

School-Based Health Care Expected Value-Return on Investment (EV-ROI)

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“You can’t educate a child who isn’t healthy, and you can’t keep children healthy who are not educated.”

Joycelyn Elders, MD, Former Surgeon
General

New Mexico Alliance for School-Based Health Care

- Envisions healthy students who are ready to learn.
- Represents school-based health centers (SBHCs) in New Mexico and collaborates with other partners to promote, facilitate and advocate for **comprehensive, culturally competent health care**, including health education in schools.
- Please join us!
- www.nmasbac.org



NMASBHC

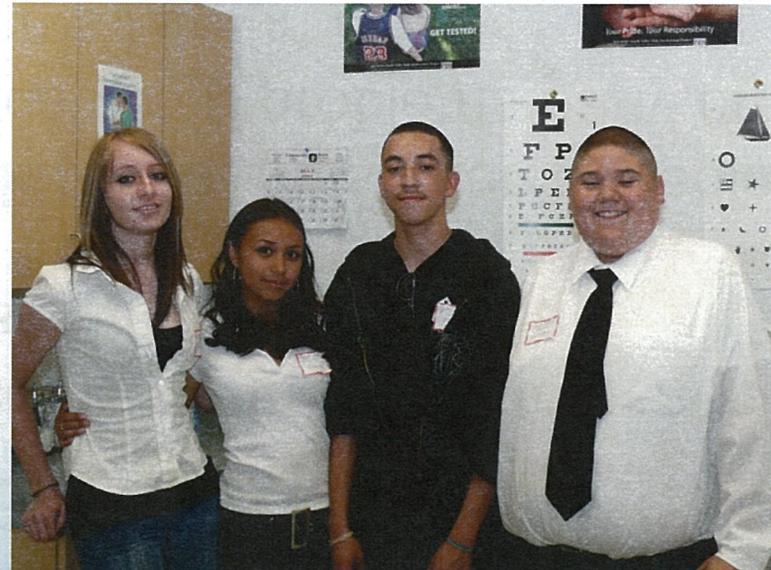
- Advocates at a state, tribal, and federal level for funding to sustain NM SBHCs.
- Secures strategic resources that sustain, grow, and integrate school-based health care into our health care and education systems.
- Represents those who support, receive, and provide health care in NM's schools.
- Manages a statewide clearinghouse for SBHC resources, data, toolkits.
- Provides leadership, technical assistance, and training to SBHCs in NM.



What is a School-Based Health Center?

A school-based health center brings the health care provider's office into the school – where the kids are.

It provides a broad range of services that meet the specific physical, behavioral, and oral health needs of youth.



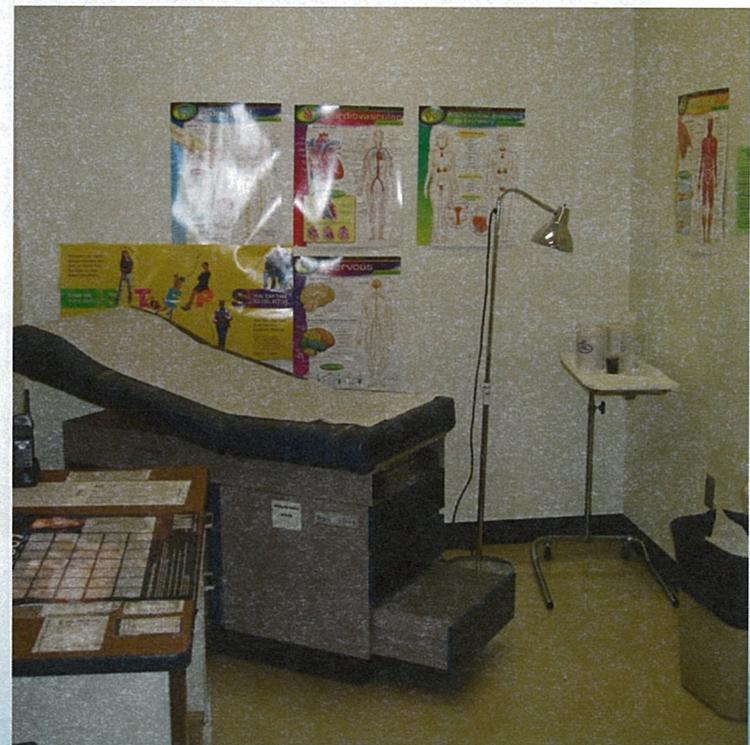
School-Based Health Centers Positively Impact Student Success:

- **Access to Care:** Offering convenient access to health care –at school – regardless of their ability to pay.
- **Prevention/Early Intervention:** Giving students medical attention when they need it, catching problems early on and preventing bigger problems later in life.
- **Reducing Barriers to Learning:** Keeping students healthy, in school and learning – and teachers focused on educating
- **Improving Attendance:** Reducing students' time out of class and parents' time away from work for health appointments.

Place-Based Care

Where SBHCs are located

Many SBHCs are on the campus of middle and high schools. Some are in elementary schools or serve entire school districts.





Services Offered

- **Based on needs of and guidance by communities and schools**
- *Primary Care* - annual exams, sports physicals, well-child care, care for acute and chronic illnesses, immunizations, reproductive health services
- *Behavioral Health Care* – identification of at-risk students, individual, group, and family therapy, alcohol and substance abuse counseling, violence and bullying prevention, outreach and education. *Studies demonstrate that adolescents are far more likely to come to SBHCs for mental health services than to other community providers.*

Evidence Based Practice

SBHCs incorporate principles and practices of adolescent health care recommended by:

- **The American Medical Association**
- **The American Academy of Pediatrics**
- **The American Association of Family Physicians.**

Mental Health National Data

- 1 in 5 adolescents have a diagnosable mental health disorder. ¹
- 70% of children and youth with a mental health disorder do not receive mental health services, with lower socioeconomic and minority youth disproportionate among them. ²
- Half of diagnosable mental health disorders begin by age 14. ³

1. The Substance Abuse and Mental Health Services Administration, 2011.

2. Journal of the American Academy of Child & Adolescent Psychiatry, 2007.

3. Archives of General Psychiatry, 2005.

Past-Year Major Depressive Episode (MDE) among Persons Aged 12-17 in New Mexico and the United States (2008-2012)

- **11.6% of youth** in New Mexico, (about 19,000) per year in 2008-2012* had at least one MDE within the year prior to being surveyed. The percentage increased over this period. ¹
- **The national rate was 8.7%.** ²

Substance Abuse and Mental Health Services Administration (SAMHSA). *Behavioral Health Barometer New Mexico 2013*. Downloaded from:
http://www.samhsa.gov/data/StatesInBrief/2k14/NewMexico_BHBarometer.pdf

Mental Health and Education

Emotional wellbeing is a predictor of educational outcomes and partially mediates the relationship between poverty rates and educational achievement.



American Journal of Public Health, 2010, 100(9).

Mental Health and Graduation

- 50% of students with a diagnosable mental health/and or addictive disorder, ages 14 and older drop out of school because their mental health issues affect their ability to learn and function.

Substance Abuse and Mental Health Services Administration (SAMHSA).

Data from New Mexico's 56 DOH funded SBHCs (2012-2013)*

- 45,535 *visits* for primary care, behavior health and oral health
- 20% of almost 15,000 students who visited a SBHC had 3 or more visits
- 69% were for BH or reproductive health purposes.
- 20% of SBHC users get BH treatment.

* New Mexico Welligent, 2012-2013

SBHCs

Mental Health Services

Overcome healthcare barriers such as:

- Transportation
- Lack of insurance
- Parents loss of work time
- Stigma
- Confidentiality

Top Reasons for students accessing BH Services at SBHCs

- Academic difficulties
- Family problems
- Depressive disorders

Journal of American Academy of Child and Adolescent Psychology, 2010.



Did You Know?

Visits by adolescents are 20 times more likely to be initiated for mental health reasons at SBHCs than at Community Health Clinics

Journal of Adolescent Health
2003, 32(S).

What is ROI?

- ROI is another tool to capture the work that we do, beyond outputs and outcomes
- Putting our outcomes into economic terms is challenging
- We need to adapt the ROI model to fit public health and use it as a method for evaluating our outcomes and as a QA/QI tool.

WHY Return on Investment?

- The financial value of health outcomes has not previously been captured by the SBHC community.
- Ongoing and sustainable funding for SBHCs has always been an issue.
- ROI gives concrete financial evidence to external stakeholders – which translates to *accountability* to legislature, funders, sponsors and = *SUSTAINABILITY*
- ROI provides internal managers/providers with financial justification to serve more clients and/or get better results

NMASBHC EV-ROI

- “First generation” calculations and report pro bono from Melanie Ginn and Associates, LLC.
- EV-ROI - probabilities based on NM Welligent data for 56 SBHCs with attribution of values from evaluations in other states – conservative estimates!

EV-ROI Results in NM

- School-based health care yields a return of **\$6.07 for every dollar spent!**
- Based on savings of \$20.1 million from 8 measures against total annual budget* of \$3.3 million.

***(annual budget from school year 2012)**

EV-ROI Methodology

- Global EV-ROI value for all 56 SBHCs
- EV-ROI values specific to:
 - 6 direct service intervention measures = costs to provide service based on cost per encounter X number of encounters for specific intervention
 - 2 indirect measures = cost savings resulting from SBHC services beyond direct service benefit to individual student

Data Analyzed

- School Year 2011-2012
- 57 New Mexico schools with a SBHC
- 14,412 students aged 14-19
- 41,468 total number of *visits* to a SBHC
- 43% of all visits

EV-ROI for NM SBHC

Direct Effects: Savings

- **Behavioral Health Services**  **\$1,033,216**
(for 670 students)
- **Asthma**  **\$206,725**
(for 573 students receiving asthma care)
- **Immunizations**  **\$54,092**
(for prevention of estimated 24 flu cases)
- **Prescription Medications**  **\$690,557**
(\$347 less than for students in schools without SBHCs)

EV-ROI for NM SBHC

Direct Effects: Savings

- **Dental**  **\$119,501**
(savings of \$335/dental sealant for prevention of future cavities and associated costs)
- **STI Detection and Treatment**  **\$692,827**
(for 219 students screened for gonorrhea and chlamydia)

EV-ROI for NM SBHC

Indirect Effects: Savings

- **Lost Work Hours**  **\$736,262** for 15,702 encounters (50% of all encounters/visits require parent x 69% estimated parents in workforce (\$46.88/encounter)).
- **Higher Graduation Rates**  **\$13.9 million NPV** (for 5.3% improvement in graduation rate for 115 students (\$121,726/ student who graduates)).

Mental Health Visits

- 2,885 students with 14,567 *visits*
- *Estimated rate of therapy completion was 86% (based on data from another SBHC study).*
- 27% of those students maintained or improved their grades following therapy.
- 27% = 670 students that completed therapy and maintained or improved their grades.

Total Annual Savings

\$1,033,216 for 670 students

- 670 students completed therapy and maintained or improved their grades
- Cognitive Behavioral Therapy for depressed Adolescents: NPV \$3,441 per student

Washington State Institute for Public Policy 2012:

Return on Investment: Evidence-Based
Options to Improve Statewide Outcomes

Downloaded from :

[http://www.wsipp.wa.gov/ReportFile/1102/Wsipp_](http://www.wsipp.wa.gov/ReportFile/1102/Wsipp_Return-on-Investment-Evidence-Based-Options-to-Improve-Statewide-Outcomes-April-2012-Update_Full-Report.pdf)

[Return-on-Investment-Evidence-Based-Options-to-Improve-Statewide-Outcomes-April-2012-Update_Full-Report.pdf](http://www.wsipp.wa.gov/ReportFile/1102/Wsipp_Return-on-Investment-Evidence-Based-Options-to-Improve-Statewide-Outcomes-April-2012-Update_Full-Report.pdf)

More Reasons Why SBHCs Make Sense

- Unlike primary care sites, SBHCs do behavioral health screenings for all students
- SBHCs meet students where they are physically , developmentally and provide early intervention.
- SBHC provide an excellent example of integrative care: primary care and behavioral health care working together.