

Impact and cost-effectiveness of a Network Specialist on school health, wellness, and WSCC-related policy implementation during the COVID-19 pandemic in Chicago Public Schools

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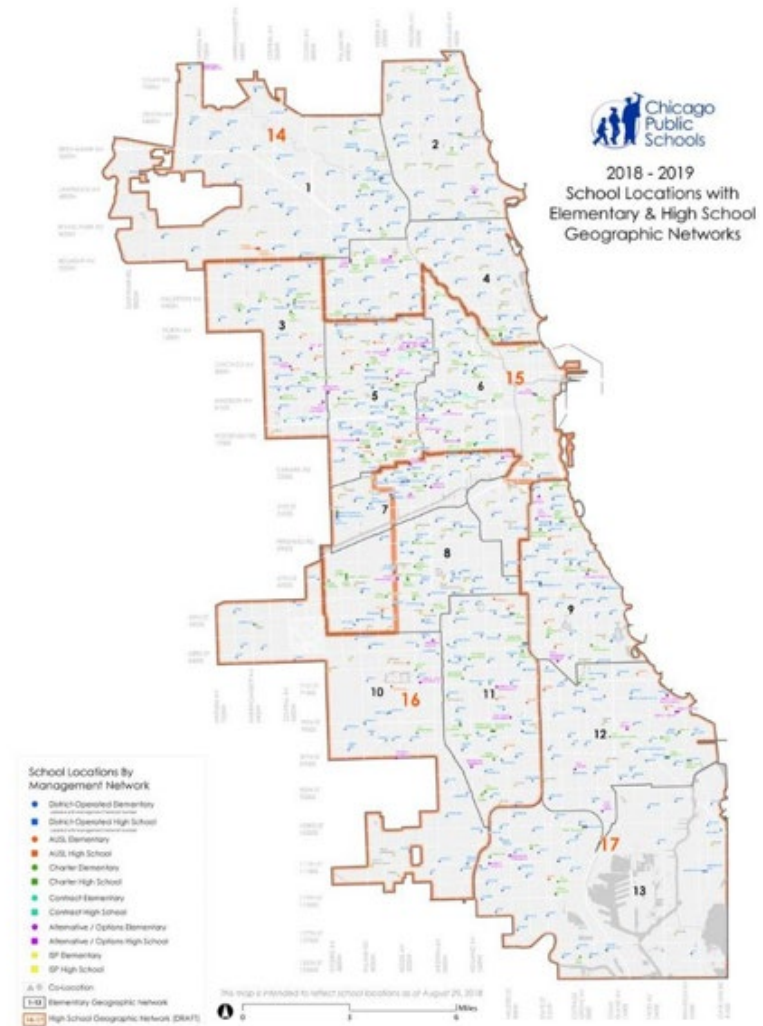
Presentation Overview

- Brief overview of Chicago Public Schools, Healthy CPS, and the Network Specialist Initiative
- Study Questions and Methods
- Key Findings
- Implications for school health practice in CPS and beyond

BACKGROUND

Chicago Public Schools (CPS)

- CPS is the 4th largest public-school district in the Nation with nearly 330,000 students enrolled.
- Elementary students are divided into 13 geographic networks.



What is Healthy CPS?

- An initiative of the CPS Office of Student Health and Wellness
 - Improve compliance with >50 federal, state, and district level health and wellness related policies
 - Enhance the overall culture of health in CPS
- 4 Badge Areas (37 criterion)
 - Health Leadership (10 criterion)
 - Health Instruction (8 criterion)
 - Healthy Environments (11 criterion)
 - Health Services (8 criterion)
- To achieve Healthy CPS must achieve 90% within each badge area



What is the Healthy CPS Network Specialist Initiative?

The Healthy CPS Network Specialist Initiative was developed to:

- Guide schools in **1 geographic network** with tiered levels of TA to support Healthy CPS implementation using an MTSS Framework
- Explore how they can embrace whole child thinking aligned with WSCC

MTSS Framework

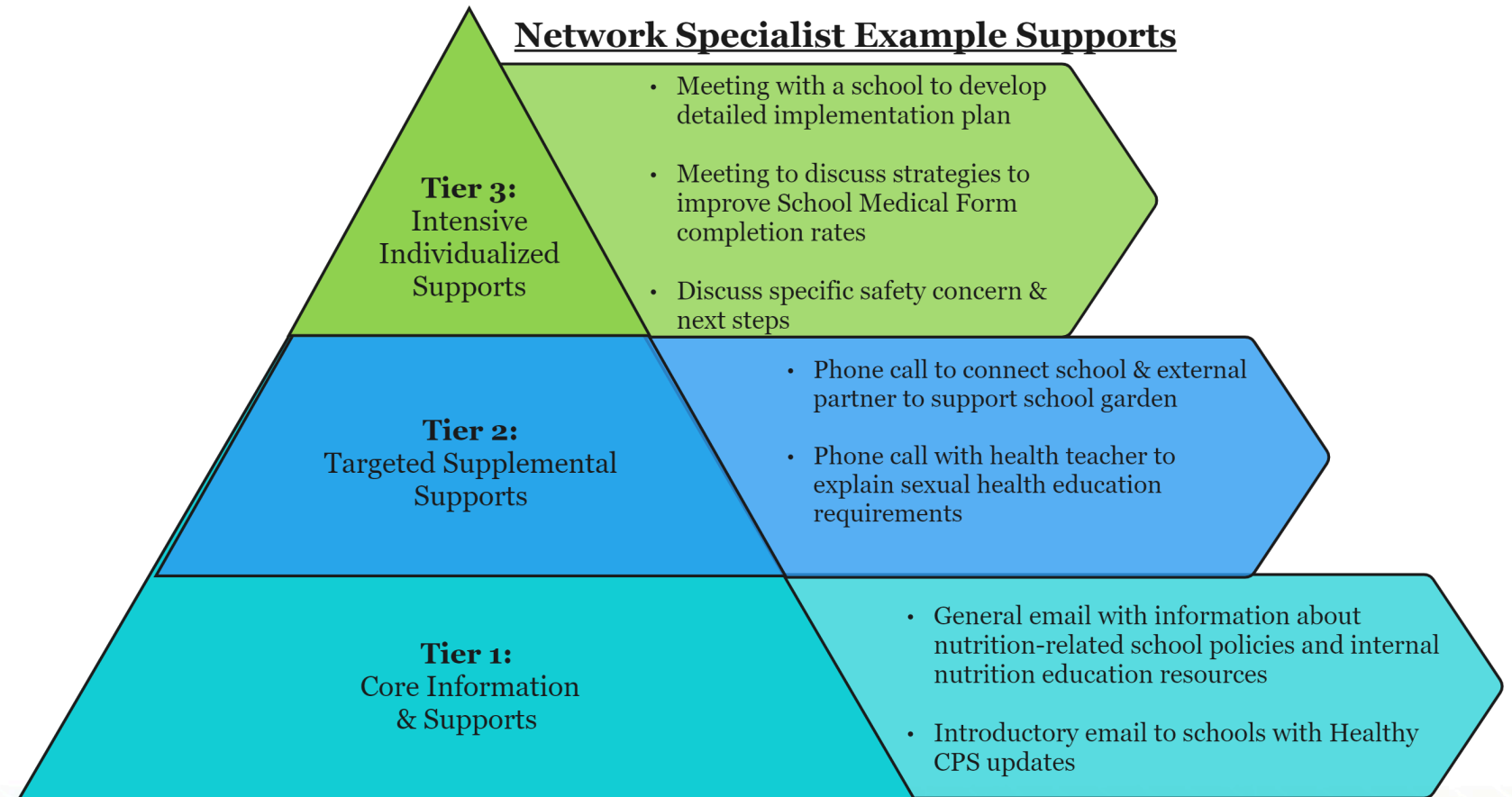
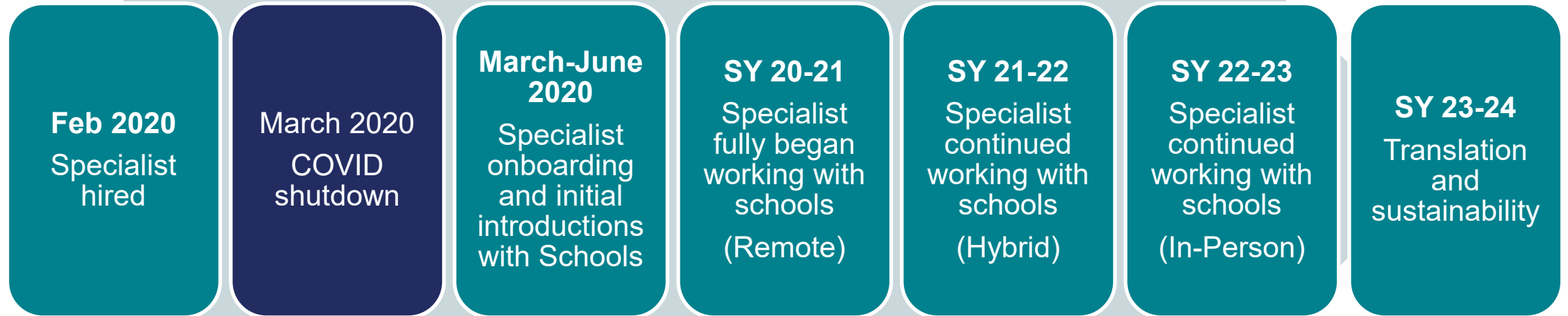


Figure 1: Multi-Tiered System of TA Supports Framework

Healthy CPS Network Specialist Initiative: Timeline



STUDY QUESTIONS AND METHODS

Study Questions

- What was the impact of the Healthy CPS Network Specialist on Network-level Healthy CPS outcomes during the COVID-19 pandemic?
 - Including some qualitative insights
- What was the cost-effectiveness of the Network Specialist Initiative?

Study Design

- Pre-post with comparison group study design
 - Intervention Network: 1 Elementary Network on the Westside of the district
 - Comparison Networks: 8 sociodemographically comparable networks

Data Sources

- Healthy CPS Survey
 - Baseline: 2018-19, Follow-up: 2021-2022
 - Together with administrative data, yields an overall Healthy CPS achievement score (0-100) based on the percentage of criteria met across badges
- TA Tracking Log
 - Activity-based time tracking for use in cost-effectiveness analysis
- Qualitative Interviews and Discussion Groups
 - Conducted throughout the study with key stakeholders (Network Chief, CPS OSHW Staff, Principals/ Assistant Principals, Wellness Champions) to provide useful context for interpreting the quantitative results

Analysis Methods

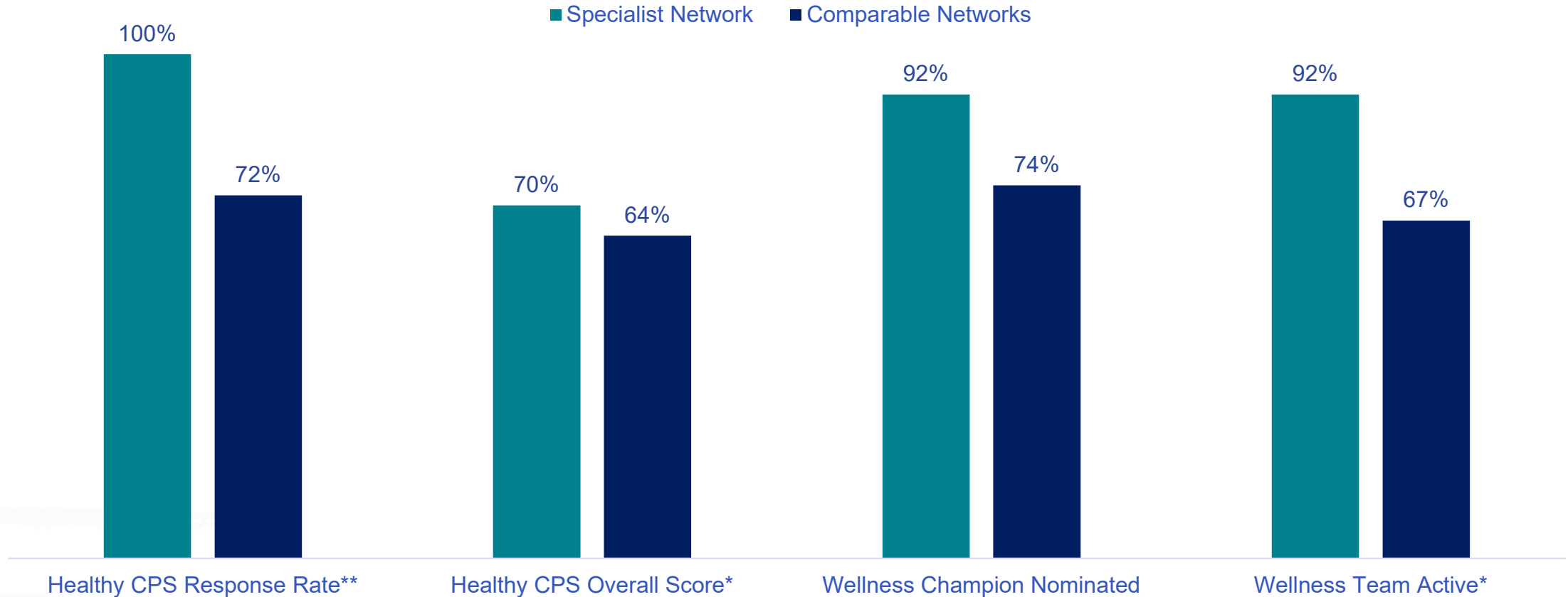
- **Difference-in-differences analysis** using Healthy CPS overall scores as the outcome
 - Examined the relative change in scores for the intervention and comparison Networks for 2018-19 vs. 2021-22
 - Additional analyses within 2021-22 only examined differences in other key outcomes between the intervention and comparison Networks
 - Conducted using Stata
- **Cost-effectiveness analysis**
 - Divided the Specialist's school-specific costs (obtained from the TA log) by the DID estimated impact
- **Qualitative Analysis**
 - Thematic analysis using MaxQDA to identify relevant themes focused on the Specialist's "added value"

Characteristics of the Intervention (N5) vs. Comparison Networks (AY 21-22)

CHARACTERISTIC	Specialist Network	Comparable Networks (8 Networks incl N3)
Network		
Total number of schools	24	213
Number of schools served by Specialist	24	NA
Number of students (PE, PK, K, and grades 1-8) served	7,668	86,895
Average number of students/school served	320	408
Student Race/Ethnicity (%)		
American Indian/Alaska Native	0.1	0.2
Asian	0.2	0.4
Black, Non-Hispanic	60.1	50.8
Hispanic	37.3	45.2
Native Hawaiian/Pacific Islander	0.0	0.1
White, Non-Hispanic	1.7	2.5
Multiple race	0.6	0.5
No race/ethnicity available	0.0	0.3
Other Student Characteristics (%)		
Limited English proficiency	17.6	22.3
Special Education	15.8	14.8
Free/Reduced Price Lunch Eligible Students	81.6	75.5

Impact of the Specialist on Healthy CPS Outcomes and Cost-Effectiveness

The Specialist Effect: Specialist Network was *more compliant* than comparable networks on Healthy CPS reporting and measures over the course of the COVID-19 pandemic



Specialist Network scored significantly **higher** than comparable networks at the: * $p < .05$ or ** $p < .01$ levels for the 2021-22 Healthy CPS Survey. Specialist Network was also in the **TOP QUARTILE of all ES Networks** for all of these items.

The Specialist Effect: Specialist Network saw the LEAST regression on Healthy CPS during the course of the COVID-19 pandemic

■ 2018-2019 ■ 2021-2022



Specialist Network's Healthy CPS score essentially was stable over the course of the pandemic; whereas, comparable networks saw an 11-percentage point decline over time with no supports. Specialist Network's change over time was NOT significant while the comparable Network change was at the $p < .001$ level. Specialist Network is significantly different than comparable networks $**p < .01$.

What does this really mean?



**Non-school time would be dedicated to the Network, district, and the research project.*

When considering only the time that the Specialist dedicated to schools* during SY20-21 and SY21-22:

- **Non-COVID-related Issues**
 - **\$168/school** to increase their Healthy CPS score by 1-percentage point
- **All issues (including COVID-related)**
 - **\$194/school** to increase their Healthy CPS score by 1-percentage point

QUALITATIVE PERSPECTIVES ON THE “ADDED VALUE” OF THE SPECIALIST

Stakeholder Perspectives on the “Added Value” of the Specialist in Supporting Schools

- Specialist as communicator and providing answers
 - “[The Specialist] communicates in a timely manner and she gives us enough time to complete the items that we need in order to be compliant. So I appreciate that because we wanna be a healthy school.” – Principal
 - “This whole thing with COVID and her being right there to provide answers, to make that kind of unknown a little more bearable...that was helpful....her being there to answer any questions and be of support...Being so accessible, to our schools...that was very helpful, a great support on CPS's part” – School Lead

Stakeholder Perspectives on the “Added Value” of the Specialist in Supporting Schools

- Specialist as a resource
 - “I think it became larger than Healthy CPS though, given the COVID circumstance, in that like the Specialist got all health questions, which is good...principals felt like she was a resource to be able to connect them to different answers they needed related to health.” – Healthy CPS Lead (OSHW)
 - “Because the Specialist constantly meets with my team, it reminded me... ‘Hey, we need a school garden.’ So the Specialist was able to say... ‘Let's make that happen... I have X partner’.” -Principal

Stakeholder Perspectives on the “Added Value” of the Specialist in Supporting Schools

- Implementation Support

- “So the role was useful just like you were saying, she clarified everything for me. I did have some questions last year we met. We did a school walk through, which is very helpful. We went through each classroom. She told me pretty much during that walk through, what I needed to fix and what was already good. And just after that meeting, I was able to take her feedback and apply it to our school.” – School Lead

IMPLICATIONS FOR SCHOOL HEALTH AND NEXT STEPS

Key Implications for School Health

- Overall
 - Providing direct support to schools using an MTSS approach is a cost-effective strategy for supporting school health, wellness, and WSCC-related policy implementation, even during a pandemic.
- In CPS
 - Transferrable knowledge – tools, resources
 - Infrastructure to support future Specialists
- For Other Districts
 - Could be replicated in small-medium districts or in other large districts with geographic networks

Next Steps

- Establishing and testing the addition of a professional learning community (PLC) with Wellness Champions within the Specialist's Network to assess whether it helps to reinforce or complement having a Specialist alone
- Examining short-term impacts of having a Specialist on youth attitudes and behaviors
- Examining 3- and 4-year impacts of the Specialist on Healthy CPS and academic-related outcomes

Thank you!

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