WV Sexual Assault Evidence Collection Kit Information System

Sarah Brown, Senior Justice Programs Specialist
Erica Turley, Research Specialist

WV Division of Justice and Community Services
Department of Military Affairs and Public Safety
Problem being addressed

- Unsubmitted, untested, and/or poorly collected kits limit the possibilities of justice for victims of sexual violence and allow repeat offenders to go undetected

- Database system used by crime lab to enter information on quality of evidence collected by medical professionals no longer meeting needs
  - Not working as originally intended to provide feedback to medical staff
  - Antiquated system, difficult to make changes and extract data

- Unable to track kits that never return to the crime lab for analysis
  - Only about 200 of the 600 kits sent out annually by the crime lab return to the lab for analysis
  - Crime lab had recently started using Excel spreadsheet to record information from hospitals when a kit was used
Partnerships
History

- 2001: Sexual Assault Nurse Examiner Advisory Board
  - Review sexual assault kit evidence collection procedures and paperwork
  - Develop and facilitate Sexual Assault Nurse Examiner (SANE) trainings
  - First database designed for improving kit collection - Sexual Assault Kit Tracking Application (SAKiTA)
  - Drafted and supported the Sexual Assault Forensic Examination (SAFE) legislation which created the SAFE Commission under the Division of Justice and Community Services (DJCS)
History

2004: First version of SAKiTA created

- Partnership of WVSP, Marshall University Forensic Science Center (MUFSC), and FRIS
- Goal of the system was to provide feedback to SANEs and physicians on the quality of evidence collected in sexual assault cases
- Crime lab provided quality review analysis of evidence collected in kits and provided feedback to examiners
History

- **2014: Sexual Assault Forensic Examination (SAFE) Commission (§15-9B)**
  - Establish, manage and monitor a statewide system to facilitate the timely and efficient collection of forensic evidence in sexual assault cases
  - Authorize minimum training requirements for examination providers
  - Establish a basic standard of care for victims of sexual assault
  - Develop a data collection system to monitor adherence to established standards
History

- 2015: National Sexual Assault Kit Initiative (SAKI) Grant/ District Attorney of NY (DANY) Grant
  - Create a coordinated community response utilizing victim centered response to resolve sexual assault cases
  - Inventory all unsubmitted sexual assault kits (SAKs) statewide
  - Test unsubmitted SAKs
  - Track SAKs from crime lab to hospital and through case adjudication
  - Develop policies to reduce the number of unsubmitted SAKs
Solution

- **2016: Sexual Assault Evidence Collection Kit Information System (SAECKIS)**
  - Integrated web-based solution combining both the quality of evidence review and kit tracking
  - Utilizes the latest industry standard technologies and is completely web-based, no special hardware or software
  - Accessible to all authorized stakeholders
  - User-friendly interfaces with built-in validation
  - Kit tracking and kit evaluation reporting features and simple data extraction
  - Easy to integrate new user interfaces for additional case information
How does it work?

- Crime lab analysts log new kits into the system to manage which kits are shipped to which hospitals and when.
- Hospital staff see inventory of available kits in stock.
  - Once the hospital collects kit evidence, system is updated to indicate disposition (kit picked up by LE, used for training, etc.).
- Crime lab receives kit from LE for analysis.
  - As kit evidence is analyzed, quality of evidence is evaluated and scored for multiple kit sections.
  - Tracking information is completed.
### Manage Kits

Enter the required fields and click the **Add** button to add a new kit.

<table>
<thead>
<tr>
<th>Kit ID Number</th>
<th>Facility</th>
<th>Disposition</th>
<th>Agency</th>
<th>Not-Used Destroyed</th>
<th>FW to Facility</th>
<th>FW Date</th>
<th>Submit Date</th>
<th>Added by</th>
<th>Examiner</th>
<th>Qualification</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISP0006</td>
<td>CAMC W&amp;C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISP0004</td>
<td>CAMC W&amp;C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISP0005</td>
<td>Berkeley County</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISP0006</td>
<td>CAMC W&amp;C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISP0007</td>
<td>CAMC W&amp;C</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Showing 1 to 5 of 25 entries
Facility Manage Kits

Current Facility: CAMC W&C [Change]

Select the kit ID number and click Search to find the kit then enter the required fields and click the Submit button.

Review the information carefully before submitting. Changes may not be made once the kit is submitted.

Kit ID Number: WVSP00021

- Kit Disposition: Law Enforcement Agency
- Agency: AMSTED POLICE DEPT.
- Date Forwarded: 02/17/2017
- Examiner Name: Examiner 2

Submit
Capabilities

- Crime lab users can manage kit information that tracks kits sent to hospitals
- Feedback on the quality of evidence collected is provided to those conducting the forensic exams
  - Kit evaluation data identifies areas of improvement, guides training opportunities, ultimately improves the evidence collection process
- Hospital staff can see inventory of kits in stock, and order new kits when needed
- All system users can utilize report functions to review kit dispositions, inventory tracking, and kit evaluation data
  - Data can also be easily extracted for more detailed analyses
Results

- 1,154 kits currently logged into system
  - 559 have no disposition, 409 have been forwarded to LE, 53 went to MUFSC (non-reports), remainder not used/destroyed, training, or forwarded to another hospital
  - Lab analysts backfilled all kits shipped in 2016
- 173 kits evaluated since launch
  - Ability to compare kit scores over time and by kit area
  - More detailed analyses of kits by hospital, examiner, examiner type, etc.
  - Time frames between assault, submission, and evaluation
  - Analysts provide specific comments to support scoring
Results

Scores by Kit Area

- Overall
- Documentation
- Clothing
- Debris
- Hair
- V/P Swabs
- Oral Swabs
- Anal Swabs
- Other Swabs
- Known Specimens
- Toxicology

Legend:
- Poorly Collected
- Needs Improvement
- Well Done
Results

Distribution of Mean Quality Review Summary Score by Kit Evaluation Year

<table>
<thead>
<tr>
<th>Category</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Well Done</td>
<td>22.7%</td>
<td>19.5%</td>
<td>23.5%</td>
</tr>
<tr>
<td>2 - Needs Improvement</td>
<td>64.0%</td>
<td>59.8%</td>
<td>61.4%</td>
</tr>
<tr>
<td>3 - Poorly Collected</td>
<td>13.3%</td>
<td>20.7%</td>
<td>15.2%</td>
</tr>
</tbody>
</table>

Percents may not equal 100 due to rounding.
Impacts

- Improved communication between hospitals and crime lab
  - Most higher volume hospitals have registered in system
- More timely feedback on quality review scores to all hospitals
  - Quarterly reports compiled and distributed by Hospital Association
- Exam reimbursement fee to be looked at based on improved tracking data
- Quality reviews help identify components of kits, documentation, and/or instructions needing modification
  - Microscope smear slides removed from kits (supports SWGDAM recommendations)
- Direction for discussion regarding mandated kit submission and centralized storage location
What Next?

- Include feature in hospital interface to submit request for reimbursement from the WV Forensic Medical Examination Fund (§61-8B) - WV Prosecuting Attorneys Institute
- Go beyond kit management and analysis to track cases through adjudication
  - Develop additional user interfaces for LE, prosecution, CODIS hits, etc.
- Consider new legislation mandating submission of all kits
  - Will increase backlog of kits at crime lab without additional resources
  - Centralized storage facility will be necessary, no current resources
- Address funding and staffing issues at crime lab to ensure timely testing so results are released to LE and justice can be served
Transferability

- System developed in partnership with WV.gov, official website of the state of WV (http://www.wv.gov)
  - Public-private partnership between state and West Virginia Interactive (WVI)
  - WVI is a subsidiary of digital government firm NIC (NASDAQ: EGOV)
  - NIC companies have developed more than 12,000 digital government services for more than 4,500 federal, state, and local government agencies
- WV SAECKIS source code can be shared freely with other NIC business units currently in 28 states
  - Solution can be customized to meet other states’ needs
- States not part of NIC family can reach out to NIC corporate sales team for referral to NIC divisions working with states outside NIC family
Contact Information

WV Division of Justice and Community Services
Department of Military Affairs and Public Safety
1124 Smith Street, Suite 3100
Charleston, WV 25301
304-558-8814
www.djcs.wv.gov

Sarah Brown, Senior Justice Program Specialist
Sarah.j.brown@wv.gov

Erica Turley, Research Specialist
Erica.e.turley@wv.gov