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## Health-e-Schools of Western North Carolina: Reaching Students Where They Are with Telehealth



### North Carolina





## Mitchell County, NC





## Questions?



Why tSBHC??



= 130 days

(Almost a school year)

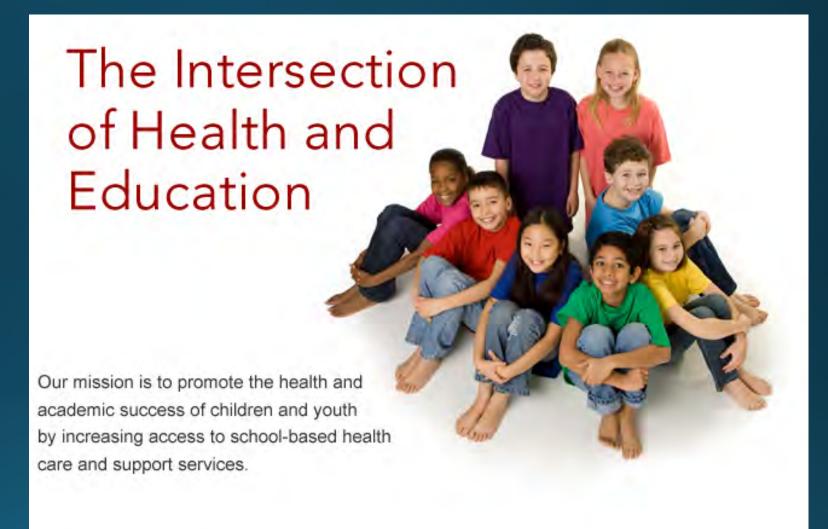


## 7 years

Increase in average life expectancy for high school graduates compared to non-graduates



What is a School-based Health Center?





SBHCs
Improve
Health
Outcomes



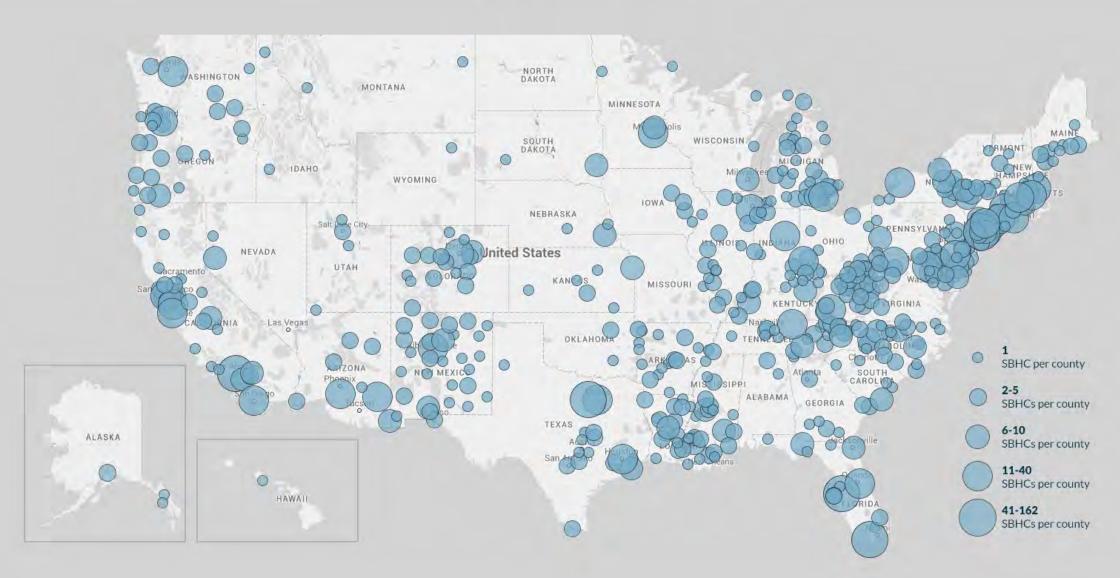


### SBHCs Improve Academic Outcomes





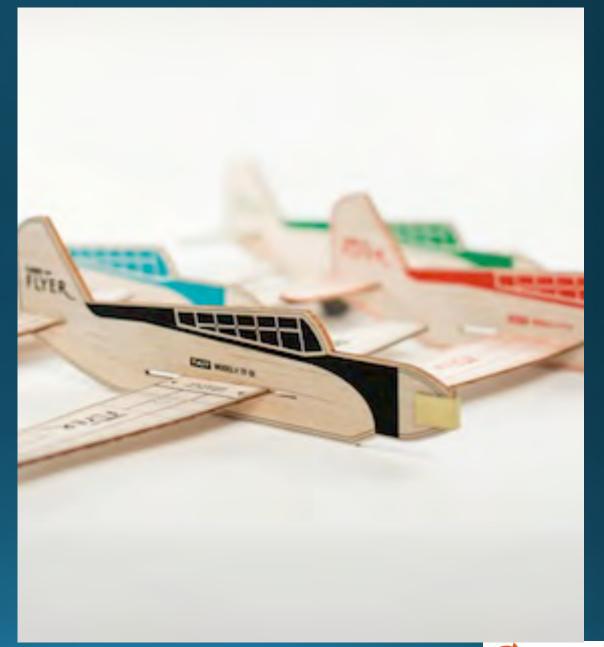
#### **SBHC Locations by County**





# Multiple Models of telehealth in school-based health centers

- 1) Add Services
- 2) Expand Reach
- 3) All Virtual





Telehealth in School-Based Health Centers

# Adding Services



## Lost to Follow Up

- Hospitalized 2013 at age 11
- BMI >99<sup>th</sup> %ile
- One follow-up visit
- Reconnected at school in
   2014



Telehealth in School-Based Health Centers

# Expanding Reach



## Expanding Reach

One provider rotates between sites

 Nurses or telehealth coordinators at other sites present the students

 Allows for comprehensive physicals









Telehealth in School-Based Health Centers

# Entirely Virtual



### Entirely Virtual





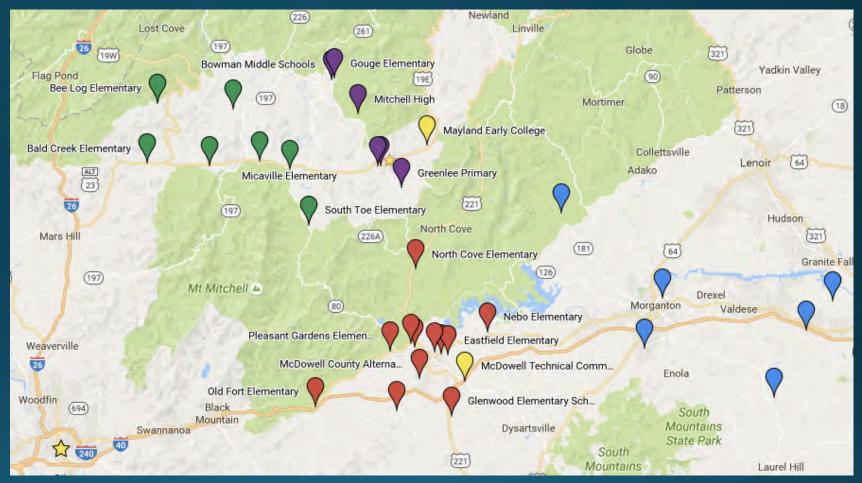








6 years
4 counties
33 schools
1500 sq. miles
4.5 FTE admin
1.0 FTE FNP





### Needs Assessment

### Family Survey

- Sent home with students
- > 30% response rate
- Complemented with a teacher survey





### Funding for Health-e-Schools

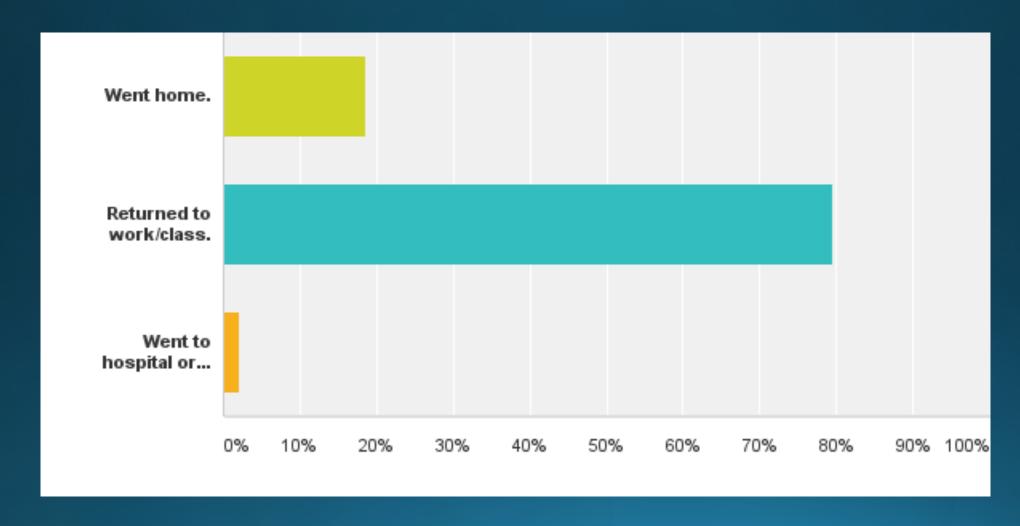
ARC, RUS/USDA, HRSA

Local and State Foundations/Trusts

State agencies: ORH & DHHS

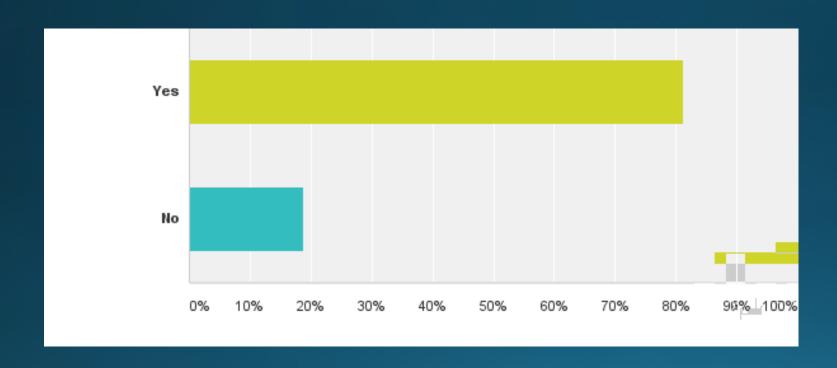


### "Did they return to class/work?"





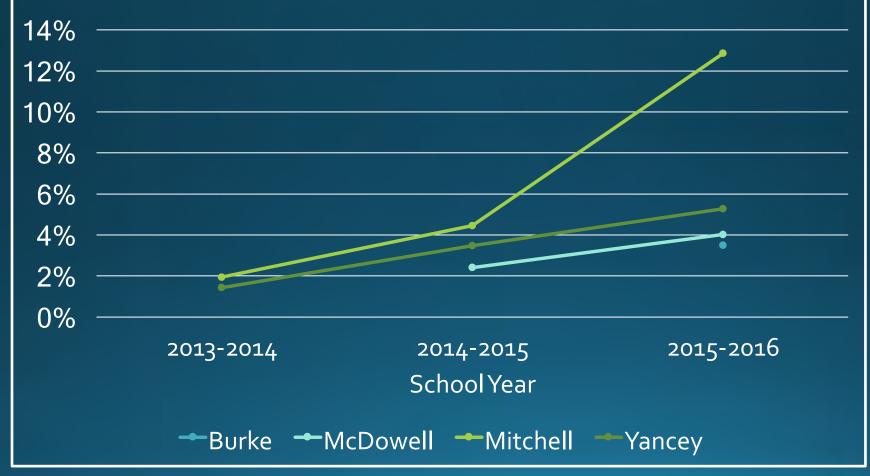
## "Did using Health-e-Schools telemedicine services keep your child from missing school?"







# Visits as a Percent of Student Population per Year





# The Big Picture



US Children average

1.6

doctor's visits per year





# 160 school days per year X 20 visits per day X \$50 per visit

= \$160,000 annual revenue



Achieve sustainability by integrating with PCMH/ACOs





## EVIDENCE?



### Qualitative: Michael Follow-up



- "I've seen her twice and I have lost 7 lbs"
- More energy
- Decreased BMI (93rd %ile)
- Improved BP control
- Continues on medication
- ENGAGED IN HIS CARE



Quantitative: Outcomes Focused

## Research



## SBHA: Standardized National Performance Measures for SBHCs

Core

Annual well <u>child v</u>isit Annual risk assessment

BMI screening and nutrition/physical activity counseling

Depression screening and documentation of follow-up plan if screen positive

Chlamydia screening

Stretch

Student disposition log (seat time saved)

SBHC student user survey

SBHC policies and procedures survey



## Telehealth Network Program Grant

- RURAL SCHOOL-BASED HEALTH CARE VIA TELEMEDICINE
- \$300,000/yr for 4 years
- 21 grants awarded
- 177 New school-based telemedicine sites







### Rural Telehealth Research Center

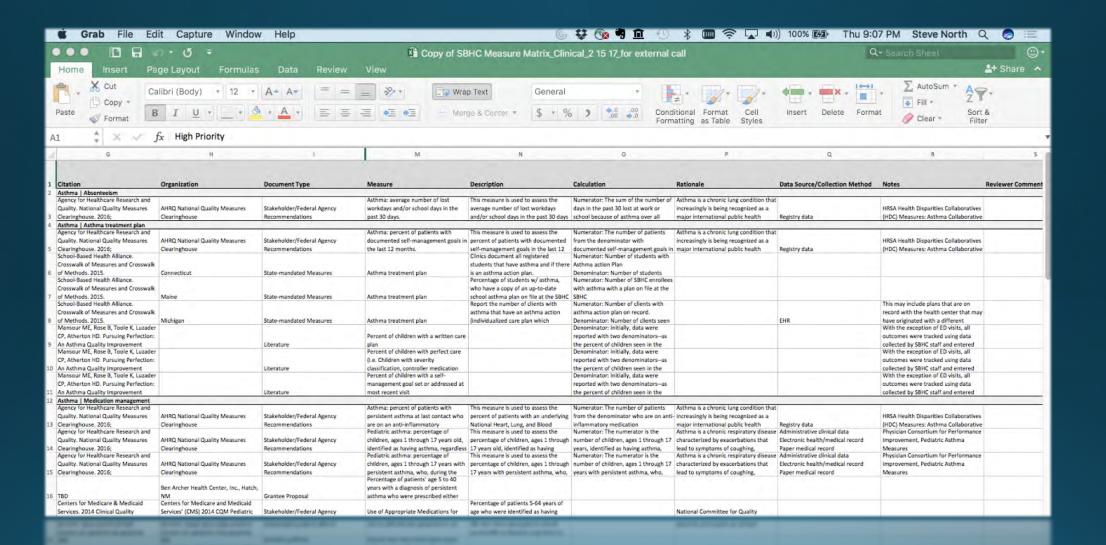














# Standardized Pediatric Research on Outcomes and Utilization of Telehealth



- Identify best practices for implementation of pediatric telehealth
- Determine the impact of telehealth on healthcare quality
- Establish a network of institutions to conduct collaborative research on pediatric telehealth





- 100 members
- 70 Institution

### **Initial Assessment**

- Database of programs
- Program Characteristics
- 54 institutions completed survey





### National Quality Forum

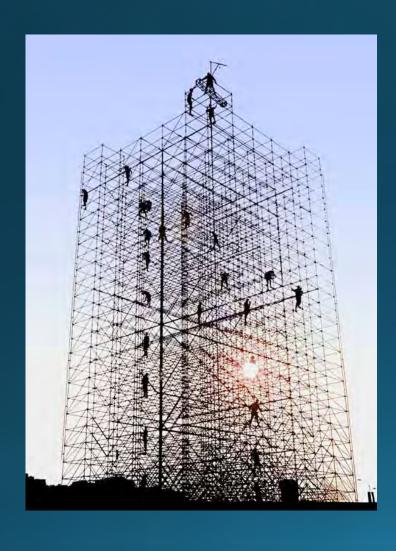


### NQF 2721:

The percentage of children who received visual acuity screening at least once by their 6th birthday; and if necessary, were referred appropriately.



### NOF Telehealth Framework



### **Five Domains**

- Access to Care
- Cost
- Cost Effectiveness
- Patient Experience
- Clinician Experience



### Moving tSBHC research forward

RTRC/HRSA
SPROUT
SBHA
NQF
Synergy

### Health Outcomes

- Appropriate use of care through Improved Access
- Specific health measures
- Coordination of care
- Multiple dimension of cost

### **Educational Outcomes**

- Impact on Attendance
- Improve academics and graduation



### More Information





### **Annual Conference**

June 18<sup>th</sup>-21<sup>st</sup> 2017 Long Beach, CA <u>Sbh4all.org</u> Webinars
Interactive Forum
matrc.org





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