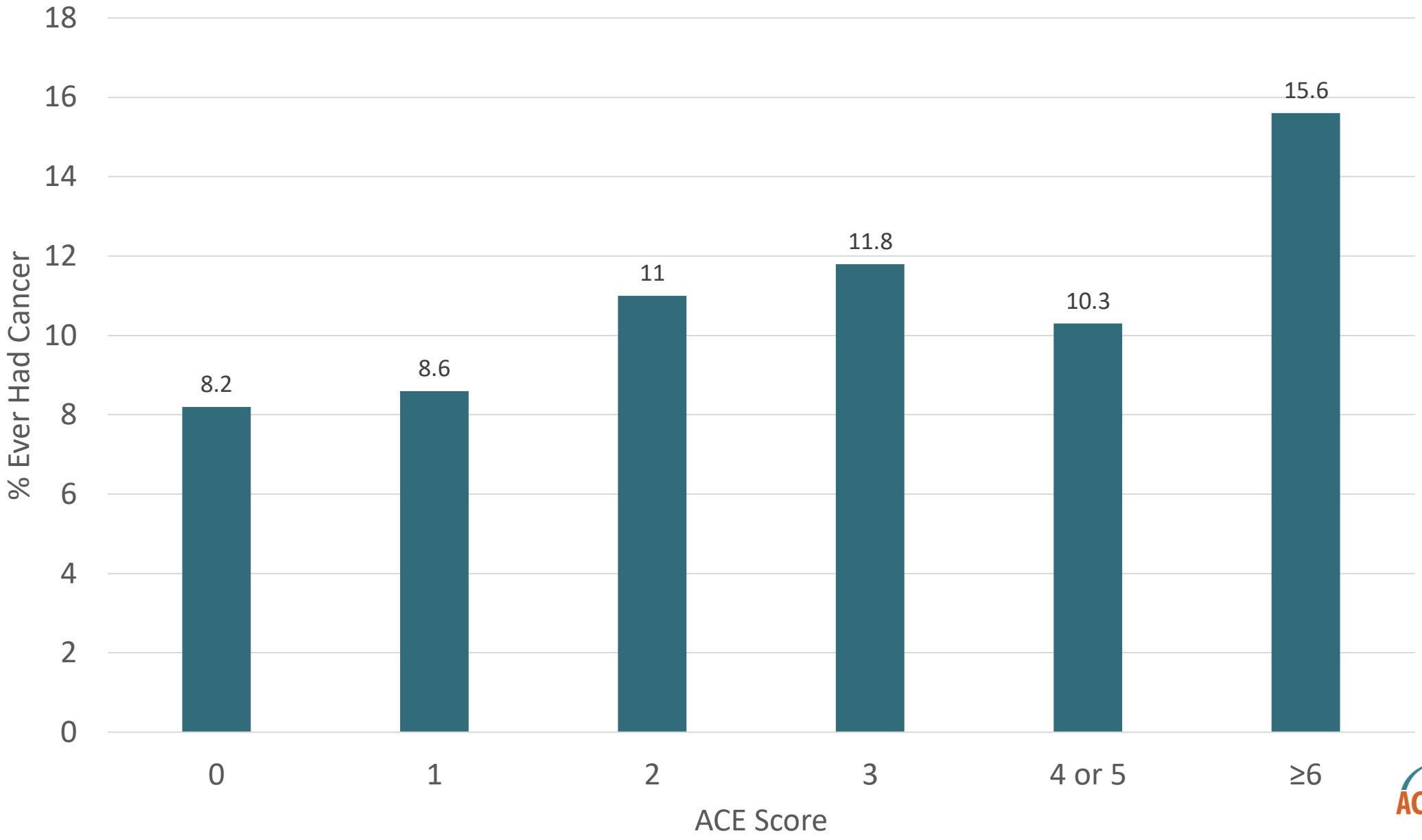
ACE Interface

Cardio Vascular Disease



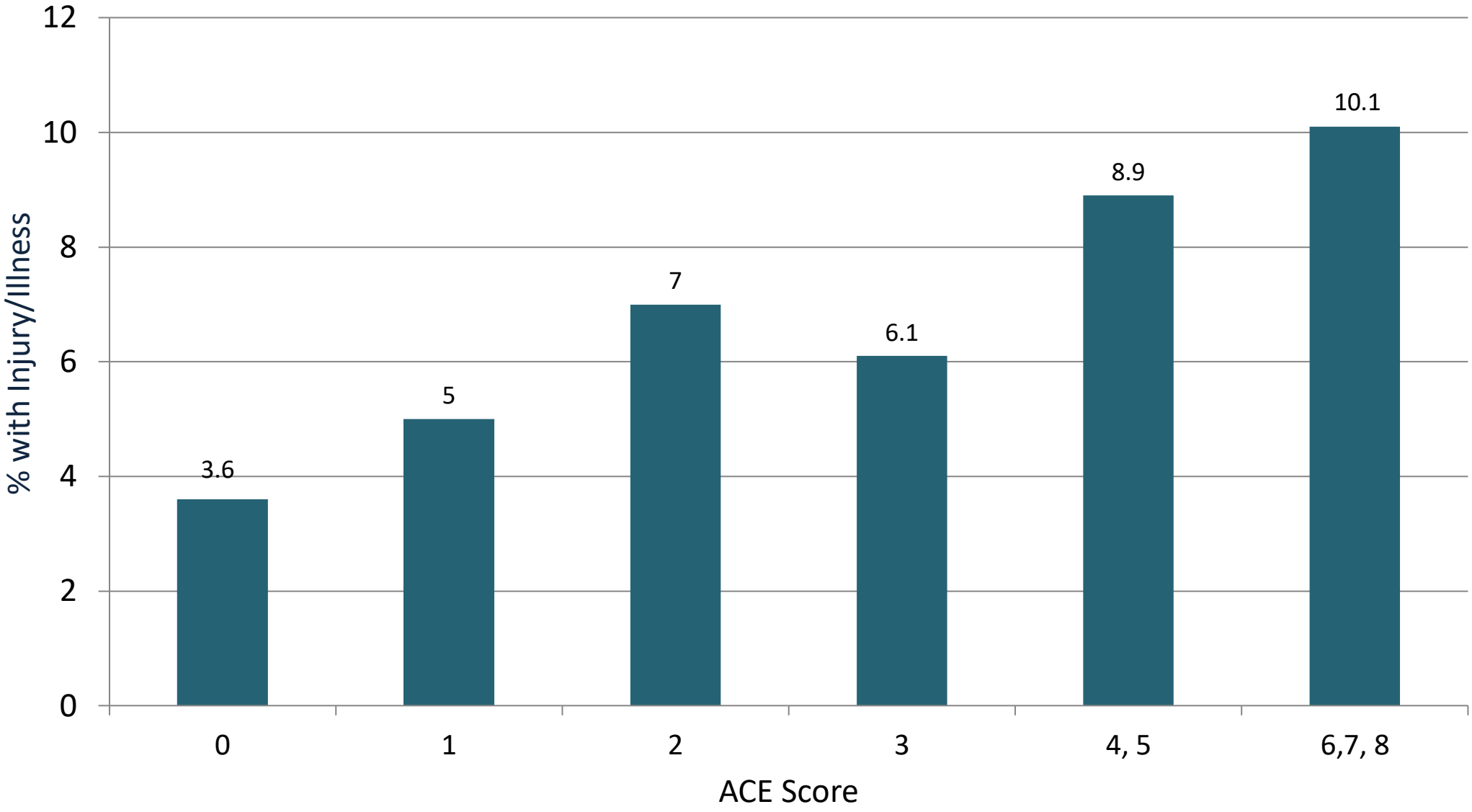
ACE Interface

History of Cancer



ACE Interface

Work-Related Injury/Illness in Past Year



ACE Interface

Common Chronic Conditions

25% of the U.S. population has one or more of five major chronic conditions:

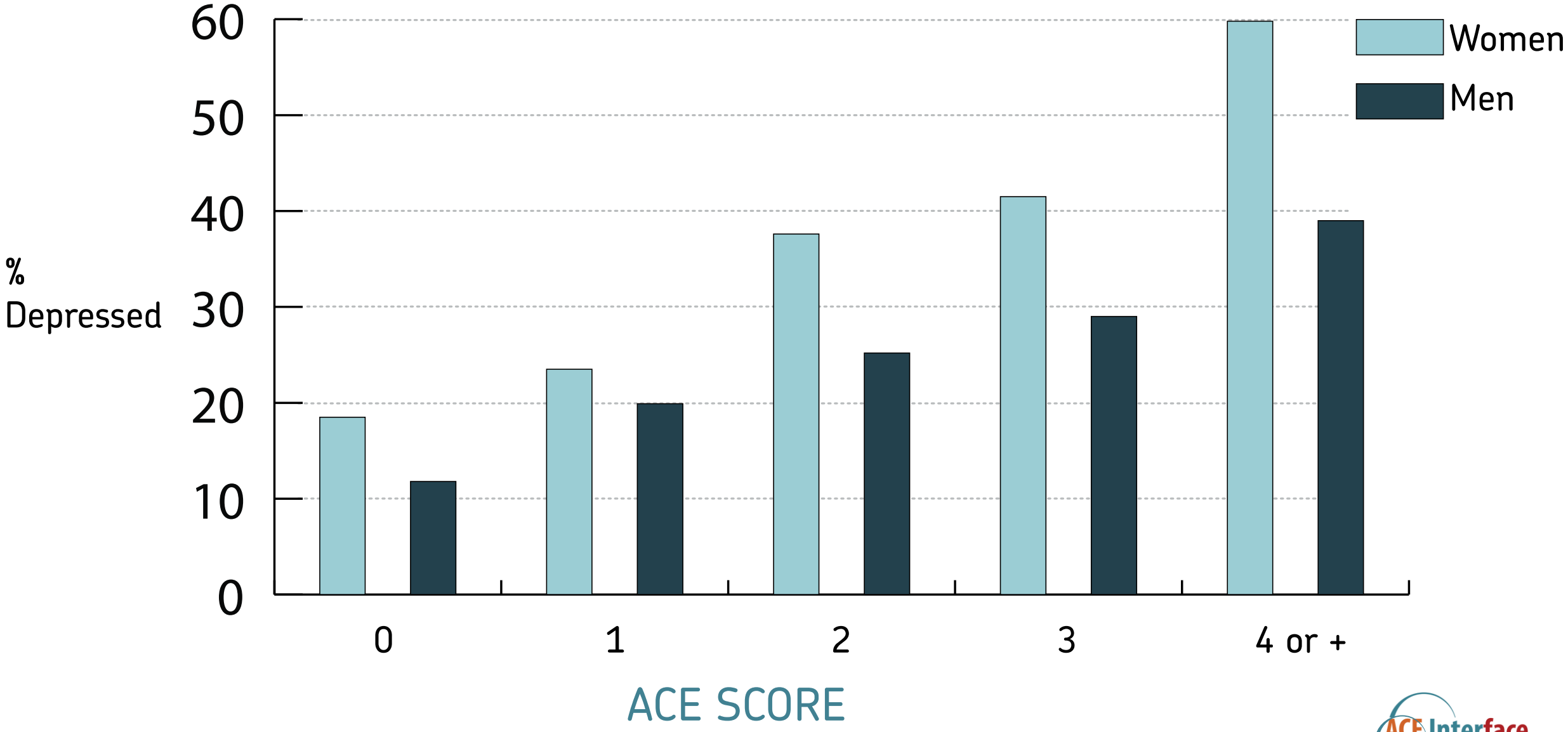
1. Mood disorders
2. Diabetes
3. Heart disease
4. Asthma
5. Hypertension

Expenses for people with one chronic condition twice as great as for those without any chronic conditions.

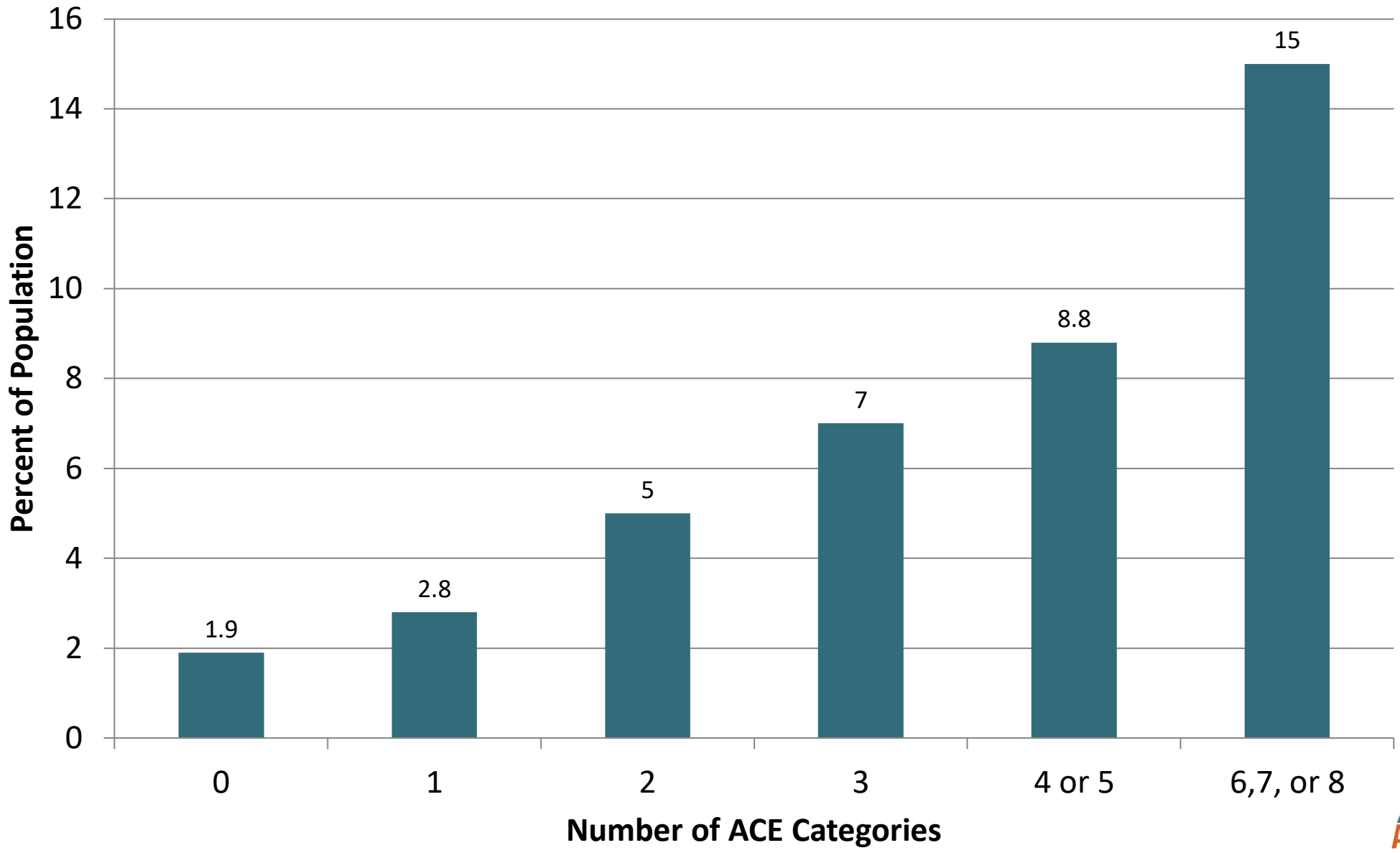
(Olin, 2006)

ACE Interface

ACEs & Depression

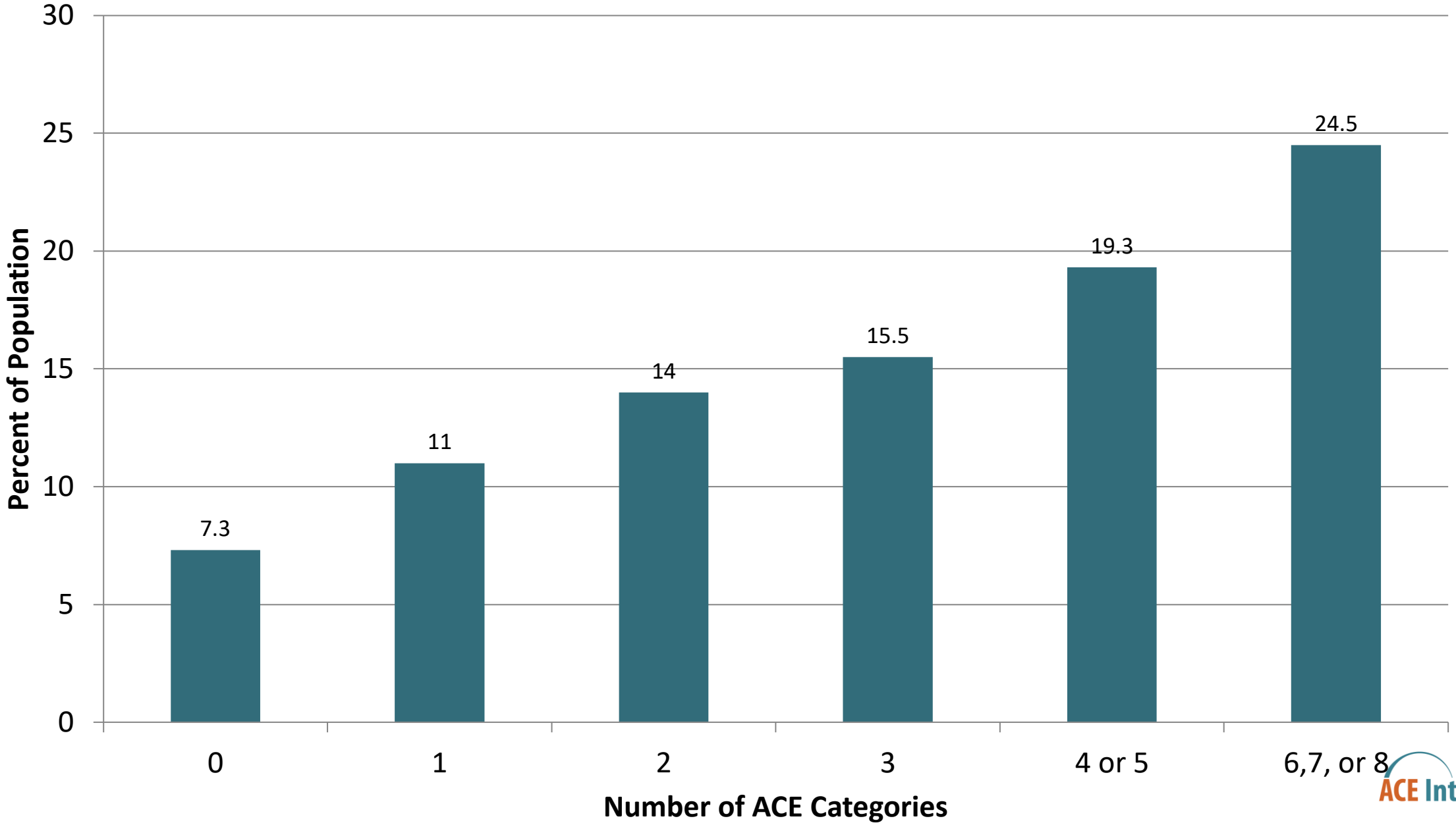


Anxiety



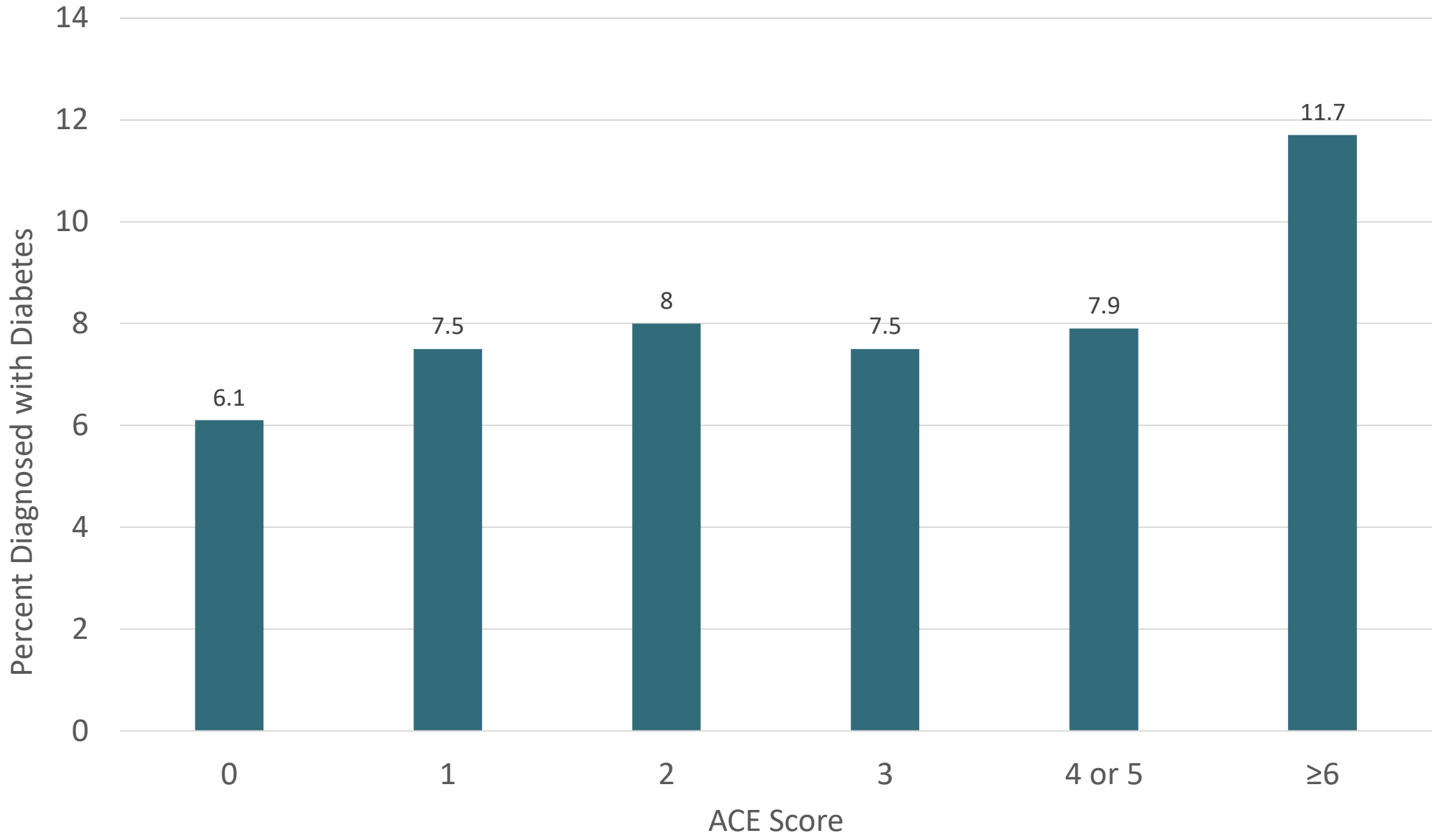
ACE Interface

Treatment: Mental Health Condition



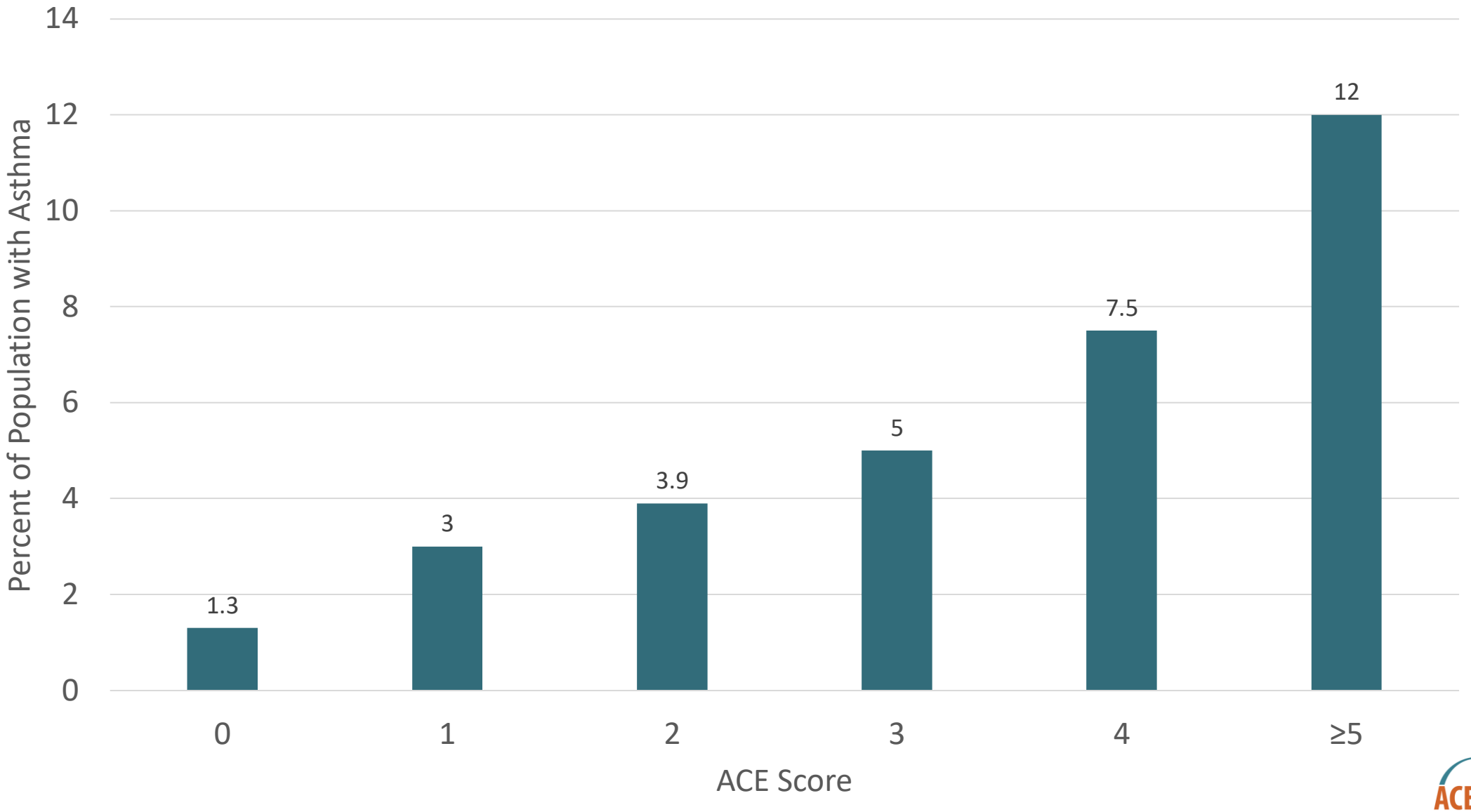
ACE Interface

Diabetes



ACE Interface

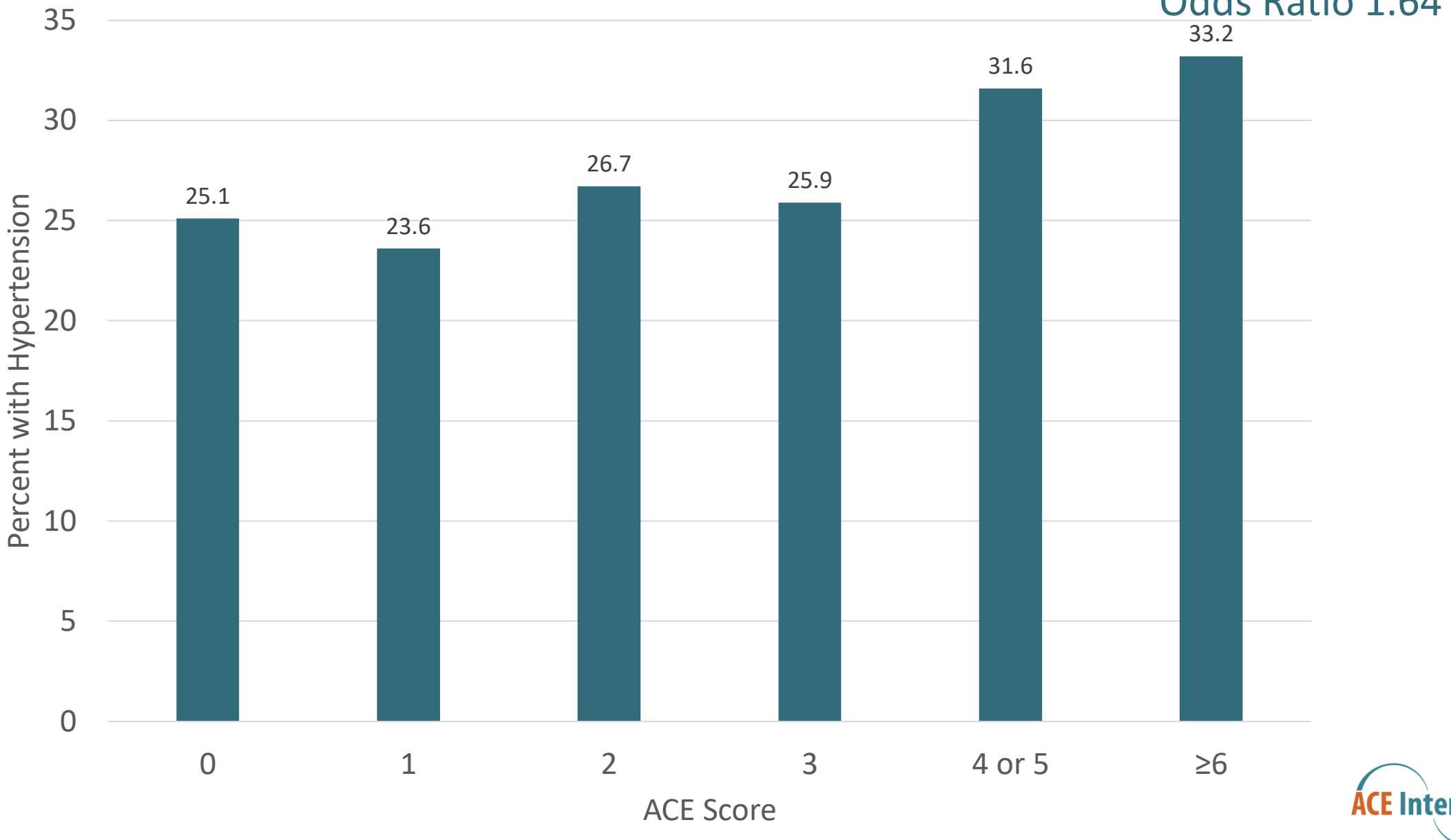
Asthma



ACE Interface

Hypertension

Odds Ratio 1.64



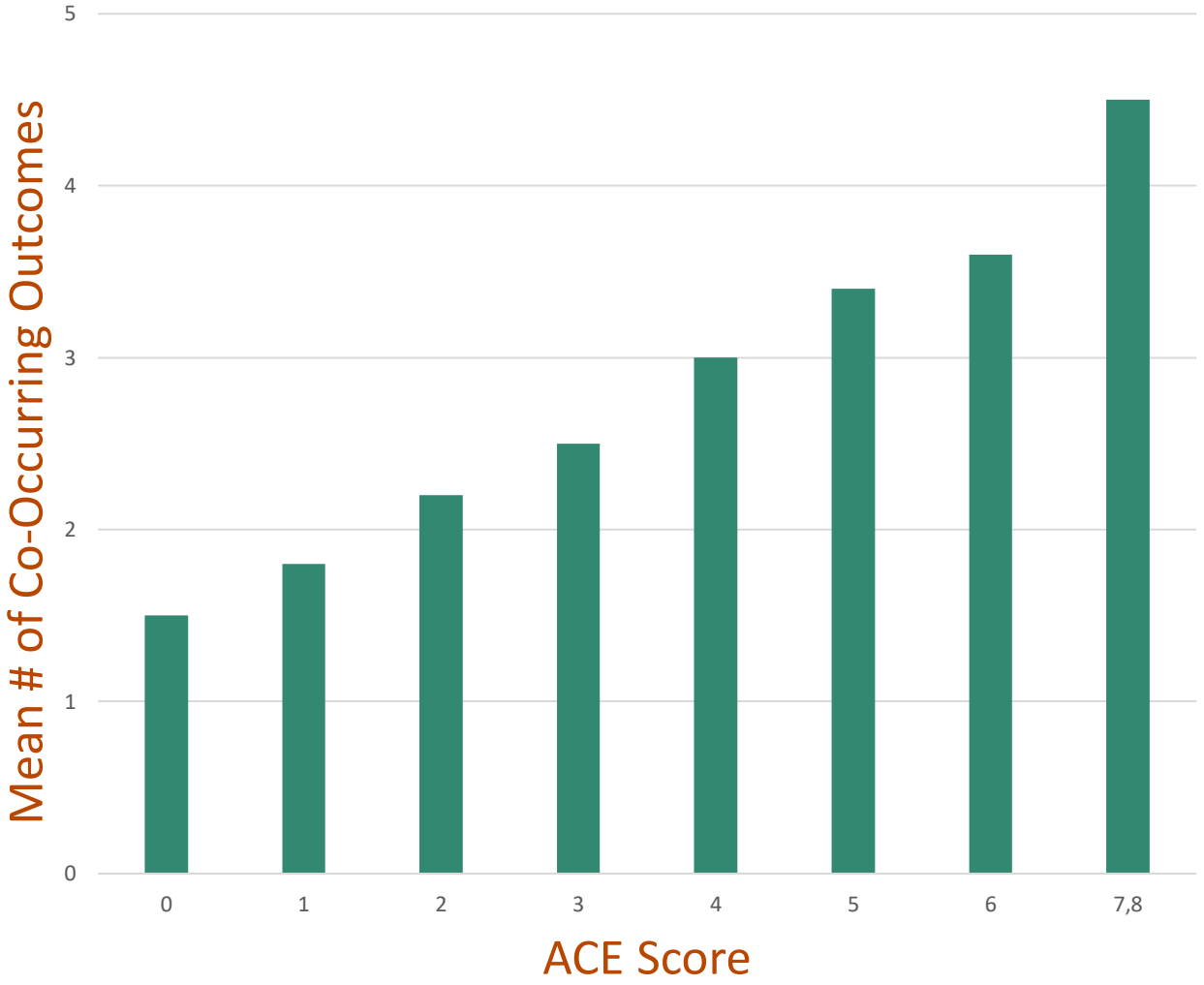
ACE Interface

Co-Occurring Chronic Conditions

People with chronic conditions tend to have other conditions and illnesses.

When the other illnesses are added in, total expenses for people with five major chronic conditions rise to 49% percent of total health care costs.

ACEs and Co-Occurring Problems



Health & Social Problems

- Panic Reactions
- Depression
- Anxiety

Affect Regulation

- Hallucinations
- Sleep Disturbances
- Severe Obesity
- **Pain**

Somatic Issues

- Smoking
- Alcoholism
- Illicit Drug Use
- IV Drug Use

Substance Use

- Early Intercourse
- Promiscuity
- Sexual Dissatisfaction

Sexuality

- Amnesia (Childhood)

Memory

- Problems with Anger
- Perpetration of Family Violence

Arousal

ACE Interface

Cost of Chronic Conditions

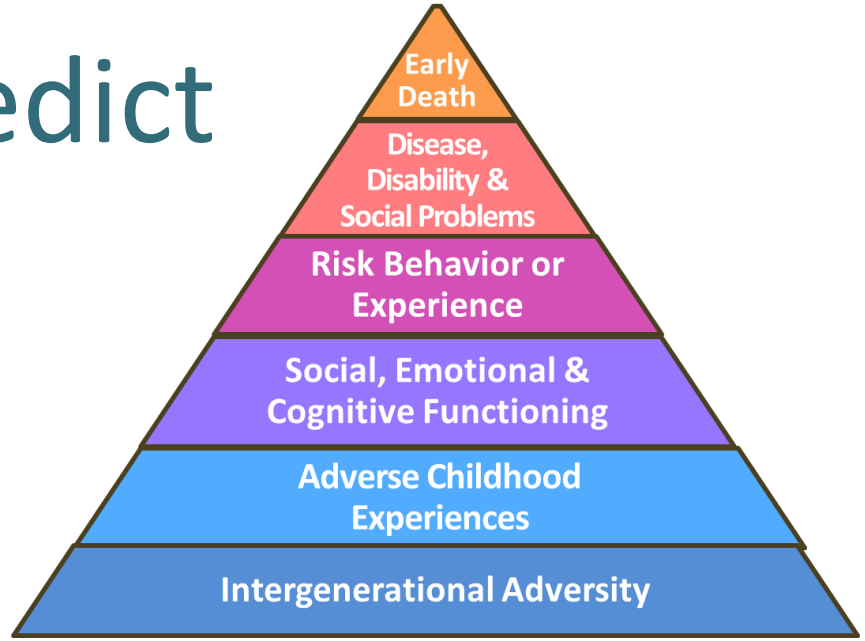
Spending for those with ≥5 chronic conditions was 14x greater than spending for those without chronic conditions. (RWJ, 2002)

Persons with ≥5 conditions also have high hospital expenditures. In New York State during 2002, of the 1.3 million different persons admitted to the hospital, the 27% with ≥5 chronic conditions accounted for 47% of all hospital inpatient costs. (Friedman, 2006)

ACE Interface

ACEs reliably predict

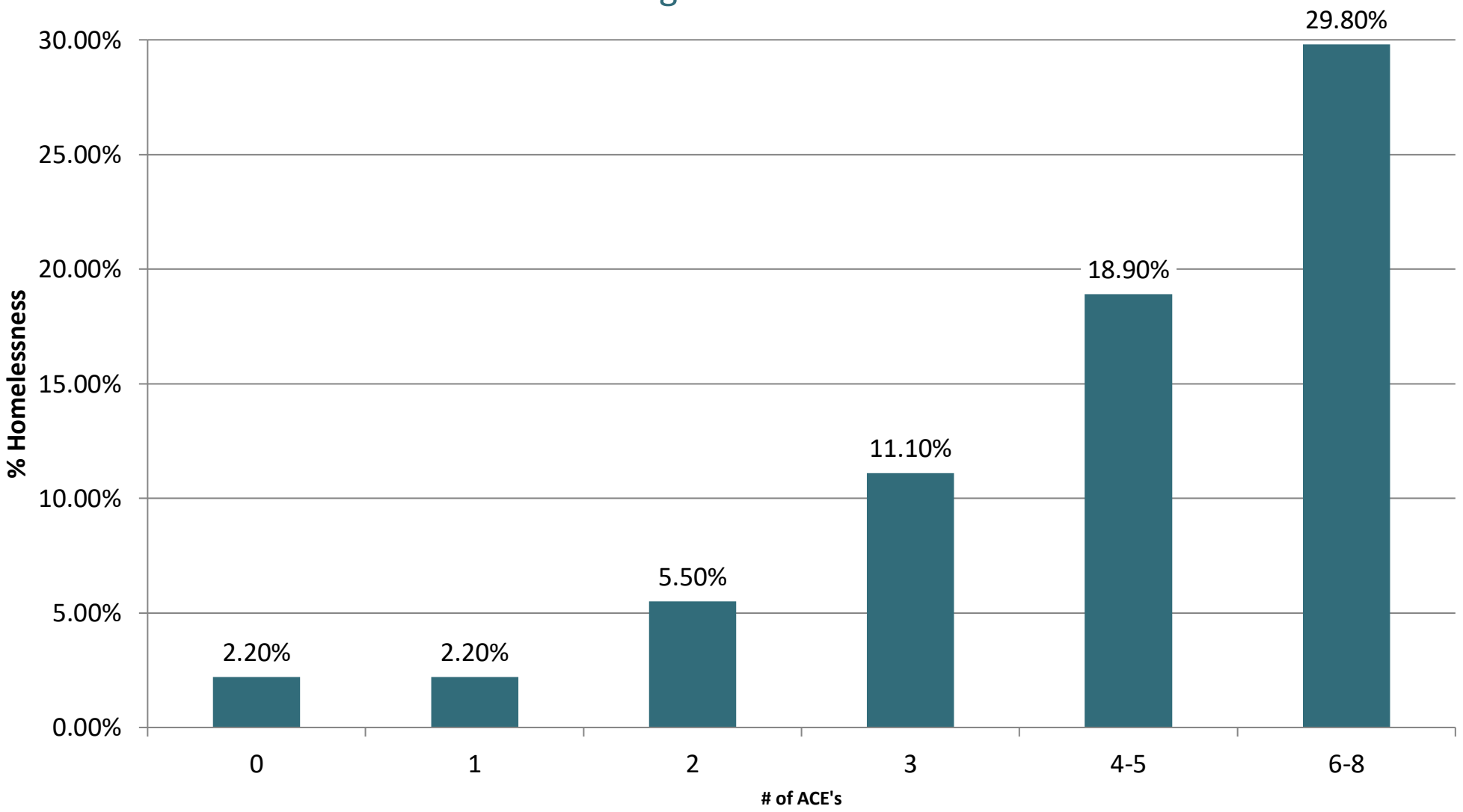
- Risk behavior
- Social problems
- Disease
- Disability
- Generational transmission of adversity
- Early death



ACE Interface

ACEs & History of Homelessness

Ages 25-54



2010 WA BRFSS – Preliminary; Based on < Full Year of Data

ACE Interface

Santa Clara County Social Impact Bonds

Population: 200 people challenged by “chronic homelessness” = adult with disabling condition (e.g.: SA or MI), homeless one year or more who experienced ≥4 bouts of homelessness in past 3 years

Model: Assertive Community Treatment with Housing First with individualized innovation based on real time service usage across behavioral health, health care, justice, housing, & more, plus trends & analysis to support continuous improvement of tailored services

Repayment to investors: County will pay up to $8m based on # of months of continuously stable housing, with an initial investment of $6.9 investment.

ACE Interface

Outcomes Attributable to ACEs

Risk

- Smoking
- Heavy drinking
- Obesity
- Risk of AIDS
- Taking painkillers to get high
- Obesity

Prevalent Disease

- Cardiovascular
- Cancer
- Asthma
- Diabetes
- Auto immune
- COPD
- Ischemic heart disease
- Liver disease

Poor Mental Health

- Frequent mental distress
- Sleep disturbances
- Nervousness
- MH problem requiring medication
- Emotional problems restrict activities
- Serious & persistent mental illness

Health & Social Problems

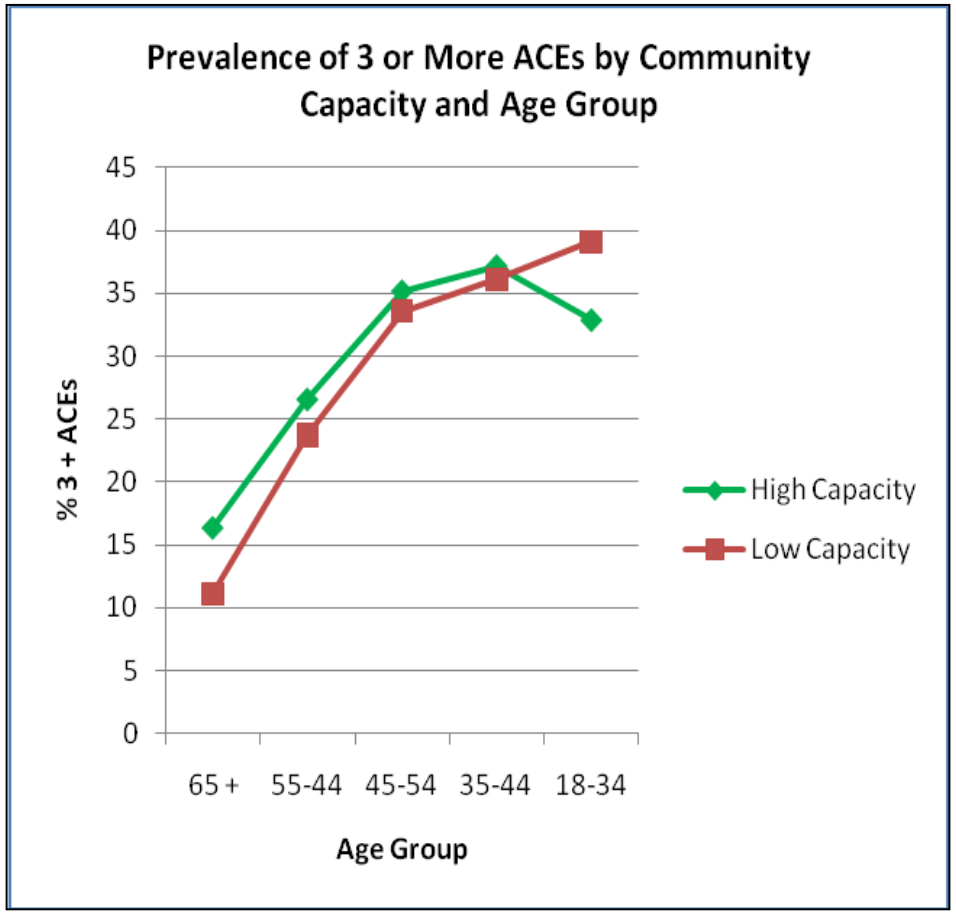
- Fair or poor health
- Life dissatisfaction
- Health-related limits to quality of life
- Disability that impedes daily functioning
- Don’t complete secondary education
- Unemployment
- History of adult homelessness

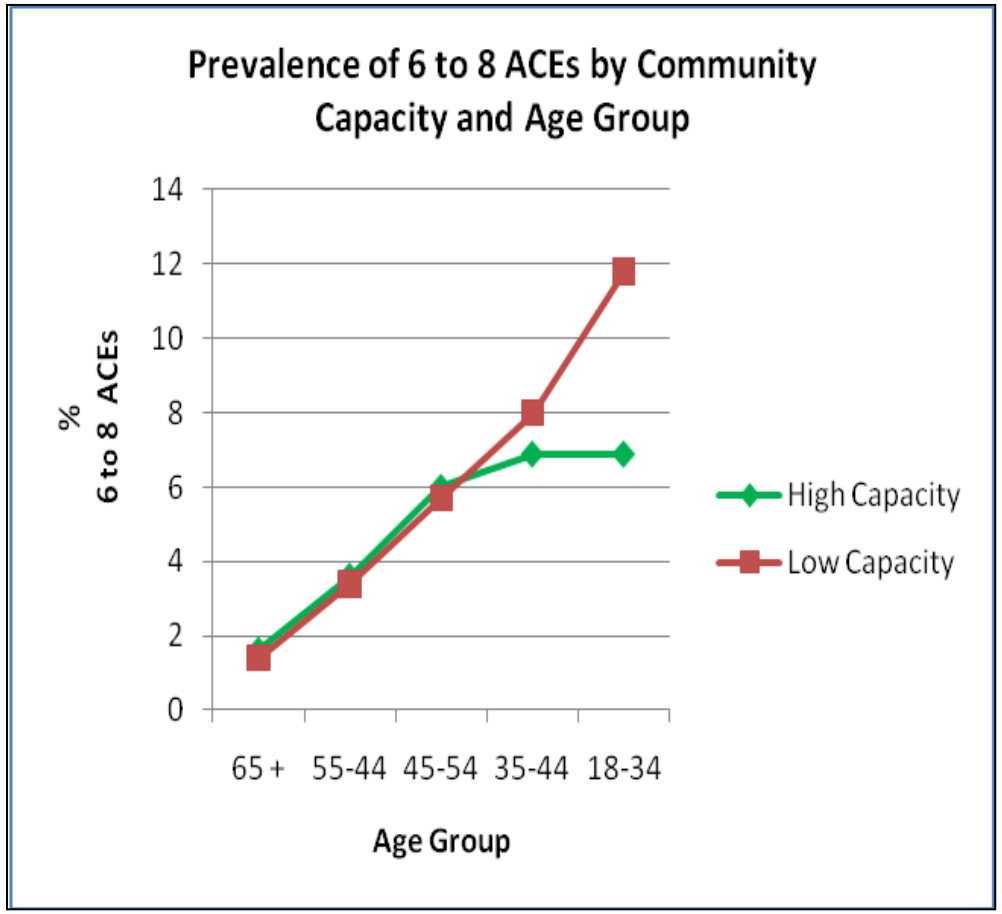
Intergenerational ACE Transmission

- Mental Illness
- Drugs or Alcohol Problem
- Multiple divorces, separations
- Victim of family violence
- Adult incarceration

ACE Interface

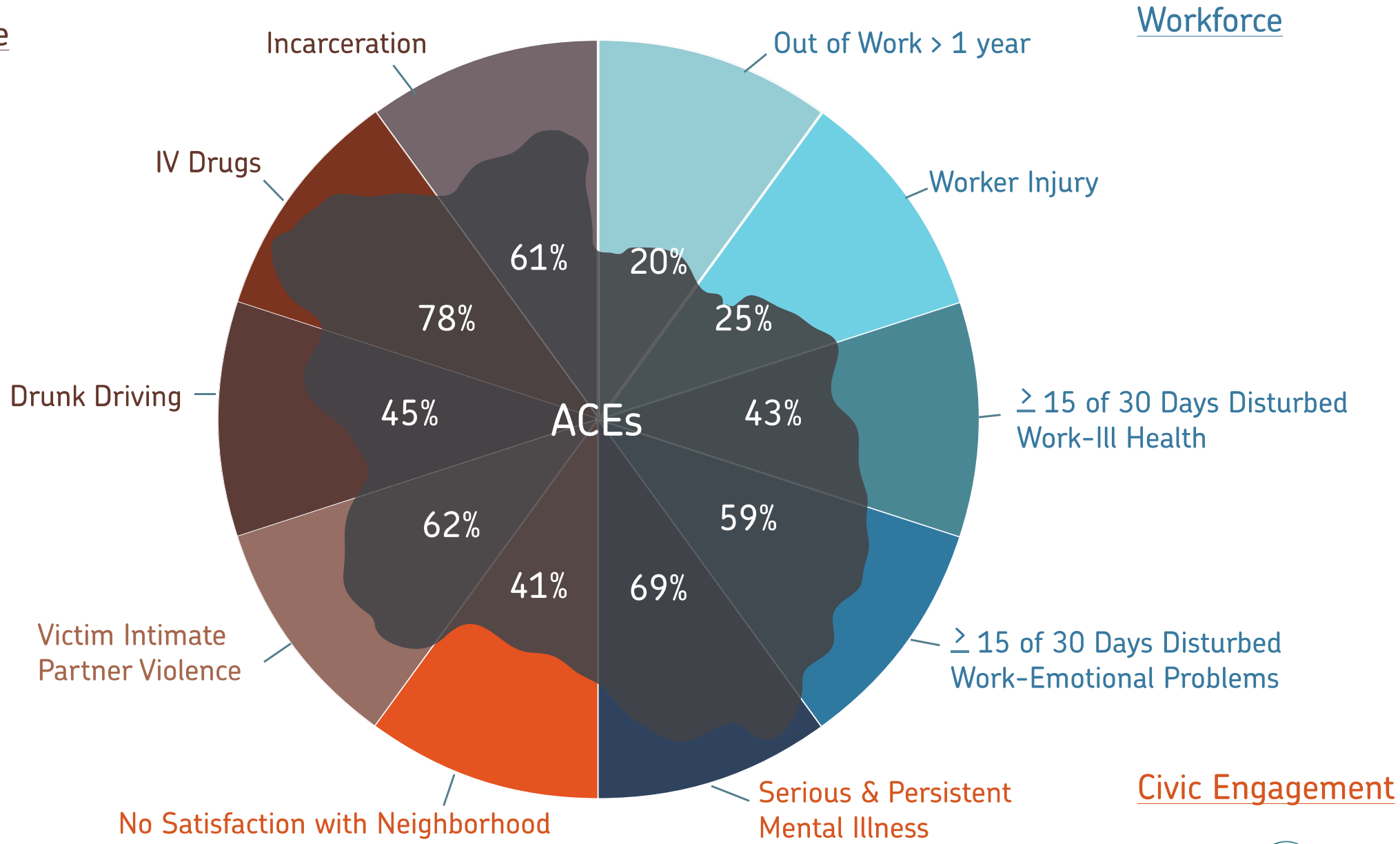
Higher Community Capacity
Fewer Adverse Childhood Experiences (ACEs) among Young Adults





ACE Interface

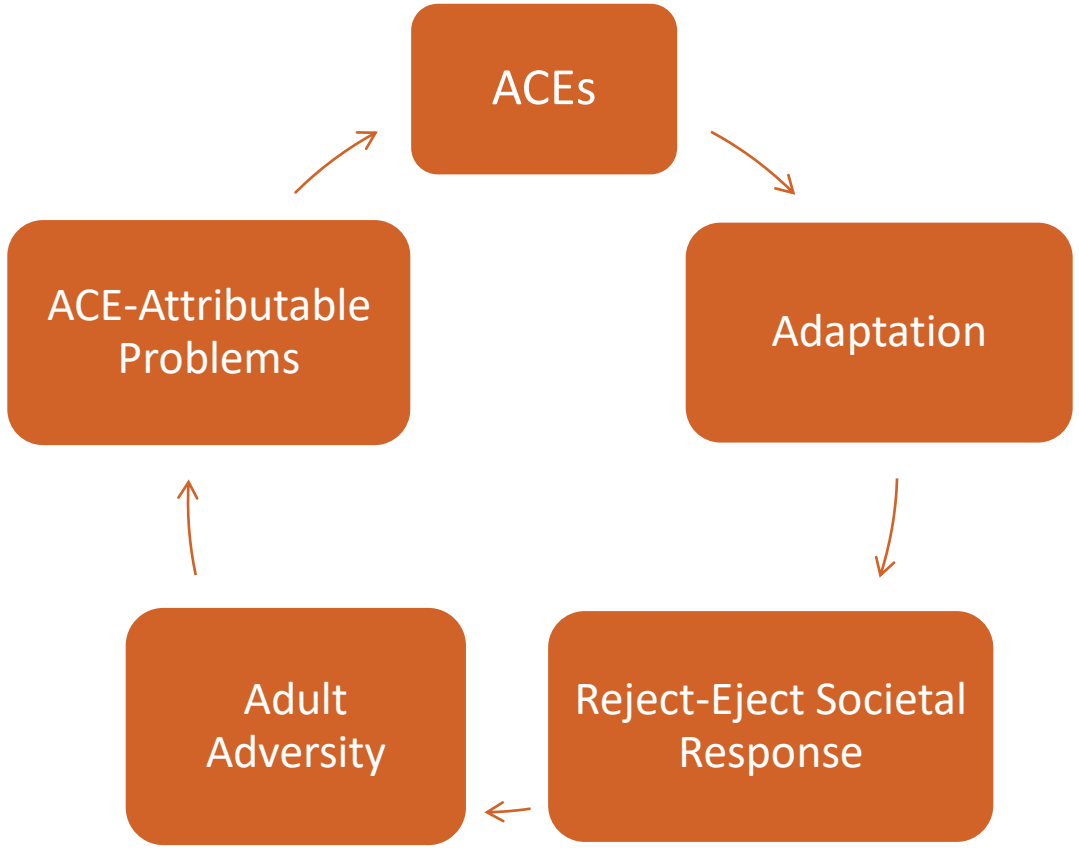
Population Attributable Risk



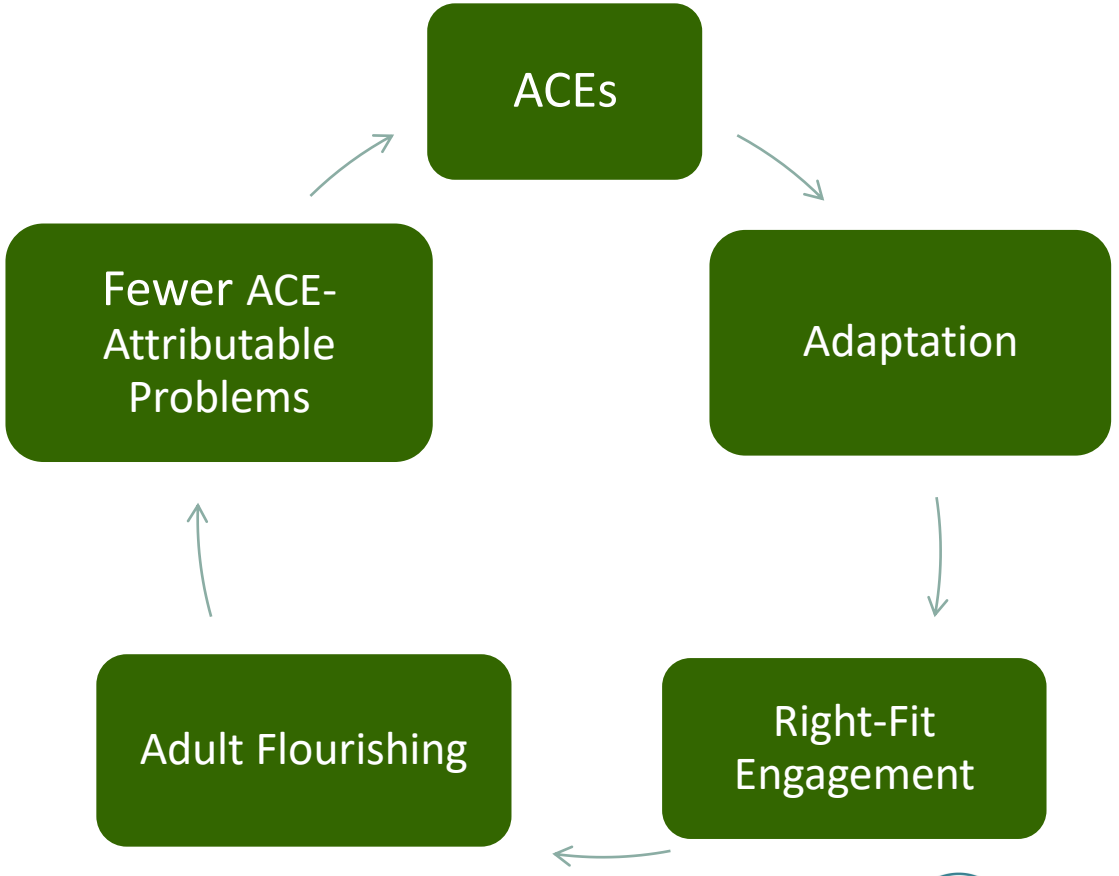
Controls: gender, age, income, education, race-ethnicity

Shifting from a Vicious Cycle to a Virtuous Cycle

Vicious Reinforcing Cycle



Virtuous Reinforcing Cycle



ACE Interface

Policy Framework

- Focus to Interrupt Intergenerational Transmission of Adverse Childhood Experiences (ACEs)
- Structure Differential Help for Loss Prevention
- Learn Systematically: What Works, for Whom, in What Context
- Invest in Staff Education and Skills Development
- Size Investments for the Magnitude of the Solution
- Protect ACE Scores; Use Information with Fidelity to the Science
- Document actions and outcomes

Thank You

Laura Porter

ACE Interface

lauraportergarden@gmail.com

www.aceinterface.com

ACE Interface