What is a School-Based Health Center? (NASBHC Definition)

- SBHC Definition: **Partnership created by schools and community health organizations to provide on-site medical, mental health, and/or oral health services that promote the health and educational success of school-aged children and adolescents.**

- Key elements:
  - One of the partners, usually a health agency (community health center, hospital, local health department, mental health agency, or 501 C3 agency), or a school system, becomes the sponsoring agency.
  - Services provided by the school-based health care team are determined locally through a collaborative process that includes families and students, communities, school districts, and individual and agency health care providers.
  - The school-based health care team works in collaboration with school nurses and other service providers in the school and community.
  - Although the model may vary based on availability of resources and community needs, SBHCs are typically open every school day, and staffed by an interdisciplinary team of medical and mental health professionals that provide comprehensive medical, mental health and health education services.
The range of common services differ, but are usually in one of 3 main categories

<table>
<thead>
<tr>
<th>Primary Care Model</th>
<th>Primary Care-Mental Health Model</th>
<th>Primary Care-Mental Health PLUS Model</th>
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</thead>
<tbody>
<tr>
<td>• NP/PA/MD 1-5 days/week</td>
<td>• PT or FT coverage</td>
<td>• FT coverage if possible</td>
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<tr>
<td>• Full or part-time (FT/PT) coverage</td>
<td>• Full Range of Prevention/Early Intervention Physical and Behavioral Health Services (age and developmentally appropriate, e.g. reproductive health)</td>
<td>• Primary care and mental health plus one or more of the following:</td>
</tr>
<tr>
<td>• No Mental Health/Substance Abuse Services</td>
<td>• Diagnosis, Treatment and Management of Minor Acute/Chronic Illnesses</td>
<td>• Dental Services</td>
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<tr>
<td></td>
<td>• Provision for after-hours care</td>
<td>• Reproductive Health Services that include contraception dispensing/prescribing</td>
</tr>
<tr>
<td><strong>Staffing</strong></td>
<td><strong>Staffing</strong></td>
<td>• Nutrition Counseling</td>
</tr>
<tr>
<td>• Medical provider (NP/PA/MD)</td>
<td>• Medical provider (NP/PA/MD)</td>
<td>• On-site Substance Abuse Treatment</td>
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<tr>
<td>• School nurse (if present)</td>
<td>• School nurse (if present)</td>
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</tr>
<tr>
<td></td>
<td>• Mental Health provider (e.g.)</td>
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</tr>
<tr>
<td></td>
<td>• Clinical Social Worker,</td>
<td>• School Nurse</td>
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<tr>
<td></td>
<td>• Psychologist/Psychiatrist,</td>
<td>• Medical provider (NP/PA/MD)</td>
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<td></td>
<td>• May include Substance Abuse Counselor if appropriate</td>
<td>• Mental Health provider</td>
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<td></td>
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<td>• Dentist/Dental Hygienist</td>
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<td></td>
<td></td>
<td>• Addictions Counselor</td>
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<tr>
<td></td>
<td></td>
<td>• Nutritionist</td>
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<tr>
<td></td>
<td></td>
<td>• Health Educator</td>
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<tr>
<td></td>
<td></td>
<td>• Social Worker</td>
</tr>
</tbody>
</table>

*Slide info from NASBHC*
School nurses and counselors are integral to the success of SBHCs

- School nurses perform key mandated functions such as vision and hearing screening, immunization tracking, medical accommodations, daily health services, triage, and health education.
- Counselors often have responsibility for many non-mental health issues like class scheduling, college and career planning, and test coordination.
- They are both members of the school-based health team which includes the SBHC, but usually continue to work outside the SBHC.
- Their role related to SBHCs is determined for each school, but is commonly:
  - Serve as a liaison between the school-based health center and school staff.
  - Identify and refer students who can benefit from school-based health center services.
  - Provide follow-up.
  - Reach out to parents.
  - Help families identify public insurance options.
Foundations have or may support school-based health care in Spokane:
- Bill & Melinda Gates Foundation
- Empire Health Foundation
- HumanLinks Foundation
- Group Health Community Foundation
- Robert Wood Johnson Foundation
- W.K. Kellogg Foundation
- McKesson Foundation

Federal Grants:
- BPHC/FQHC (Section 330 of the Public Health Service Act)
- Title X of the Public Health Service Act: Family Planning
- HRSA New Access Point & SBHC Equipment Grants

Patient Revenue:
- SCHIP
- Medicaid
- Private insurance
- Patient fees

Chart from NASBHC
What does research say about emergency room use, hospitalization, and SBHCs?

Reduced inappropriate emergency room use, increased use of primary care, and fewer hospitalizations


Adolescents with Medicaid in Denver were four time less likely to access urgent and emergency care if they used SBHCs

- Kaplan DW et al. Managed care and SBHC. Arch Pediatric Adolescent Med. 1998 Jan; 152

The annual hospitalization cost per student in Cincinnati schools with SBHCs was 85% less than those without


Prevention-oriented care in SBHCs results in decreased utilization of emergency departments

- Key JD, Washington EC, and Hulsey TC, Journal of Adolescent Health 2002: 30;273
What does research tell us about mental health and SBHCs?

Harder-to-reach populations, especially minorities and males, are more likely to receive crucial services such as mental health care and high risk screen


Adolescents were 10-21 times more likely to come to a SBHC for mental health services than a community health center network or HMO


Dallas SBHCs found that mental health services helped decreased discipline referrals by 85%

Efficiencies in SBHCs

Parents time off work is reduced
- This effect combined with other social benefits was estimated at $3.35 for every $2 spent on centers in Cincinatti

Follow-up is less labor intensive

Students spend more time in school
- A recent study showed reduced early dismissal and a 3x reduction in lost class time for health services
  - Van Cura, Journal of School Health, Aug 2010, Vol. 80, Iss. 8; p 371

Health concerns are identified earlier

More costly emergency room visits and hospitalizations are reduced
Seattle’s SBHC System

- 14 SBHCs: 10 Comprehensive HS
   4 Comprehensive MS

- Public Health-Seattle & King County serves as program manager

- Four additional health care organizations serve as SBHC “sponsors”

- School District and City are key partners
How did we get here?

City of Seattle Families and Education Levy


Focused investments on increasing measurable academic outcomes and closing the achievement gap for students in Seattle

Investment areas include: Early Learning, Family Support, Community Learning Centers, Middle School Innovations, Ninth Grade Transition, and Student Health ($4m/year)
# SBHC Sponsors & Sites

<table>
<thead>
<tr>
<th>Sponsor: Group Health Cooperative</th>
<th>Sponsor: Neighborcare Health</th>
<th>Sponsor: Public Health Seattle &amp; King County</th>
<th>Sponsor: Swedish Medical Center</th>
<th>Sponsor: SCH Odessa Brown Children’s Clinic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aki Kurose MS</td>
<td>Denny MS</td>
<td>Cleveland HS</td>
<td>Ballard HS</td>
<td>Garfield HS</td>
</tr>
<tr>
<td>Franklin HS</td>
<td>Madison MS</td>
<td>Ingraham HS</td>
<td></td>
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<tr>
<td>Nathan Hale HS</td>
<td>Roosevelt HS</td>
<td>Rainier Beach HS</td>
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<tr>
<td>Washington MS</td>
<td>Sealth HS</td>
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<tr>
<td></td>
<td>West Seattle HS</td>
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</table>
**Seattle SBHC Operating Costs**

Operating costs of a Seattle High School SBHC is approximately $300-350K

Pays for a provider/program staff, medical equipment/supplies, pharmacy, other operating expenses, and indirect costs

The cost of the clinics in Seattle schools is borne by the following sources:

- City levy – 69%,
- third-party reimbursements (Medicaid, private insurance, etc.) – 10%,
- contributions form SBHC sponsoring organizations – 18%,
- other miscellaneous revenue – 3%
Seattle’s SBHC Model

Staffing: 1.0 FTE Mid-Level Practitioner (NP/PA)
- 1.0 FTE MH Counselor
- 1.0 FTE Administrative Support

Middle schools have a .5 FTE medical provider

Some sites offer “enhanced” services (health education, nutrition, naturopathic medicine)
## SBHC Scope of Services

### Primary care services:
- Preventive healthcare including immunizations and well-child care
- Primary and acute health care assessment, diagnosis, treatment and referral
- Age appropriate reproductive health care/family planning
- Screening and treatment for sexually transmitted diseases
- Mental health screening, counseling, case management, and referral
- Health education and health promotion
- Care coordination and referral for drug/alcohol services and dental care

### Interventions and strategies that support school success:
- Standardized behavioral and health risk assessment
- Mental and behavioral health interventions
- Medical evaluation and intervention
- Facilitating on-going peer support groups
- Facilitating communication on students’ behalf within school communities
- Linkages and coordination with community organizations
- Referral to substance abuse services
- Linkage to tutoring and academic support.
## Seattle SBHC User Demographics
### Sep 2008-Jun 2009

<table>
<thead>
<tr>
<th></th>
<th>Asian</th>
<th>Black</th>
<th>Hispanic</th>
<th>Native American</th>
<th>White</th>
<th>Free/Reduced Lunch</th>
<th>LEP</th>
<th>Total Unique Users</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SBHC System Total</strong></td>
<td>1132</td>
<td>1590</td>
<td>709</td>
<td>129</td>
<td>1607</td>
<td>2775</td>
<td>670</td>
<td>5167</td>
</tr>
<tr>
<td><strong>SBHC User</strong></td>
<td>21.9%</td>
<td>30.8%</td>
<td>13.7%</td>
<td>2.5%</td>
<td>31.1%</td>
<td>53.7%</td>
<td>13.0%</td>
<td></td>
</tr>
<tr>
<td><strong>School Enrollment</strong></td>
<td>25.5%</td>
<td>22.6%</td>
<td>11.4%</td>
<td>1.9%</td>
<td>40.3%</td>
<td>38.5%</td>
<td>11.3%</td>
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</tbody>
</table>

2010 Wisepear Consulting
SBHC Services 2009-10

5,590 total users
- 5,507 had a visit to a medical provider
- 1,639 had a visit to a MH counselor

30,893 total visits
- 7,723 medical
- 13,170 mental health

Productivity (85% of total student days)
- 9.9 medical visits per day
- 6.4 mental health visits per day
School-Based Health and Academic Outcomes

Two studies, conducted by researchers at the University of Washington, found that student use of SBHCs is positively related to academic outcomes, including grade-point average, attendance, and graduation.

More detailed information about these studies is available from Suzanne Kerns, Ph.D.; sekerns@uw.edu; (206)685-2766. Additionally, Study 1 has been published in a peer-reviewed journal: Walker, S.C., Kerns, S.E.U., Lyon, A.R., Bruns, E.J., & Cosgrove, T.J. (2010). Impact of school-based health center use on academic outcomes. Journal of Adolescent Health, 46, 251-257. Study 2 is currently under review at a peer-reviewed journal. The UW research team includes: Suzanne Kerns, Sarah Walker, Michael Pullmann, Aaron Lyon, and Eric Bruns.
A study following high-risk 9th graders across five semesters (Fall 2005-Fall 2007) found, compared to demographically similar non-users:

- Students who used SBHCs for medical purposes had a relative increase in attendance.

- Students who used SBHCs for mental health purposes had a relative increase in GPA.
Academic Outcomes: Study 2

A study of all Seattle Public School students starting in 9th grade and across eight semesters found, compared with demographically similar non-users:

- Students using SBHCs a low to moderate amount had a 33% reduction in dropout.
- Students using SBHCs at a high amount did not show a different rate of dropout.
- Exploratory analyses indicate that students at higher risk for dropout (i.e., free/reduced lunch, GPA <2.5, attendance <90%, African American or Hispanic ethnicity) experienced greater benefits related to SBHCs.
Possible buffering effects of SBHC

Significant risk categories for dropout included:
free/reduced lunch status, low GPA, low attendance, African American/Hispanic, special education, disciplinary actions

SBHC usage may help to ameliorate the relationship between these risk factors and dropout

Preliminary analyses revealed that low amounts of SBHC usage was related to less dropout across nearly all types of students

However, moderate and high usage was differentially associated…
Possible buffering effects of SBHC

For combined moderate and high use categories, compared to no use:

- Reduced/free lunch: ~41% less likely to dropout
- No reduced/free lunch: no significant differences

- GPA < 2.5: ~34% less likely to dropout
- GPA > 2.5: no significant differences

- Attendance < 90%: ~47% less likely to dropout
- Attendance > 90%: no significant differences

- African American: ~43% less likely to dropout
- Hispanic: ~59% less likely to dropout
- White: no significant differences
- Asian: no significant differences
More Outcomes

2001 Student User Survey

- Over 70% of students report that they obtained care at the SBHCs that they otherwise would not have received.
- 90% of student users reported that being able to get healthcare at school helped them to be more attentive when they were in class.
- 78% of student users reported an improvement in their health as a result of using the SBHC at their school.
- 87% of student users said they know how to take better care of their health as a result of contact they have had with staff of the SBHC.
- More than 80% of student users reported that they were more knowledgeable and better able to access health and mental health services as a result of the SBHC.
Lower Chlamydia Rates and Birth Rates in Adolescent Females Coincide with the Establishment of Teen Health Centers in King County, WA

T Shafii, RP Kerani, B Strelitz, MR Golden. U of Washington and Public Health Seattle & King County.

BACKGROUND

- Adolescents have high rates of Chlamydia trachomatis CT infection and unintended pregnancy.
- Their access to healthcare is limited by lack of health insurance, ability to pay, transportation, and confidentiality from family.
- Teen Health Centers (THC) located within schools remove these barriers and provide adolescents with access to healthcare.
- In 1989 the first THC was established in the Seattle Public School District. There are now THCs in all Seattle Public School high schools.
- Funding for these clinics is potentially insecure and is dependent on voter support of city levies.

METHODS

- Data grouped as Seattle School District and Non-Seattle (comprised of 17 other school districts).
- Chlamydia and general fertility rates (GFR) for 15-19 yr old females weighted for population estimates and standardized for race/ethnicity, sent to Seattle School District.
- GFR data sorted by school district. CT data estimated for Seattle vs. other districts based on zip code data.
- Differences assessed using linear regression.

RESULTS

- Estimated change per year of Chlamydia Rates per 100,000 for Non-Hispanic(NH)-Whites, NH-Blacks, and Hispanics.
- Estimated change per year of General Fertility Rates per 1,000 for Non-Hispanic(NH)-Whites, NH-Blacks, and Hispanics.

CONCLUSIONS

- The disparate trends in chlamydial infection rates and GFRs we observed comparing areas served by the Seattle Public Schools and other King County, WA school districts is consistent with the hypothesis that THCs have improved reproductive health.
- Studies are needed to more definitively establish the reproductive health impact of Teen Health Centers.
The Most Important Outcomes

“I think having a teen health center at my school is very helpful to me and for others. I like it because they provide me with info and health care that I wouldn’t feel comfortable asking my doctor or mom for”. 9th grade female

“I really like coming here. If it were not for the Center I would be in extremely bad shape.” 12th grade female

“I love the Teen Health Center. It’s convenient because I don’t have to take a lot of time off of school to get an appointment” 11th grade female

“Thanks for saving my life!” 10th grade male
The emergence of SBHCs in Washington

Including Seattle SBHCs, there now are 20 school-based health centers in our state.

- Two in south King County (Kent, SeaTac)
- Two in Jefferson County (Port Townsend, Chimacum)
- One in Kitsap County (Kingston)
- One in Walla Walla

All high school programs
The emergence of SBHCs in Washington

In 2008, DOH and the Group Health Foundation partnered to award grants to ten communities to plan new SBHCs

- Only Walla Walla and Jefferson County were able to successfully launch.
- Most of the plans have been adopted by key stakeholders (e.g. LHJ, school district)
- Funding is the primary barrier to implementation
New SBHC initiatives in Washington

Communities in Schools of Spokane County recently received a SBHC planning grant from the Bill and Melinda Gates Foundation.

The Group Health Foundation has funded a partnership between the Oregon School-Based health care network and WA SBHC stakeholders to develop a state SBHC association.

- Mission: *Advance and advocate for school-based health care to ensure the health and academic success of children and youth statewide.*
What’s next for SBHCs?

Key provisions in *Patient Protection and Affordability Act*

Grants for the Establishment of SBHCs
- $200 million over four years, starting FY2010
- Only for expenditures for facilities, equipment, capital (no funds for personnel or to provide care)

Grants for Operations of SBHCs
- Authorizes spending, but does not appropriate any funds
- Funds management and operations, training, personnel, etc.
- Within a challenging economic environment, SBHCs will be competing with other newly authorized programs for legislation/appropriation.
Federal Opportunities in Education Reform

Promise Neighborhoods
- Health services and resources as family and community supports.
- Assesses appropriate use of/access to health care.

ESEA: Successful, Safe, and Healthy Students
- Consolidation of several existing programs that seek to provide services or ensure that schools provide the environment that students need to succeed.

Community Schools
- Utilizes the physical resources of the school building to provide access to academic enrichment activities, youth development programs, adult education, social services, and health care.
What will help move SBHCs forward in Washington?

There is no “silver bullet” funding solution, but...

- Connecticut has mandated SBHC reimbursement in their contracts with health plans.
- Some states directly reimburse SBHCs on a fee-for-service basis.
- Many states have line item SBHC funding

SBHCs can be a critical component of an integrated, patient/family-centered health home

Emphasizing and operationalizing the shared agenda of Health and Education.
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