



Healthy and Ready to Learn

Title V Partnership Meeting

November 7, 2023

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Vision: Healthy Communities, Healthy People



AGENDA

Overview of the NSCH

Approach to HRTL

Data Snapshot

Strengths and Limitations



Learn more at <https://mchb.hrsa.gov>

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National Survey of Children's Health: **OVERVIEW**

Learn more at <https://mchb.hrsa.gov>

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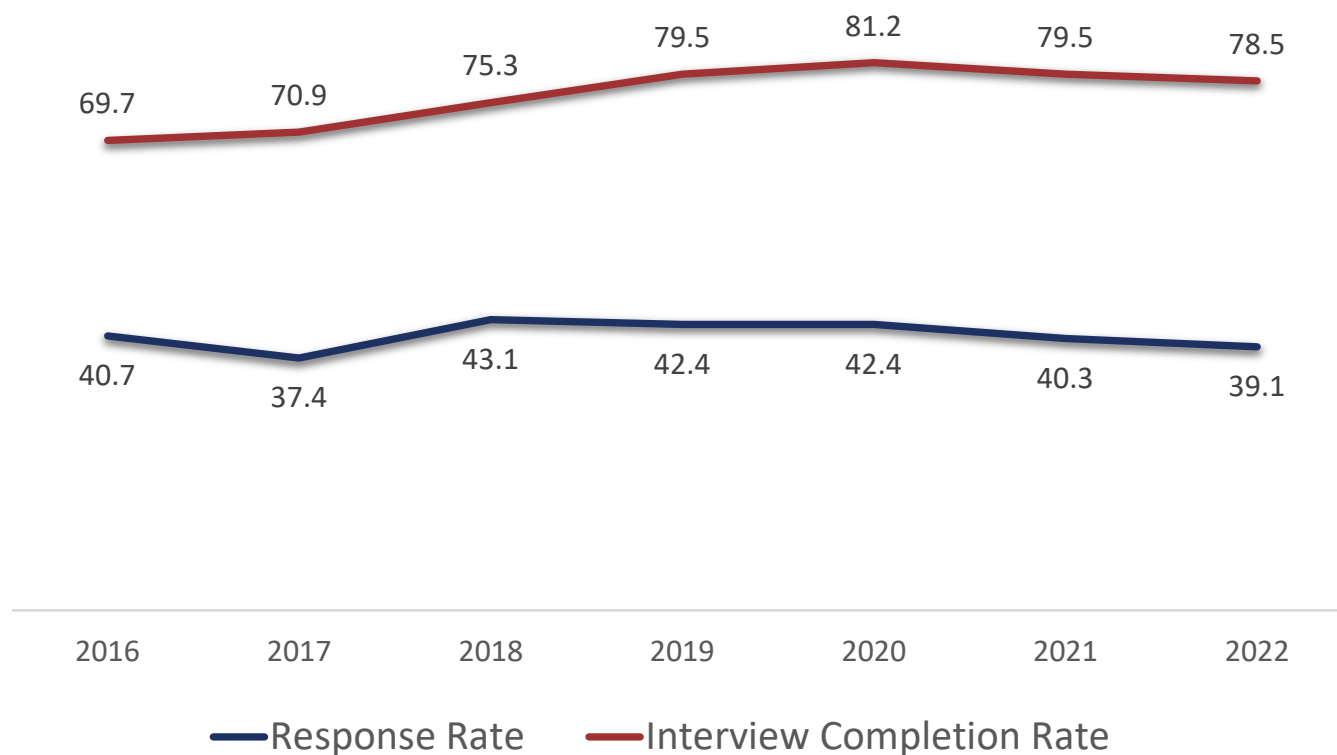
National Survey of Children's Health OVERVIEW

- Sponsored by the **Health Resources and Services Administration's Maternal and Child Health Bureau**; conducted by the U.S. Census Bureau. Co-sponsorship by CDC and USDA.
- **Annual**, cross-sectional, address-based survey that collects information via the web and paper/pencil questionnaires.
- Designed to collect information on the health and well-being of **children ages 0-17**, and related health care, family, and community-level factors that can influence health.
- Provides both **national** and **state-level** estimates for all non-institutionalized children ages 0-17 years in the U.S.
- Data are released annually on **Child Health Day** for the previous year.



SAMPLE SIZE AND RESPONSE RATES: 2016-2022

Annual Response and Completion Rates



Completed Interviews Per Year

- **2016 = 50,212**
 - 638+ per State & DC
- **2017 = 21,599**
 - 343+ per State & DC
- **2018 = 30,530**
 - 520+ per State & DC
- **2019 = 29,433**
 - 482+ per State & DC
- **2020 = 42,777**
 - 644+ per State & DC
- **2021 = 50,892**
 - 790+ per State & DC
- **2022 = 54,103**
 - 688+ per State & DC

PERFORMANCE MEASUREMENT, POLICIES, AND PROGRAMS

Current Title V MCH Services Block Grant National Performance and Outcome Measures

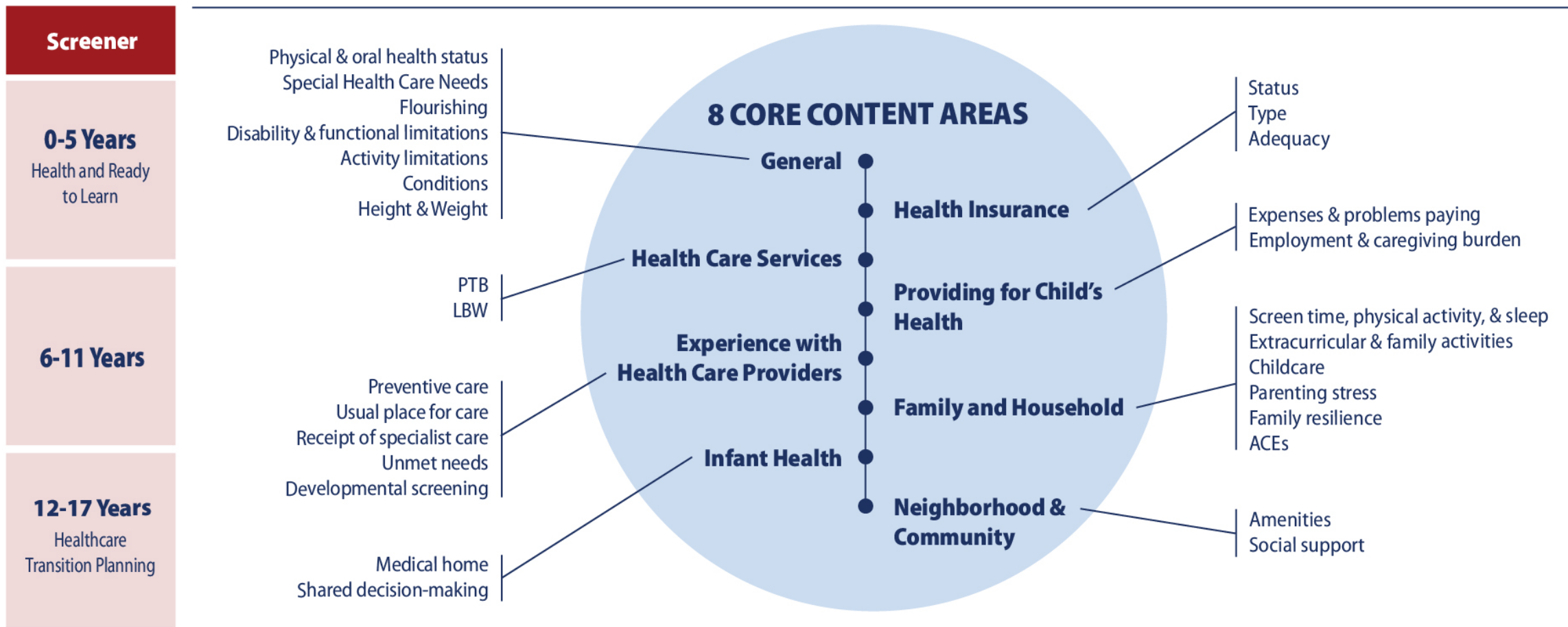
- | | |
|---|-------------------------------------|
| 1. NPM 6: Developmental Screening | 11. NOM 13: School Readiness |
| 2. NPM 8.1: Physical Activity (6-11 years) | 12. NOM 14: Tooth Decay/Cavities |
| 3. NPM 8.2: Physical Activity (12-17 years) | 13. NOM 17.1: CSHCN |
| 4. NPM 9: Bullying | 14. NOM 17.2: CSHCN Systems of Care |
| 5. NPM 10: Adolescent Well-Visit | 15. NOM 17.3: Autism |
| 6. NPM 11: Medical Home | 16. NOM 17.4: ADD/ADHD |
| 7. NPM 12: Transition | 17. NOM 18: Mental Health Trt. |
| 8. NPM 13.2: Preventive Dental Visit | 18. NOM 19: Health Status |
| 9. NPM 14.2: Smoking (household) | 19. NOM 20: Obesity |
| 10. NPM 15: Adequate Insurance | 20. NOM 25: Forgone Health Care |

Federal policy and program development:

- ✓ 15 Healthy People 2010/2020/2030 Objectives;
- ✓ CDC investments in ADHD, ASD, and Developmental Conditions;
- ✓ MCHB investments in early childhood (Home Visiting and Healthy Start);
 - ✓ Developmental Screening
 - ✓ Literacy Promotion
- ✓ Children with Special Health Care Needs.
 - ✓ Prevalence
 - ✓ Impacts
 - ✓ Experiences
 - ✓ Core Outcomes & System of Care

National Survey of Children's Health

CORE CONTENT



Healthy and Ready to Learn Approach

Learn more at <https://mchb.hrsa.gov>

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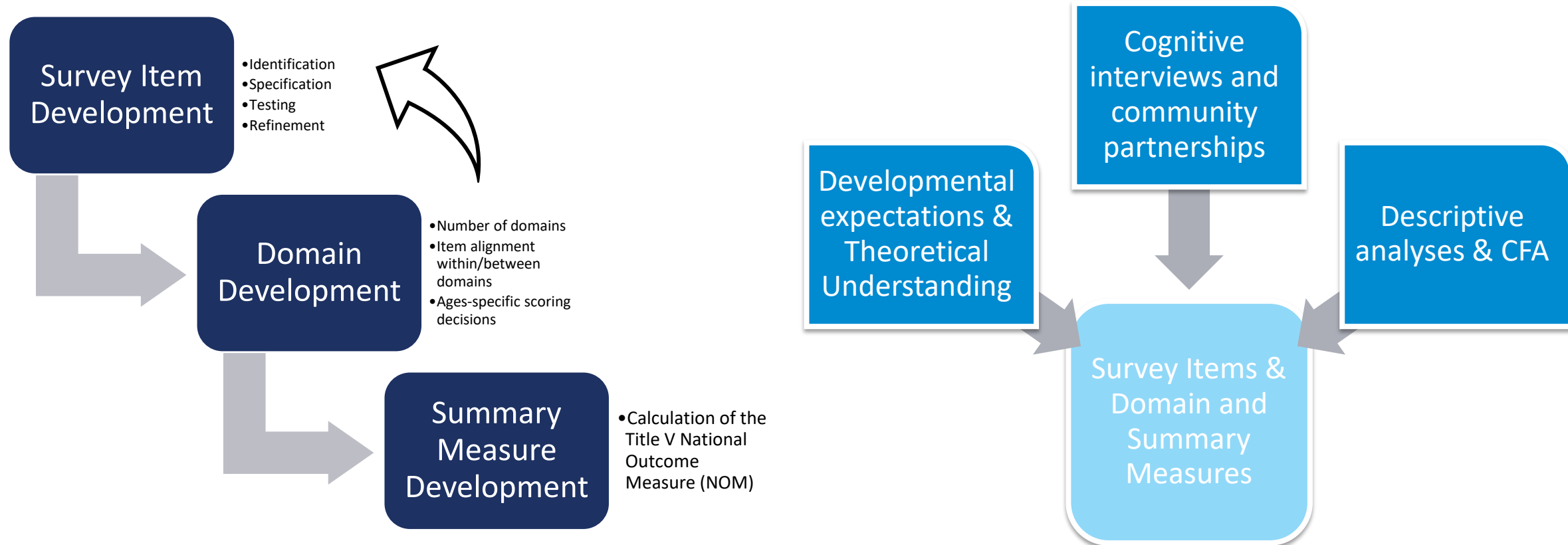
Healthy and Ready to Learn (HRTL)

GOAL AND TIMELINE

Goal: To develop a standardized, multidimensional, population-level measure of children's learning and development across ages 3-5 years of age.

2012-2013	Title V Block Grant performance measures <u>and</u> NSCH redesigned
2013-2014	Candidate items identified along the 5 NSRII Domains of School Readiness
2015-2016	Items vetted and tested (2015) and fielded in 2016 National Survey of Child Health
2017-2021	Items reevaluated, summary and domain measures re-estimated, and additional cognitive testing completed in partnership with Child Trends
2022	Final revised items selected and fielded in 2022 NSCH
2023	State and National Estimates available (Fall)

DEVELOPMENT OF THE PROPOSED MEASURE



Healthy and Ready to Learn (HRTL)

FINAL CONTENT

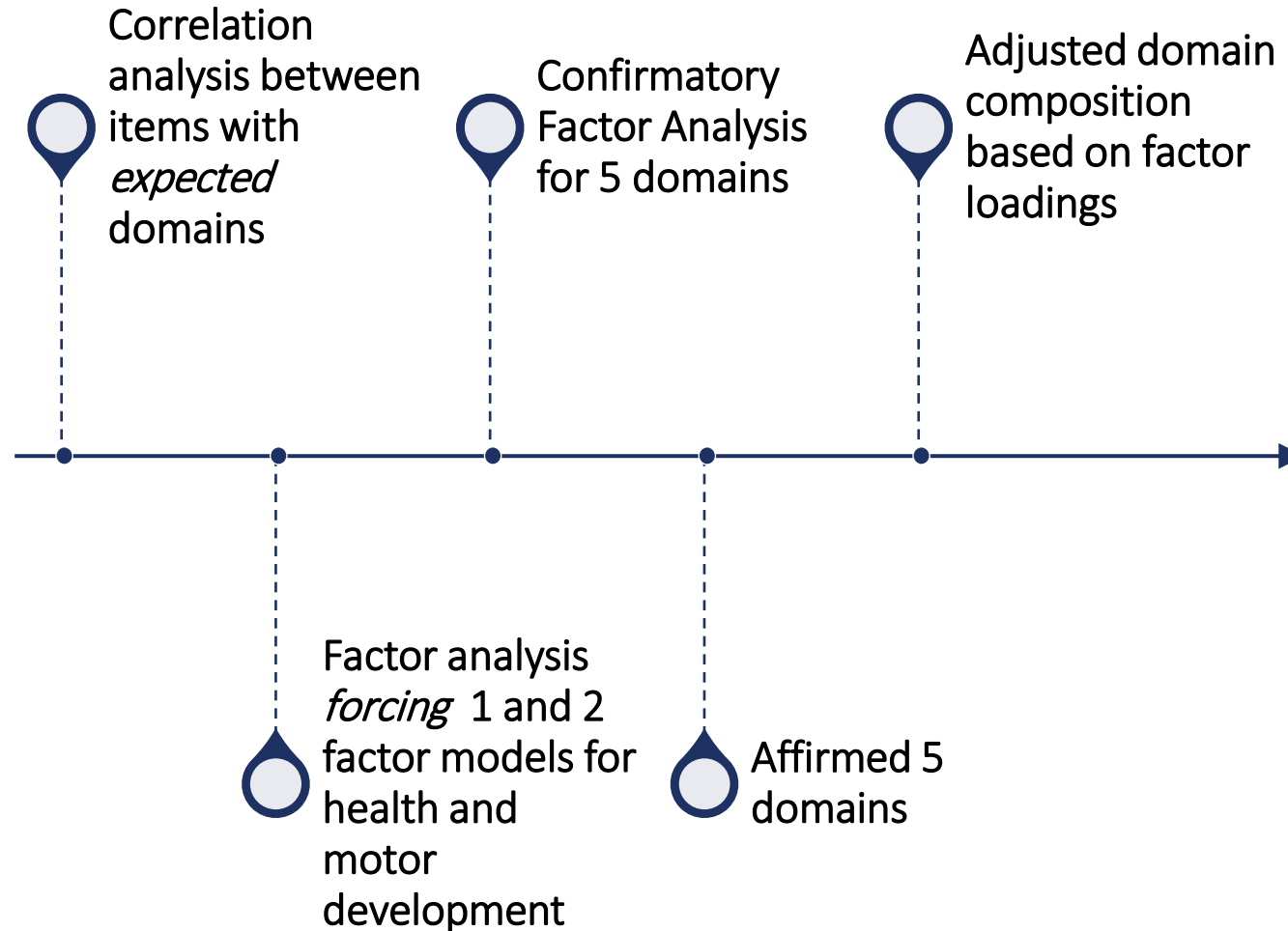
28 questions in 5 domains

- Early Learning Skills
- Social Emotional Development
- Self-Regulation
- Motor Development
- Health



Learn more at <https://mchb.hrsa.gov>

DEVELOPMENT OF DOMAINS



Decision Examples:

- Correlations were poor between health and motor development items (<0.2) and factor analysis yielded two distinct factors → 5 domains
- CFA showed that “writing name” was less associated with motor development than early learning skills → moved domains
- “Bouncing back” was not sufficiently correlated with other SE items → dropped (maintains independence of flourishing measure)

DEVELOPMENT OF SCORING APPROACH

- **ITEM LEVEL:** Parent/caregiver responses were coded on a three-point scale:
1 = Needs Support, 2 = Emerging, and 3 = On Track, based on age-appropriate developmental expectations and an assessment of the overall distribution of responses across domain items and ages.
- **DOMAIN LEVEL:** Points achieved within each domain were summed and cut-points established for the overall average item-level score:
On Track (average score ≥ 2.5 ; most items received a score of 3 or 'On Track'), Emerging (average score 2.0-2.49; most items received a score of 2 or 'Emerging') and Needs Support (average score < 2.0 ; indicating at least one and usually multiple items received a score of 1 or 'Needs Support').
- **HRTL:** The overall measure was calculated by summing the number of domains in which a child was 'On Track', 'Emerging', and 'Needs Support'.
- **NOM-13:** Children 'On Track' in 4-5 domains with no domain that 'Needs Support' were considered 'On Track' overall, forming the definition for the Title V National Outcome Measure for School Readiness.
 - Children with less than 4 'On Track' domains and no more than 1 'Needs Support' domain were considered 'Emerging' overall.
 - Children who 'Needs Support' in ≥ 2 domains were considered 'Needs Support' overall.

DEVELOPMENT OF SCORING APPROACH – ITEM DETAIL

No Age Variation

HEALTH: In general, how would you describe this child's health?

AGE (Years)	Poor	Fair	Good	Very Good	Excellent
3	0.1	0.9	4.0	25.3	69.7
4	0.1	0.7	7.2	25.4	66.7
5	0.1	1.1	7.4	23.9	67.5

Age Variation based
on theory/data
distribution

EARLY LEARNING SKILLS: About how many letters of the alphabet can this child recognize?

AGE (Years)	None of Them	Some of Them	About Half of Them	Most of Them	All of Them
3	15.9	30.4	10.6	18.2	24.9
4	4.7	18.5	11.9	23.4	41.5
5	2.6	7.3	6.7	22.2	61.1

Needs Support

Emerging

On-Track

DEVELOPMENT OF SCORING APPROACH – DOMAIN DETAIL

Social Emotional Development

Sum of points	AGE (Years)			Mean Score
	3	4	5	
6	0.7	0.3	1.3	1
7	0.6	1.1	1.4	1.2
8	2.5	1.6	0.9	1.3
9	1.2	0.6	0.8	1.5
10	1.6	0.9	1.6	1.7
11	1.8	1.9	1.2	1.8
12	1.7	1.5	1.9	2
13	3.0	4.0	2.9	2.2
14	6.0	4.6	4.1	2.3
15	7.1	6.1	5.9	2.5
16	12.7	11.7	11.2	2.7
17	20.2	19.0	21.7	2.8
18	40.8	46.8	45.2	3

6 items in domain

Min Score = 6 (1 pt/item) -
Max Score = 18 (3 pts/item)

Mean score = Sum of points ÷
Number of items

Cut points chosen based on
review of data and consistency
across domains

On Track : Average score ≥ 2.5 ;
Emerging: Average score 2.0-
2.49; and Needs Support:
Average score < 2.0 .

DEVELOPMENT OF SCORING APPROACH – NOM-13

The overall measure calculated by summing the number of domains in which a child was 'On Track', 'Emerging', and 'Needs Support'.

Children who 'Needs Support' in ≥ 2 domains

Children with 4 or fewer 'On Track' domains and no more than 1 'Needs Support'

Children 'On Track' in 4-5 domains with no domain that 'Needs Support'

Considerations:

1. Simplify messaging.
2. Acknowledge child development is highly variable.
3. Special consideration for motor and health domains.

Healthy and Ready to Learn Data Snapshot

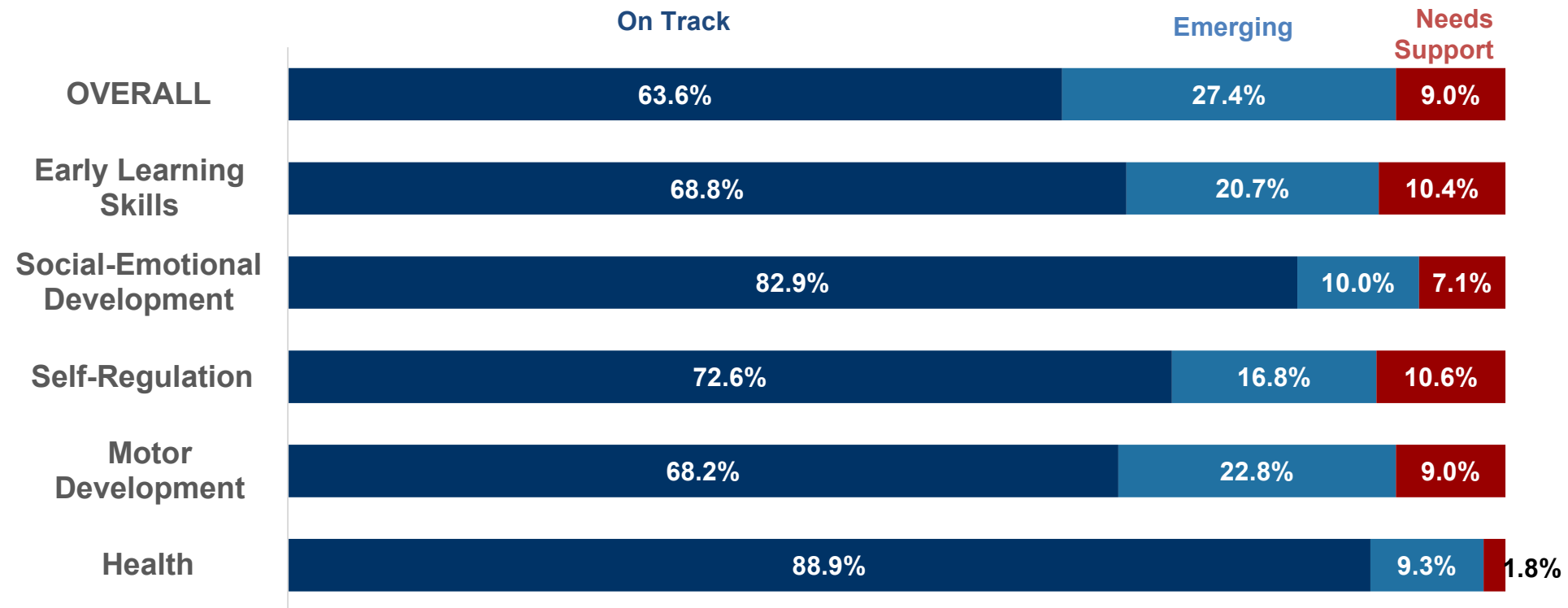
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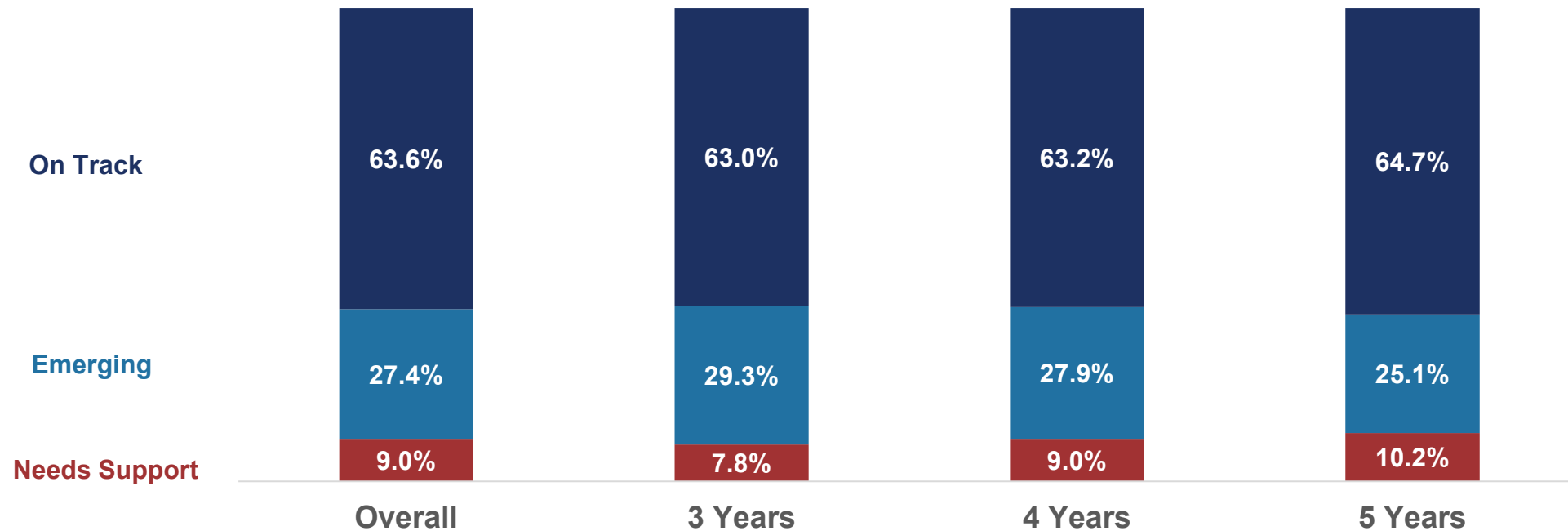
2022 National Survey of Children's Health Estimates

Proportion of 3-5 Year-olds who are On Track, Emerging, or Needs Support by HRTL Domain



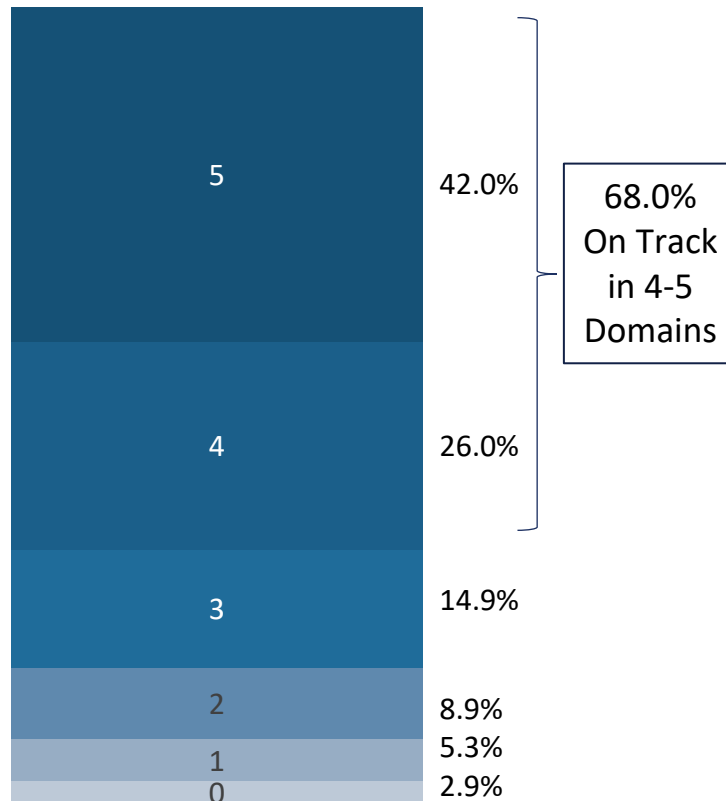
2022 National Survey of Children's Health Estimates

Proportion of children 3-5 years who are On Track, Emerging, or Need Support in HRTL,
by Age

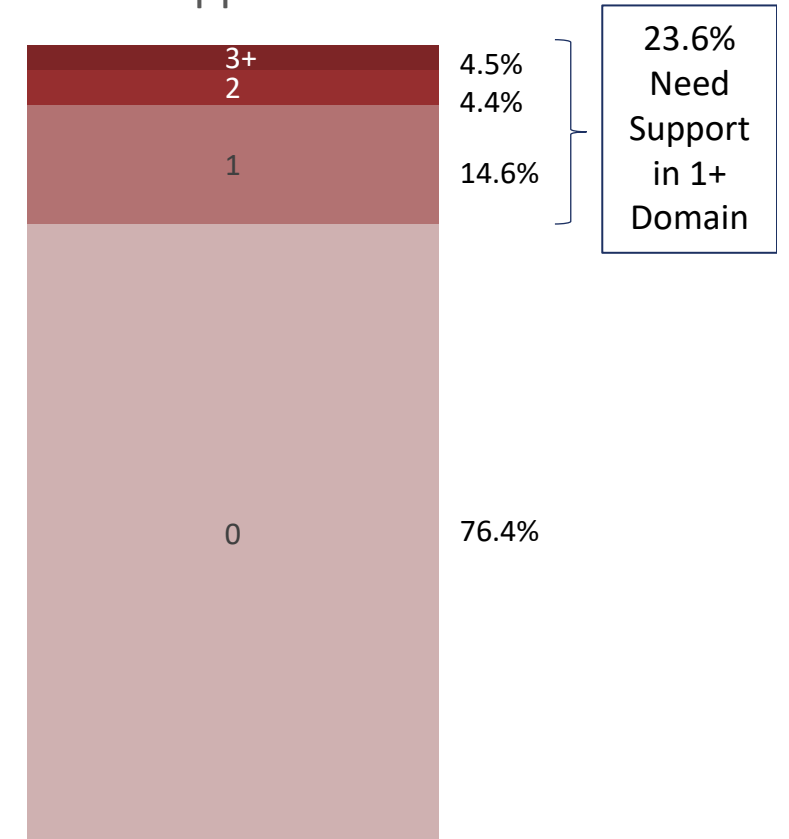


2022 National Survey of Children's Health Estimates

On Track Domains

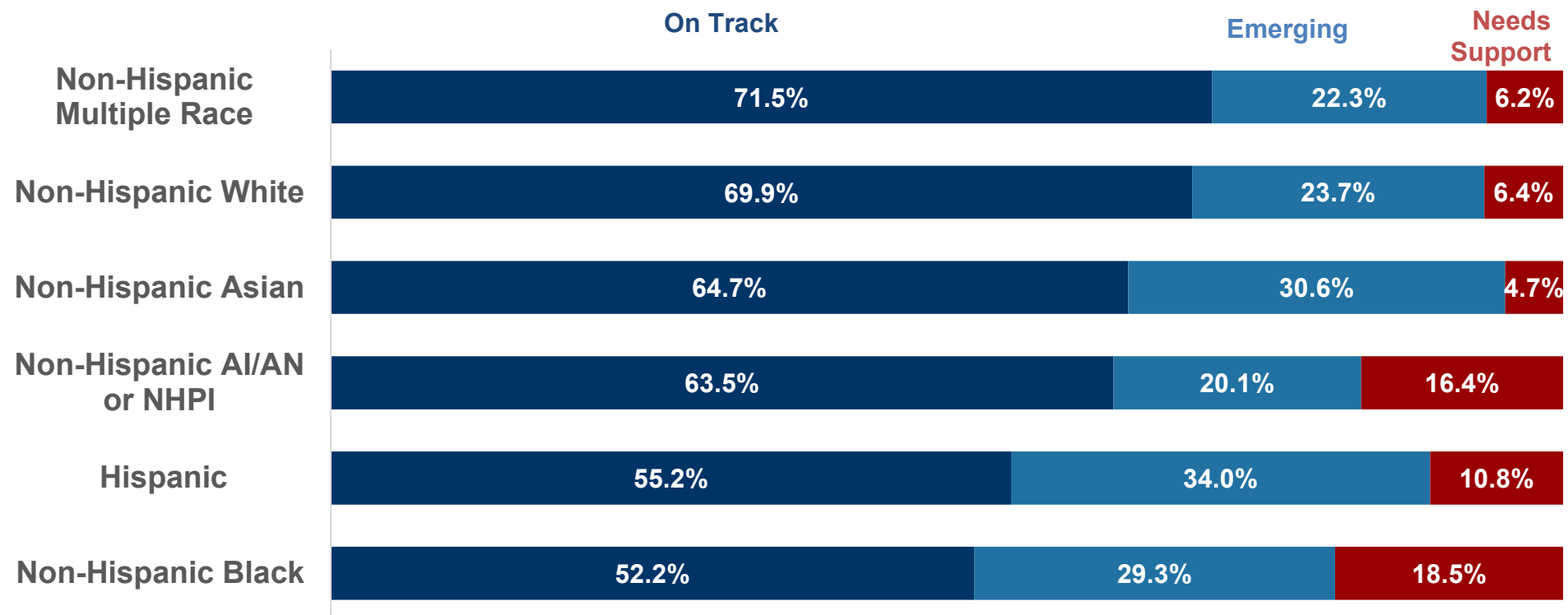


Needs Support Domains



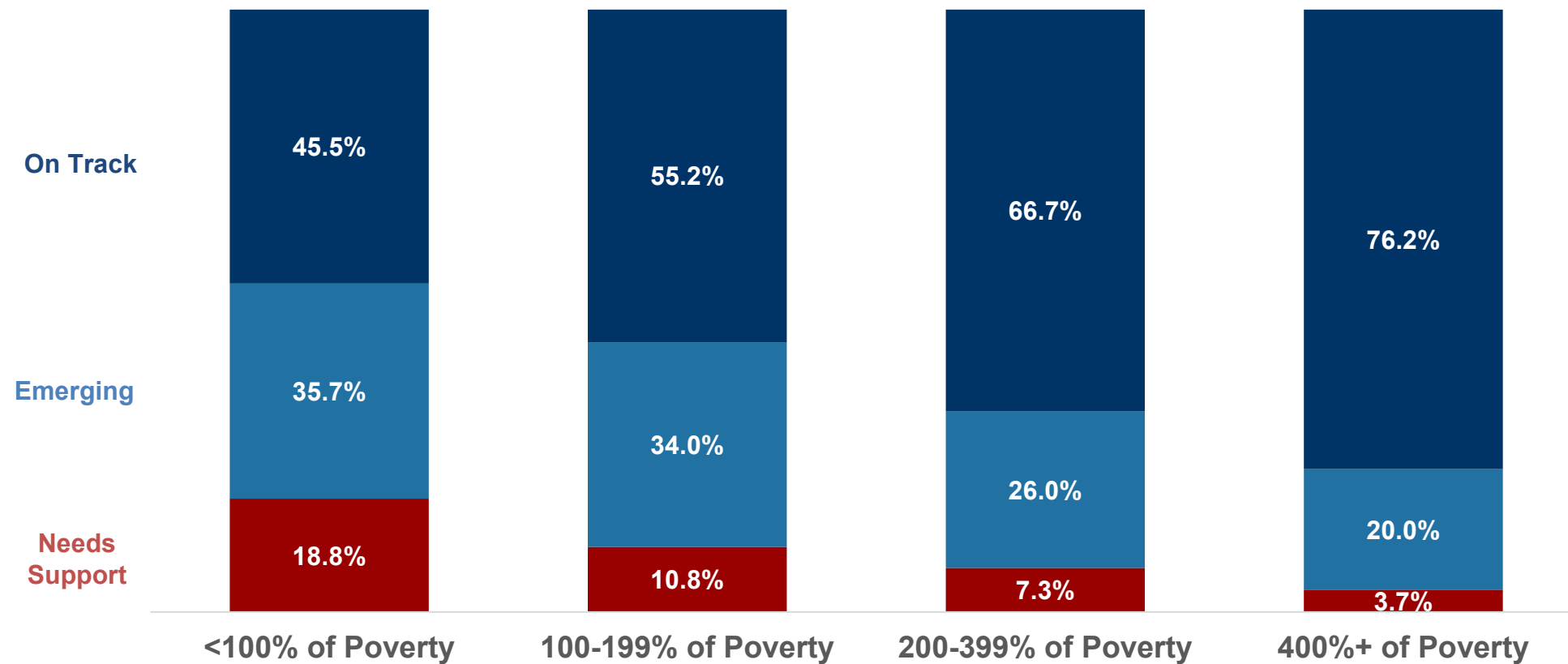
2022 National Survey of Children's Health Estimates

Proportion of 3-5 Year-olds who are On Track, Emerging, or Needs Support
by Race/Ethnicity



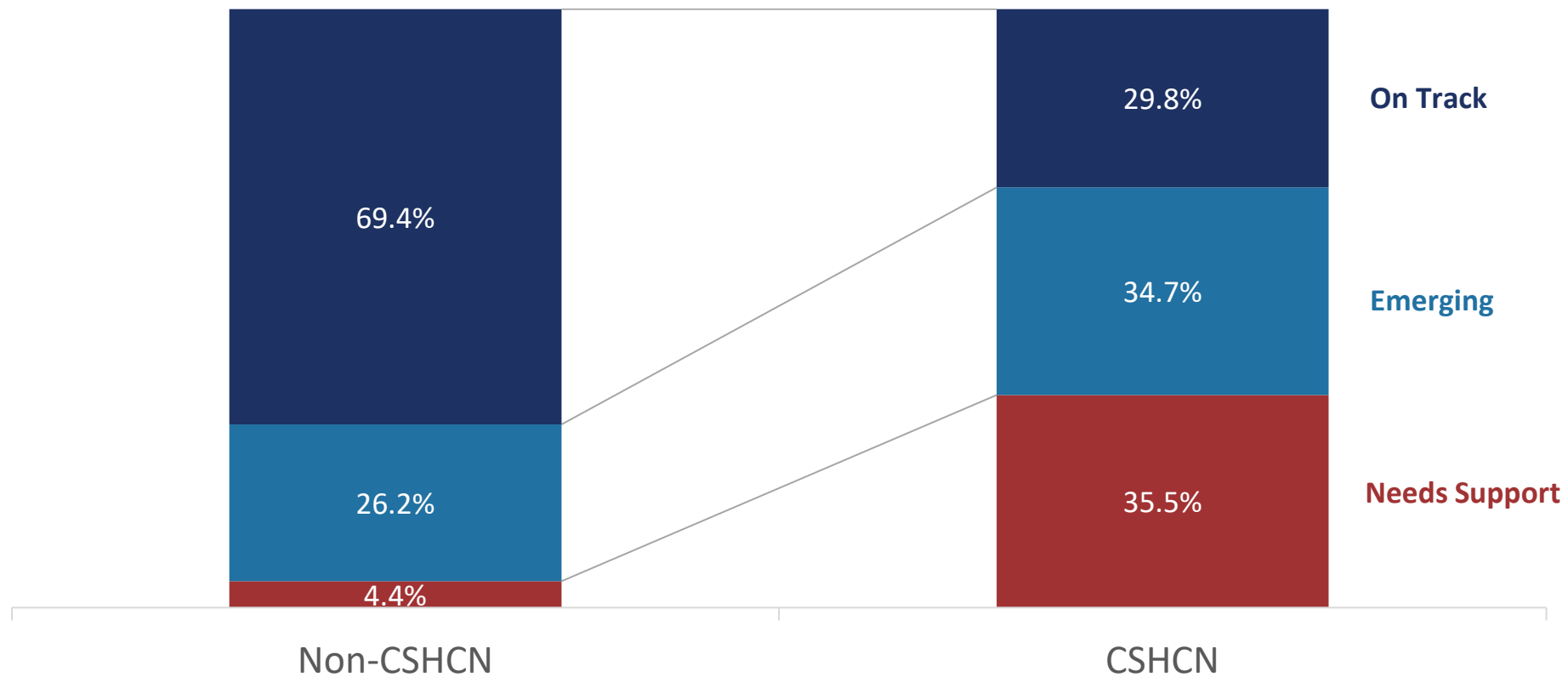
2022 National Survey of Children's Health Estimates

Proportion of 3-5 Year-olds who are On Track, Emerging, or Needs Support by Family Income

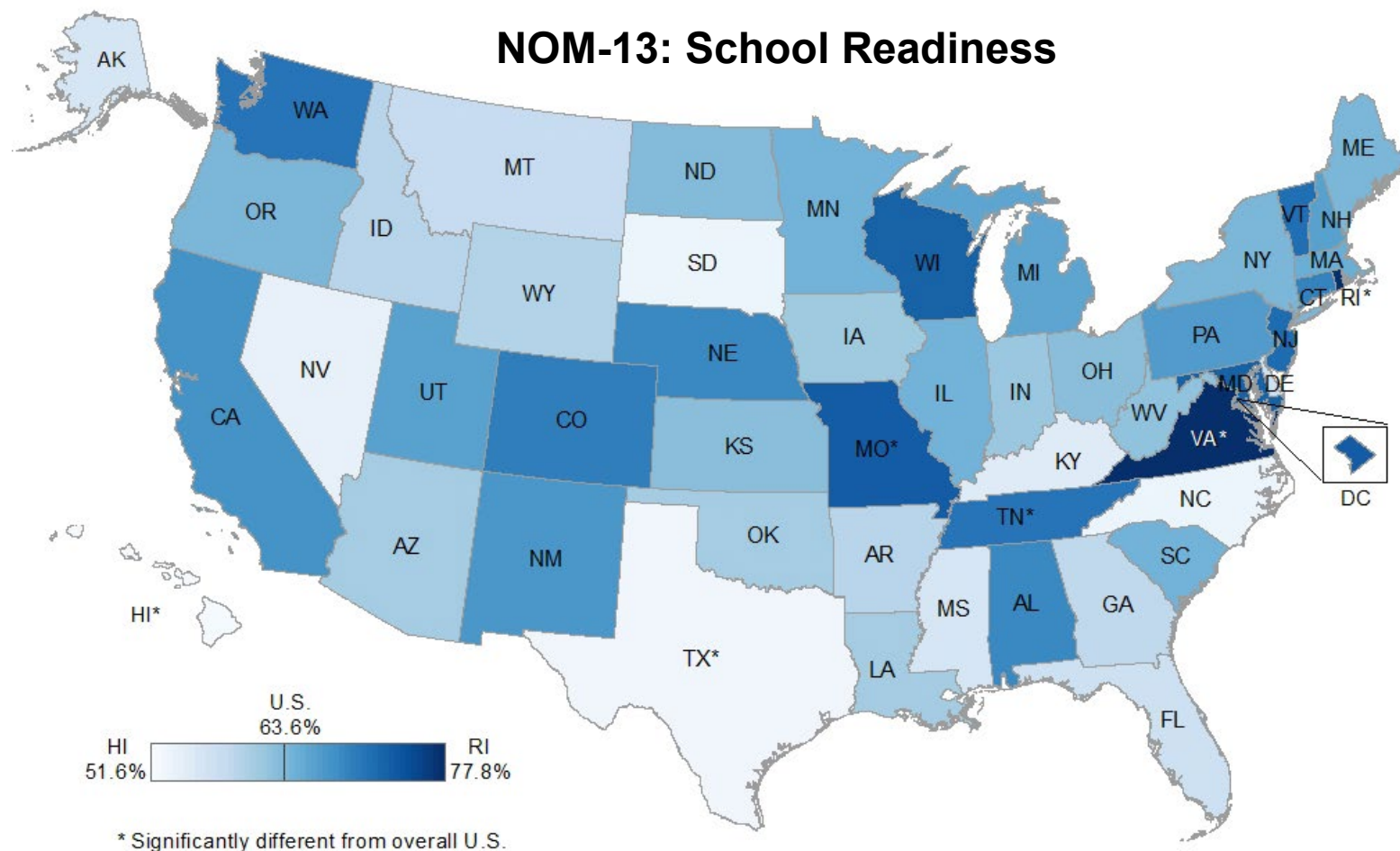


2022 National Survey of Children's Health Estimates

Proportion of 3-5 year olds Healthy and Ready to Learn by CSHCN Status



2022 National Survey of Children's Health Estimates



Compared to Overall U.S.
(63.6%)

- 4 states significantly higher
 - RI (77.8%)
 - VA (77.7%)
 - MO (73.3%)
 - TN (70.7%)
- 2 states significantly lower
 - HI (51.6%)
 - TX (53.0%)

CAUTION: 22 states have reliability flags

2022 National Survey of Children's Health Estimates

Multivariable Analysis Characteristics

Child

- Sex*
- Age
- Race/Ethnicity
- Special Health Care Needs Type*
- In School*

Family/Community

- Household Language*
- Parental Education*
- Family Income
- Food Sufficiency*
- Housing Instability
- Parental Mental Health*
- ACEs*
- Neighborhood Amenities*
- Medical Home*

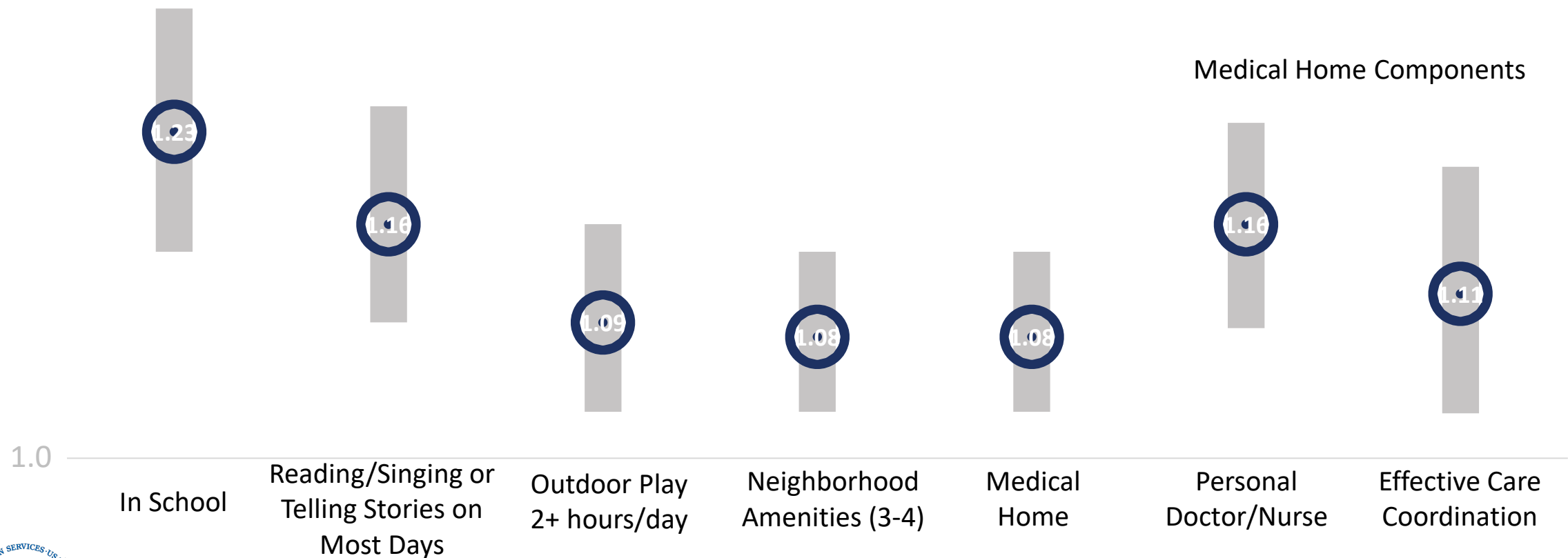
Behavioral

- Screen Time
- Sleep Adequacy
- Reading/Singing or Telling Stories*
- Outdoor Play*

*Statistically significant

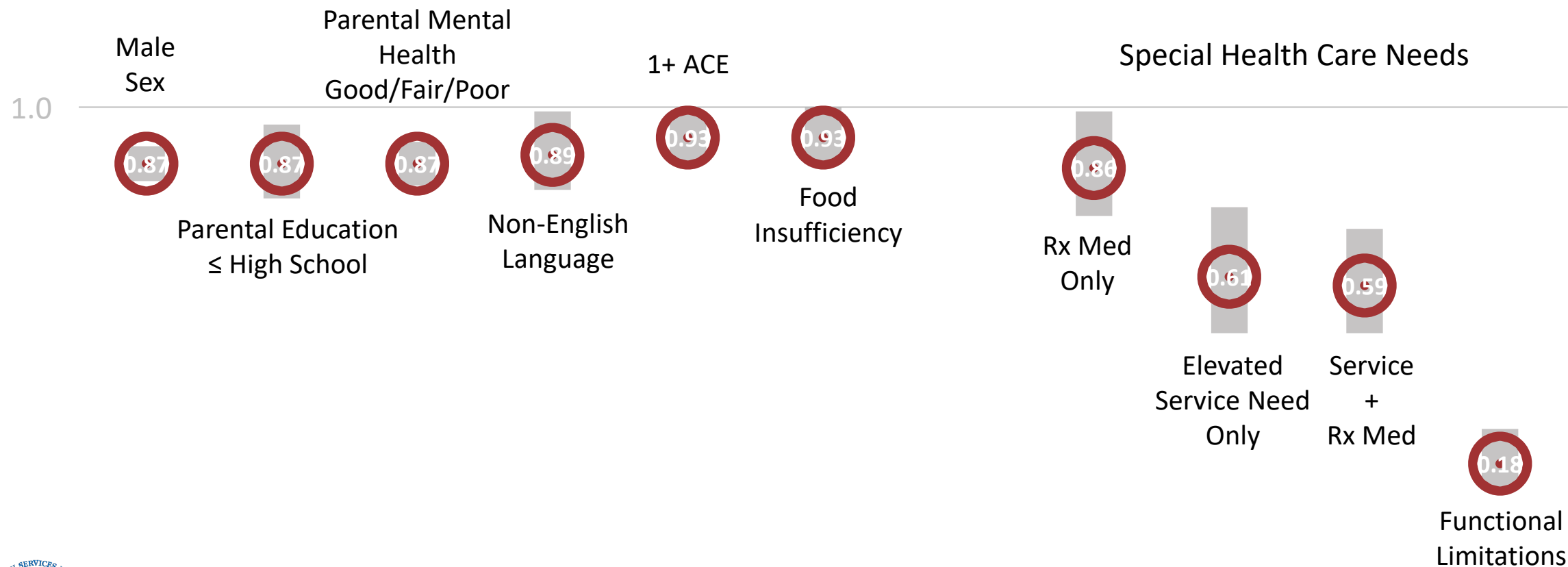
2022 National Survey of Children's Health Estimates

Protective Factors to Promote Adjusted Prevalence Ratios



2022 National Survey of Children's Health Estimates

Risk Factors to Mitigate Adjusted Prevalence Ratios



Healthy and Ready to Learn **Strengths and Limitations**



Learn more at <https://mchb.hrsa.gov>

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National Survey of Children's Health

STRENGTHS & LIMITATIONS

Limitations:

- ✓ Parent/caregiver report
- ✓ Self-administered data collection
- ✓ Limited real estate
- ✓ Cultural, linguistic, and community norms
- ✓ (Relatively) complex measure
- ✓ Need to establish predictive validity

Strengths:

- ✓ Annual
- ✓ Multidimensional
- ✓ Standardized across states and nation
- ✓ Contextualized within larger health, family and community factors



National Survey of Children's Health **ACCESSING THE DATA**

MCHB Website

<https://mchb.hrsa.gov/data/national-surveys>

Census Bureau Website

<https://www.census.gov/programs-surveys/nsch.html>

Data Resource Center

www.childhealthdata.org

(2021 file not yet updated)

Enhanced Historical Files

- Revised Imputation/Weighting for Race/Ethnicity
- Multiple race flags for AIAN, Asian, NHPI
- BMI for 6-9 (previously 10-17)
- Height/Weight 6-17
- Breastfeeding corrections



National Survey of Children's Health Interactive Data Query

Video Tour of the Interactive Data Query

2022

Nationwide

Note: For the most reliable estimates, use the two-year combined data (e.g. 2020-2021).

Continue

Archived Data Query for NSCH and NS-CSHCN (prior to 2016)



How to Use the DRC Website

The DRC advances the use of the National Survey of Children's Health, led by HRSA MCHB. Find more resources here:

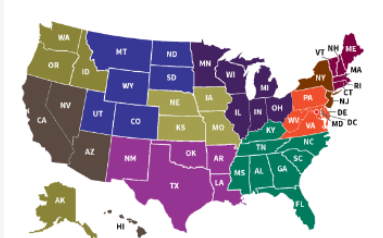
- About the DRC
- DRC Video Overview
- DRC Frequently Asked Questions
- Data available in the online data query
- Request NSCH datasets
- Download NSCH codebooks

For Title V

The DRC focuses on data and resources for Title V programs and partners. For over 75 years, the HRSA Maternal and Child Health Bureau (MCHB) has funded the Title V program to ensure the health of the nation's mothers, women, children and youth.

- Ways to Compare Data Across States on the DRC
- HRSA MCHB Title V Information System
- Issue Brief: Health Disparities and Health Equity
- Tell us what TA would be most useful to you!

Compare Data Across States



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