A Retrospective Chart Review of Adolescent Mental Health in Urban Primary Care

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Introduction
A retrospective chart review was done to determine the extent of the need for adolescent mental health services within the Adolescent Social History Form (ASH).

Objectives
1. Determine the extent of need for adolescent mental health services within Philadelphia Health Care Center #4 (HCC#4).
2. Documenting mental health status of adolescents as recorded using the Adolescents Social History Form (ASH).
3. Compare ASH form results where possible to data from a NIH funded study entitled the Philadelphia Adolescent Lifestyle Study (PALS) currently being conducted at HCC#4.

Methods
Study Site
Philadelphia Health Care Center # 4 annually treats over 1300 adolescents.

Chart Review
The chart review took place over a 15 week semester, on five days from 9/07 to 11/07.

Random sample of charts were drawn by HCC#4 administrator.

The Villanova research assistant reviewed the charts for complete ASH forms.

The ASH data was entered into an electronic version of the ASH, implemented as an HTML application, which produced an excel spreadsheet for further statistical analysis.

An automated validation software tool was created in order to test the electronic ASH form and verify its correctness. The tool analyzes any web-based or HTML form, identifying duplicate or missing values and confirming proper form field naming and value ranges, providing a very high degree of confidence in the collected data.

Data Sources
1. Adolescent Social History form (ASH) is a clinical interview prompt tool used by adolescent healthcare providers covering the following domains:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td>Living arrangements</td>
</tr>
<tr>
<td>School</td>
<td>Facility subjective aspects, etc</td>
</tr>
<tr>
<td>Friends</td>
<td>Friendship, relationships</td>
</tr>
<tr>
<td>Dietary Habits</td>
<td>Weight concerns, etc</td>
</tr>
<tr>
<td>Safety</td>
<td>Psychological/emotional, etc</td>
</tr>
<tr>
<td>Substance Abuse</td>
<td>Substance use</td>
</tr>
<tr>
<td>Violence</td>
<td>Weapons, and or violence, etc</td>
</tr>
<tr>
<td>Mental Health</td>
<td>Quality of life, feeling good about self</td>
</tr>
</tbody>
</table>

2. Philadelphia Adolescent Lifestyle study (NIH funded) has conducted 268 interviews between 10/10/07 through 4/10/08. Pals data are collected through structured, confidential, psychosocial covering the following domains:

<table>
<thead>
<tr>
<th>Domain</th>
<th>Measure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mental Health</td>
<td>Behavior Assessment System for Children, Post Traumatic Stress Disorder</td>
</tr>
<tr>
<td>Substance Use</td>
<td>Alcohol, and Drug Resistance Scale</td>
</tr>
<tr>
<td>Social Network</td>
<td>Adolescent Social Network Assessment</td>
</tr>
<tr>
<td>Environmental Risk</td>
<td>Psychological Behavior</td>
</tr>
<tr>
<td>Spirituality</td>
<td>Religious and/or Spiritual</td>
</tr>
</tbody>
</table>

Results
Violence

- Have you witnessed fights or violence? 57%
- Do you carry weapons in school? 2%
- Have you been involved in physical fights? 58%

Substance Use (compared to PALS data)

- Tobacco: 7% (PALS: 8%)
- Alcohol: 10% (PALS: 9%)

Mental Health (compared to PALS data)

- PAST: 55%
- GAD: 23%
- PTSD: 15.6%
- BD: 3.3%

Conclusions
- Relying solely on ASH data to address adolescent mental health concerns is not supported by these findings.
- The data are not consistent with the data collected by the PALS study.

Problems Associated with ASH Screening Process
- Inconsistency of the utilization of the ASH form; some adolescents complete this, most do not.
- ASH form was missing in 67% of charts reviewed. Only teens with scheduled appointments received the ASH thereby missing many walk-in patients.

Problems Associated with ASH form
- ASH form produces missing data. Results are unclear if the data are missing or if they are true negative responses.

- When the ASH mental health items are compared to the PALS project the contrast produces concerns for the validity and effectiveness of the ASH as a mental health screener.

Recommendations
- We recommend HCC#4 review the procedures of conducting mental health screening.
- If the clinic determines the need for consistent and high quality mental health screening we recommend:
  - Implementing a comprehensive screening protocol, one which implements consistent, clear, and confidential components.
  - Use a psychometrically sound, validated and reliable screening instrument.
  - Begin an evaluation of the screening procedures, process, and outcomes to make needed adjustments based upon solid evidence.

Electronic ASH form
Automated form validator