Curbing healthcare spending early: Investing in children

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Three Key Takeaways

1. Investing in non-medical approaches like high-quality early care and education, evidence-based home visiting, coordination across social services and broader supportive economic policies produce greater impact on health and a greater return on investment over time than medical care.
2. Investing in high-quality early childhood education (ECE) is a proven effective intervention for improving long-term health, educational achievement, and social outcomes.
3. Achieving health equity is crucial to improving long-term health and educational achievement.

Investing in Non-Medical Approaches

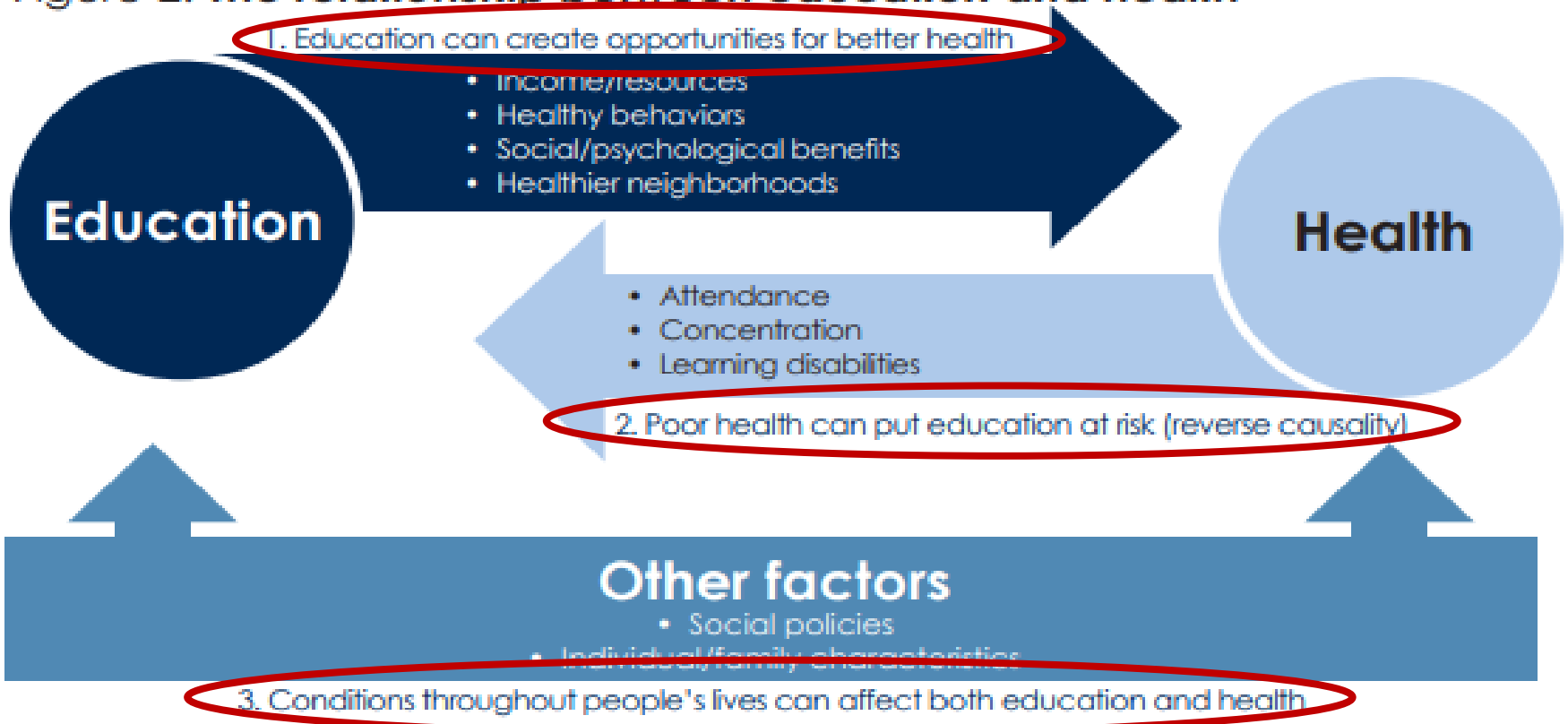
- We know we spend more on healthcare and yet it has not produced better quality of care or better outcomes.
  - As much as 30% of US health care spending does not improve individual or population health.
- In the public sector, and particularly at the state level, this spending is crowding out social, educational and public health investments.
- Current evidence indicates that interventions in early childhood development and education have generated better outcomes and addressing the upstream determinants of health have shown to pay for themselves in reduced Medicaid expenditures.

Source: L.D. Tran et al. SSM- Population Health 3 (2017) 185-191

How are health and education related?

People with more education live in healthier communities, practice healthier behaviors, have better health outcomes and live longer than those with less education.

Figure 2. **The relationship between education and health**



Source: Adapted from Virginia Commonwealth University. *Why Education Matters to Health: Exploring the Causes*. Feb. 13, 2015

Education can create opportunities for better health.

WHERE DOES OHIO STAND WHEN IT COMES TO EDUCATIONAL ACHIEVEMENT?

Only 40% of Ohio children enter *Kindergarten* ready to learn.

Chart 1 FY17 % of Ohio Students **DEMONSTRATING READINESS** for Kindergarten by Race & Ethnicity

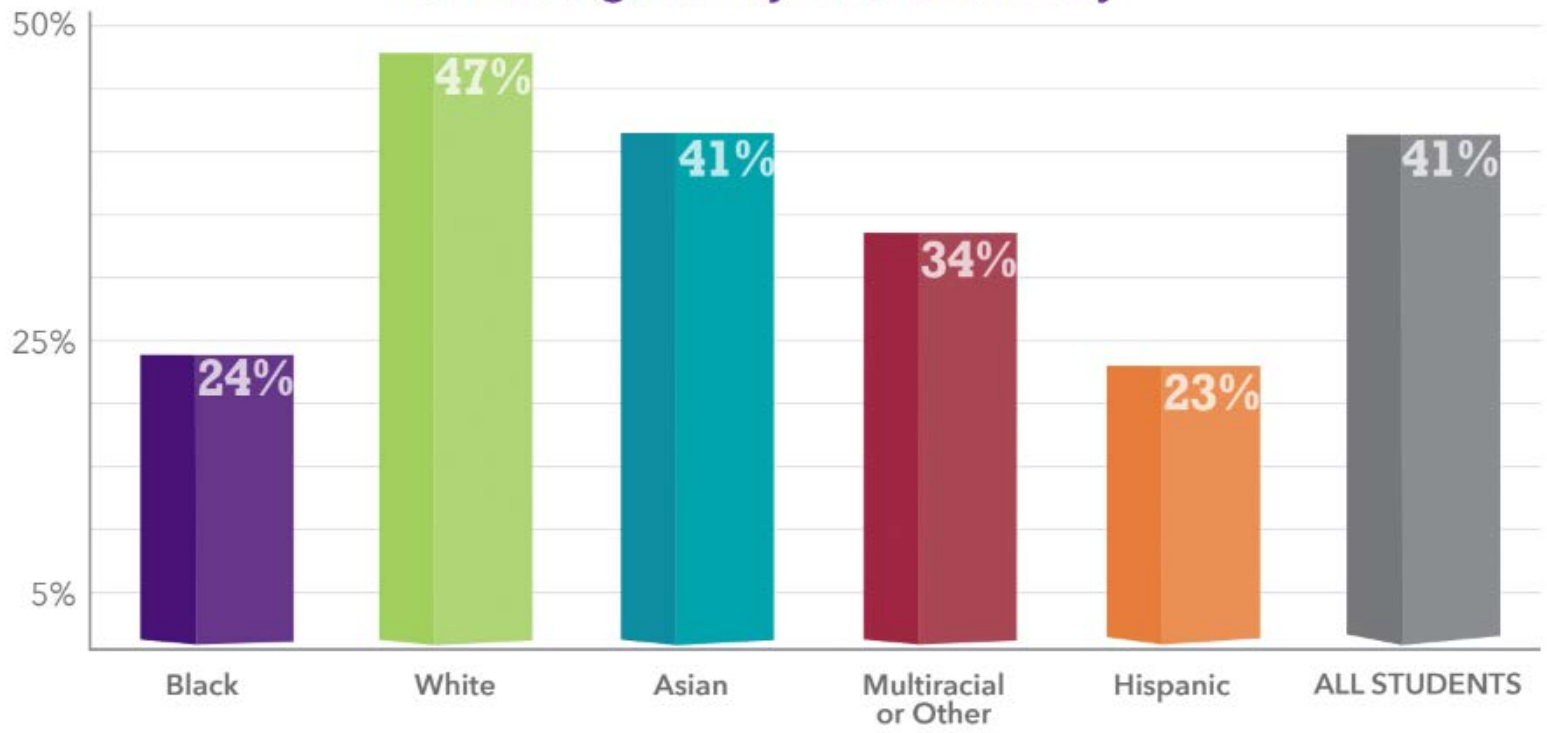


Chart 2 FY17 % of Ohio Students Demonstrating Readiness for Kindergarten by **ECONOMIC STATUS**

Only 63.8% of Ohio children are proficient in *reading by the 3rd grade.*

Chart 4

STATEWIDE
FY17 Percent of Students Proficient & Above
BY RACE & ETHNICITY

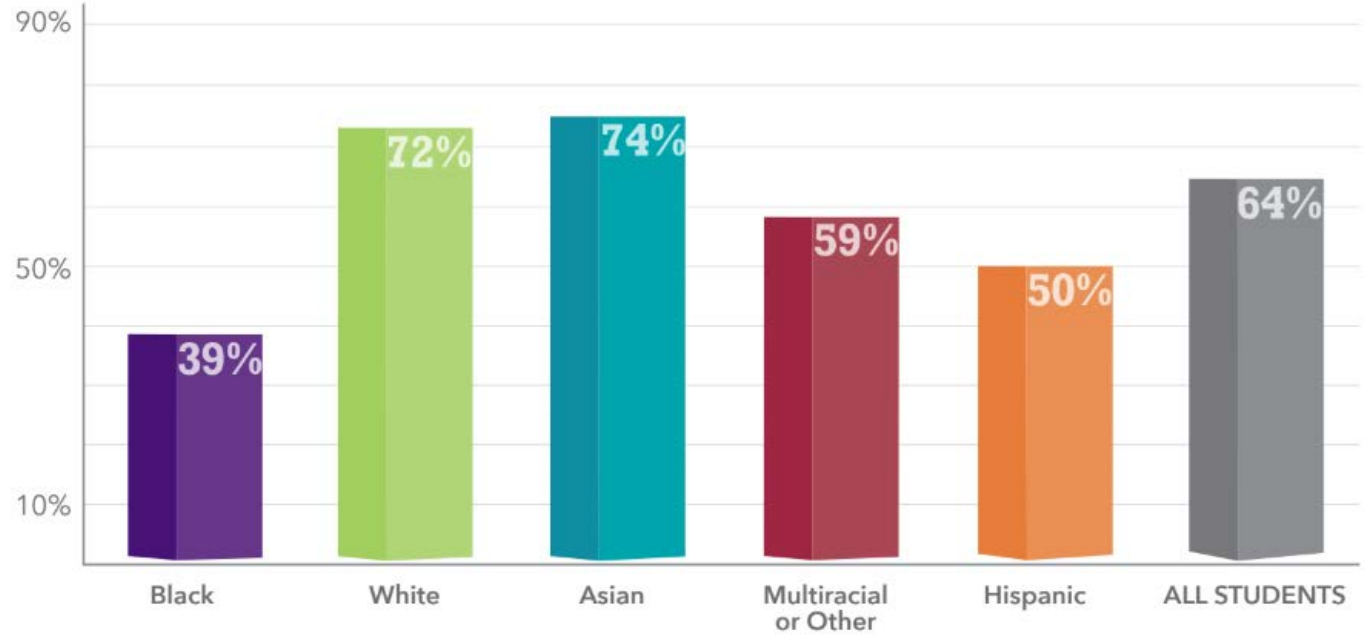
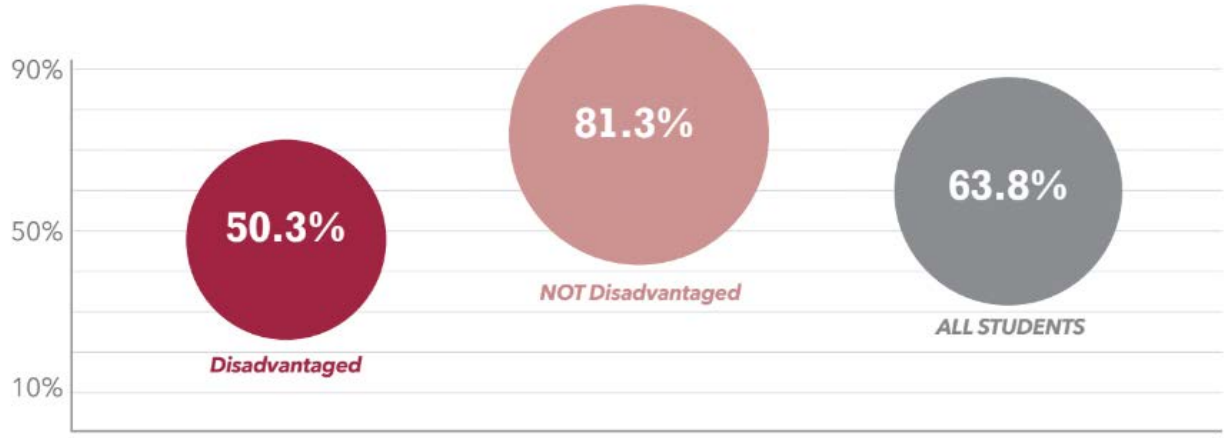
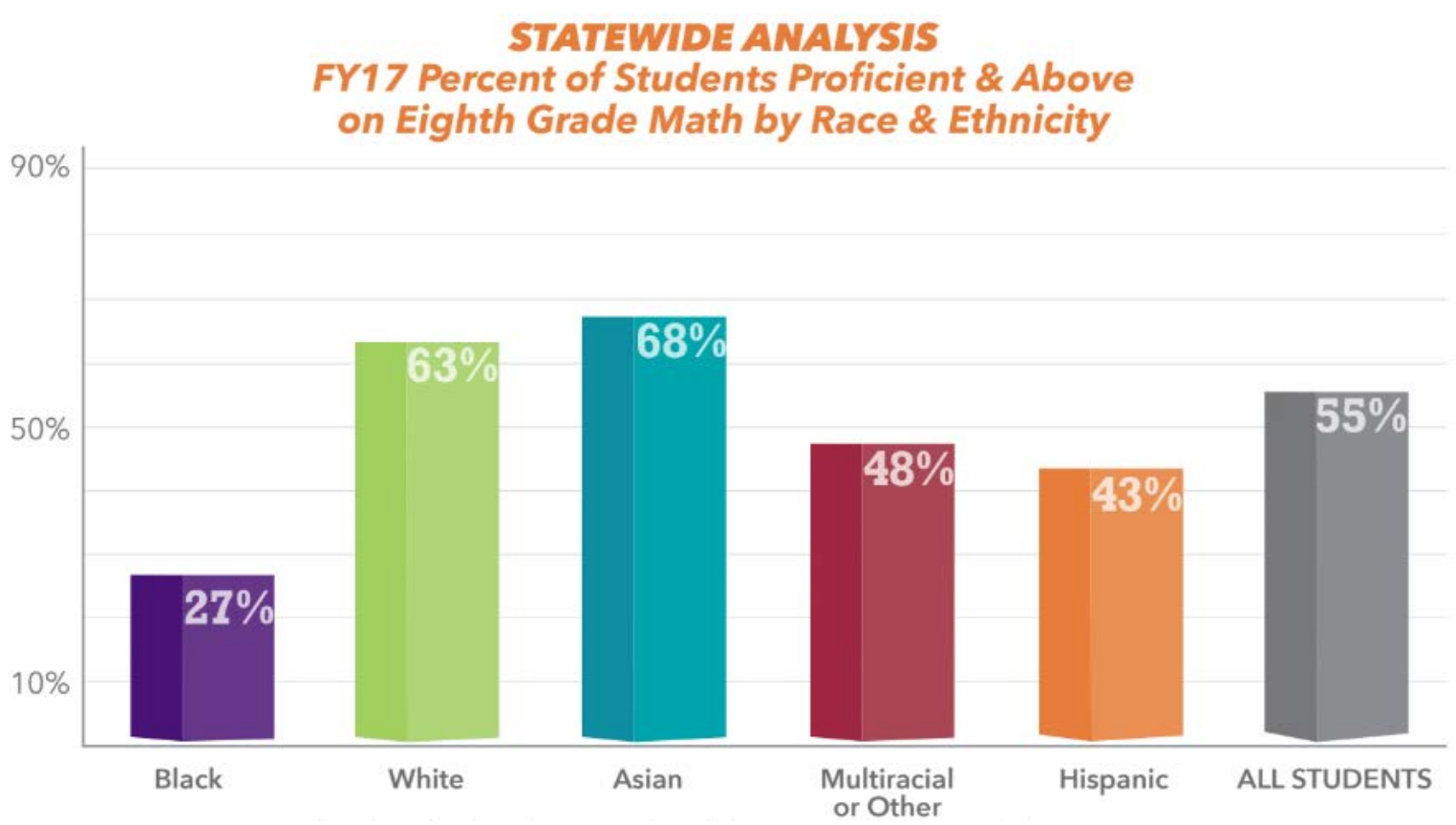


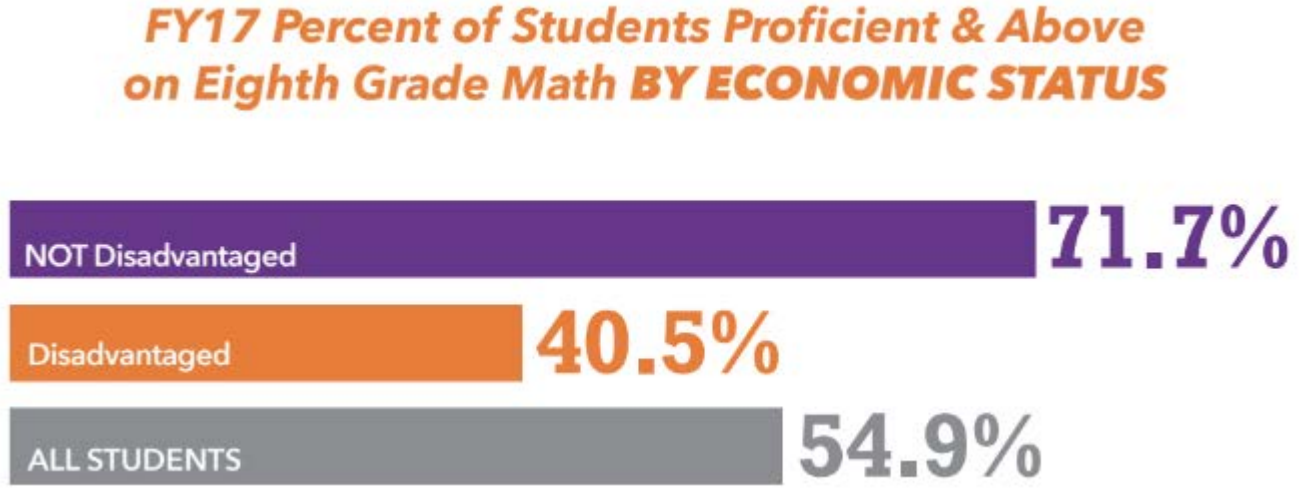
Chart 2

FY17 Percent of Students Proficient & Above
BY ECONOMIC STATUS



Only 55% of Ohio children are proficient in *math by 8th grade*.





Only 43% of Ohio's workforce have some type of *postsecondary degree or credential* qualifying them for an available job.

Chart 1

Ohio Percentage with a Bachelors Degree or Higher Age 25 or Older by Race & Ethnicity

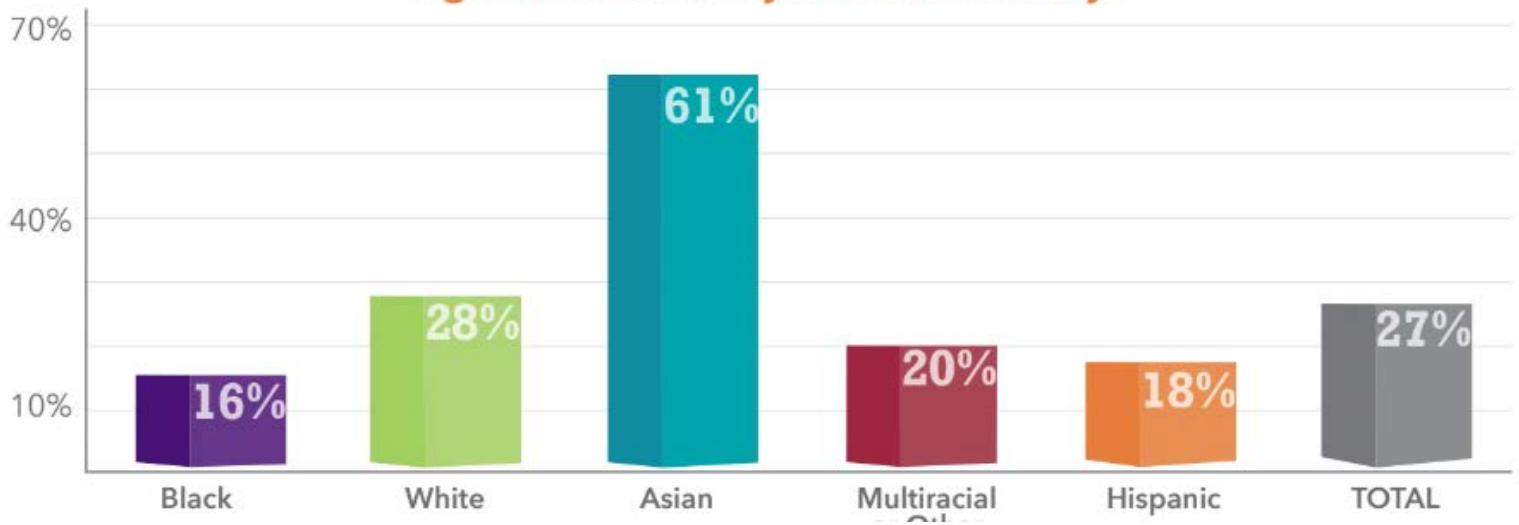
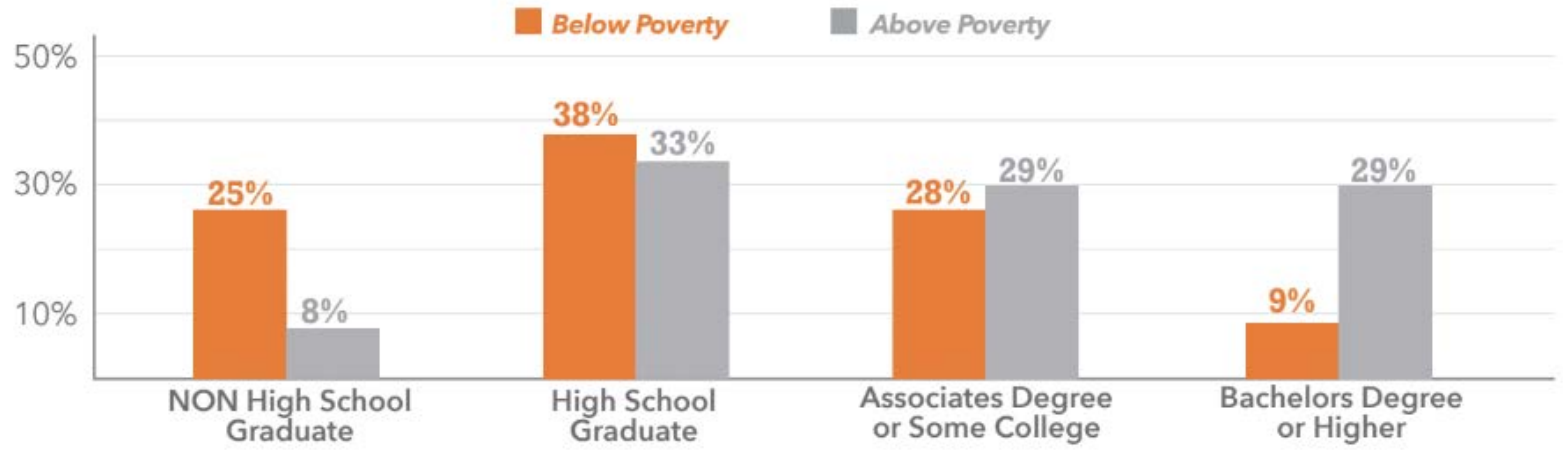


Chart 2

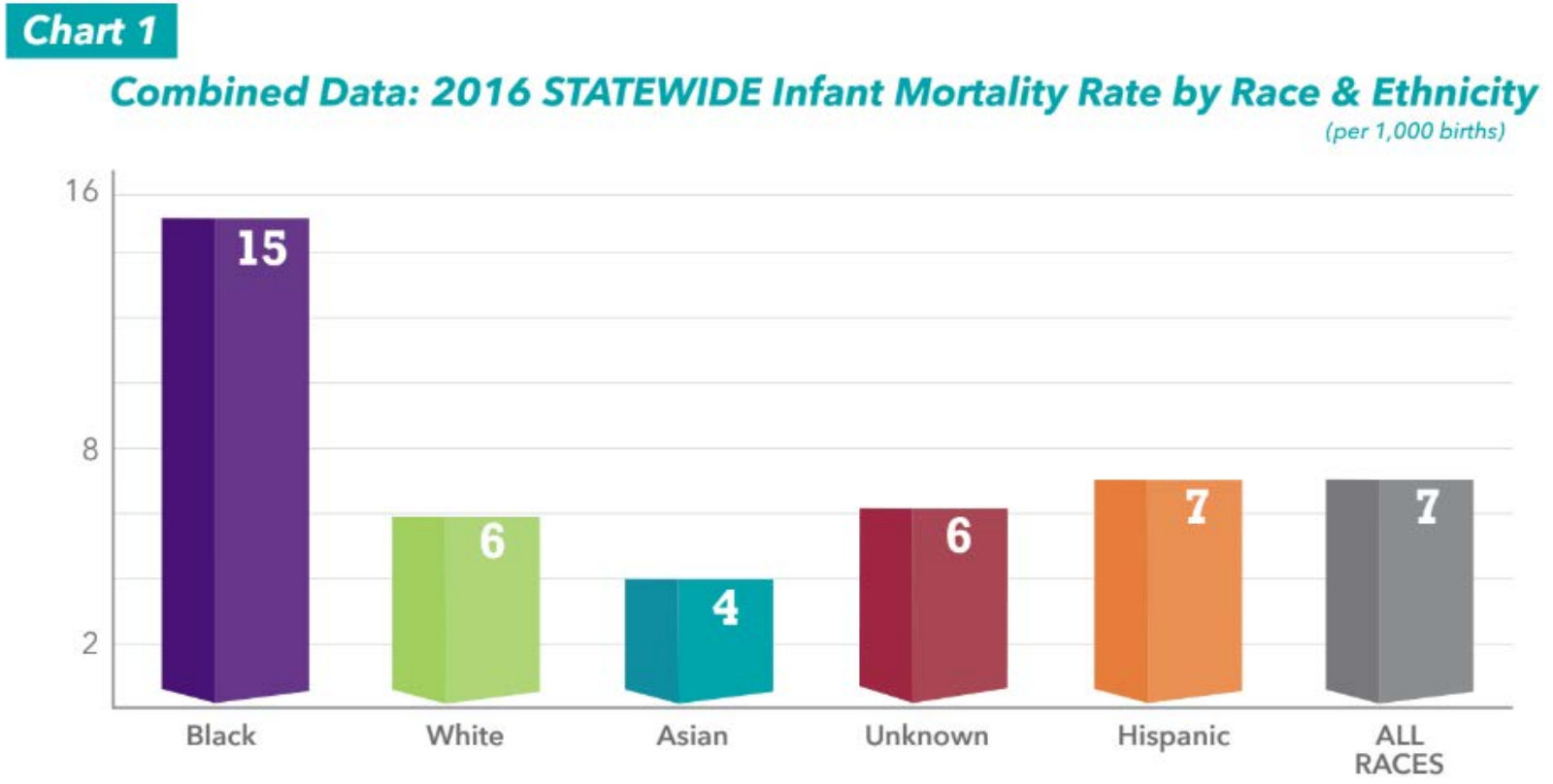
Ohio Percentage Educational Attainment of Persons Age 25 or Older by Income



Education can create opportunities for better health.

IT IS NO SURPRISE THEN THAT WITH POOR EDUCATIONAL ACHIEVEMENT, OHIO ALSO HAS CONCERNING HEALTH OUTCOMES.

Ohio ranks 41st our of 50 states for *infant mortality* with a rate of 7.4 for every 1,000 live births.



Ohio Adult Health Outcomes

- Adult Smoking: 21.6% of the population smoke. Ohio ranked 43rd among 50 states and D.C.
- Adult Diabetes: 11% of population. Ohio ranked 35th.
- Adult Depression: 19.6% of population. Ohio ranked 30th.
- Life Expectancy: 77.8 years old. Ohio ranked 37th.

Ohio Adult Health Outcomes

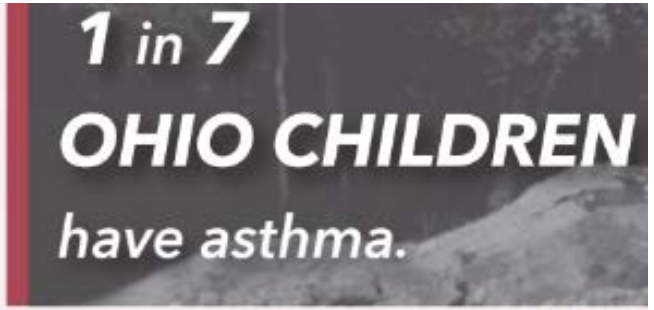
- In 2015, 35.5% of Ohio adults with less than a high school diploma rated their health as fair or poor compared to only 6.5% of college graduates.
- These Ohio adults without a high school diploma also reported having one or more chronic conditions.
- Bottom Line: If we would invest in increasing educational attainment, we would see increased health outcomes.

Poor health can put education at risk

POOR HEALTH CAN ALSO BE A BARRIER TO EDUCATIONAL ATTAINMENT.

Disparities in Asthma:

1. Asthma is more common among children, especially younger children, than adults.
2. **Income:** Asthma is more common among low income residents and residents of Appalachian counties.
    - *Nearly 1 in 5 children living at or below the poverty line have asthma.*
3. Children with reported asthma are significantly more likely to be in reported poor health, especially in Appalachia.
4. **Race & Ethnicity:** More than 1 in 5 black Ohio children have Asthma (22.4%). Black children are significantly more likely to have asthma than other races.



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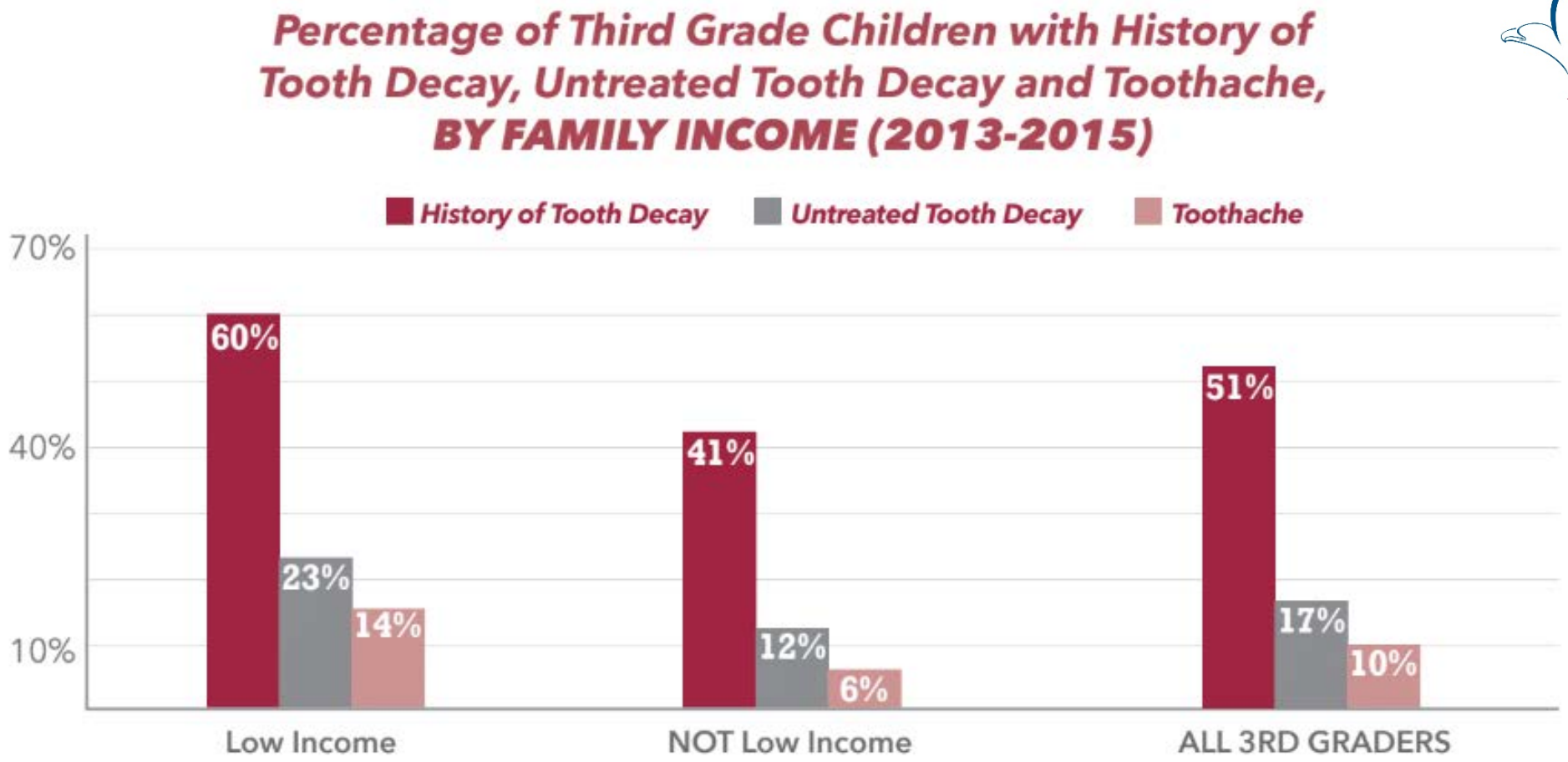
Attendance

Example: Incidence of Asthma

Children miss approximately 13 million school days per year across the country because of asthma.



Concentration

Example: Oral Health

Untreated tooth decay and toothache can cause pain as infections may lead to problems eating, speaking, playing and learning as a result of pain and discomfort.

49% OF OHIO KIDS HAVE HAD AT LEAST ONE ACE.

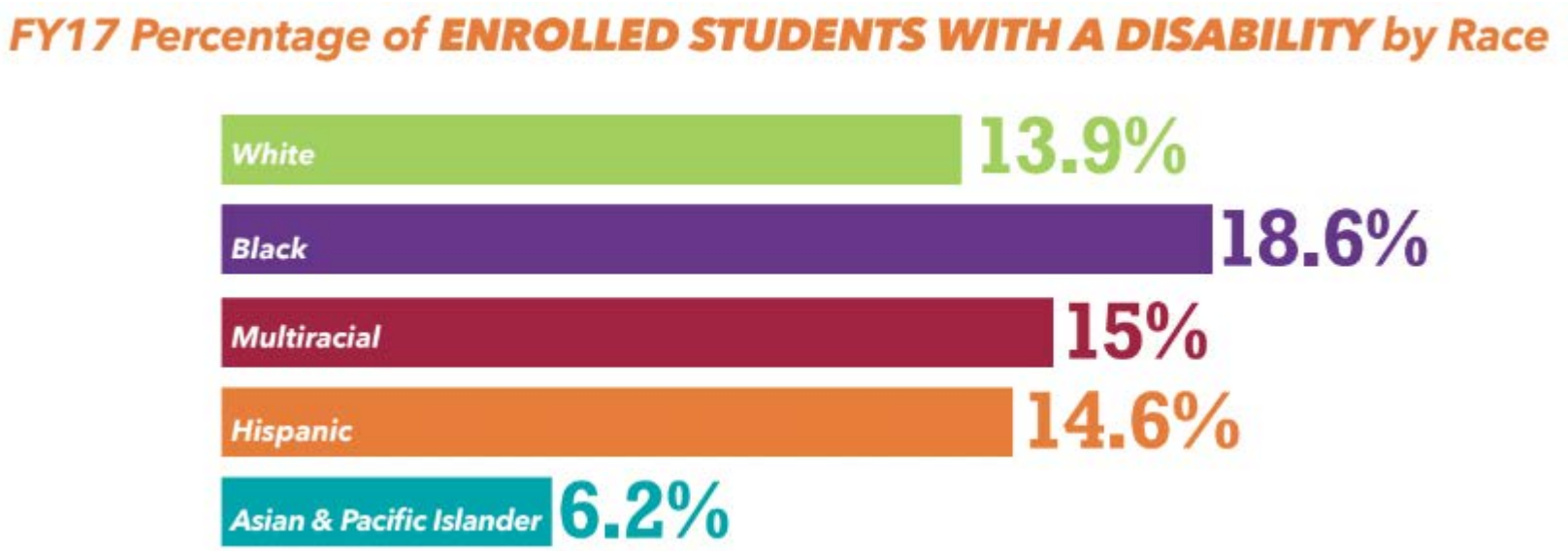
1 in 7 *Ohio kids has had THREE or MORE Adverse Childhood Experiences, putting them at much higher risk for long-term negative effects.*

Ohio ranks ***46TH*** *in the* ***NATION*** *for kids experiencing childhood trauma.*

Concentration

Example: Incidence of Trauma

Other barriers to concentrating in school include mental health conditions, teen pregnancy, hunger, insufficient sleep and environmental concerns.



Learning Disabilities

Example: Special Education

Conditions throughout people's lives can affect both education & health

INDEPENDENT FACTORS SUCH AS INCOME, GEOGRAPHY, STRESS AND PARENTING, CAN INFLUENCE BOTH HEALTH AND EDUCATION.

Children who start behind, often stay behind.

Key Findings from Groundwork Ohio

Ohio Early Childhood Race & Rural Equity Report, 2018

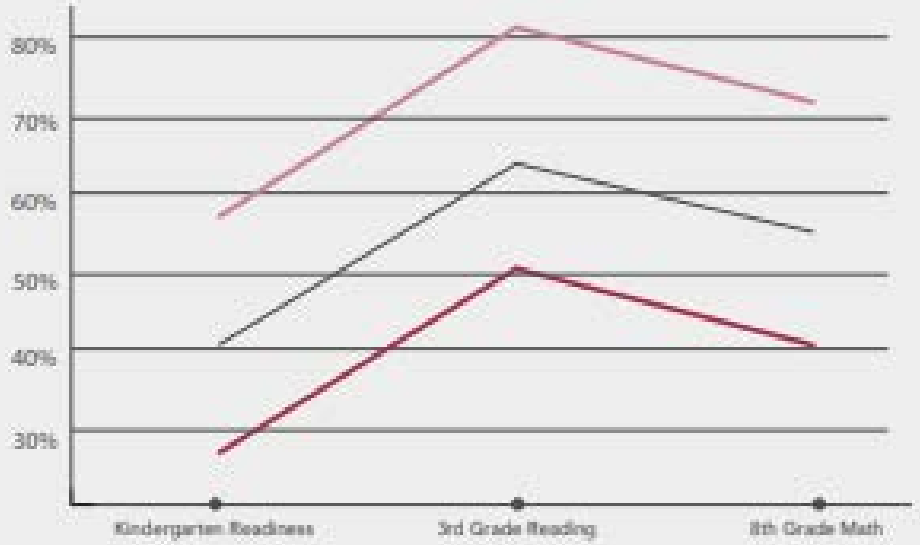
Gaps between **CHILDREN IN POVERTY** and their higher income peers emerge much earlier than state and federal policy recognizes and persist long into adulthood.

26.4% OF OHIO CHILDREN AGES 0-5 **ARE LIVING IN POVERTY**

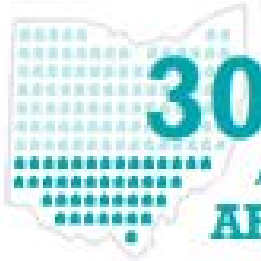
Table 1

% Students Performing at Grade-Level by **Economic Status**

	Kindergarten Readiness	3rd Grade Reading	8th Grade Math
Non-Disadvantaged	57%	81.3%	71.7%
Disadvantaged	26.7%	50.3%	40.5%
STATE TOTAL	40.6%	63.8%	55%



Concentrated poverty of **CHILDREN IN OHIO'S RURAL APPALACHIAN REGION** is obstinate and barriers to overcoming the impacts of poverty in this region are unique compared to Ohio's metropolitan areas.

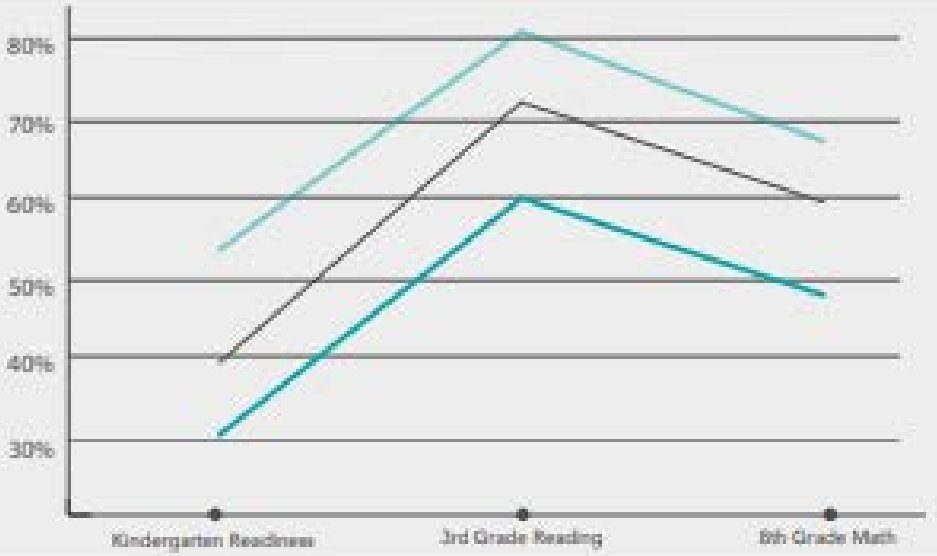


30.3% OF APPALACHIAN CHILDREN AGES 0-5 **ARE LIVING IN POVERTY**

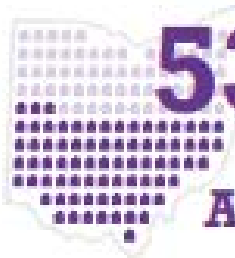
Table 2

*% Students in the **Appalachian Region** Performing at Grade-Level by Economic Status*

	Kindergarten Readiness	3rd Grade Reading	8th Grade Math
Non-Disadvantaged	53.4%	80.9%	67.1%
Disadvantaged	30.1%	59.9%	47.7%
REGION TOTAL	**39.2%**	**72%**	**59.4%**



A child's race tells a distinct and critical narrative that must be examined separately to fully understand the problem, as even those **BLACK CHILDREN** who are not poor are too often not achieving at the rate of their white peers.

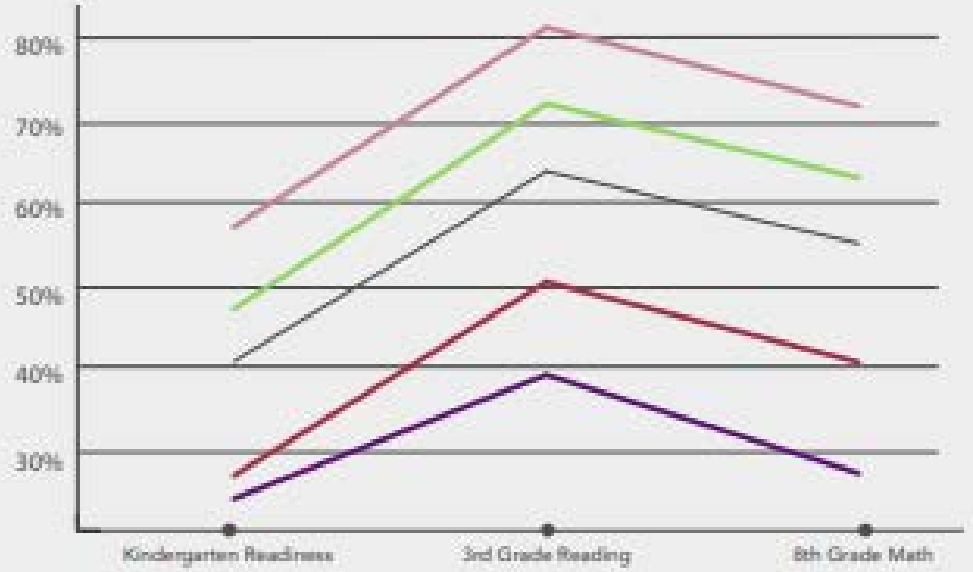


53.9% OF
BLACK CHILDREN AGES 0-5
ARE LIVING IN POVERTY

Table 3

% Students Performing at Grade-Level by
Race and Economic Status

	Kindergarten Readiness	3rd Grade Reading	8th Grade Math
Black	23.9%	39%	27%
White	47%	72%	63%
Non-Disadvantaged	57%	81.3%	71.7%
Disadvantaged	26.7%	50.3%	40.5%
STATE TOTAL	40.6%	63.8%	55%



What is health equity?

The Robert Wood Johnson Foundation (RWJF) defines it as the following: ***"Health equity means that everyone has a fair and just opportunity to be healthier. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care."***

When a child faces challenges throughout their life, the strength of their foundation is what matters the most.

But, every child has unique assets and barriers to healthy development, and builds their foundation in different environments.

If, however, we gave every child what they need to succeed and built their foundation up in their earliest years, they would all be better prepared to withstand the storm.

This is equity.

Key Findings from RWJF Health Equity Report

1. Poverty limits the options for children and families for healthy living conditions. Poverty can limit where children live, and can lead to exposure to unhealthy conditions in the home, such as lead or mold—and in the community, such as air pollution or lack of healthy food options.

2. Structural racism also limits families' options for healthy living conditions. Race-based unfair treatment built into institutions, policies, and practices—such as residential segregation in impoverished neighborhoods; discrimination in bank lending to residents of largely minority neighborhoods; and discriminatory policing and sentencing practices—constrain parents' ability to provide healthy living conditions for their children.

Key Findings from RWJF Health Equity Report

3. Sustained poverty and racism can create chronic stress in children and parents. So-called toxic stress can derail healthy physical, cognitive, and social emotional development.

4. Supporting children requires supporting families. Improving health equity in early childhood requires reducing poverty in households with children, which may require different strategies than those that focus on services for children alone.

Key Findings from RWJF Health Equity Report

5. ***Early care and education can help narrow the inequitable gaps. More than 40 years of research links short- and long-term health and health-related outcomes with a range of early-care and education programs.***

Drafting a New Blueprint for Success

Thank you.

QUESTION & ANSWER.

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Sources

- Win-Win Project, UCLA Center for Health Advancement, “Public Health and Economy Could be Served by Reallocating Medical Expenditures to social Programs. “ L.D. Tran, F. Zimmerman, J. Fielding; SSM – Population Health 3 (Jan. 2017).
- HPIO Health Policy Brief, “Connections between education and health,” January 2017.
- Groundwork Ohio, “Ohio Early Childhood Race and Rural Equity Report,” July 2018. www.GroundworkOhio.org
- Robert Wood Johnson Foundation, “Early Childhood is Critical to Health Equity,” June 2018.

Summary of Expected Returns on Investment for Three Health Dividend Options. One year of excess health care expenditures worth $6.14 billion fully funds programs in each of the sectors below.

Sector	Social investment	Years funded	Impact on mortality	Other health and social outcomes	Financial return
Education	Hire 8,443 additional secondary school counselors starting 2016–2017 for 10 years. This would reduce the ratio of students to counselors from 467 to 139.	10 years	126 deaths averted annually by 2028 (10 years after initial hires).	418,000 additional high school graduates by 2028. Graduation rate would increase from 84.3% to 93.7%.	$153-$313 billion lifetime return to society. $81-$104 billion return to government. Benefits include productivity loss averted, and health care, crime, and public assistance costs averted. Benefit to cost ratio=29–60.
Public health	Fund comprehensive state tobacco control program at CDC recommended levels ($9.15 per capita) for 13 years (through 2031).	13 years	10,500 annual deaths averted in 2028 (end of funding period).	2.42 percentage point reduction in smoking prevalence from 10.8% in 2014 to 8.4%. (Additional reduction in cigarette consumption per smoker not quantitatively estimated).	$65 billion return to society at end of funding period. Cumulative savings of $11 billion in health care costs from 2016–2028 due to reduction in smoking prevalence & fewer pack years smoked. $2.5 billion savings for CA state in health care costs. Benefit to cost ratio=12.4.
Child development	Fund 55,032 additional State Preschool full-day slots for 10 years. This would increase the fraction of income eligible children served from 26% to 35%.	10 years	372 deaths averted saved by 2056 (40 years after end of funding period).	2,036 additional high school graduates per year by 2036-37 (20 years after implementation). Among additional children served by the program, 3.7 percentage point increase in proportion of adults 18–24 with high school degrees. 29% reduction in proportion with less than a high school education.	$25 billion lifetime return to society. $7 billion savings for taxpayers. Benefit to cost ratio=4.8.

Source: L.D. Tran et al. SSM- Population Health 3 (2017) 185-191