

# Partnering with School Nurses to Manage Chronic Conditions: An Ongoing Evaluation of the San Jose Unified School District Nurse Demonstration Project in underserved schools

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## Background

Research has continued to document the important role of school nurses in facilitating positive health outcomes among students, and in turn impact academic performance. Poorly managed care can affect student absenteeism rates, which are associated with academic performance and school funding. Students in under-resourced schools are at particularly higher risk of suffering adverse health effects, given their greater likelihood to suffer chronic conditions (e.g. asthma, diabetes) that necessitate proper care and management.

Increasing budget cuts to public schools and lack of assessment and rigorous evaluations raise significant concern about the decreasing nursing time and nurse-to-student ratios in public schools. We present a model of assessing the impact of school nurses and nurse-to-student ratios in the context of high-need schools with a diverse student body with complex health needs.

## Community Partner

San Jose Unified School District (SJUSD) is a large and diverse district in Santa Clara County, serving 30,314 students across 40 schools during the 2007-2008 academic year. In 2007, 51.3% of SJUSD students were identified as Hispanic/Latino and 42.6% of students were enrolled in the free or reduced price lunch program.



## Project Description

- The “Putting Health Care Back Into Schools” project is a five-year demonstration program to expand school nursing and formally link school nurses to a school health clinic in San Jose Unified School District (2007-12).
- Grant that provides for:
  - Four full-time, credentialed school nurses at two elementary and two middle schools
  - Increase in overall school nursing time throughout all SJUSD schools
  - Nurse Practitioner based at School Health Clinics of Santa Clara County

### Sponsors

- Lucile Packard Children’s Hospital
- Lucile Packard Foundation for Children’s Health

### Partners

- San Jose Unified School District (SJUSD)
- School Health Clinics of Santa Clara County (SHCSCC)
- Stanford University Department of Pediatrics, and Center for Family and Community Medicine

## Evaluation & Methodology

### Project Evaluation Focus Areas

- 1) Better medical management of students with **chronic conditions** (with a particular focus on asthma management)
- 2) Establishment of a **medical home** for students as defined by the American Academy of Pediatrics (AAP)

### Evaluation Components

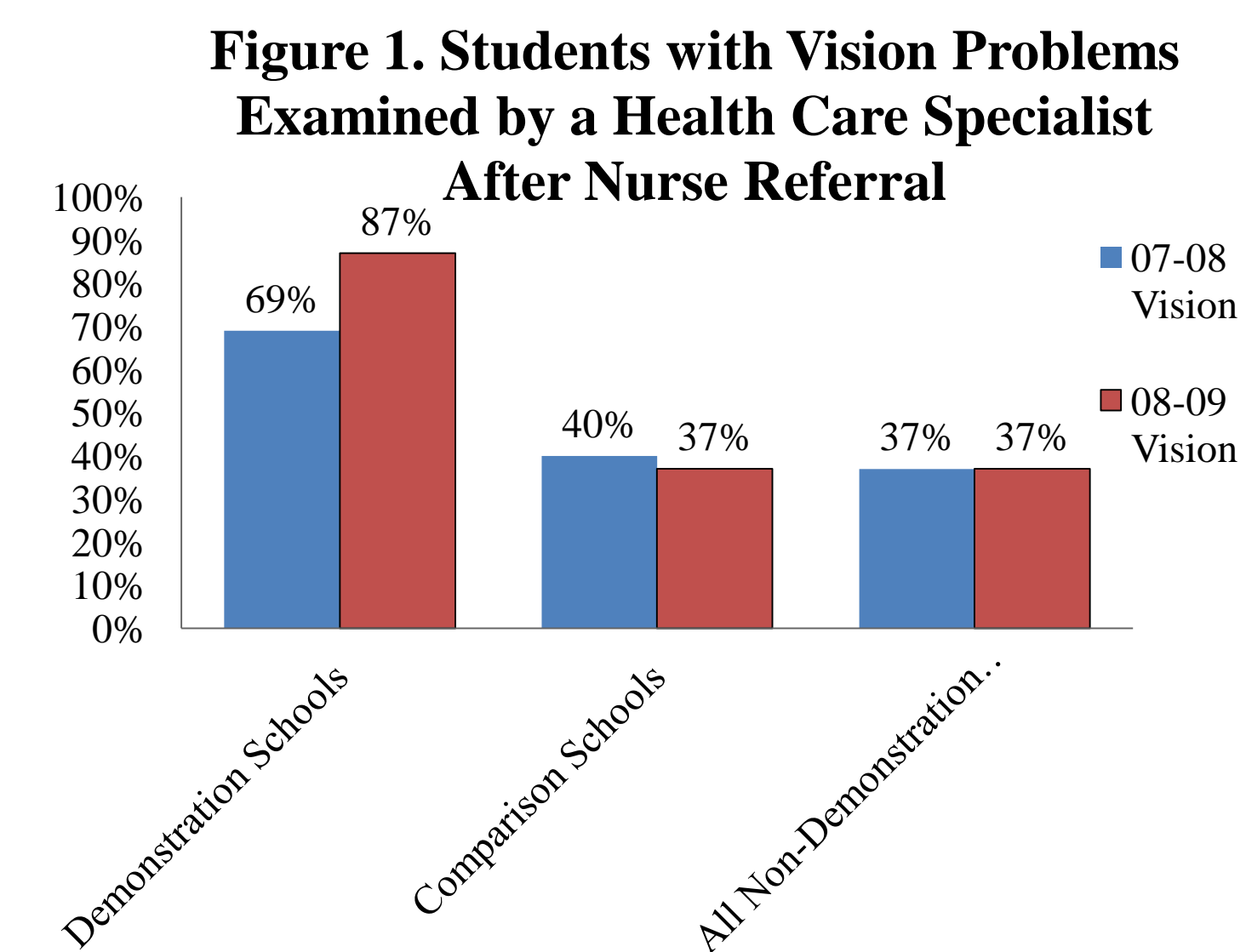
- Case-Control, Mixed Methods Study Design
- Logic Model Development
- SJUSD School Nurse Monitoring Tools
- School Health Clinic Monitoring Tools
- Parent Survey Instruments
- Teacher and Administrator Survey Instruments
- Analysis of Student Data, including sociodemographic, health, absenteeism, and educational data

	Demonstration Schools	Comparison Schools
Enrollment	2,877	3,204
Students Enrolled in Free & Reduced Lunch	81.9%	71.9%
Hispanic/Latino Students	82%	73.2%
Students with Chronic Conditions	438 (15.2%)	504 (15.7%)
Students with Asthma (% Among Students with Chronic Conditions)	195 (44.52%)	213 (42.26%)

## Results

### Key Findings

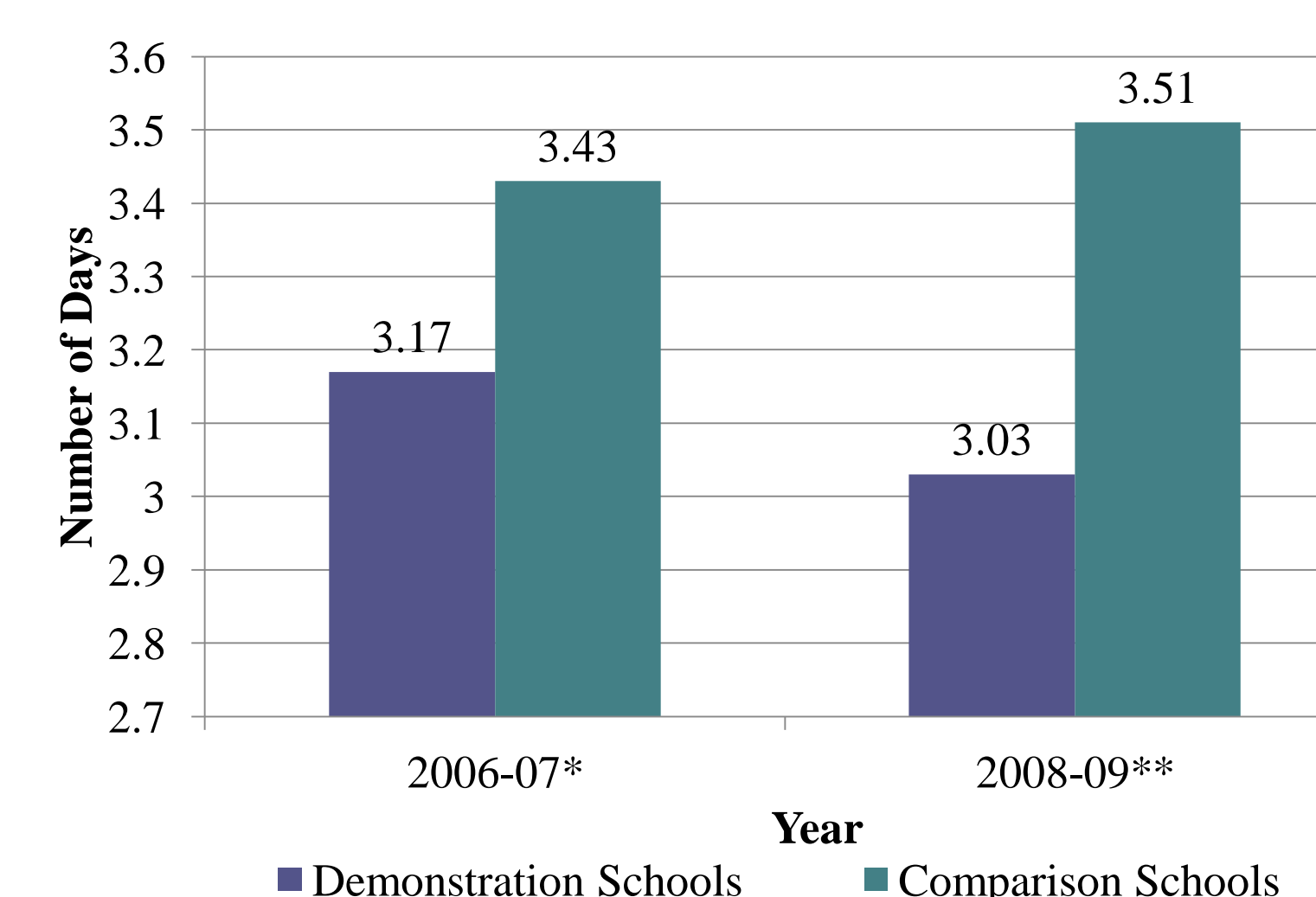
- In demonstration schools, students referred for medical exams by the School Nurse are more likely to be seen by HCP (Figure 1)
- Development of improved health care tracking systems available to all district schools
- Increased collaboration with community health resources
- Increased awareness of and support from school nurse among school staff and parents



### Analysis of Student Absenteeism

- Students in demonstration schools experienced a **reduction** in the mean number of absences due to illness in 2008-09 when compared to 2006-07
- Students in comparison schools experienced an **increase** in the mean number of absences due to illness in 2008-09 when compared to 2006-07
- Larger impact was observed at the elementary school level

**Figure 2. Change in Mean Number of Days Absent Due to Illness among all students**



## Results (cont)

### Logistic Regression Analysis

- Difference in rates of absenteeism due to illness by school type remained statistically significant when controlled for: school type, socioeconomic status (free/reduced lunch program), ethnicity, chronic condition, grade, and 06-07 absenteeism rates due to illness
- Students in comparison schools remained more likely than students in demonstration schools to miss more days of school due to illness



## Conclusion

### Ongoing Project Developments

- Cost Benefit Analysis of Increased Nurse Time
- Qualitative Data (e.g parent focus groups, narratives)
- Sustainability and Advocacy Plan

### The Bottom Line:

“In order to sustain public support for increased spending, it will be critically important to give examples of cost savings from public health programs”

*Health Affairs*, 29, no. 11 (2010): 2033-2040 . Americans' Conflicting Views About The Public Health System, And How To Shore Up Support. Blendon<sup>1</sup>, Benson<sup>2</sup>, SteelFisher<sup>3</sup> and Connolly<sup>4</sup>

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