COLORADO HEALTHY SCHOOLS SMART SOURCE

Improving School Health: How social, emotional, and mental health supports in schools impact students

Advancing School Mental Health Conference

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OBJECTIVES

1. Connect student health and academics
2. Learn about relevant health assessments in Colorado
3. Understand the Colorado context for school behavioral health
4. Explore associations in school behavioral health practices
5. Identify relevant data sources available in your area
6. Q&A

School Health Overview

Connecting health and learning

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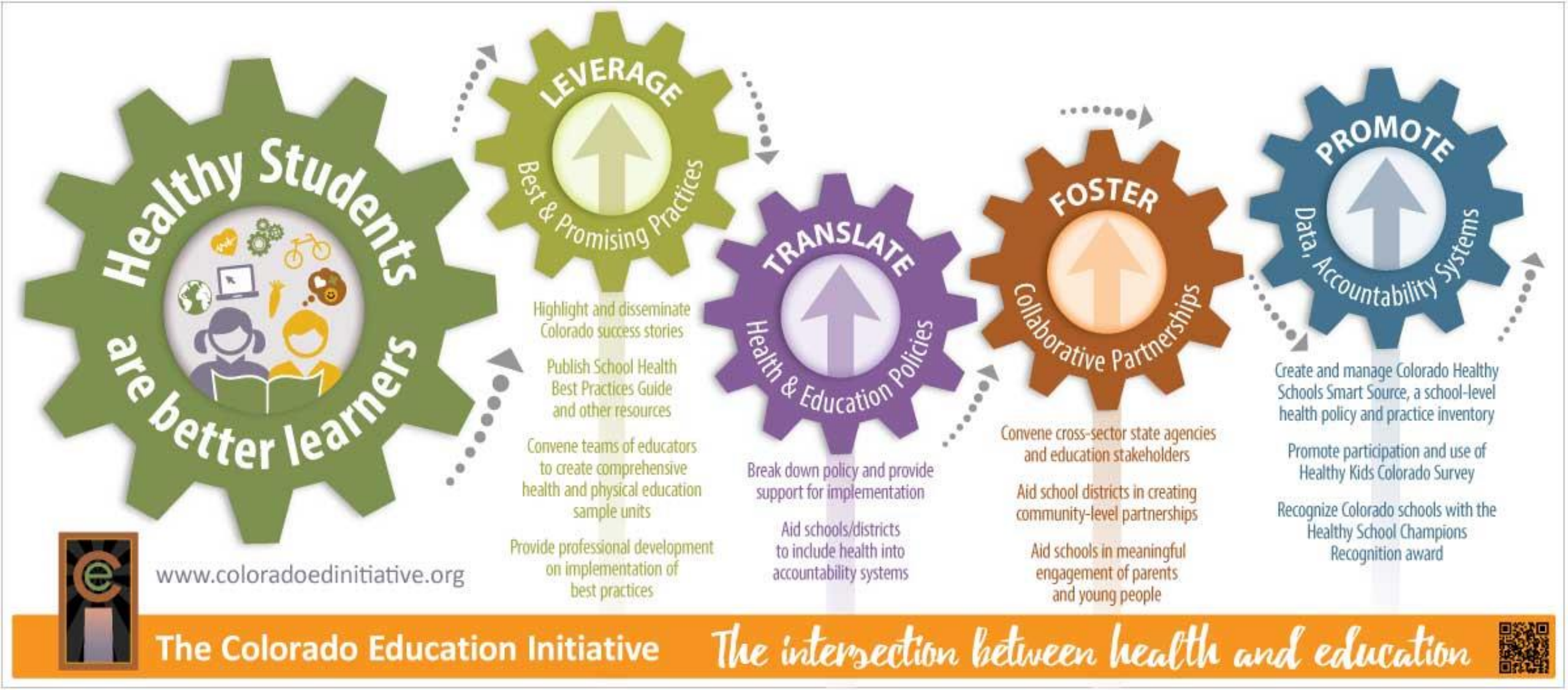
Colorado Education Initiative

CEI HEALTH AND WELLNESS WORK



WHY SCHOOLS?

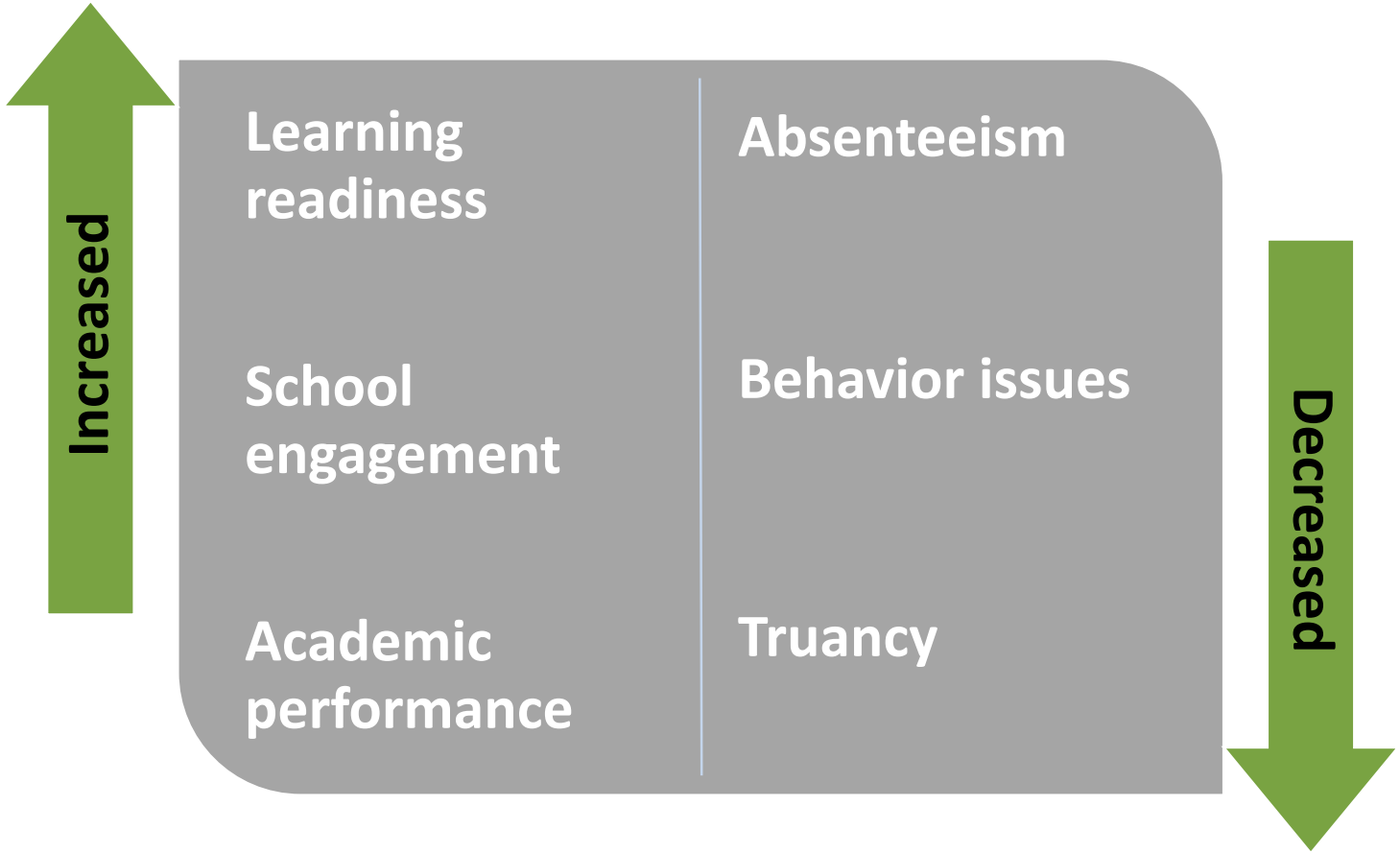
Healthy Students are Better Learners!

"No matter how well teachers are prepared to teach, no matter what accountability measures are put in place, no matter what governing structures are established for schools, educational progress and closing the achievement gap will be profoundly limited if students are not motivated and able to learn."

- Charles Basch, Professor at Teacher's College, Columbia University

WHY SCHOOLS?

Healthy students have…



PURPOSE OF SMART SOURCE

Serve as an inventory for schools to assess health policy and practice	Reduce burden on schools by streamlining multiple school health surveys into one tool	Improve the quality of school health policy and practice data	Increase the number of schools assessing health and wellness	Inform improvements in school health efforts

COMPREHENSIVE MEASUREMENT

1. General Health Policies & Practices
2. Nutrition
3. Physical Education & Physical Activity
4. Health Education
5. Health Services
6. Counseling, Psychological, and Social Services
7. Healthy and Safe School Environment
8. Family, Community, and Student Involvement
9. Staff Health Promotion
10. Local Wellness Policy

PARTNERSHIPS

Steering Committee

CEI
CDE
CDPHE
Kaiser Permanente

+

Stakeholder Input

Schools & Districts
Content Experts
Funders
Researchers and Evaluators
Other Stakeholders

→

Smart Source

PROCESS

2013

- Reviewed relevant tools and compiled indicators
- Engaged school health experts on what Smart Source should measure
- Identified items and refined to meet needs of schools

2014

- Developed tool and methodology
- Conducted think-aloud interviews with schools
- Completed first pilot in 77 schools

2015

- Built report template and sent reports to schools
- Refined and streamlined tool and reports
- Completed second pilot in 451 schools

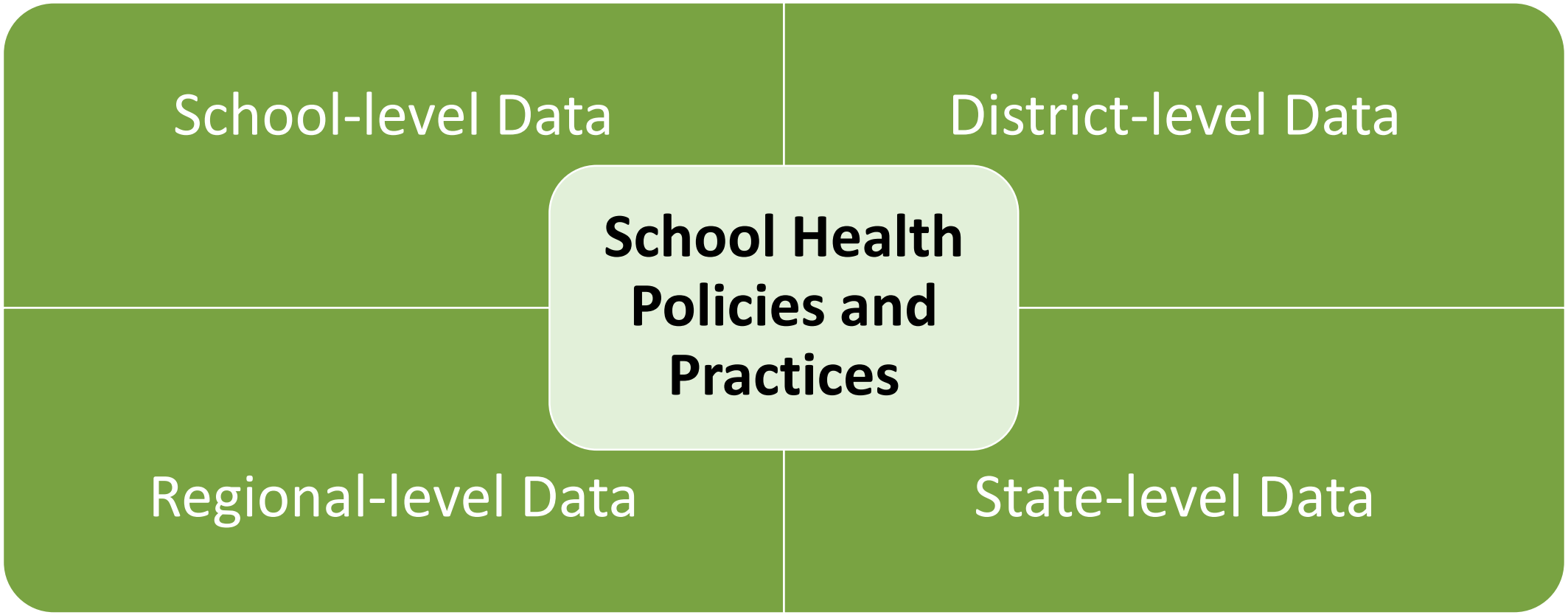
2016

- Developed automatic reporting process
- Made final refinements to tool and reports
- Released aggregate data via executive summary and data tables

2017

- Completed validity and reliability study
- Developed sample for statewide administration
- To conduct largest administration during the 2017-18 school year

DATA AVAILABLE



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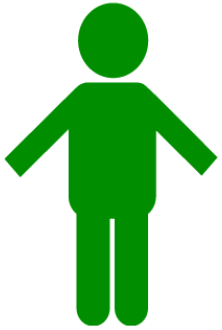
CONNECTION BETWEEN TWO SURVEYS

- Joint Smart Source & Healthy Kids Colorado Survey (HKCS) administration
  - Schools benefit from using both sets of data
  - Minimize confusion between two efforts
  - Data collected during same cross section of time
  - “Off year” can be used for planning & implementation

Smart Source
(school-level tool)



HKCS
(student-level tool)

Complete Picture of School Health

HEALTHY KIDS COLORADO SURVEY OVERVIEW

CO's only comprehensive survey on the health and well-being of young people in Colorado.

HKCS is aligned with the CDC's Youth Risk Behavior Survey (YRBS) and has been conducted on a two-year cycle in CO since 1991.

Supported by Colorado Departments of Education, Public Health & Environment, Human Services, and Safety.

Administered to randomly selected middle and high schools and classrooms every odd year in grades 6-12.

HEALTHY KIDS COLORADO SURVEY

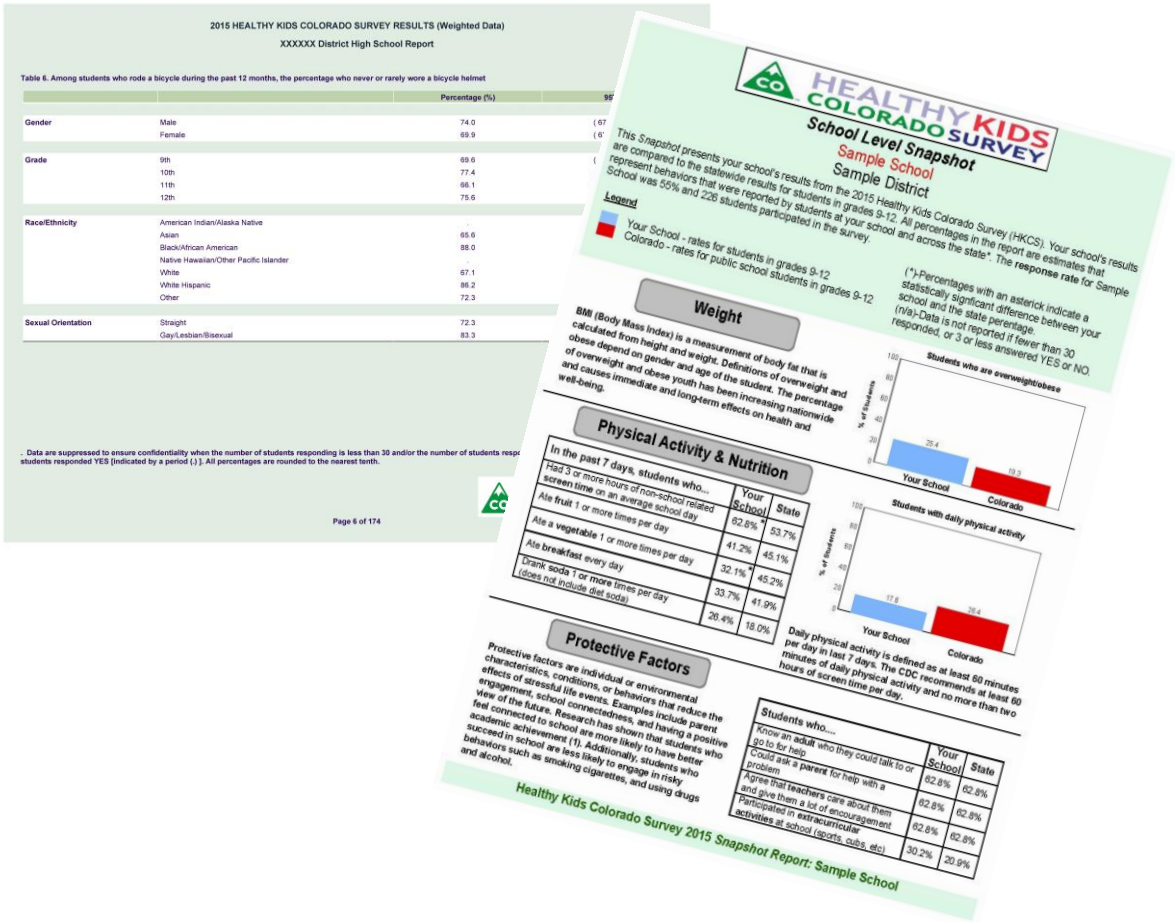
HKCS MEASURES

Protective Factors	• Trusted adults • School climate • Community involvement
Health Behaviors	• Alcohol, tobacco, and substance use • Safety and violence • Nutrition and fitness • Sexual health (high school only)
Social-Emotional Indicators	• Depression • Suicide • Bullying

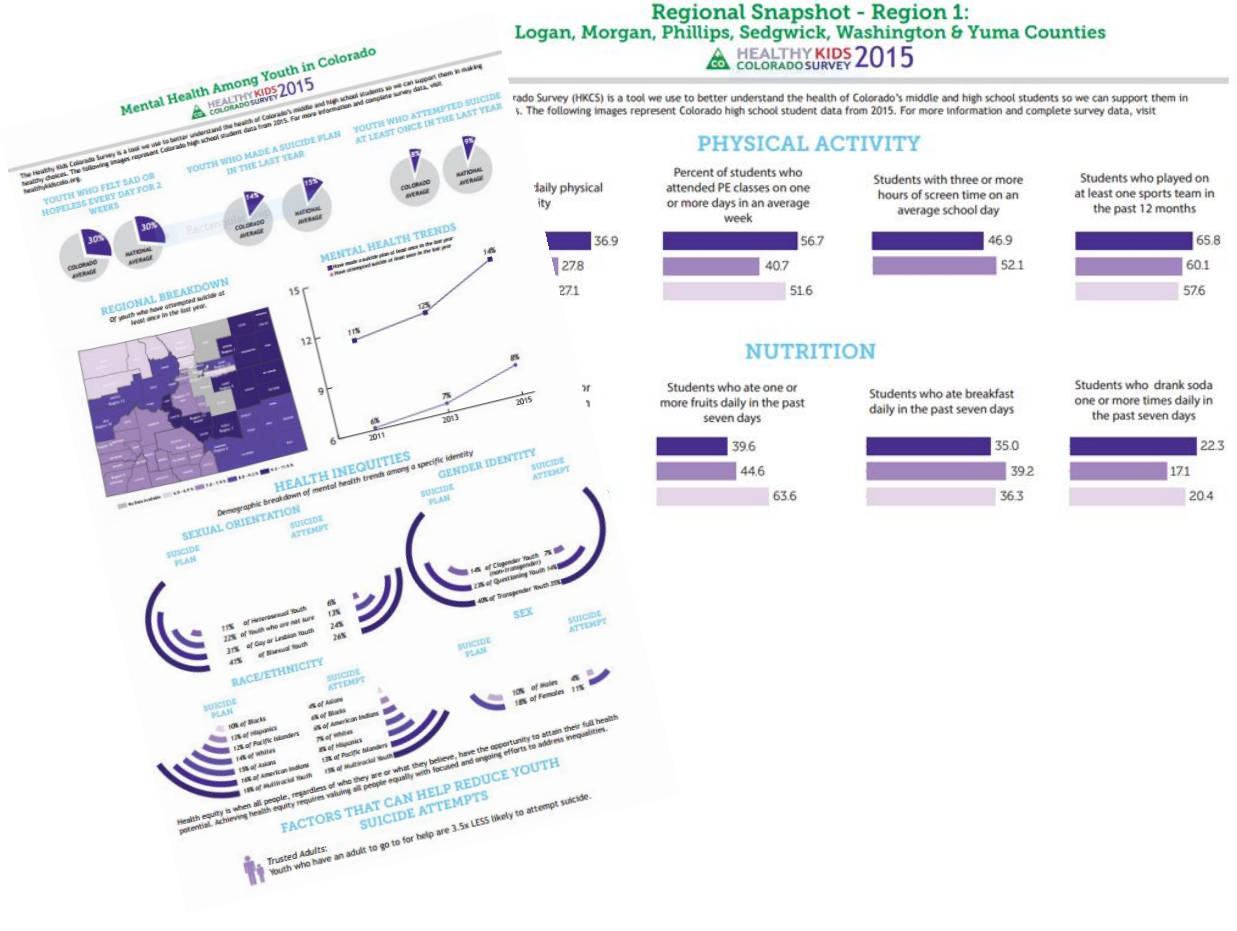
HEALTHY KIDS COLORADO SURVEY

HKCS DATA AVAILABLE

Private: School/District Level



Public: State/HSR Level



School Behavioral Health

Trends in Colorado

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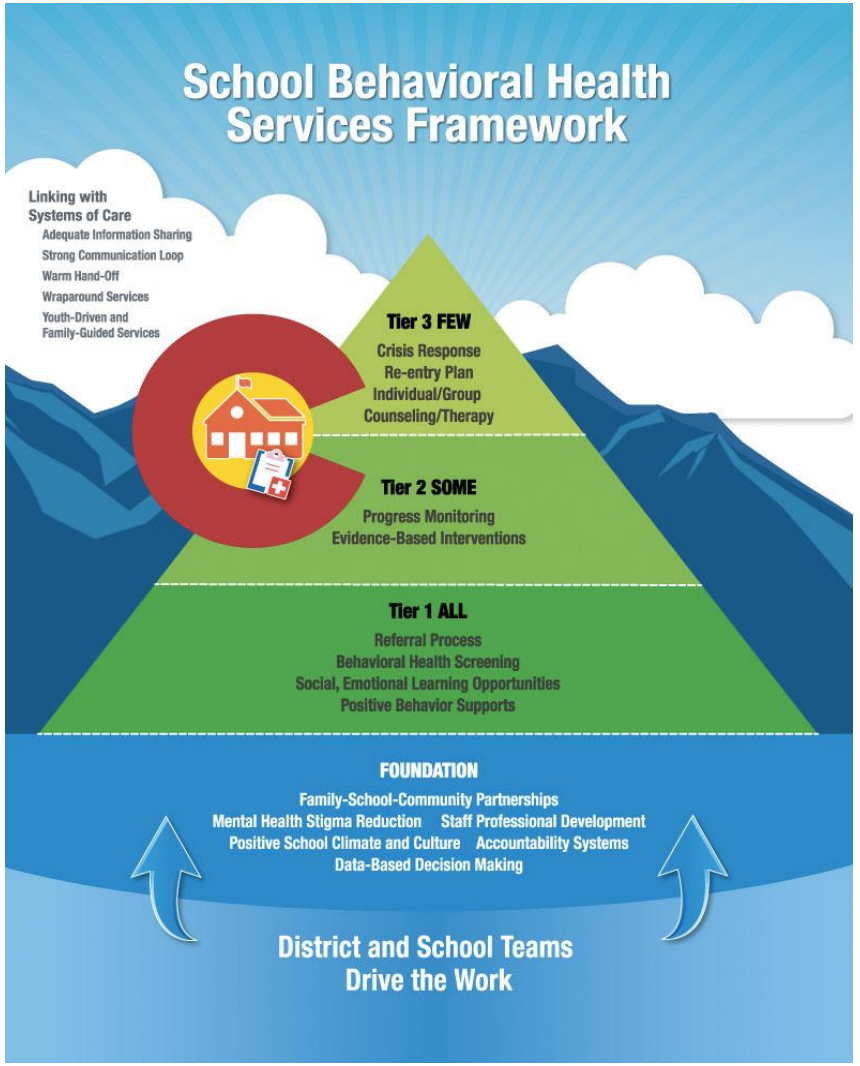
BEHAVIORAL HEALTH FRAMEWORKS

- Positive Behavior Support Framework
  - Model for systematic implementation of best practices
  - Prevention-based multi-tiered systems of supports (MTSS)

- CO Framework for School Behavioral Health Services
  - Co-created by content experts and school/district personnel
  - Expands on PBS with systems of care principals
  - Highlights foundational best practices that support all tiers



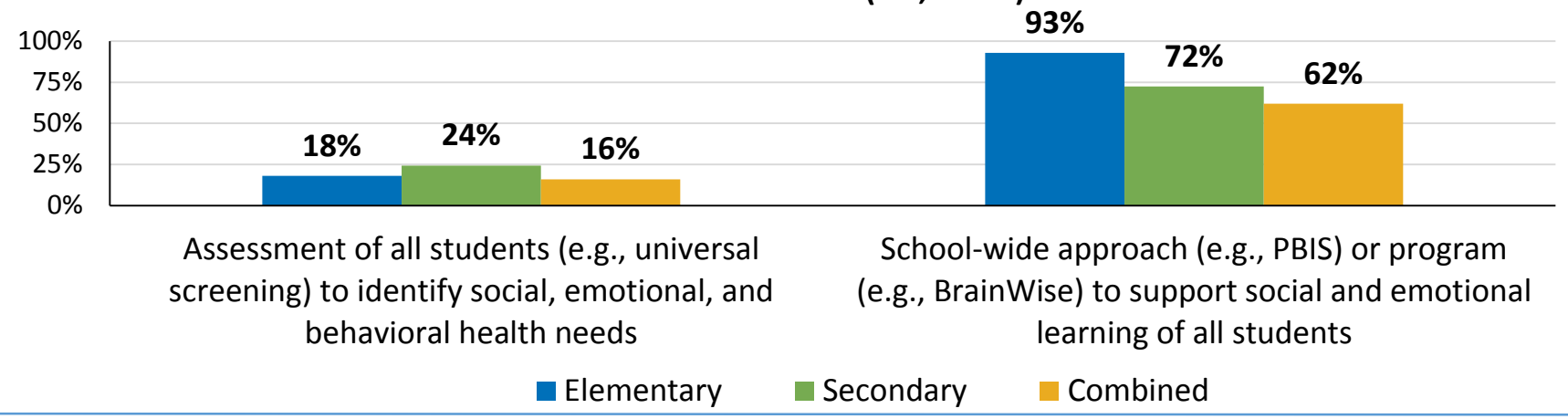
BEHAVIORAL HEALTH & ACADEMICS

- Students with diagnosed behavioral health issues miss **three times** as many school days as those without behavioral health challenges.
- Students who use drugs or alcohol are **three times** more likely to drop out of school.
- Students who receive social and emotional learning (SEL) instruction have academic achievement scores an average of **11 percentage points** higher than students who did not participate in SEL programs.

BEHAVIORAL HEALTH DATA

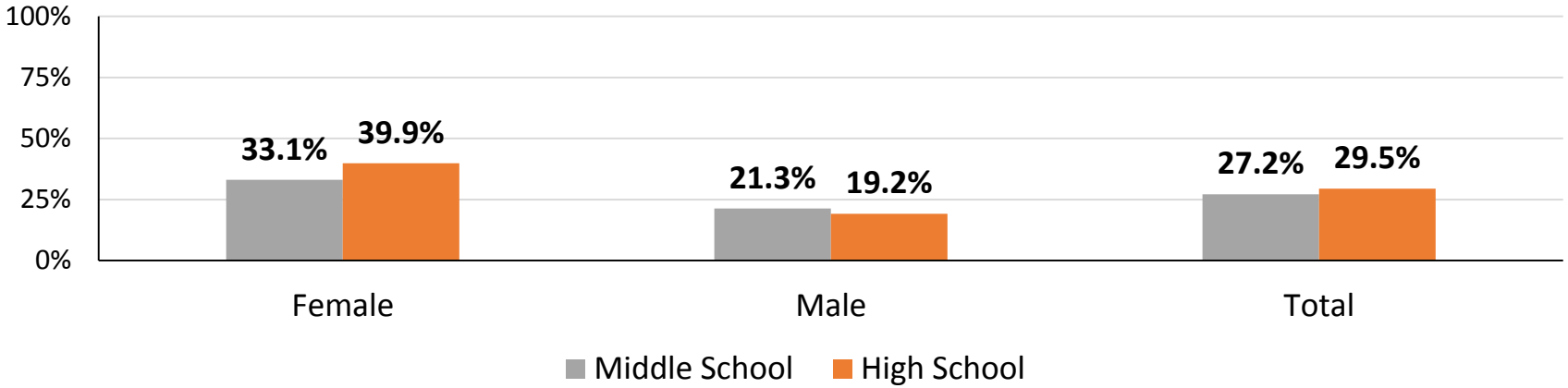
Smart Source

Figure 4.1: Practices to support social, emotional, and behavioral health of all students (i.e., Tier 1)



HKCS

Figure 4.2: Secondary students feeling sad or hopeless for two or more weeks in the past 12 months



SCHOOL CLIMATE & ACADEMICS

- Students who perceive school to be physically or emotionally unsafe often choose to **avoid school** altogether.
- Youths who are bullies or are victims of bullies are more likely to miss school.
- The best predictors of class attendance were:
  - Whether the student trusted their teacher
  - Perceived the teacher to care about them

SCHOOL CLIMATE DATA

Figure 6.1: Policies/practices to promote positive school climate

Smart Source

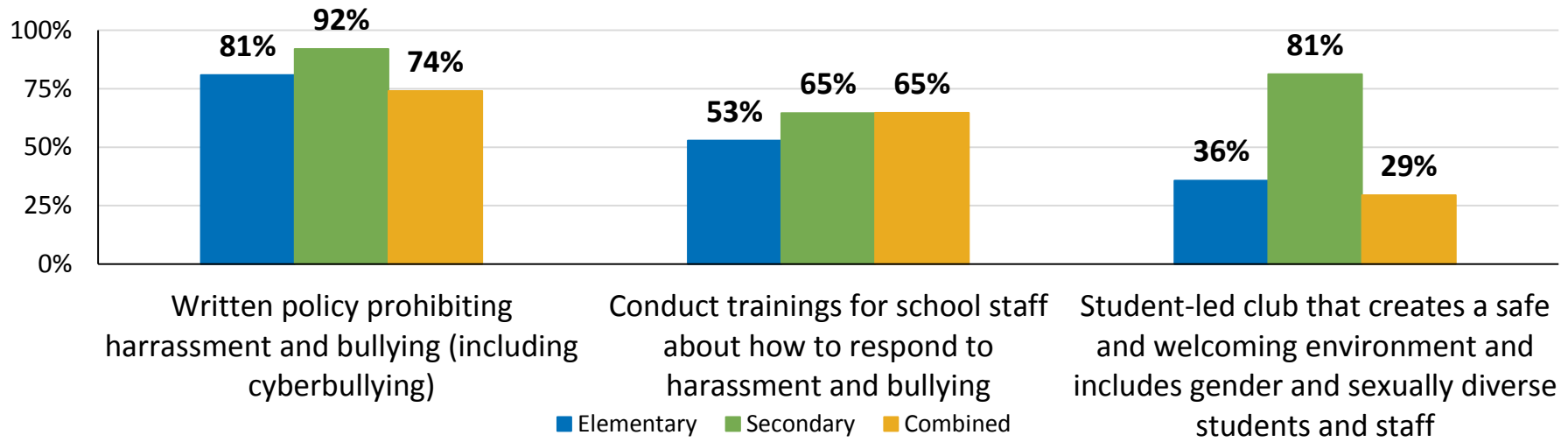
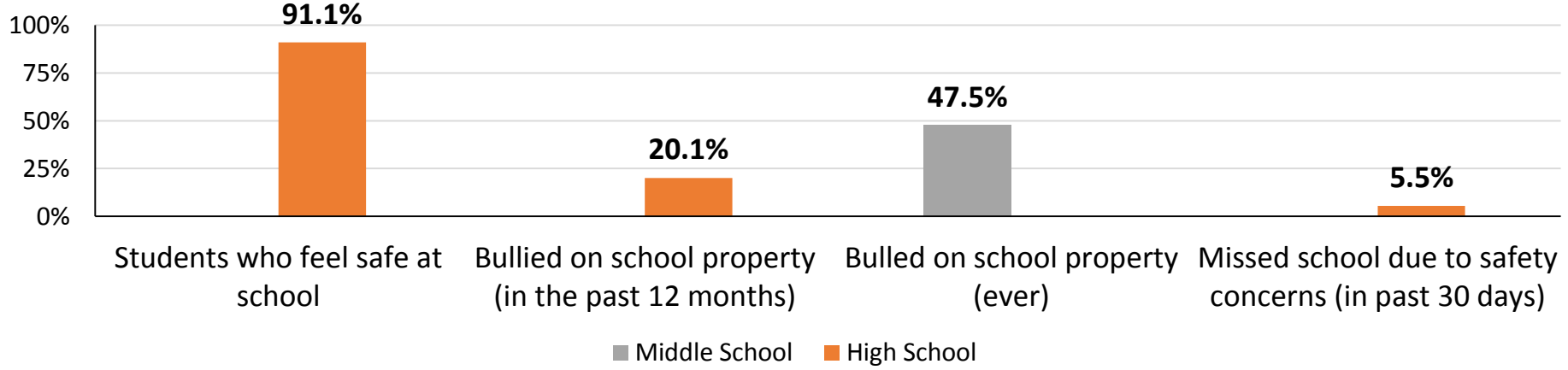


Figure 5.2: Safety and bullying among secondary students

HKCS



School/community collaboration & secondary prevention

Testing associations across Smart Source data

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BACKGROUND

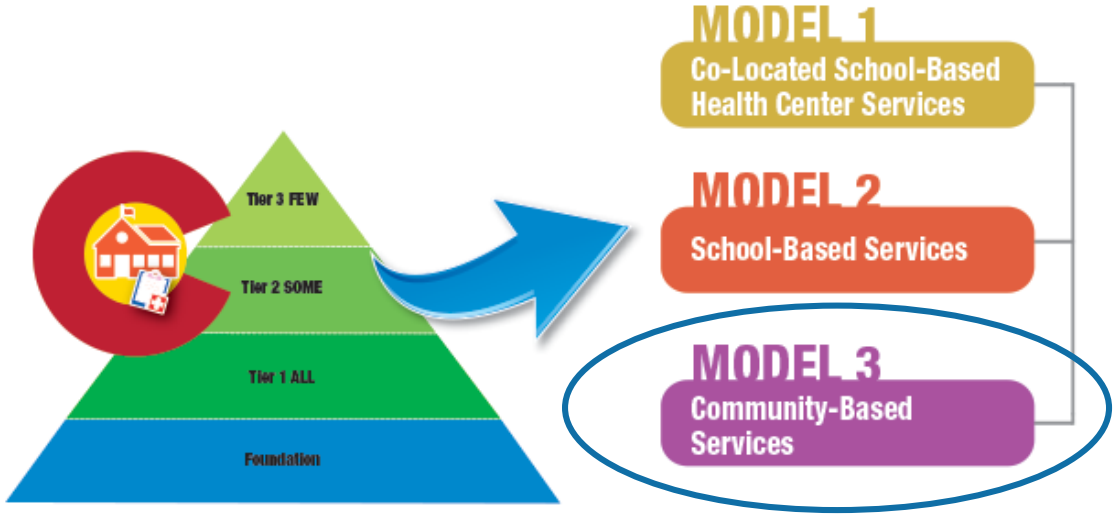
- <50% of youth with mental health needs receive treatment
  - Of those that do, 80% receive care in a school setting
  - Schools = critical mental health provider

"Given schools' unique ability to access large numbers of children, they are most commonly identified as the best place to provide supports to promote the universal mental health of children" (CASEL 2008, p. 1).[1]

- Tier 2 programs meet the needs of select students at risk for behavioral health disorders
  - Examples: AVID, Check & Connect, Check In/Check Out, HEARTS
  - Of all tiers, Tier 2 is the **least studied** and **most difficult** to implement in schools

BACKGROUND

- Collaboration with CMHCs shown to improve student outcomes
  - Community providers aid schools in expanding existing services
  - CO Framework promotes community-based serves as delivery model



<u>Research question:</u> Does collaboration between schools and CMHCs increase the likelihood of Tier 2 implementation while accounting for other factors potentially associated with the implementation of Tier 2 programs?

METHODS

Data Collection

1. Smart Source administered once per school during fall 2015
2. Team of school staff encouraged to complete collectively
3. Submissions collected using online platform

Independent variable: School collaboration with CMHCs
Dependent variable: School implementation of Tier 2 programs

Analyses

1. Sample *t*-test and Chi-square tests to explore differences across schools
2. Bivariate correlations to determine covariates
3. Linear regression of IV & DV, controlling for covariates: significance set at $p<.001$

PARTICIPATION BY REGION

Table 1.1: 2015-16 Smart Source Participation										
State		Region[1]								
		Metro	North Central	Northeast	Northwest	Pikes Peak	Southeast	Southwest	West Central	Unaffiliated
Elementary	226	70	50	6	14	65	5	13	2	1
Secondary	175	48	25	7	13	46	5	21	7	3
Combined[2]	50	17	6	1	4	12	2	4	1	3
Total	451	135	81	14	31	123	12	38	10	7

25% of all Colorado schools

[1] Regions are defined by the the Colorado Department of Education. For more information, please visit: www.cde.state.co.us/cdeedserv
[2] Combined schools have at least one elementary (K-5) and one secondary (6-12) grade.

SAMPLE VS. OVERALL STATE

	Number of Schools	Free or Reduced Price Lunch	School Size
SAMPLE (n=451)	**Elementary:** 226 (50%) **Secondary:** 175 (39%) **Combined:** 50 (11%)	**Mean:** 45%	**Mean:** 508 students
STATE (n=1793)	**Elementary:** 884 (48%) **Secondary:** 672 (36%) **Combined:** 237 (13%)	**Mean:** 45%	**Mean:** 496 students

FINDINGS

1. **Schools that are more likely to collaborate with CMHC:**
   - Located in small districts and outlying cities or towns
   - Higher rates of FRL eligibility and truancy
   - Secondary level, versus elementary and combined

2. **Covariates correlated with implementing Tier 2 programs (DV):**
   - School-wide approach to SEL (Tier 1)
   - In-school therapeutic services (Tier 3)
   - Referrals to services outside of school
   - Wellness team
   - School counselor availability

3. **Collaboration with a CMHC was positively associated with implementation of Tier 2 programs**
   - OR = 2.23
   - 95% CI: 1.36, 3.66

IMPLICATIONS

- Schools collaborating with a CMHC are more than twice as likely to implement Tier 2 programs as those that did not

- CMHCs may assist or inform schools in implementation of Tier 2 programs
  - Direct vs. indirect role

- Results suggest school/CMHC collaboration as a potential:
  - Important best practice for comprehensive school mental health
  - Strategy to narrow research-to-practice gap around Tier 2 implementation

The impact of social, emotional, and mental health supports in schools on students

Testing associations between Smart Source and Healthy Kids Colorado data

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HYPOTHESIS & VARIABLES

***Study hypothesis*: Schools that report greater presence and quality of counseling, psychological, and social services will be associated with improved self-reported student mental health outcomes.**

Indicators for school-level predictors

1. Staff training
2. Programming
3. Screening
4. Other procedures

COLORADO HEALTHY SCHOOLS SMARTSOURCE

Indicators for student-level outcomes

1. Mental health
2. School climate
3. School connectedness

HEALTHY KIDS COLORADO SURVEY

METHODS

Data Collection

- Smart Source administered to schools in 2015-16
- HKCS administered to students in 2015-16
- Merged school records that participated in both Smart Source and HKCS

Analysis (led by CU Anschutz)

- Descriptive statistics
- Bivariate tests of association (Chi-square)
- Multivariable regression analysis (significance set at $p<.05$)

STUDY SAMPLE

Smart Source

Total schools with secondary grades in sample: 275

HKCS

Total high schools in sample: 153

Overlap

49 high schools

10,816 students

FINDINGS

1. Presence of a school psychologist: protective for suicide attempts

2. Schools where staff are trained to identify students in crises: more likely to have students report they have an adult to go to for help

3. Schools where staff are trained to support students in crises: more likely to have students report they feel safe at school

FINDINGS

4. Universal screenings: protective for bullying

5. Providing in school supports for students was positively associated with:
   - students reporting they feel safe at school
   - students reporting teachers care about them

6. Collaborating with a community mental health center was:
   - protective against skipping school
   - positively associated with students reporting teachers care about them

IMPLICATIONS

<u>Conclusion</u>: School policies and practices related to mental health and school climate seem to have an impact on student suicide attempts, bullying, feeling safe at school, and positive relationships with adults.

<u>Limitations</u>

- Overlap in schools is relatively small & did not include middle schools
- Surveys have different questions, respondents, formats, etc.
- Conducted with pilot tool – revised items in Smart Source sections are more specific

<u>Future Directions</u>

- Conduct these analyses in 2017-18 (there will be larger sample of schools)
- Explore literature about research in possible associations

Activity

Exploring data at your fingertips

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POSSIBLE DATA SOURCES

Student-Level Data

- **Health Surveys** (e.g., HKCS)
- **Climate Surveys**
- **Student Perception Surveys**
- **Non-cognitive/SES Surveys**
- **Attendance Data**
- **Discipline Data**

Staff-Level Data

- **Tell Survey**
- **Teacher Perception Survey**
- **FTE Count** (e.g., Nurse, Counselors)

School-Level Data

- **Health Policy and Practice Assessments** (e.g., Smart Source, School Health Index)
- **Graduation Rates**
- **Mobility Rates**
- **FRL Rates**
- **Nursing Visits**

State/County Data

- **Child Health Survey (state)**
  - Physical health
  - Mental & behavioral health
- **Kids Count (state & county)**
  - Child health
  - Education
  - Economic status
- **Smart Source**
- **Healthy Kids Colorado Survey**

HOW TO USE HEALTH DATA

- Identify Needs
- Make the Case for Resources
- Initiate Policy or Practice Change
- Communicate about School Health Programs and Garner Support
- Evaluate Effectiveness of Policies and Practices

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Q&A

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Thank You!

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