



SEXUAL ASSAULT KIT TRACKING SYSTEM STUDY

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Executive Summary

This study is a product of Act 70 of 2022. In part, the act tasked the Pennsylvania State Police with conducting a study to examine the resources required to implement a rape kit tracking system within the Commonwealth. The study examined the available software systems currently employed in other states along with costs and necessary resources to provide an effective sexual assault tracking system for survivors of sexual assault, law enforcement, forensic laboratories, and health care facilities in Pennsylvania.

The goal of this study was to provide information and options to the General Assembly and cultivate informed discussions related to implementing an effective statewide tracking system aimed at empowering survivors of sexual assault while increasing transparency and accountability.

The available systems are composed of two public (free) options and two private (vendor-driven) options. The two open source (free) systems are the “ISAKI” by Idaho State Police and “SAMS-Track” by Portland, Oregon along with the Oregon State Police. The two (COTS) commercial-off-the-shelf systems are “Track-Kit” by InVita and “PERK” by Forensic Advantage. A detailed review is below.

1. The ISAKI (Idaho Sexual Assault Kit Initiative) does not provide any upgrades, bug fixes, updates, technical support, maintenance, and training for the share version. Therefore, it is the recipient state's responsibility to configure, maintain, and manage the system. The software is Java-centric, and the Commonwealth IT infrastructure is Microsoft-centric. If this system were to be chosen one must consider the necessary IT personnel and equipment upgrades that will be required to support the Java-centric system.



2. The SAMS-Track system was developed by Portland Police Department and is currently in statewide use. Oregon is willing to distribute this software to other states free of charge as long as they continue to receive federal funding to sustain the ongoing cost of maintenance, updates, technical support, and bug fixes. This system is Microsoft-centric.
3. Track-kit by InVita is a cloud-based system. Maintenance, updates, upgrades, and technical support are provided for an additional cost. This system is packed with features, hence any add-on features increase the final cost including the victims' portal. Track-Kit was substantially more expensive in comparison to the other systems.
4. PERK (Physical Evidence Rape Kit) by Forensic Advantage (FA) is a Microsoft-centric system. It only offers hosted services on the cloud for cost efficiency and in case of a disaster, there is no extra cost to the client. The cost of the system is estimated based on the state's population. FA provides maintenance, upgrades, updates, and 24/7 technical support to both victims and authorize users.

The approximate costs of the open source (free) systems are driven by maintenance and personnel costs. The approximate costs for personnel and maintenance are difficult to estimate due to variables such as sexual assaults per capita, varying state statutes, and differences in salaries and benefits identified during interviews with representatives from various states during this project.

The approximate costs for commercial off-the-shelf (COTS) systems are variable due to each state's specific needs and populations. The InVita Track system requires a recurring \$210,000

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annual fee for access to the standard edition with additional annual fees of \$50-\$60,000 for cloud hosting, technical support, and additional functionality.

The funding sources for the systems are primarily distributed by the U.S. Department of Justice (DOJ) via grants to address the issue and impact of unsubmitted sexual assault kits (SAKs). This funding includes a comprehensive approach to unsubmitted SAK (the agency must have a plan to significantly eliminate or reduce the existing number of unsubmitted kits).

Problem Statement

House Bill 2032, now known as Act 70 of 2022, requires the Pennsylvania State Police to conduct a study and issue a report on a Statewide Sexual Assault Kit Tracking System. The intent of the report is to identify not only the available software systems but the resources necessary (including costs and funding) along with the training required to implement and maintain the system.

Available funding sources that could potentially be utilized for costs associated with the integration and support of a new system have also been evaluated.

This report includes an analysis of the benefits to not only the victims of sexual assaults but those involved in working with the sexual assault kits (collection, investigation, and testing of the evidentiary material) from these types of cases. The goal of this report is to assist the Commonwealth in making improvements to the process of tracking sexual assault kits to ultimately allow survivors of sexual assault to become empowered with knowledge of where their rape kits are at any given time after collection.

These types of software systems assist with increasing accountability and transparency by ensuring sexual assault kits are tracked, managed, and when applicable, tested in a timely and efficient manner, making it easier for the parties involved in these types of cases (victims, law



enforcement, prosecution, etc.) to better understand at any given time where the evidence is located and where the kits are in the testing process ensuring this type of evidence is not left untested and backlogged for long periods. These systems are in no way designed to replace conventional evidence tracking used for the chain of custody but are designed specifically to track sexual assault kits from the time of collection to disposition.

These researched systems will automate the current manual efforts to manage the tracking of sexual assault kits within the Commonwealth of Pennsylvania while ensuring the process is easy to operate for the diverse group of potential users.

An acceptable tracking system will allow sexual assault victims to log in at any time to access the status of their evidence kit while creating much-needed transparency for victims by allowing a survivor of sexual assault to determine where their kit is currently located from time of collection to when it is submitted to Law Enforcement and potential forensic testing, along with additional contact information with resources for help when needed. The ideal system that would be selected for use in Pennsylvania is expected to track the kits from the moment they are collected at a healthcare facility to being relinquished to Law Enforcement Agencies (LEAs), information on if/when the kit was submitted to an approved forensic laboratory for analysis, and finally the return to LEA. The currently available systems also track the destruction of kits when applicable by law.

Scope

The scope of this study is limited to Act 70 of 2022.



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Impact on Stakeholder Groups

The implementation of a statewide kit tracking software system will impact numerous stakeholders with varied experience, knowledge, and duties within the Commonwealth of Pennsylvania. Stakeholders or their many designees must be required to perform their responsibilities to maintain an accurate and smooth flow of data within the system. Without mandatory participation from healthcare, law enforcement, and laboratories, the system will not perform as desired. Each stakeholder must be required to ensure their staff is well-trained while monitoring users with access to the system. Several agencies are acknowledged as accountable stakeholders for administering and maintaining the tracking system and/or inputting & retrieving data. The PSDC (Public Safety Delivery Center) has been tasked with facilitating the drafting of this study. The Pennsylvania State Police Bureau of Forensic Services (BFS) assisted the PSDC in the decision-making process due to their expertise. Additional stakeholders that were interviewed for their input and agency-specific recommendations include:

- Pennsylvania Department of Health (DOH)
- International Association of Forensic Nurses (IAFN)
- Pennsylvania Coalition Against Rape (PCAR)
- PA Chiefs of Police Association (PACP)
- The Hospital & Health System Association of PA (HAP)

The two county laboratories that conduct analysis of sexual assault kits and upload data into CODIS were met with to provide recommendations, suggestions, and expertise.

- Allegheny County Office of the Medical Examiner
- Office of Forensic Science Philadelphia Police Department



Cost Considerations

The current legislation requires the Pennsylvania State Police to conduct a research study that explores the cost of obtaining resources necessary to implement a statewide tracking system.

- The tracking system must be customizable to abide by Pennsylvania statutes and regulations while exhibiting the capability to easily track kits throughout the Commonwealth with a varied group of users such as hospitals and law enforcement.
- The tracking kit system must be robust enough to allow for the large number of potential users the Commonwealth of Pennsylvania has in both law enforcement and health care.
- The system is required to have the capability to allow victims of sexual assault to view the location and real-time status of their kits along with providing the real-time status of kits that remain untested within the Commonwealth to authorized users.

Based on the findings during this study, the cost of each system is variable due to the multiple levels of pricing plans, the level of configurations that are required, the amount of available technical support along with the population of Pennsylvania which is taken into account by some software suppliers. States with larger populations may have a larger number of not only sexual assault kit submissions, but users spread throughout a large geographical region, requiring a more robust system to store, input, and retrieve data at a constant speed of service which drives up the cost. Technical support appears to be the most expensive component of these systems, particularly the around-the-clock technical support that is required. Technical support would be supplied by the Commonwealth for any system acquired for “free” as these systems do not offer this feature. Personalized configurations will increase cost due to features which will be necessary to implement within the system or are not included in the selected package option. Two options



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where software developers of a sexual assault kit tracking system are willing to share their software with other states “free” of charge were researched.

- However, it is important to note there will be no ongoing technical support or additional functionality with some of the shared versions.
- Research has shown any system considered would require a new IT administrator and assistant to manage and maintain the tracking system along with an additional programmer.

The states researched were smaller in population and recommended at least two individuals to administratively monitor and upkeep the system.

The U.S. Department of Justice (DOJ) does offer funding via grants to address the issue and impact of unsubmitted sexual assault kits (SAKs). This includes funding for a comprehensive approach to unsubmitted SAKs (the agency must have a plan to eliminate or reduce the existing number of unsubmitted kits significantly). Currently, for Fiscal Year 2023-2024, there are eight awards being offered with a maximum award amount of \$2,500,000 and a 36-month duration (starting date of 10/1/2023). It must be noted that there are extensive tracking and monitoring requirements including mandated multi-disciplinary elements of this current solicitation that would require an immense amount of work. Recipients are not only required to track inventoried SAKs throughout the duration of the award using an electronic sexual assault system designed specifically for SAK cases but additional information is required to be tracked such as:

- Kit Number, Law Enforcement Incident Number, dates of submission, age of the victim, date of offense, location of each kit, the status of each kit including dates of submissions, who it was submitted to, testing progress, and results such as DNA profile obtained, CODIS eligibility, date of CODIS upload if applicable, CODIS hits returned, date and type of hit returned (offender or forensic case), and current status of the investigation.



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- All key personnel from the awardees' agency must attend the annual 2-day SAKI (Sexual Assault Kit Initiative) workshop in Washington, DC.
- This award also specifies exactly what is expected to be entered into a kit tracking system removing the authority of the agency to make those decisions.

The establishment of a multidisciplinary working group is required to meet regularly to reduce the existing number of unsubmitted SAKs through increased testing and changes in practice. The working group must address factors that lead to a high number of unsubmitted SAKs, develop a strategy to address the backlog and provide uniform assistance to all agencies. It is recommended within the grant guidelines that this working group should comprise law enforcement personnel (including superior officers and officers that respond to and investigate sexual assault complaints), forensic medical personnel (including sexual assault forensic examiners), forensic laboratory personnel, prosecutors, victim advocates (both system-and community-based), and victim treatment providers.

Systems Reviewed

The study group consulted with four vendors/providers that have designed a sexual assault kit tracking system. These included Idaho State Police: ISAKI (Idaho Sexual Assault Kit Initiative); Portland, Oregon along with the Oregon State Police: SAMS-Track (Sexual Assault Management System); InVita: Track-Kit; and Forensic Advantage (FA): PERK (Physical Evidence Rape Kit).

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Open Source (Free) systems

Idaho shares the ISAKI with other states free of charge with limited features. Idaho does not make any updates, nor do they provide any support to this shared version. Any developments or software fixes are not passed along to the recipient states. The system is distributed with no additional functionalities, requiring other states to rewrite any code upon obtaining the software to meet individual state requirements.

- The ISAKI is Java-centric, hosted on Apache as a web server and a reverse proxy to the Tomcat Java app server.
- Consequently, if the Commonwealth decided to opt to implement this software, it will require the hiring of Java developers along with implementing other types of equipment as the Commonwealth's IT infrastructure is Microsoft-centric and currently does not support the necessary Java-centric infrastructure needed for the use of the Idaho system.
- Java developers will be needed to configure and provide ongoing technical support and maintenance for the system. The Commonwealth must host the system on the cloud or on-premises. The annual average cost for maintaining the system varies since each state may have different requirements.
- The system does not provide victims with the capability to set up automatic notifications instead, they must log into the provided weblink to check on the status of their kits.
- It does not provide the capability to interface with existing software in the laboratory to alleviate the need for dual entries (ex. Laboratory Information Management System which tracks evidence for the chain of custody).



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- It does not have a Quick-escape option (this allows a victim to immediately exit out of the system and land on a nondescript site such as Google or other sites when someone abruptly enters the room).
- Idaho does not conduct any live training regarding the system, the recipient state is provided with links to short training tutorials posted on YouTube and short videos on how to navigate the system upon procuring the code.
- Also, due to Idaho's small population in comparison to the Commonwealth, Idaho is not certain that the system will respond well to the scalability for the size of Pennsylvania and the magnitude of data that will be entered and tracked as well as the number of users that will be granted access in the system.

North Carolina is currently using the ISAKI tracking system; after an initial phase and the cost of having contracted Java developers completely configure the software. With three Java contracted developers, it took North Carolina six months to deploy the system after acquiring the code from Idaho. Upon completion of the six-month project, North Carolina spends approximately \$90,000 annually for one full-time Java developer to maintain and provide technical support for the system; along with a full-time administrator position and approximately two assistants to manage the system. NC also stated there is a latency issue with scalability, such that the system lacks consistent robust performance when the number of users utilizing the system increases. As a side note, this system is the least advanced out of all the systems researched.

The SAMS-Track system was developed by Portland Police Department and is currently in statewide use. It was developed because their method of manually tracking kits in Excel spreadsheets, was no longer feasible. The federal government awarded \$1.8 million in grants to the Portland, Oregon PD to design a sexual assault kit tracking system. The Oregon State Police



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have now partnered with Portland PD for the continued development and disbursement of the software system. Oregon is willing to distribute this software to other states free of charge as long as they continue to receive federal funding as they do incur costs associated with the continual expansion and sharing of the software system. Currently, the only cost which may be incurred by the recipient state is travel expenses if a representative from Oregon is required to travel to the state that is implementing the SAMS-Track system to demonstrate how to operate the software onsite. Oregon is willing to provide virtual training along with links to YouTube instruction training videos at no cost when obtaining the software. They have implemented a process called train the trainer (where the Oregon system administrator trains the new administrator for a few days and then has the new administrator conduct training for the rest of the users within that state). Currently, there is no ongoing operational cost to maintain the system, as Oregon is responsible for all upgrades, updates, and maintenance as long as they continue to receive grant funding as mentioned previously. This software runs on .NET. SAMS-Track contains as many features as other competitors in the market today and is highly compatible with other existing laboratory management software. The system provides several functionalities not yet available in other systems such as:

- The capability to create a reporting dashboard utilizing any reporting platform.
- The IOS mobile app for Sexual Assault Nurse Examiners (SANE) and LE.
- The options to activate Two-Factor Authentication.
- API (Application Programming Interface, allows two software programs to communicate and share data) which could potentially allow the lab to push kit tracking information directly from the Laboratory Information Management System (LIMS). It is unknown if this feature will work with the current LIMS used in the PA State Police Laboratory System.



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This feature would eliminate the need for dual entry into the computer system the laboratory utilizes to track all evidence custody.

- The ability to add users via Microsoft Excel dumping helps bypass the entry users individually.
- The system allows the exporting of data from SAM-Track into an excel or PDF file whenever permissible.
- It provides victims with the Quick Escape option.
- It allows filtering, searching, and sorting options for optimized report generation.

Tennessee State Police is currently utilizing Oregon's SAMS-Track system and reported to the study group there have been no additional costs incurred for the system (beyond personnel) and has claimed tremendous success with the system stating it does exactly what it was intended to do. Per Tennessee's opinion (estimated population 7.05 million in 2022, which is about half of PA's estimated 12.97 million), it is necessary to have more than one staff member dedicated exclusively to managing and maintaining the system. This suggests the need for PA to have at the very least two full time staff members dedicated to managing the system. The state of Hawaii is also using this software but was not interviewed for this study.

Commercial (COTS) systems

Track-Kit by InVita (previously STACS) was only able to provide a general cost of different package options for the tracking system. The cost for the standard edition is \$210,600 annually, which does not include any add-on features. Upon selection of Track-Kit, professionals from InVita will demonstrate at no cost how to use the system. Users that choose Track-Kit must start with the standard module which includes five portals:



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- Manufacturer, Medical Facility, Law Enforcement, Laboratory, and Policy Center Portal.

The final cost for each state derives from the number of sexual assaults which occur in that state, with this number being derived from the Federal Bureau Investigation Uniform Crime Report. Cloud-hosting service is necessary to acquire access to the Track-Kit standard edition: the annual cost is \$15,000-\$20,000 per year dependent upon which option is preferred. The more expensive option allows for Geo-replication of data where a copy of the data is stored in multiple virtual servers in different physical locations guaranteeing interruption free service in the event of a natural disaster. The optional portals:

- Survivor portal is \$26,325.
- Prosecutor portal is \$13,813.
- Outsourcing (private lab) portal is \$13,183.

The user training Policy Center Portal is part of the standard edition.

- The user training for end-users of selected optional portals is \$18,800 for an estimation of 50 training sessions.
- Annual Technical support services range from 8 hours a day to 24/7, and prices range from \$56,650 to \$263,093 annually.
- Track-kit does provide victims with the option to set up automated notifications via email or text message and can change language preference (other sexual assault track kit system providers did not include this feature to maintain victim's anonymity).

Michigan State Police (MSP) is currently using the Track-kit system; their system was completely state-funded and did not use federal funding. MSP hired two full-time positions to manage and assist with password resets, kit locations, kits entered, testing, and updating the system. MSP agreed to a five-year contract with InVita, \$50,000-\$60,000 a month in maintenance and



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technical support. In researching InVita services it was found to not be as fluid as advertised due to a shortage of personnel to assist with multiple changes at once. Some functionality issues after updating or upgrading the system have been encountered as technical support has taken longer than expected to resolve issues. There is a tremendous cost for this system compared to the other systems researched in this report.

The Physical Evidence Rape Kit (PERK) tracking system was developed by Forensic Advantage (FA), a division of Caliber Public Safety Business Unit (CPSB) located in Virginia that offers mission-critical records management to Law Enforcement Agencies across the United States; it has clients at the municipal, state, and federal levels. This system runs on .NET Core with a SQL backend; FA only offers hosted services on the cloud for cost efficiency, and in the case of disaster recovery, they handle any issues at no extra cost.

- The cost of the tracking system focuses on the state's population, technical support needs, and customization requirements.
- 24/7 technical support is available for both authorized users and victims.
- FA maintains the infrastructure and security while allowing state administrative authority over the system.
- PERK is automatically integrated with the FA version of LIMS (which is not utilized by PSP); however, it is uncertain whether it can integrate with other LIMS.
- To maintain victim anonymity this system does not allow victims to set up automated notification of kit status which would require obtaining a victim's information such as email address or phone number.
- Currently, there is no Quick Escape option hence it is in the process of implementation.

Georgia was the first state to purchase the PERK tracking system.



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- The initial cost of implementation was approximately \$100,000 initially and \$40,000 per year thereafter (using federal grants for maintaining the system).

Georgia stated the PERK system is very similar to Track-Kit, providing almost all the functionality features, and support at a cost-effective price plan. Georgia requested extensive configurations to the system at the time of purchase; with these expanded functionalities becoming integrated into the standard software package upon purchase. Georgia (with an estimated population of 10.91 million in 2022, compare to Pennsylvania’s 12.97 million) recommended having a dedicated system coordinator along with several assistants to upkeep the system. The tracking system requires ongoing maintenance to provide a smooth flow of data from one organization to the next.

The below chart summarizes the systems, states researched, and approximate costs associated with each system if implemented.

State	Vendor Name	Estimated Initial Implentation Costs	Estimated Operational Costs	Personnel Costs
Idaho	Idaho ISAKI system	Free of charge from Idaho	Unknown	Java developer(s)/administrator(s)
North Carolina	Idaho ISAKI system	Free of charge from Idaho	Unknown	Developer(s)/Administrator(s) \$90000
Oregon	SAMS-Track	Free of charge from Oregon	Unknown	.Net Developers/Administrator(s)
Tennessee	SAMS-Track	Free of charge received from Oregon	Unknown	.Net Developers/Administrator(s)
Michigan	STACS InVita	\$210,600 plus Tech support	\$50,000-60,000 Monthly	Administrator(s)
Virginia	Forensic Advantage	Funded through the SAKI grant	Unknown	Administrator(s)
Georgia	Forensic Advantage	\$100,000 with grant assistance	\$40,000 with grant assistance	Administrator(s)



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Risk Assessment

ID	Description	Type	Date Opened	Status	Category	Probability	Impact	Risk Score	Risk Response	Detailed Risk Response	Risk Trigger(s)	Timing	Risk Owner	Close Date
1	Standardized Work Flow	Threat	10/3/22	Open	Business	Low	Low			Hard to find qualified SANE for vacant positions due to less competitive wages and lack of experience and qualifications.				
2	Developer Availability	Threat	10/3/22	Open	Business	Moderate	High			Lack of cohesiveness and communication amongst agencies make it difficult to administer the system.				
3	Communication Issues	Threat	10/3/22	Open	Business	Moderate	Moderate			The method of communication is ambiguous.				
4	Training of Personnel	Threat	10/3/22	Open	Business	Moderate	Moderate			Staff are not well trained.				
5	Meeting Attendance	Threat	10/3/22	Open	Business	Moderate	Moderate			Higher-ups are not attending meetings.				
6	Technical Assistance	Threat	10/3/22	Open	Business	Moderate	Moderate			Not sure whom to contact to resolve anything				
7	Resource Issues	Threat	11/11/22	Open	Business	High	High	-18		Lack of adequate resources - funding / personnel				
8	Storage Issues	Threat	11/22/22	Open	Business	Moderate	Moderate	-8		On premise solution vs. cloud solution				

The qualitative risks associated with this Project include but are not limited to: Standardized Workflow, Developer Availability, Communication Issues, Training of Stakeholders which include Medical Professionals, Law Enforcement, and Forensic Personnel, Meeting Attendance, Technical Assistance, Resource Issues, and Storage Issues. In conducting a sensitivity analysis of the Risk Register shown above, which was used to identify qualitative risks, the highest risk items are considered, and a sensitivity analysis was conducted to determine the project's overall risk and help us propose effective controls.

Mitigation of Risks

In order to mitigate the risk posed to standardizing Workflow there must be a robust training program initiated from the start which will provide adequate and ongoing training for personnel entering data into the system. This training program must account for all medical facilities and users who would be tasked with the initial entry of the kit into the system, as well as the training of over 1,200 law enforcement agencies in Pennsylvania. These agencies and facilities are prone to high turnover of staff and may require ongoing training.



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In order to mitigate the risk posed to developer availability there must be an adequate project plan in place that brings together the various stakeholders. The free-to-implement systems will require more development activity than commercial solutions, including the need to know the technical specifications of the selected system prior to engagement in order to properly plan for additional resources.

In order to mitigate the risk posed by communication issues there must be an agreed-upon Communication Plan that is then implemented and followed. This includes communication between the developers, users, and administrators. In order to mitigate the risk posed by training varying stakeholders there must be a well-thought-out project plan that encompasses all aspects of training that include handling large volumes of turnover.

In order to mitigate the risk posed by meeting attendance issues there must be a well-established series of meeting notes and a comprehensive Risk Management plan. In order to mitigate the risk posed by technical assistance issues, the encompassing project must create detailed systems design and technical support documentation and a separate, standard operating procedures (SOP) document for the service desk.

In order to mitigate the risk posed by resource issues there must be an established Resource Allocation Plan with the agreement made prior to implementation. In order to mitigate the risk posed by storage/security issues there must be a well-thought-out architectural design for the system and the encompassing project will need to obtain approval from the PSDC's Architecture Review Committee (ARC) if this system is run through the PSDC.

In order to compensate for the increased volume of data entry required for the implementation of a statewide tracking system there must be enough financial resources available to fund the necessary number of developers required for such a project.

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Resource Allocation Plan

Even with the promises of the “free” software systems that are available, it must be understood there are costs associated with these systems. This project mainly focuses on software with a small portion of hardware. The software is required to be customizable to meet the Commonwealth of Pennsylvania’s unique Sexual Assault Testing and Evidence Collection Act. If a free-of-charge system is selected such as the software offered by Idaho, full-time software developer position(s) will be required to configure the software and provide future upgrades, bug fixes, and updates. In addition, the proposed system will require a full-time software administrator to manage and maintain the data in the database. The small portion of hardware that might be required for usage of a system would be hand-held bar code scanners.

It is unknown at this time if kits that existed prior to the implementation of a new system will be added retroactively to the new system. Another important item to understand is that the sexual assault kits are not currently distributed from the Pennsylvania State Police directly to hospitals, instead, hospitals are required to manage their own inventories accordingly. This would need to be considered as how the kits are distributed and entered into the tracking system for initial retrieval to begin the tracking would need to be determined prior to implementation. From the research conducted, approximately half of the states are using a distribution plan after entering the kits using barcode identifiers to then make the kits accessible within the system for the medical facility to begin tracking. Other states are opting to have the medical facilities continue with the current practice of ordering their kits from the manufacturer and entering them at that point. Some states have taken over the process of purchasing all kits and having the kit manufacturer enter the kits into the system.

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It must be understood that upon initial implementation of a new system, there may be a significant volume of data entry required which must be taken into account when allocating resources for the management of the system.

All states presently utilizing a statewide kit tracking system emphasize that having additional personnel to manage and maintain data in the database is critical. Agencies will need to assign an administrator role to either grant or rescind access to the tracking system, access reports, access all areas of the portals, and utilize the data being populated by the system, etc.

A trainer or a training procedure is required to train first-time users and coordinate annual training requirements. A robust, confidential sexual assault kit tracking system could be implemented on a statewide basis based upon a thorough evaluation of the different options available to the citizens of the Commonwealth of Pennsylvania.

All four systems researched essentially provide the backbone and common core sexual assault tracking capabilities. These systems allow for tracking of kits from time of entry at the hospital to LE to the laboratory and of course by the victim. The system administrator can easily generate real-time reports. The ease of implementation and use along with the cost is the main difference between the four systems.

Additional Considerations

Although not specifically required by legislation for the research to address the below items, there are several factors beyond the scope of the report to be considered.

- The software system must be able to accept out-of-state kits into the system.



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- All information contained and tracked in any statewide sexual assault evidence tracking system should be considered for exemption from the Freedom of Information Act (FOIA) and Right to Know Law (RTKL) requests.
- Accreditation standards and regulations must be taken into consideration when applying protocols.
- Redundant requirements, such as those mandated by the Sexual Assault Testing and Evidence Collection Act for annual reporting should be considered and potentially amended. This includes requirements on how often the data should be compiled and who is responsible for receipt of the data.

Summary

In summary, this study conducted by the Pennsylvania State Police in consultation with not only the Pennsylvania Coalition Against Rape, but many stakeholders previously mentioned examined the resources required to implement a rape kit tracking system to be utilized within the Commonwealth. It was determined that the four systems researched will offer the capabilities for the victims and other authorized users to access the relevant information. All systems researched provide the capabilities to act as an online database that receives, stores, updates, and preserves tracking information related to the testing and analysis of the sexual assault kits including the location of the kit. Research has shown that information accessible via a tracking system does include, but may not be limited to, the location and status of sexual assault kits providing transparency to victims. Many of the available systems offer the ability to be configured to allow a victim to access additional information such as victims' rights and contact information for local rape crisis services. All systems researched allow for collaboration between multiple entities such

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as medical facilities, law enforcement, and forensic laboratories to track kits from the time of collection to the disposition of the case.

Resources and training are required to implement a successful system. These resources include, but are not limited to, a robust software system that has ease of maintenance and use, and personnel to maintain the integrity of the data which would include IT personnel and administrative personnel. Costs associated with the implementation of a system should not be dependent upon federal funding as research shows the availability of funding does come with its own requirements that may impede the limited personnel resources currently available.

The benefits of a robust tracking system for sexual assault kits are transparency and accountability. The real-time data available by having the ability to pull reports to ascertain how many kits have not been submitted for testing and where each kit resides within the system will also make agencies more accountable when kits are not submitted. It is understood that not all kits do get submitted for testing, due to victims' rights, investigative information determination, etc. A statewide system will assist in eliminating the confusion of why a kit was or was not submitted for testing.

Act 70 states the system will be managed and operated by the Pennsylvania State Police. Research has shown that this may not be the best option as PSP is an equivalent link with Medical Facilities and other law enforcement within the Rape Kit Tracking System (RKTS). The management of the RKTS should fall under an agency that will have the authority to direct the links within the RKTS for compliance. In addition, the RKTS is a strictly IT-based program with no need for LE expertise or management. To ensure the success of the program, PSP does not believe it is in the best position to effectively manage the system primarily due to the fact that PSP



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has an integral role in the analysis and processing of the very kits that are being tracked. Assignment of this responsibility to another agency would likely require legislative action.

It is imperative we remember that processing sexual assault kits to aid investigations and bring justice and closure to victims is the most important thing PSP can do. These tasks should not be negatively impacted by reallocating those necessary resources to address tracking requirements.



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Appendix

The following is a report that was provided to PSP by one of our stakeholders and was used as one of our artifacts in our requirements gathering sessions.



The Hospital + Healthsystem
Association of Pennsylvania

Leading for Better Health

RAPE Kit Tracking Study

Recommendations from the Hospital and Healthsystem Association of Pennsylvania

<p>Resources and training needed to implement, manage and maintain a rape kit tracking system.</p>	<p>Resources:</p> <ul style="list-style-type: none"> • Should be administered by a state entity (e.g. Department of Health, Pennsylvania Commission on Crime and Delinquency, Provider Service Plan) • Should be electronic, web-based • Critical for the website to work flawlessly upon roll out to ensure victim safety and to prevent negative impact to mental health • Providers will need a clear 24/7 contact for when issues arise with the system/website <p>Training:</p> <ul style="list-style-type: none"> • Will need a comprehensive, fully funded, streamlined educational effort to inform all users about the existence of the tracking system, the requirements of the legislation, and the requirements to use the statewide tracking system. This could be through: <ul style="list-style-type: none"> ○ Online webinars and tutorials ○ Regional in-service trainings • Consideration of educational methods will be needed for hospitals with vs. without a Sexual Assault Nurse Examiner (SANE) program • Anonymous kits and anonymous testing of kits must be included in the training • Training should be offered on a regular basis to address workforce turnover
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<p>The costs associated with implementing, managing and maintaining a rape kit tracking system.</p>	<p>Technology costs:</p> <ul style="list-style-type: none"> • Purchasing of scanning equipment • Maintenance/troubleshooting costs • Interfaces to connect/build data <p>Labor costs:</p> <ul style="list-style-type: none"> • Roll out costs <ul style="list-style-type: none"> ○ Training authorized hospital users ○ IT ○ Time for uploading all required data into system, password creation/upkeep ○ Data entry • Maintaining staff training (onboarding and continuing education)
<p>Potential sources of funding for implementing, managing and maintaining a rape kit tracking system.</p>	<p>Sources of Funding:</p> <ul style="list-style-type: none"> • Recurring state budget appropriations • <u>National Sexual Assault Kit Initiative (Grantees)</u>
<p>The benefits to victims and public safety associated with implementing a rape kit tracking system in this Commonwealth. and recommendations on implementing, managing and maintaining an efficient and cost-effective rape kit tracking system.</p>	<p>Benefits to Victims/Public Safety:</p> <ul style="list-style-type: none"> • One in four women and about one in 26 men have experienced completed or attempted rape. For a survivor of sexual assault, the aftermath can pose significant problems such as: physical, like bruising and genital injuries, sexually transmitted infections, and pregnancy, as well as psychological impacts, such as depression, anxiety, and suicidal thoughts. Survivors of sexual violence may experience post-traumatic stress disorder, and recurring or long-term health consequences such as reproductive, gastrointestinal, cardiovascular, and sexual health problems. Children who experience sexual abuse are more likely to be victimized into adulthood.¹ • A tracking system would provide victims access to information in a timely matter when there is a change in the status of their kit, as well as the opportunity to access this information directly, rather than through an intermediary. • A tracking system helps address unsolved crimes involving serial offenders, identify meaningful evidence linking an offender to the crime, and prevent wrongly identifying suspects. However, if all kits will be tested then additional support services for Law Enforcement (LE), advocacy, victim notification system must be in place. <p style="text-align: center;">(Continued)</p>

¹ Centers for Disease Control and Prevention. Fast Facts about Sexual Violence. Retrieved February 2023.



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Recommendations on Implementing, Managing, and Maintaining an Efficient/Cost-Effective Tracking System:

- System should allow for secure access with unique user ID/password. Additionally, there should be an ability to create a unique password for each survivor. If this is not possible at the time of the exam or at the healthcare provider location (due to internet access issues, etc.), another method should be available
- Consider turnover and workforce shortages, there should be an ability to create/modify access to the system 24/7 for health care providers
- In some communities, the healthcare provider may not have bedside access. If concurrent entry is not possible due to lack of equipment or tech at a healthcare facility, entry should be made by provider within a to be determined appropriate amount of time (24 to 48 hours) of kit collection
- A profile should be included for the person entering data
- Sexual assault evidence kit should include
 - Prominent notification on the outside of the box and inside box advising healthcare provider of instructions and the need to enter the kit into the tracking system and a guide
 - Changes to the forms/literature for survivors that may be needed to enhance victim's ability to understand their rights to access system
- An ID or tracking bar code should be pre-labeled on the kit
 - Consideration of how barcode will be added to each piece of evidence, separate from the box (Code/number printed)
 - If there are different vendors, consideration of how will barcode/QR codes be generated if the QR codes are placed directly on the evidence kit.
 - The process with a scanner may be challenging for hospitals without a SANE program. Consider having an evidence number or unique identifier with barcode/QR code so evidence can be tracked by number/unique identifier. The number may help to eliminate providers needing scanners.
- A menu should be included to log each piece of evidence and the type of evidence (e.g. underwear, brown bags containing clothing, etc.)
- Dates that should be included:
 - Date LE takes possession of kit from health care provider
 - Date LE notifies LE in different jurisdiction if jurisdiction were to change
 - Date LE delivers kit to lab
 - Date lab completes forensic testing
 - Date on which LE retrieves kit for storage
- Fields that require entry of the following:
 - LE complaint number
 - Lab number
 - Time, date, user ID tracking whenever a user accesses system
- Auto notifications
 - Ability for the state agency to restrict user access to information in the system based on different permission levels
 - e.g. Hospital A has access to track and generate reports on kits it used as part of a sexual assault forensic exam or in its inventory;



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	<p>LE Agency X has access to track and generate reports on kits it has been notified to have been released to it or which it has taken possession of or delivered</p> <ul style="list-style-type: none">• Reporting function to easily generate reports as required by statute• Ability to accommodate data entry through computer, smartphone, scanning devices• Should be an ability to correct entries if an error is made when entering data• Persons/entities who should have access to tracking system (“users”) and for what purpose. Hospitals/health care systems should have the ability to:<ul style="list-style-type: none">○ Enter data○ Track Kits (particularly for inventory purposes)○ Generate required data• The confidentiality of survivor information should be protected. No SSN, birth date, address, etc. should be allowed to be entered into the system• Patient should receive pin number or access code• Within the tracking system, there should be instructions regarding <i>who</i> the survivor can contact for more help/more information on their test kit• A 24/7/365 “help desk” function provided by vendor of the system should be available• Will need method of documentation if items are returned to victim.• Consider implementing an statewide rape kit tracking system advisory committee
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