The Utility of Using Multiple Data Sources for Suicide Prevention Evaluation

CARING ABOUT LIVES IN MAINE GLS GRANT

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GLSMA Grant Goal

- Build competent communities that identify and appropriately respond to youth at risk for suicide.
- Able to effectively manage the environment if a suicide occurs.
Workshop Agenda

- Three evaluation components that complement the learning of the program
  - School and Community Based Evaluation
  - Epidemiology
  - Violent Death Reporting
- How the use of multiple data sets enhances our understanding of the dynamics of youth suicide
- How the use of multiple data sets enhances our ability to design and implement evidence-based prevention & intervention strategies

Interviews

**Description of Data**
Interviews with key contacts in schools & agencies

**What we Want to Learn**
- Fidelity and adaptations
- Implementation successes and challenges
- Perceived impacts
- Use of protocols
- Changes attributable to program
- Perceived impacts
- Key events

**Challenges**
- Time intensive
- Transcription
- Data management
- Staff changes
- Limited perspectives

**Considerations**
- Roles and numbers of interviewees from each school/community
- Balance between structured questions and probing
- Transcription
### Staff Training Data

#### Description of Data
Surveys of staff who participated in day-long Gatekeeper and/or staff awareness training

#### What We Want to Learn
- Changes in knowledge, attitudes, confidence and referrals
- Difference in impact by roles
- Changes in # of identifications
- Outcomes differences by training received?

#### Challenges
- Returns
- Matching surveys
- Anonymous surveys = no specific follow-up
- Added Gatekeeper trainings
- Spread of training dates

#### Considerations
- Immediate posttest or not?
- How many follow-ups?
- Matching system
- Encouraging returns
- Paper vs. web-based

### Early Identification and Referral Data

#### Description of Data
Expanded web-based version of the EIRF data collection. Data are collected from project and comparison schools.

#### What We Want to Learn
- # students
- Demographics
- 1<sup>st</sup> to identify student
- Signs that prompt concern
- Action taken by staff
- Follow through with referral
- Results of assessment

#### Challenges
- Consistent reporting
- Coordinated system of sharing and reporting data
- Confidentiality
- Total ids vs. total students

#### Considerations
- Collection & submission of data?
- Confidentiality barriers
- Student identifiers
- Obtaining follow-up data
Peer Identification

![Peer Identification Chart]

Crisis Agency Data

Description of Data
Data from agencies serving communities in each cohort. Information on youth seen for concern of suicide

What We Want to Learn
- Demographics of youth served
- Referral source
- Outcome of assessment

Challenges
- Data not electronic
- HIPPA
- Limited staff
- Data inconsistencies

Considerations
- Data retrieval
- HIPPA and data disaggregation
- Staff to gather and submit data
- Cost to agency?
- Consistent data
Youth Survey Data

**Description of Data**
School-based student survey (Youth Risk Behavior Survey)

**Challenges**
- Complex survey design methods
- Limited number of suicide questions
- Timing (biennial)

**What We Want to Learn**
- Prevalence of youth suicide ideation and attempts
- Trends over time
- Risk and protective factors of suicide

**Considerations**
- May not fulfill need for local-level data
- Available online

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Odds of Suicide Ideation by Number of Victimization/Risk Experiences

*\(p<.01\)  Adjusted for sex, grade, race, same sex sexual contact

Victimization=Dating violence, sexual assault, threatened at school, property damaged at school, unsafe at school, racial harassment, sexual orientation harassment

Risk behaviors=low grades, multiple sexual partners, substance use, smoking, binge drinking, fighting at school, weapon to school, eating disorder
Hospitalization/ED Data

Description of Data
Statewide discharge information from hospitals.

Challenges
• Low numbers
• Years of available data
• Unknown behavioral intention

What We Want to Learn
• Rates of intentional self-injury
• Trends over time
• Comparison of self-injury hospitalization rates between intervention and control.

Considerations
• May not be available in every state
• Need zip code or geocode in database to link to school or community

Hospitalization rates (per 10,000) for self-inflicted injury among youth age 14-19 years, Maine 2001-2006

<table>
<thead>
<tr>
<th>Cohort A</th>
<th>Cohort B</th>
<th>Comparison</th>
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<tbody>
<tr>
<td>2001-2002</td>
<td>20.4</td>
<td>11.4</td>
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<tr>
<td>2003-2004</td>
<td>21.6</td>
<td>25.7</td>
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<tr>
<td>2005-2006</td>
<td>14.3</td>
<td>8.8</td>
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<tr>
<td>2007</td>
<td>TBD</td>
<td>TBD</td>
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</tbody>
</table>
Medicaid/Private Insurance Data

**Description of Data**
Medical care use claims from those insured.

**Challenges**
- Accessing data
- Analyzing data
- Sample size

**What We Want to Learn**
- Contact with health care providers prior to and after self-injury hospitalization

**Considerations**
- Relationship with Medicaid agency
- Claims coding

Maine Violent Death Reporting System

- Abstracted and analyzed all youth suicide cases from 2005-2008
- In process of abstracting 2000-2004, 2009
- Multiple data sources
  - Death Certificates
  - Medical Examiner Reports
  - Police Reports
  - Suicide Notes
  - Hospital/Physician Reports (as available)
  - Mental Health Provider Reports (as available)
- Goal: Better understanding of youth’s life before suicide – where are the potential prevention/intervention points
MEVDRS – Description of Data

- Paper records at ME office
- Standard form for DC
- ME reports vary according to who completed and the extent of examination
- Police reports vary according to Department, extent of investigation, both objective and subjective data, anecdotal, suicide notes (if available)
- Suicide notes original documents
- Hospital/physician records to the extent requested by ME office
- Mental Health/Psychiatric records to the extent requested by ME office

MEVDRS – What We Want to Learn

- Circumstances surrounding death
- Person’s life experiences for the prior six ~ months
- What risk factors/behaviors did the decedent have
- Demographic information – age, sex, education, transition period
MEVDRS Data Challenges

- Incomplete data sets
  - Three required documents collected within 18 months after death
  - Files don’t generally contain medical information
  - Cases are generally not fully investigated (suicide is not a criminal act)
- Anecdotal evidence
  - Investigators not trained to do after-suicide debriefing
- Subjective assessments by law enforcement
  - “I couldn’t find any reason for him to commit suicide. His girlfriend broke up with him last night but I don’t see how that is important.”

MEVDRS
Spectrum of Risk Variables

- Toxicology Screening
- Mental Health
- Substance Abuse
- Crisis
- Physical Health
- Interpersonal Problems
- Interpersonal Violence
- Relationship Problems
- Job
- School
- Finance
- Recent Suicide
- Other Death
- Legal – Criminal
- Legal – Civil
- Expressed Intent
- History of Suicide
**Sustainability of School-based Prevention Program**

- Strong consistent champion in the school
- Core of consistent staff
- Supportive administration
- Continued updates and awareness for staff
- Ensure new staff receive training, esp., health teachers
- Adequate number of trained Gatekeepers
- Continued availability of program & evaluation staff

**Evaluation Informs Program**

- Creation of Protocol Development Workshop
- Change in composition, development and maintenance of school-community referral networks
- Change in coordination of school-based efforts
- Discontinuation of school data-tickler system
- Discussions with schools on where information about student risk resides
- Creation of curriculum for students transitioning in life
- More current information on risks faced by adolescents
Group Questions

- What data sets are you currently using in your project?
- What challenges have you encountered in using multiple databases?
- What data sets might be available for you to use in your project?
  - Who has them?
  - How do you access them?
  - Is there added value?
- When do you reach saturation with data sets?
- How do you use these data to inform programming?