  
**SCHOOL-BASED HEALTH ALLIANCE**  
The National Voice for School-Based Health Care

## Delaware Interoperability and Sharing Cooperative (DISCO)

**Scaling and sustaining data ecosystems for equity in school-based health care**

**June 27, 2023**

**Session C3**

© School-Based Health Alliance 2022


1

### TODAY'S PRESENTERS



**Jacquelyn Christensen, PhD**  
Vice President of Quality, Research & Evaluation






**Jamie Duvall, MPH**  
Evaluator







**Angela "Angie" Scott, BSN, RN, ACRN**  
Clinical Programs Manager





**Jason Ravitz, PhD**  
President & Founder





**Marihelen ("Midge") Barrett**  
Executive Director



© School-Based Health Alliance 2022

2

### Session Objectives

As a result of this session, participants will be able to:

- Recognize the needs and challenges in implementing SBHC data systems.
- Examine ways to improve data collection and reporting within their organization.
- Develop options for equitable data collection and reporting.

\_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

© School-Based Health Alliance 2022

3

Are SBHCs Effective?

Do Students Actually Use Them?

What's the impact?

© School-Based Health Alliance 2022

4

### Needs: Youth and Health Equity Concerns

- SBHCs can reduce inequity in health care access and quality for children
- Systems must do a better job to support health equity for all youth
  - Cooperation & Collaboration
  - Collecting, sharing, and using data to identify issues of inequity and make informed decisions
- School-wide screening is needed to support ALL students

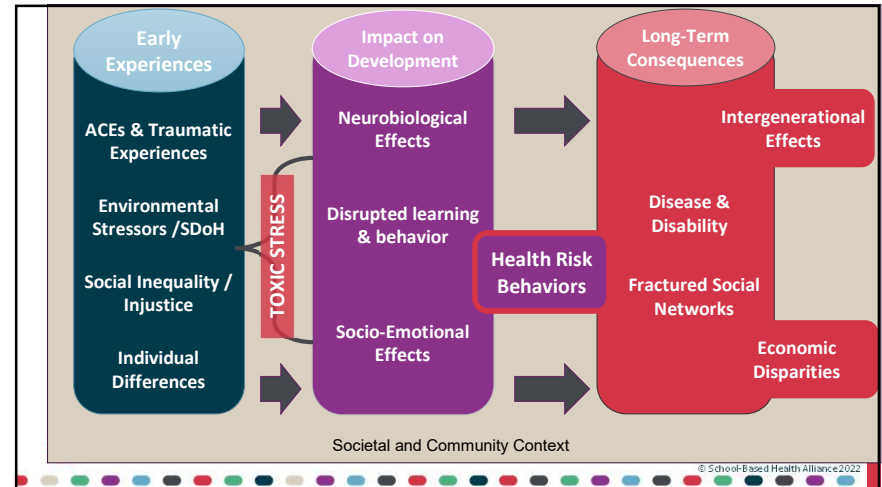
Improving health equity requires a holistic approach. Change is needed everywhere – from the bedside to the board room to how payers pay for care to health policy changes.

– O’Kane, et al., 2021<sup>1</sup>

<sup>1</sup>O’Kane, M., et al. 2021. An Equity Agenda for the Field of Health Care Quality Improvement. *NAM Perspectives*. Discussion Paper, National Academy of Medicine, Washington, DC. <https://doi.org/10.31478/202109b>.

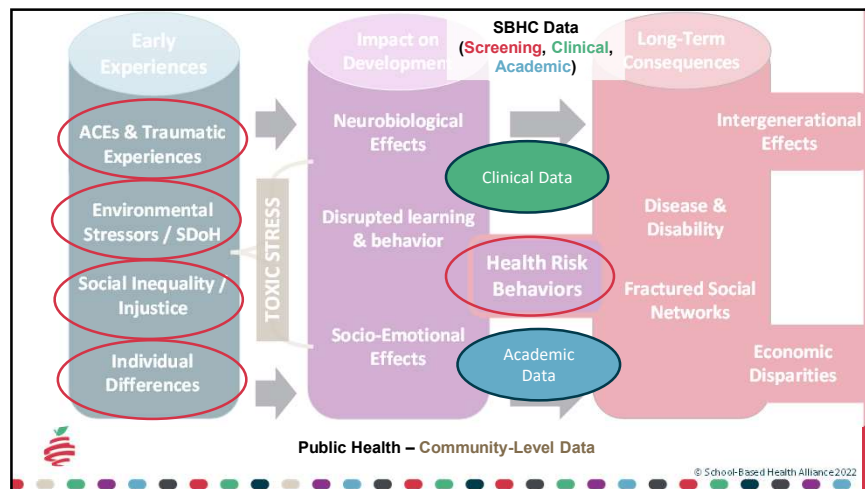
© School-Based Health Alliance 2022

5



© School-Based Health Alliance 2022

6



© School-Based Health Alliance 2022

7

### Challenges and Barriers to Using Data for Health Equity

"Sharing health and educational data across systems and providers is essential to effective planning, monitoring, and care coordination" but there are major "privacy and technical challenges associated with sharing student information... interoperability issues inherent in many health information systems mean providers across systems often cannot easily share information" (Butler & Diaz, 2016).

**INTEROPERABILITY**

Butler, S., & Diaz, C. (2016). Hospitals and schools as hubs for building healthy communities. Washington, DC: Brookings Institution, Economic Studies.

© School-Based Health Alliance 2022

8

## Needs – Why address interoperability?

### National-level

- Need standardization across states and SBHCs
- Need better understanding of impact of SBHCs
- Need to be able to identify gaps in health equity

### State-level

- Collaboration of state agencies to align goals and resources
- Define and calculate performance measures that meet the needs of various agencies
- Comprehensive statewide data set used for advocacy and sustainability

### Site-level

- Better understanding of resource management
- Identification of areas with increased opportunity
- Risk management



© School-Based Health Alliance 2022

9

## Q & A

What questions do you have so far?

What are your interoperability challenges at your organization?



© School-Based Health Alliance 2022

10

## DISCO Project Overview

Goal: Innovate ways to improve data collection and reporting in organizations using **interoperable technologies, processes, and tools** to create more robust data exports for SBHCs

- Human Services Interoperability Innovations grant – one of two grantees
- Pilot technology in up to 5 Delaware SBHCs

### Funding

- Health & Human Services (HHS)
- Administration for Children & Families (ACF)

### Partners

- SBHA
- Apex Evaluation
- Delaware SBHA
- DE Partnership for Healthy Communities
- DE SBHC Network\*
- Evaluation by Design

### Technical Assistance

- Zane Networks
- Goldbelt
- Advocate Consulting
- MDIX
- MaxMD



\*DE Sponsor organizations approached: Beebe Health, Christiana Care, Bay Health, Tidal Health (formerly Nanticoke), Nemours Children's Hospital

© School-Based Health Alliance 2022

11

## Interoperability Challenges



Data Collection



Duplication of Effort



Support Levels Vary



Loss of Data



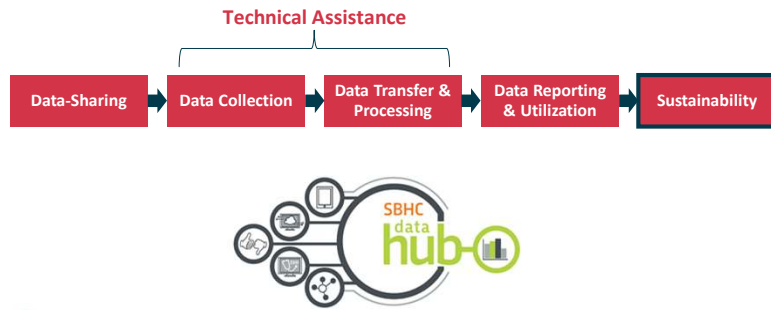
Discrete Fields vs. Codes



© School-Based Health Alliance 2022

12

## DISCO Project Approach to Interoperability



© School-Based Health Alliance 2022

13

## Process Issues to Overcome



### Data-Sharing

- Building trust and relationships takes time
- Security assessments and data-sharing agreements

© School-Based Health Alliance 2022

14

## Process Issues to Overcome

### Data Transfers

- Sponsoring Organizations .csv exports differ
- Technical capability survey - Certified EHRs
  - National experts to help
  - Continuity of care documents – standard format
  - Direct messaging – secure email transfers to Fast Healthcare Interoperability Resources 1 (FHIR) enabled data server



© School-Based Health Alliance 2022

15

## Process Issues to Overcome



### Data Processing

- Manual, tedious process
- 100s of file types
- MDMI mapping tool

© School-Based Health Alliance 2022

16

## Process Issues to Overcome



### Data Reporting and Utilization

- Standard data makes reporting easier
- More accurate data
- Population management, advocacy, and administrative



© School-Based Health Alliance 2022

17



## Beebe Sponsor July 2022 - March 2023

These data snapshots provide insight as to how clinics are coding and do not necessarily reflect the actual work done by clinicians.

### Clinic Utilization

Total Utilization	2022-2023	
	Site #	State #
SBHC Users	1,033	1,035
Visits	3,013	3,013
Average Visits per SBHC User	2.92	2.91

Type of Visit by Primary Diagnosis	2022-2023	
	Site #	State %
Primary Care Visits	1,611	53%
Well-Child Checks (w/o Sports Physicals)	477	30%
Sports Physicals	26	2%
Reproductive Health Visits	381	24%
Other Primary Care Visits	727	45%
Behavioral Health Visits	1,402	47%
Dental Visits	0	0%
Visits Missing a Diagnosis	0	0%

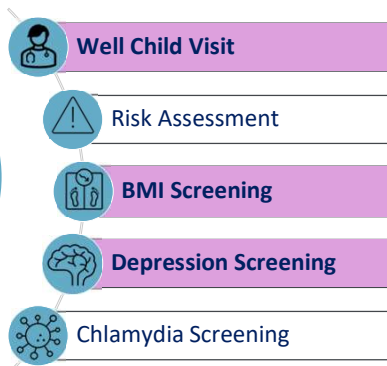
**Primary Care Visits:** Well-Child Checks, Sports Physicals, Reproductive Health Visits, and Acute Care Visits.  
**Well-Child Checks:** Primary diagnostic codes Z00.00, Z00.01, Z00.10, Z00.11, Z00.12, Z00.12S, or Z00.8.  
**Sports Physicals:** Primary diagnostic codes Z02.89 or Z02.5.  
**Reproductive Health Visits:** Primary diagnostic codes beginning in O, A5, N4, N6, Z1, A60-A64, B07, E28-E29, N34, N90-N93, N90-N97, N90-N98, O26-O28, S30-S37, S86-S87, A14B, 201.4, 203.7, 204.4, Z11.3, A743, B20, B37.3, B97.7, or Z20.2.  
**Other Primary Care Visits:** Visits that do not fit into any other category.  
**Behavioral Health Visits:** Primary diagnostic codes that start with F, 645, T74, T76, Z60, Z62-263, R46.2-R46.4, R46.6-R46.8, Z18.4, Z50.0-Z50.5, Z71.1, Z71.4-Z71.9, Z64.6, Z65.4, Z65.5, or Z72.  
**Dental Visits:** Visits with procedure codes beginning in D.  
**Missing:** Visits missing a primary diagnosis.



© School-Based Health Alliance 2022

18

## National Clinical Performance Measures



<https://www.sbh4all.org/wp-content/uploads/2018/06/Quality-Counts-Standardized-Performance-Measure-Definitions-112717.pdf>



© School-Based Health Alliance 2022

19

## Beebe Sponsor

### Performance Measure Data

Well-Child Check	2022-2023	
	Site #	State %
Well-Child Check Quantity (WCC) (age 0 to <21)	513	50%

**Diagnostic OR procedure codes in any position:** Z00.10, Z00.11, Z00.12, Z00.12S, Z00.00, Z00.01, Z01.10, Z01.11, Z00.8, 99381-99385, or 99391-99395. The denominator for this measure is 1,033.

Depression	2022-2023	
	Site #	State %
Depression Screening (age 11 to <21)	467	45%

**Depression Screening:** Calculated using visit data. Procedure codes 96160, 96127, 60444, 68431, 3725F, 1220F, 3351F, 3352F, 3353F, 3354F, 68510 or diagnostic code Z13.31 in any position. The denominator for this measure is 1,033.

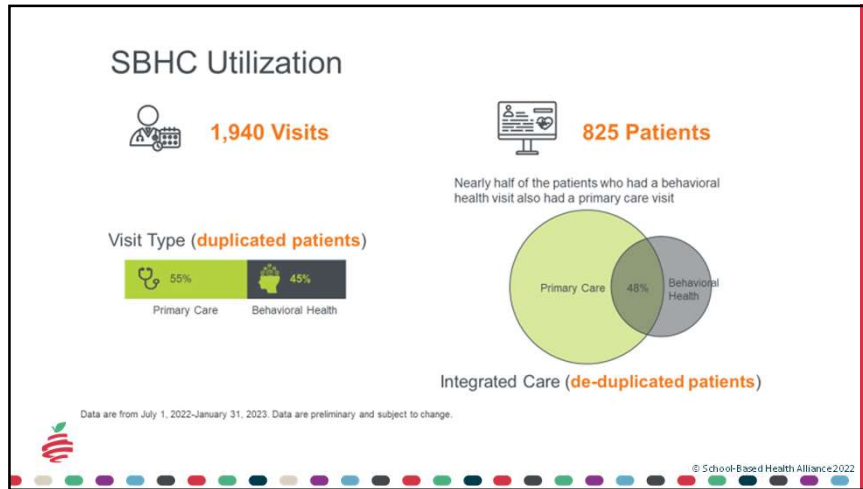
Weight Assessment & Counseling	2022-2023	
	Site #	State %
BMI Assessment (age 3 to 17)	573	64%
Nutritional Counseling (age 3 to 17)	92	10%
Physical Activity Counseling (age 3 to 17)	0	0%
<b>BMI &amp; Counseling (age 3 to 17)</b>	0	0%
BMI ≥85 Assessment (age 3 to 17)	157	17%
<b>BMI ≥85 &amp; Counseling (age 3 to 17)</b>	0	0%

**Diagnostic OR procedure codes in any position:**  
**BMI Assessment:** Any diagnostic code beginning in Z68, E66, or R63.6.  
**Nutritional counseling:** Z71.3, 97802, 97803, or 98780.  
**Physical activity counseling:** Z71.82 or 98780.  
**BMI & Counseling:** This includes those who receive a BMI Assessment, Nutritional Counseling, AND Physical Activity Counseling. The denominator for this measure is 902.  
**BMI ≥85 Assessment:** Any diagnostic code beginning in E66, Z68.53, or Z68.54.  
**BMI (E66) & Counseling:** This includes those who receive a BMI (≥85) Assessment, Nutritional Counseling, AND Physical Activity Counseling.

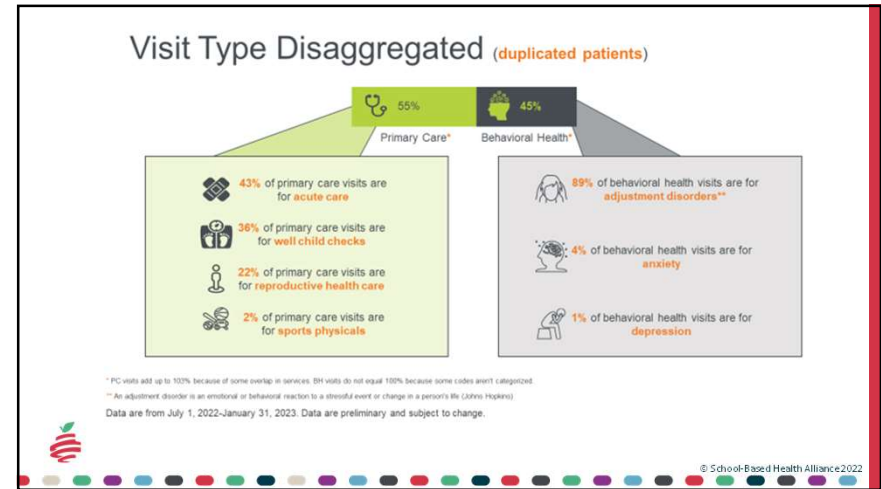


© School-Based Health Alliance 2022

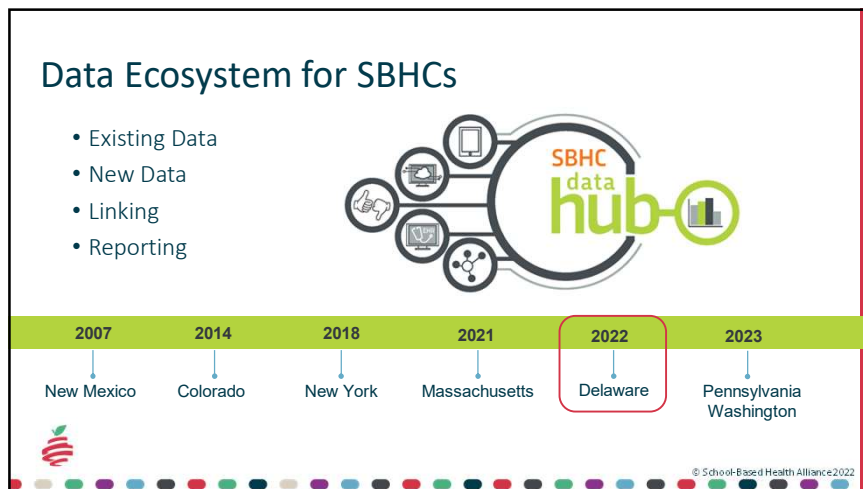
20



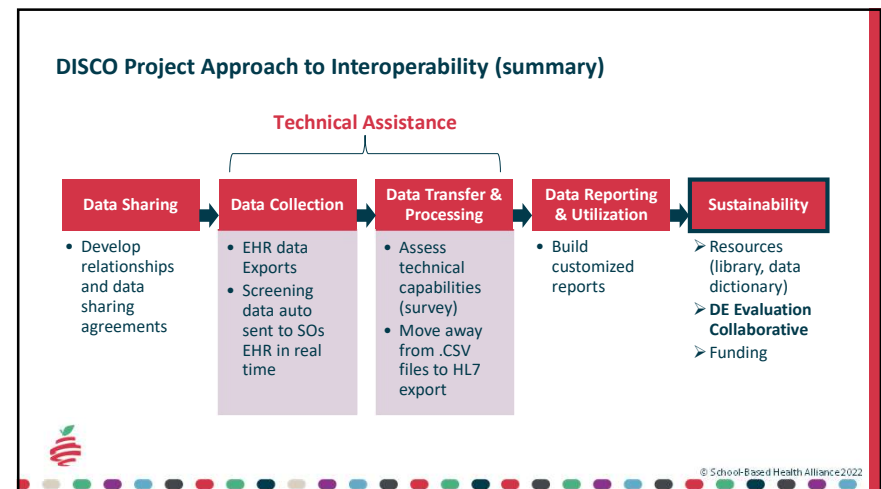
21



22



23



24

**Q & A**

What questions do you have so far?

How are you using data in your clinical operations?

What kind of reporting are you doing?

How do you communicate with partners?




© School-Based Health Alliance 2022

25

**Making it Make Sense**

**Why this worked for us:**

- Transitioning from paper to E.H.R.
- Change in Organizational Target
- Post-COVID Healthcare transformation
- Starting from Quality 101
- Evaluation Collaborative



**Tips:**

- Buy in from Clinical Team (involve everyone)
- Involve E.H.R. Team early
- Connect the heart-warming stories to the data
- Use what you already have in place, then build

© School-Based Health Alliance 2022


26

**Value added through process**

Making sense of data – see patterns, see the bigger picture	More complete clinical record
Visibility and ability to share – others can understand and use data	Use data for clinical decisions
	Address broader concerns and social determinants of health

*"I knew what I was seeing with my eyes but couldn't really put that into numbers to explain to executive leadership so that they could understand where their money was going."*

*"They are all completely 100% documenting in the record. They all understand the value in doing it that way and how much it actually speeds up their time so that they can actually spend more time with the student."*



© School-Based Health Alliance 2022

27

**Q & A**

What questions do you have so far?

What is holding your organization back from making a commitment to better data collection?

How could improved data reporting increase your impact if it was tangible for providers?



© School-Based Health Alliance 2022

28

## Evaluation: Questions with Indicators & Process

### Driving Questions & indicators -

To what extent has the project...

- 1) Responded to the needs of participants and partners? → Inclusive, helpful
- 2) Addressed technical challenges? → Help with connecting, streamlining
- 3) Demonstrated outcomes? → Informed decisions, comparison to alternatives
- 4) Developed a scalable model? → Efficient, accurate, equity-focused, impactful
- 5) Disseminated models, tools, and findings? → Meetings, conferences, publications



© School-Based Health Alliance 2022

29

## Evaluation: Questions with Indicators & Process

### Process Evaluation

#### Tracking onboarding & implementation milestones

- Extensive work needed to get buy-in and approval
- Creation of model and tools for dissemination

#### Participating in team meetings

- Maintain focus on milestones and deliverables

#### Observing Technical Assistance and Trainings

- Tended to end early with all questions answered and clear next steps, strong interest

#### Getting Feedback from Evaluation Collaborative

- Reasons for attending, needs defined

#### Interviewing Users

- Benefits, needs met



© School-Based Health Alliance 2022

30

## Evaluation: Lessons Learned

### Reasons for participating

- Better information for patient and population care
- Observing patterns and needs to guide internal decisions
- Showing impact with measures and reporting over time
- Sharing aggregated reports to inform policies

### Reported Benefits

- Visibility for executive leaders and funders
- More compelling stories and anecdotes with data
- Shifting towards bigger picture & systems change
- Directing resources to needs and opportunities
- Eliminating silos of concerns and interests
- Opening lines of communication and connecting



© School-Based Health Alliance 2022

31

## Evaluation: Lesson Learned & Capacity Building

### What contributes to success?

#### Leadership buy-in / prioritizing

- Champions
- Increased visibility
- Focus on systems change
- Relationship building

#### \*Evaluation Collaborative\*

#### Include diverse stakeholders

- Directors
- Data Leads
- District Leads
- Student Services
- Clinical programs
- Dental Health
- Mental Health
- Nurse Practitioners
- Public Health

#### Funding strategies

- Cost savings
- Grants & Policy Initiatives

#### Meeting people where they are

- Existing systems
- Technical Assistance
- Data and evaluative thinking

#### Create user-friendly summaries

- For meeting standards
- FAQs & Documentation
- Inbound and outbound data templates

#### Avoid duplicate efforts by coordinating

- SBHCs & Sponsoring Orgs
- Schools & Districts
- Government & Universities



© School-Based Health Alliance 2022

32



## Evaluation: Recommendations

### Next Steps

- Pursuing screening and educational data
- Show the importance of screening data
- Document student benefits in school next year
- Get feedback from students and clinicians
- Assess process improvements
- Disseminate generic versions of tools and processes
- Convene future Evaluation Collaboratives

### Additional Recommendations

- Collect more retrospective/summative feedback
- Focus on scaling and sustainability
- Explore systemic issues and a wider range of needs
- Continue coordination work with partners to avoid duplication of effort




© School-Based Health Alliance 2022


33

## Discussion and Q & A

What questions do you have for us?

What are 1-2 tangible ways you can use information from today to better interact with data from your organization?





© School-Based Health Alliance 2022

34

# SAVE THE DATE



2024 National School-Based Health Care Conference

## JULY 1-3 2024

Renaissance Downtown Hotel, 999 Ninth Street, NW, Washington DC



35