The Essential Elements of Adolescent-friendly Care in School-Based Health Centers: A Mixed Methods Study of the Perspectives of Nurse Practitioners and Adolescents

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Background and Significance

• Adolescents are a healthy population
• Vast majority of morbidity and mortality results from preventable causes related to injury and risk-taking behaviors rather than disease and chronic illness
• Wellness services effective mechanism for screening, anticipatory guidance, treatment & referral
• Majority of teens do not receive annual wellness visit
Adolescent-friendly Care

• WHO (2012)
  • Accessible.
    • Adolescents are able to obtain the health services that are available.
  • Acceptable.
    • Adolescents are willing to obtain the health services that are available.
  • Equitable.
    • All adolescents, not just selected groups, are able to obtain the health services that are available.
  • Appropriate.
    • The right health services (i.e. the ones they need) are provided to them.
  • Effective.
    • The right health services are provided in the right way, and make a positive contribution to their health. (WHO, 2012, p. 7-8)

• School-Based Health Centers
  • Adolescent-friendly community resource
  • Interdisciplinary team
  • Separate from school nurse; confidential
  • Available to all teens in school
Purpose

• To identify the essential elements of adolescent-friendly health care services provided to teens in SBHCs from the perspectives of NPs and adolescents
• Addresses a major gap in literature
Research Questions

1. What does an expert panel of NPs identify as the essential elements of providing adolescent-friendly health care services to teens in SBHCs?

2. What is the adolescent perspective on the essential elements of adolescent-friendly health care services specific to SBHCs?

3. How do the perspectives of NPs and adolescents compare regarding the essential elements of adolescent-friendly care in SBHCs?
Philosophical & Theoretical Foundation

• Complex adaptive systems

• Pragmatism
Design & Methods

Explanatory sequential mixed methods design

- Phase I: Delphi technique
  - Expert panel of NPs from Northeastern Region of U.S.
  - NP certification, 3+ years as NP in SBHC, recognition as an expert, & willingness to participate in all rounds
  - Recruitment through professional organizations, personal contacts
  - 4 Rounds

- Phase II: Focus group study
  - 13-19 years olds, English speakers, & at least one visit to SBHC
  - Recruitment through flyers & SBHC staff
  - Content analysis (Krippendorff, 2013)

- Phase III: Mixing of quantitative & qualitative data

- Approved by UCONN IRB
Challenges & Limitations of Design & Methods

• Challenges
  • Time
  • IRB approval
  • Which results should be explained in Phase II?
  • Sample for Phase II

• Limitations
  • Purposive sample
  • Northeastern U.S. sample
What does an expert panel of NPs identify as the essential elements of providing adolescent-friendly health care services to teens in SBHCs?

Phase I: Delphi Technique Results
### Demographic Characteristics of NPs Participating in the Delphi (N=21)

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<thead>
<tr>
<th>Characteristic</th>
<th>N</th>
<th>%</th>
</tr>
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<tbody>
<tr>
<td><strong>Gender</strong></td>
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<tr>
<td>Female</td>
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<td>100</td>
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<tr>
<td>Other</td>
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<td></td>
</tr>
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<td>Publication of a Paper</td>
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<td>National Presentation</td>
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<tr>
<td>Professional Organization Expert Designation</td>
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<td>38.1</td>
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<tr>
<td>Other</td>
<td>13</td>
<td>61.9</td>
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<td><strong>SBHC Location</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>11</td>
<td>52.4</td>
</tr>
<tr>
<td>Massachusetts</td>
<td>4</td>
<td>19.1</td>
</tr>
<tr>
<td>New York</td>
<td>4</td>
<td>19.1</td>
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<td>Pennsylvania</td>
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<td>4.8</td>
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<tr>
<td>Vermont</td>
<td>1</td>
<td>4.8</td>
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</table>
Delphi technique

• 4 Rounds ($N=21$)
  • Round 1
    • “What are the essential elements to providing adolescent-friendly care in SBHCs?”
    • 200 elements, grouped into 6 categories
  • Round 2-4
    • Questionnaire, 5-point Likert scale
    • Round 3 & 4 participants asked to reconsider response in context of group response
    • Response rate 95-100%

• 98 items, 49% reached consensus at $\geq 0.75$ level
Essential Elements

Confidentiality/Privacy (N=8, 8.2%)
- Ability to provide services in a manner that insures confidentiality from parents/guardians (e.g. reproductive care) with the parameters of the law
- Understanding of state laws, policies, and regulations regarding adolescents’ rights

Accessibility (N=15; 15.3%)
- Same day appointments
- Open door policy

SBHC Clinicians/Staff (N=51; 52%)
- Non-judgmental
- Genuinely like working with tweens and teens

Clinical Services (N=12; 12.2%)
- Ability to provide comprehensive care including reproductive health/contraception
- Mental health screenings, referrals...provided on-site through the SBHC

SBHC Environment (N=4; 4%)
- An environment that feels safe
- Friendly

Relationship Between School and SBHC (N=8; 8.2%)
- Good working relationship with school personnel
- Coordination with school personnel (teachers, guidance counselors, nurse, principals, coaches)
Phase II: Focus Group Results

What is the adolescent perspective on the essential elements of adolescent-friendly health care services specific to SBHCs?
### Demographics of the Focus Group Participants (N= 30)

<table>
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<tr>
<th>Characteristic</th>
<th>N (%)</th>
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</thead>
<tbody>
<tr>
<td><strong>Gender</strong></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>13 (43.3)</td>
</tr>
<tr>
<td>Male</td>
<td>17 (56.7)</td>
</tr>
<tr>
<td><strong>Grade</strong></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>9 (30)</td>
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<tr>
<td>10</td>
<td>3 (10)</td>
</tr>
<tr>
<td>11</td>
<td>7 (23.3)</td>
</tr>
<tr>
<td>12</td>
<td>11 (36.7)</td>
</tr>
<tr>
<td><strong>Age Group</strong></td>
<td></td>
</tr>
<tr>
<td>13-14</td>
<td>9 (30)</td>
</tr>
<tr>
<td>15-17</td>
<td>7 (23.3)</td>
</tr>
<tr>
<td>18-19</td>
<td>14 (46.7)</td>
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<tr>
<td><strong>Ethnicity</strong></td>
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<td>Hispanic or Latino</td>
<td>16 (36.7)</td>
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<tr>
<td>Not Hispanic or Latino</td>
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<td><strong>Race</strong></td>
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</tr>
<tr>
<td>Black/African American</td>
<td>7 (23.3)</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>10 (33.3)</td>
</tr>
<tr>
<td>White</td>
<td>4 (13.3)</td>
</tr>
<tr>
<td>2 or more races/ethnicities</td>
<td>9 (30)</td>
</tr>
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</table>
What do you like about coming to the SBHC?

Accessibility of Services
- “You don’t have to go out of your way. They are just there for you whenever you need it.”

Attitude of the SBHC Staff
- “friendly,” “smiling,” “never rude,” “nice” and “cool people”

Competence of the NP
- “I feel like they have to know a little more than like, doctors. Because they are just by themselves here.”

Confidential and Private Setting
- “It’s very private”

Open Communication
- “[the NP] does a really... good job, making everyone feel comfortable...I could talk to her about anything...she always knows what to say.”

Relationship Between the SBHC Staff and the Teen
- “Gets to know you and know[s] when something is wrong”
How is the care in SBHC different than other places you go for care?

School Nurse and SBHC

- Keep You In School
  - “When you are not feeling well, they actually try to make you feel better instead of like, making you go home fast.”
- Not So Confidential or Private
  - “The nurse’s [office] is always crowded.”

Other Community Sources and SBHC

- Accessibility
  - “Can come as many times as they need to.”
- Trusted Relationship
  - “You have to build a relationship with somebody in order for you to like, open up to them. So that takes time. But I do feel like that is important because you wouldn’t tell somebody you don’t trust something serious”
- Comfortable but tiny
  - “It’s really small. When you step in the office there is nowhere to go.”
- SBHC Fosters Independence
  - “Don’t have to wait to for your parents to take you.”
## Importance of Each of the Essential Elements of Adolescent-friendly Care to Focus Group Participants

<table>
<thead>
<tr>
<th>Essential Element</th>
<th>13-14 year olds</th>
<th>15-17 year olds</th>
<th>18-19 year olds</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female</td>
<td>Male</td>
<td>Female</td>
<td>Male</td>
</tr>
<tr>
<td>Dots</td>
<td>20</td>
<td>25</td>
<td>15</td>
<td>20</td>
</tr>
<tr>
<td>Confidentiality &amp; Privacy</td>
<td>6</td>
<td>7</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Accessibility</td>
<td>6</td>
<td>5</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Clinicians &amp; Staff</td>
<td>2</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Types of Services Offered &amp; Provided at the SBHC</td>
<td>3</td>
<td>2</td>
<td>2</td>
<td>6</td>
</tr>
<tr>
<td>SBHC Environment</td>
<td>1</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Relationship Between SBHC &amp; School</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>
Confidentiality & Privacy

• What happens in the SBHC, stays in the SBHC
  • “Whatever happens in Vegas, stays in Vegas. Whatever happens there, stays there.”

• Private Setting
  • “If you want to tell them something personal, they pull you to the side instead of like, you talking out loud and then keeping everything to themselves.”
  • “Door shuts”
Accessibility

• Positive Energy
  • “friendly and chill...always glad to help you.”

• Location, Location, Location
  • “I like how it’s already in my school, I’m in school every day... it’s just right there for me to use.”

• Flexibility
  • “flexible, if you don’t want to do something, she will offer you something else.”

• Services are Available When We Need Them
  • “Physicals for sports that week”
Clinicians & Staff

• Makes Me Feel Comfortable
  • “She treats you like she is in your own shoes at the moment.”

• Takes Care of My Needs
  • “Always helpful in rescheduling my appointments and making sure that I am up-to-date on certain things.”

• Reliable
  • “She don’t forget anything and if she tells you, ‘I’m going to give you the results the next day’...she makes sure it is done.”

• Knows Me
  • “She wouldn’t just worry about you that one time and forget. She will remember it from last year...and be more helpful.”
SBHC Environment

• Comfortable but Tiny
  • “comfortable”, “attractive”, “clean” and the size of the clinic did not deter them from using the services of the SBHC

• Good Vibes
  • “Their vibe- they give a feeling the way they help you.”
  • “Comfortable walking into. Like my heart is not beating [fast].”
### SBHC Clinical Services

<table>
<thead>
<tr>
<th>SBHC Service</th>
<th>Total (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical examinations for school, sports, or camp</td>
<td>8 (9%)</td>
</tr>
<tr>
<td><strong>Routine check-ups</strong></td>
<td>9 (10%)</td>
</tr>
<tr>
<td>Treatment of acute illnesses or injuries (colds, sore throats, rash)</td>
<td>8 (9%)</td>
</tr>
<tr>
<td><strong>Care of chronic illnesses (asthma, diabetes)</strong></td>
<td>9 (10%)</td>
</tr>
<tr>
<td>Immunizations</td>
<td>5 (5%)</td>
</tr>
<tr>
<td>Mental health care</td>
<td>8 (9%)</td>
</tr>
<tr>
<td><strong>Reproductive care (pregnancy tests, contraception counseling, condoms)</strong></td>
<td>13 (14%)</td>
</tr>
<tr>
<td>STD/HIV testing and treatment</td>
<td>12 (13%)</td>
</tr>
<tr>
<td>Nutrition counseling/ Weight counseling</td>
<td>3 (3%)</td>
</tr>
<tr>
<td>Crisis intervention</td>
<td>4 (4%)</td>
</tr>
<tr>
<td><strong>Prescriptions and dispensing of medications</strong></td>
<td>9 (10%)</td>
</tr>
<tr>
<td>Laboratory testing</td>
<td>2 (2%)</td>
</tr>
<tr>
<td>Individual, group, family counseling</td>
<td>0</td>
</tr>
<tr>
<td>Health education</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Classroom presentations</td>
<td>0</td>
</tr>
<tr>
<td>Dental care</td>
<td>1 (1%)</td>
</tr>
<tr>
<td>Referral and follow-up to specialty care</td>
<td>0</td>
</tr>
</tbody>
</table>

+ 2 participants in the male 18-19 year old group circled 4 responses
• “A lot of these [services] are really good for me. I appreciate the school-based health center.”

• Reproductive care & Prescriptions/dispensing of medications were listed in the top three services across all groups

• Immunizations listed only among the youngest and oldest groups
Relationship Between School & SBHC

• The School Supports the SBHC
  • “I feel like if they didn’t have a good relationship, they wouldn’t still be here.”

• Working Collaboratively
  • “So they like, helped each other out. They work together.”

• All Teacher’s Don’t Know About the SBHC
  • “I’m not sure the teachers understand...I think they think it’s basically like the nurse.”
Summary of Focus Group Findings

• Adolescents aware of what they like and do not like about the health care services they receive

• SBHC provide adolescent-friendly services that are comfortable, confidential, easily accessible, and with health providers they know and trust

• They value that a variety of services, including reproductive and mental health care, are available if and when they are needed
How do the perspectives of the NPs and adolescents compare regarding the essential elements of adolescent-friendly care in SBHCs?
## Essential Elements

<table>
<thead>
<tr>
<th>Essential Element</th>
<th>NP Perspective</th>
<th>Shared</th>
<th>Adolescent Perspective</th>
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<tbody>
<tr>
<td>Confidentiality &amp; Privacy</td>
<td></td>
<td>What happens in the SBHC, Stays in SBHC A Private Setting</td>
<td></td>
</tr>
<tr>
<td>Accessibility</td>
<td>Inclusive Environment</td>
<td>Flexibility Services Available When Needed</td>
<td>Positive Energy Location, Location, Location</td>
</tr>
<tr>
<td>SBHC Clinicians/Staff</td>
<td>Showing Respect Competence</td>
<td>Working Together</td>
<td>Makes me Feel Comfortable Takes Care of My Needs Reliable Knows Me</td>
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<td>SBHC Services</td>
<td>Comprehensive Care Easy to Access Continuity</td>
<td>Mental health Reproductive Care</td>
<td>Medications Immunizations Laboratory Tests Crisis Intervention Care of Acute and Chronic Illnesses Nutrition &amp; Weight Counseling STI Testing and Treatment Referrals</td>
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<tr>
<td>SBHC Environment</td>
<td>Welcoming to All Teens</td>
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<td>Comfortable But Tiny Good Vibes</td>
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<tr>
<td>Relationship Between School &amp; SBHC</td>
<td>Working Collaboratively</td>
<td></td>
<td>The School Supports the SBHC All Teachers Don’t Know About the SBHC</td>
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</table>
Overarching Themes

Comfortable
- Needed to be comfortable in all aspects of experience--- “Good vibe”
- Confidentiality allowed teen to open up more
- Improved timely access to services

Trusted Relationship
- Developed overtime, “knows me” as a unique person
- Enhanced by continuity
- Honoring confidentiality, providing privacy
- Reliability
Conceptual Model of the Essential Elements of Adolescent-friendly Care in SBHCs as a Complex Adaptive System
Implications for Clinical Practice

• Divergent perspectives on the development of trusted relationships
• Mechanisms for enhancing continuity needed
• Time allocated for wellness visits
• Teachers as a source of referral
Implications for Education

Professional Education

• Adolescent development key factor in the provision of adolescent-friendly care
• Increased attention to mental health curriculum in NP programs
Research Implications

• Satisfaction with SBHC services
• Impact of comfort and trusted relationship on engagement in preventive care
• Impact of SBHC services on sports participation and the prevention of school exclusions from missing physical examination and immunization requirements
Conclusions

• SBHCs support the WHO criteria of adolescent-friendly health care services
• Feeling Comfortable and Trusted Relationships essential elements
• Emphasis in confidentiality and privacy
Acknowledgements

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