Healthcare Policy Analysis: Next of Kin Contact Information on Driver's License and Its Use in Emergency Notification

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Abstract

In Pennsylvania, there has been a rise in unclaimed decedents within Third-Class and Fifth-Class county coroner offices. Decreasing the number of unclaimed decedents in Third-Class and Fifth-Class Pennsylvania coroners offices is the goal for this healthcare policy analysis project. Using the Bardach's eight step policy analysis problem solving technique, the data and the project outcomes will be presented to Pennsylvania Department of Transportation (PennDOT). Data collection began with a questionnaire sent to all 67 counties to determine who had access to the Pennsylvania driver's license database entitled Pennsylvania Justice Network (JNET). Fourteen of 67 counties have partial access and use the JNET database. In Third-Class counties, only three out of twelve have partial access and in Fifth-Class counties only one out of seven have partial access. Third-Class and Fifth-Class Pennsylvania counties were also asked and responded with their total number of unclaimed decedents from 2015-2019. Descriptive bar graphs and pie charts were used to visually demonstrate data outcomes. The data collected did support the need for a healthcare policy analysis project regarding next of kin notification becoming more visible on PennDOT's driver's license and identification card application and renewal process web pages. Success of this project is determinant on PennDOT's decision based upon project data.

Introduction

In Pennsylvania, and throughout the country there has been a rise in unclaimed decedents especially within county coroner offices. Third-Class Pennsylvania counties are defined by a resident population of 210,000 to 499,999 (PA. Courts, 2019). Fifth-Class Pennsylvania counties are defined by a resident population of 90,000 to 144,999 (PA. Courts, 2019). Data from the Third-Class counties in Pennsylvania demonstrated the increase of 1.59% over the past five years. In contrast, Fifth-Class counties demonstrated an increase of 3.43% over the past five years. The COVID-19 pandemic will also contribute dramatically throughout the United States thus adding to the rise in unclaimed decedents. During a recent death investigation, in Dauphin County, it was learned that Arkansas has mandated next of kin requirements for all Arkansans that have a driver's license. The decedent which Dauphin County was caring for was able to be reunited with family because of his Arkansas driver's license. Despite the decedent being in Dauphin County, Pennsylvania, his Arkansan license made notification much easier. With proper next of kin listed on his driver's license, a search to find next of kin was not necessary. Implementation of this healthcare policy within the Pennsylvania Department of Transportation (PennDOT) driver's license database would lead to a decline in unclaimed decedents.

Through the proposed healthcare policy analysis, the goal of this project is to analyze the unclaimed decedents within Third-Class and Fifth-Class Pennsylvania counties, and analyze how a change in policy would assist in returning decedents to their families. Healthcare policy analysis is not only a social issue, but is also considered a

political issue (Collins, 2005). Healthcare policy analysis focuses on the outcomes in the community, in this case, improving notification and bereavement process for next of kin.

The rise of unclaimed decedents can be related to several factors: increase in opioid drug overdoses; rise in interstate commerce on Pennsylvania highways; and risings cost to bury loved ones which precludes family from claiming the decedent. The increased cost associated to unclaimed decedents, not only strains the coroner's offices, but also contributes to a rise in local taxes to cover cremation and burial expenses. For example, Dauphin County had 26 unclaimed decedents in 2018 which was an increase of three decedents as compared to 2017 unclaimed decedent counts (Vendel, 2019).

The rise in unclaimed decedents in Third-Class and Fifth-Class Pennsylvania counties not only impacts the families whose decedent cannot be returned for final disposition but also, the impact to the county taxpayer who absorbs the cost of attempting to contact the next of kin. When finding next of kin fails, the additional cost to cremate and bury the cremains becomes the counties' responsibility. Using next of kin selection on the driver's license, the decedent can be returned to families for final disposition or at the very least, the unclaimed counts can decline. The Emergency Contact Notification link for next of kin designation is found on the Penn DOT website and needs to be linked to the driver's license activation and renewal system. This technology is already present but would need to be placed in a more prominent location.

Review of Literature

A search was conducted of the following databases: CINAHL, Embase, Scopus, Lexus Nexis and ProQuest during the years 2015-2019. The inclusion criteria were (a) unclaimed bodies (b) decedent (c) unclaimed decedent (d) next of kin (e) identify

(f) identify decedent (g) locating next of kin (h) coroner (i) medical examiner (j) corpse (k) medico-legal (l) Potter's field (m) indigent (n) unexpected death (o) ethics (p) disposition (q) policy (r) health policy (s) healthcare policy and (t) U.S. articles in the English language. Exclusion criteria included: (a) funeral home (b) nursing home (c) palliative care (d) hospice (e) pre-paid burial (f)articles greater than five years old and (g) non-U.S. articles not in the English language.

Data collection has been assessed through multiple databases to retrieve articles specific to this project topic. Literature synthesis will be assessed using the John Hopkins Nursing Evidence-Based Practice (JHNEBP). Data collection regarding specific Third-Class and Fifth-Class Pennsylvania counties will be stored on a secured private database. A standard literature review substantiated the need for a formalized program that identifies the increase of unclaimed decedents within Third-Class and Fifth-Class Pennsylvania counties. The JHNEBP tools were used to assess the articles chosen. The model provides the framework for the Practice question, Evidence, and Translation into practice (PET) through proposed awareness to Pennsylvanians.

The JHNEBP model is structured upon three essential concepts which lie at the core of the nursing profession: education, research, and practice (Dearholt, 2012). The literature review includes both non-research-based literature as well as research-based literature with differences in their retrospective quality and strength. Overall, the articles were described as 12 level III with seven of the articles being of high quality and five representing a good quality. Additionally, there were 12 level V reviews. The quality of the articles were assessed as five high quality and seven good quality articles. Bias has been and will continue to be assessed.

Rating tools. The JHNEBP models were chosen. The specific JHNEBP tools that were used are Appendix A, B, E, F, and H. JHNEBP tools were selected to assess the quality and strength of research articles chosen for this proposed project.

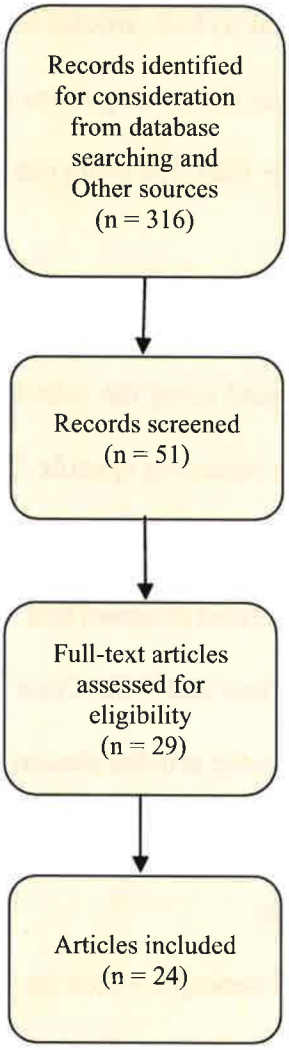


Figure 1

Literature Synthesis

Currently, there is no research which addresses the specific issue of increasing unclaimed decedents within county coroner or medical examiner offices. The literature search did glean several research articles that support the need for a next of kin notification process, and why this increase in unclaimed decedents may be occurring.

One example is the ongoing opioid epidemic. A study was conducted in Ontario Canada which addressed premature opioid mortality (Gomes et al., 2014). This study determined that opioid deaths had increased 242% between 1991 and 2010 (Gomes et al., 2014). Many times, the addicts have been estranged from their families. The only identification that a decedent will have is a driver's license with an outdated address. Through next of kin designation, finding a family member would be helpful during the medico-legal investigation.

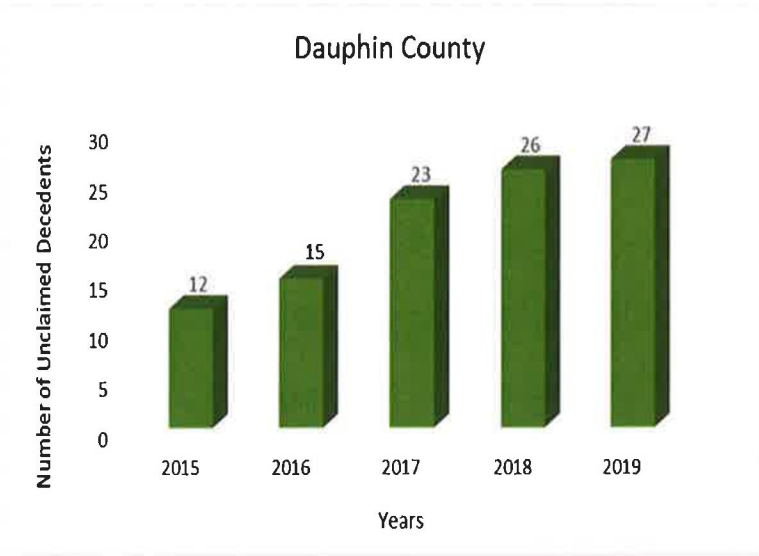


Figure 2

Vendel (2019) interviewed the Dauphin County Coroner Graham Hetrick. Hetrick also confirms the opioid epidemic through Dauphin County Statistics: 104 deaths in 2017 and currently, the 2018 statistics showed 128 opioid deaths, an increase of 23% as compared to 2017 (Vendel, 2019). Most importantly, the discussion of unclaimed decedents in Dauphin County, has been increasing every year since 2014 (Vendel, 2019). Hetrick substantiates that the rise in 2017 reporting 23 unclaimed decedents as opposed to in 2018, 26 decedents were unclaimed (Vendel, 2019).

In addition to the opioid epidemic, the United States is also struggling with the novel COVID-19 pandemic. New York City (NYC) had been deemed the epicenter for COVID-19. McDonough (2020), a journalist, wrote as of May 15, 2020, NYC had seen 15,422 deaths related to the novel COVID-19 pandemic. This is approximately 120 unclaimed decedents per week, which is an increase from the average of 25 unclaimed decedents prior to COVID-19 (Yuan, 2020). When NYC has unclaimed decedents, they are buried at a Potter's field called Desolate Hart Island (Hart Island). Hart Island can only be reached by ferry and is located on a one mile stretch of the Long Island Sound at the northwestern borough of the Bronx (Mosher, 2020). Hart Island is not a public island, therefore, families cannot go to visit loved ones. The lack of accessibility for these unclaimed decedents ultimately makes the bereavement process more difficult for these

families. This healthcare policy analysis project aims to prevent the lack of accessibility for families to claim their decedents by giving them the right to choose respective burial arrangements.

This project considers the ethical issues which unclaimed decedents can create. When coroner offices must cremate unclaimed decedents, the burial of those ashes are usually laid to rest in mass graves which hold 30-50 cremains. Rugg and Holland (2017) have discussed the ethics of reusing a grave to address the limited remaining grave spaces in the United Kingdom (UK). Although this does not specifically address mass grave cremains in the unclaimed, it certainly has parallel findings which can be applied to unclaimed cremains and the burial process. Rugg and Holland (2017) found that "grave reuse has been proposed to achieve sustainable and affordable municipal burial provisions and working capacity of cemeteries." This finding supports why Third-Class and Fifth-Class counties in Pennsylvania cremate and use mass burial plots. Castex (2007) highlights Veteran Service organizations and Potter Field Programs to maintain dignity and respect for the unclaimed decedents. The burden of latent family notification and the failure to provide complete closure to these families was another key point Castex (2007) outlined. Across Pennsylvania, county coroner offices struggle to identify and locate next of kin daily. County coroners also struggle financially to continue to care for unclaimed decedents in a cost effective and dignified manner. This healthcare policy analysis will address each of these concerns while identifying a solution which will maintain the dignity and respect of the decedent and their family through a more effective notification process. The methodology of this healthcare policy analysis project is

essential in determining solutions towards the decline in unclaimed decedents within Pennsylvania.

Method

Bardach's Eight Step Policy Analysis Model

According to Bardach and Patashnik (2020) policy analysis contributes to better governance in a democratic society by focusing on debates regarding real-world consequences of collective decisions. Using the Bardach eight step model for policy analysis, data will be obtained from Third-Class and Fifth-Class Pennsylvania counties providing the foundation for policy synthesis and analysis. Bardach's eight step model for policy analysis includes: defining the problem, assembling the evidence, construct the alternatives, select policy criteria, project outcomes, confront the tradeoffs, decide, and tell the story (Collins, 2005). The eight-step process does not need to be in this exact order, and not all eight steps will apply to every policy analysis project (Bardach & Patashnik, 2020).

The first step of Bardach's model is to define the problem. Next of kin notification has been an increasing problem for Pennsylvania coroners. Since the opioid epidemic and now COVID-19 pandemic, it has become increasingly difficult to find next of kin for decedents. As mentioned previously, the inability to return a loved one to their family is not just a coroner issue, but also a bereavement issue for the families. Families need to have closure during their bereavement journey. They deserve to make the final decisions on burial and religious services. Through a well-designed Doctor of Nursing Practice (DNP) project, next of kin notification will be improved through the Pennsylvania driver's license and identification card registration process. The clinical question to be answered is: decedent's in the care of the county coroner's office (P), to

mandate next of kin on Pennsylvania driver's license initially and upon renewal (I), as shown in Florida's To Inform Family's First (TIFF) Initiative (C), which will decrease the number of unclaimed decedents in Pennsylvania (O). Additionally, Pennsylvania coroners will have access to the law enforcement database Pennsylvania Justice Network (JNET) which would be linked to Pennsylvania's Emergency Contact Information System. PennDOT's Emergency Contact Information System will not only show the updated driver's information but also provides pictures which verify that the decedent in the care of the coroner is the right person.

The four project AIM's which will assemble the evidence for this healthcare policy analysis includes:

AIM I: Healthcare policy analysis of current next of kin notification in Pennsylvania

Objective 1

- Define context of unclaimed decedent data in Third and Fifth-Class Pennsylvania Counties

Objective 2

- Identify shifts in data among Third and Fifth-Class counties in Pennsylvania

Objective 3

- Development of the project problem based on data collection

AIM II: Collection of evidence to support rise in unclaimed decedents in Third and Fifth-Class Pennsylvania counties supporting the need for healthcare policy change

Objective 1

- Complete literature search for both non-research and research-based articles

Objective 2

- Complete and synthesize literature search enabling the development of health care policy recommendations

AIM III: Develop criteria for JNET implementation to access next of kin contact information in Pennsylvania

Objective 1

- Survey the existing number of Pennsylvania Coroner's that have JNET access

Objective 2

- Implementation of JNET application process

Objective 3

- Establish JNET access for Pennsylvania Coroners through PennDOT's driver's license database which will include next of kin contact information

AIM IV: Weigh project outcomes and create final policy recommendations

Objective 1

- Evaluate stakeholder feedback

Objective 2

- Implement policy recommendations that are: relevant, progressive, efficient, and impactful based on data collected

Objective 3

- Cost benefit analysis in healthcare policy analysis

Objective 4

- Create a projection of unclaimed decedent populations across all 67 counties based on a conservative estimate of 12.5, 25, and 50%

Objective 5

- Legislative collaboration

The potential benefits of these project AIMS are intended to return the decedent to his or her family which allows the survivors to achieve closure. Failure to find next of kin causes an increase of cost to the Third-Class and Fifth-Class counties which are passed along to the taxpayers. Additionally, the cost to investigate and find possible next of kin also increases county coroner budgets. By notifying next of kin, counties can return decedents to their families thus, allowing families to provide the final disposition (i.e. burial or cremation) and the counties do not have to incur that expense. Step three of the model was to construct alternatives in how next of kin notification in Pennsylvania could occur. It is important to determine how the JNET system applies to this healthcare policy analysis project. Selecting the policy criteria was done by engaging two of the project stakeholders, the Dauphin County Coroner's Office, and the Pennsylvania State Coroners Association. During the initial phases of project development, it was learned that most Pennsylvania county coroners did not know that JNET access was already available.

In the beginning, in assembling the evidence for this project, it was imperative to coordinate with PennDOT officials. It is essential to demonstrate the rise in unclaimed decedents in tandem with needing to move the next of kin link to a more prominent place on the website. The recommendation would be based on Florida's TIFF initiative. This would redirect the Pennsylvania "Emergency Contact Information System" link thus increasing its visibility on the driver's license and identification card application and renewal pages. New and current Pennsylvanians seeking initial as well as renewal of current driver's license and identification cards will be asked each time whether they would like to list emergency contact information. The goal of having the link moved is to raise awareness while making the process easier for

Pennsylvanians to use, as seen in other states who have established next of kin notification protocols.

Policy Options

It was found, during the literature search for this healthcare policy analysis project that, unlike Pennsylvania, Ohio and Florida had already enacted next of kin options on their state's driver's licenses. During the research phase of the project, it was learned that the TIFF Initiative was founded by Christine Olsen, a bereaved mother who experienced a six-hour delay when her twenty-two year old daughter was killed in a 2006 motorcycle accident. Olsen knew she had to do something so another family did not suffer from such a delay in notification. Olsen reached out to her local Sheriff and Representative. This political representative was instrumental in authoring a state resolution for next of kin information to be incorporated into the Florida driver's license and identification card program. TIFF Initiative is a nonprofit, tax-exempt organization in Florida which promotes a voluntary program through the Florida Department of Transportation driver's license portal to select a next of kin person to be entered on the driver's license database (Vreman, 2020). Olsen was the first to register her next of kin information in Florida on October 06, 2006. Today, 14 years later, there are over 17 million Floridians registered on the Florida Department of Transportation next of kin database. According to Olsen, the next of kin registration numbers increase by approximately one million Floridians annually (C. Olsen, interview, July 22, 2020).

Ohio, like Florida, also sought to develop a next of kin notification system using the Ohio driver's license system. Ohio's systems were developed and implemented on September 08, 2008 after the passing of House Bill 392 in 2007 (Fazzalaro, 2008). Ohio does not have the statistical information like Florida, but the impact was huge and remains in effect today. Ohio,

like Florida, protects the next of kin information that has been declared "not for public record," and only makes it available to law enforcement and driver's license personnel (Fazzalaro, 2008). Ohio has limited the next of kin designation to two separate persons, where Florida allows for three persons. Currently on PennDOT's "Emergency Contact Information System" link, there is an option to list two persons to be notified in case of an emergency, however, this information is not easily located as opposed to Florida or Ohio's identification database systems.

Through research, Pennsylvania was found to have a next of kin designation available for the Pennsylvania driver's license and identification cards. The link is only found through the Penn DOT's website under the title "Emergency Contact Information System" or form MV-39 (PennDOT, 2020). Unfortunately, the link prior to project development, was not part of the driver's license renewal process like Florida or Ohio. Rather, the Emergency Contact Information System link was located within the PennDOT website but not easily accessible. Unlike Florida, which started a new program and was able to track citizens who registered, the "Emergency Contact Information System" in Pennsylvania has not tracked how many Pennsylvanians have actually registered under the "Emergency Contact Information System" link. Additionally, this link does not appear when law enforcement attempts to access the driver's license. This project is meant to change this practice. The goal is threefold: move the Emergency Contact Information System link to part of the Pennsylvania driver's license screen; incorporate the link as part of annual or biannual license renewal process and; when the Pennsylvania driver's license is queried by law enforcement, the next of kin information will automatically display. Additionally, Pennsylvania coroners will be taught how to register their agency for partial JNET access, which will allow the next of kin information and driver's

license photographs to be given to Pennsylvania coroners offices (Appendix A). This access will allow next of kin to be notified quickly, and if identification is required, the picture of the decedent will also be available. Additionally, once coroners have partial JNET access, if the license is a commercial driver's license (CDL), a health history is also accessible through the JNET system. Having access to the CDL information may prevent the coroner's from having to do an autopsy. If an autopsy is not necessary based on CDL medical information, then the decedent can be returned to the family for final disposition sooner.

Project Outcomes

Pennsylvania JNET was established by executive order June 6, 1999 under the direction of former Governor Tom Ridge. The Integrated Criminal Justice Project (ICJ) was intentionally created for the purpose of developing a strategic vision for sharing of electronic information between justice and justice-affiliated agencies in order to improve operating efficiencies and enhance public safety (S. Shanaman, interview, July 02, 2020). JNET is available to law enforcement and public safety officials at federal, state, and local levels in Pennsylvania. Typical users include municipal and state police, probation, corrections, courts, 911 dispatch centers, booking centers, district attorneys, children and youth, domestic relations, and Pennsylvania Office of the Attorney General (Newsome, 2020). 16 Pa. Statute §1218 - B (c) (a) states "the coroner shall determine the identity of the deceased and notify the next of kin of the deceased" (Pa. Code, 2020). This Pennsylvania statute is the authority which supports the rationale for coroners to have JNET access. A policy initiative was drafted under the direction of the Pennsylvania State Coroners Association and emailed to all 67 county coroner offices (Appendix A). This has allowed Pennsylvania coroners to apply for access to the basic driver's license information as well as photographs which will assist in positively identifying the

decedents. After the application for JNET access is received by the Pennsylvania Communication Manager in the Office of Administration, a subdivision of the Public Safety Delivery Center and Pennsylvania JNET, it is provisionally approved and forwarded to the Pennsylvania Attorney General who can either grant or deny the county coroner's access.

During the initiation of this healthcare policy analysis project it was learned through data collection that the Third-Class counties Lackawanna, Westmoreland, and Leigh have had partial access to JNET for approximately 10 years. Within Fifth-Class counties, only Lycoming had partial JNET access and was actively using it to locate next of kin. In addition to using JNET, these counties will continue to use other social media when searching for next of kin.

Following the receipt of JNET instructions, all 67 counties were given 45 days to apply for JNET access. At the conclusion of 45 days, a second survey was sent asking the coroners to answer the following: had they applied for JNET access and, if not, what was their rationale. The county coroners had the option to choose one of the following regarding their application status: county refused to allow JNET access, coroner deemed it was unnecessary, or they had applied but their application is still under review.

After JNET data was collected and analyzed, the findings were presented to the Pennsylvania State Coroners Association annual meeting. These stakeholders fully supported the need for next of kin notification on Pennsylvania driver's license and identification cards. It was explained that following the formal presentation of this DNP project, they would be given a copy of the manuscript to continue to advocate for policy change in Pennsylvania. Additionally, the Pennsylvania State Coroners Association also sent a letter to the Secretary of PennDOT asking for a virtual meeting. No meeting has been established.

To enhance the reality of what would happen if policy change did not occur, a predictive analysis using a regression graph was completed. Several options were considered across all 67 counties based on projections of known third and fifth-class county data. The predictive analytics also demonstrates how alternatives over a three-year period could decrease the number of unclaimed decedents if implementation occurred. This effect would impact the number of unclaimed decedents thus have a significant impact to county coroner budgets where expenses typically are passed onto county taxpayers.

Evaluative Criteria

Evaluative criteria based on Bardach's model can be assessed through one of three methods: political process, analyst-imposed solution, or the distribution of "rights" (Bardach & Patashnik, 2020). For this healthcare policy analysis project, the evaluative criteria most appropriate are analyst-imposed solutions. Analyst-imposed solutions are appropriate because of the multiple project components which, when brought together, creates a positive solution in returning "unclaimed decedents" to their families. Defining the evaluative criteria is essential for healthcare policy analysis when determining the next steps in improving Pennsylvania next of kin notification.

The evaluative criteria was defined through a pre and post assessment: which counties had JNET access, and how many counties applied for JNET access as part of the initial project phase. Third-Class and Fifth-Class Pennsylvania unclaimed decedent counts were assessed for the timeframe between 2015-2019. Bar graphs and pie charts were used to display project findings which support the need for policy change in Pennsylvania. The data collected by Florida's transportation department over the last fourteen years demonstrates that next of kin designation on the driver's license and photo cards can be successful.

Cost Benefits Analysis

Healthcare policy analysis projects do not have the traditional cost-benefit analysis like clinical care projects do. Collins (2005) states, "the main concern of policy analysis is outcome base of health policies or the effects that the policy has on people." The cost of unclaimed decedents is passed onto taxpayers through county taxes. Through this healthcare policy analysis project, there are potential cost savings to individual county coroner offices.

There are costs that need to be considered in implementing the change to the current PennDOT Emergency Contact Information System link. Pennsylvania, like Florida, did not mention the cost of developing the next of kin link in their data system. At the time of project development, it was discovered that Pennsylvania already had the link. Implementation to move the "Emergency Contact Information System" link is anticipated to be de minimis. However, when asking PennDOT for how many Pennsylvanians are currently registered under the existing system, it was discovered that this information had not been tracked. The PennDOT representative stated it would cost approximately two thousand dollars to have the existing system be able to track the data. Ohio also has a next of kin designation process. Ohio spent approximately $60,000.00 to institute the next of kin designation program on their driver's license system (Fazzalaro, 2020). In response to this dollar figure, it is apparent that, the cost to implement the next of kin designation link on PennDOT's website would not be as costly.

Predictive analytics were critical in assessing the financial impact to counties if the status quo continued. Based on data known from third and fifth-class counties, predictions demonstrate that the unclaimed decedent count could continue to rise by 6.32 decedents per 100,000 in population. The cost per decedent can range from $250.00 to $2500.00. The extreme difference is related to demographic location and service cost in that area. This cost does not represent cost

changing overtime. If the status quo continued, this has the potential to impact to Pennsylvania county coroner budgets ranging from $1580.00 to $15,800.00 per decedent with a population estimate per 100,000.

Weigh the Outcomes

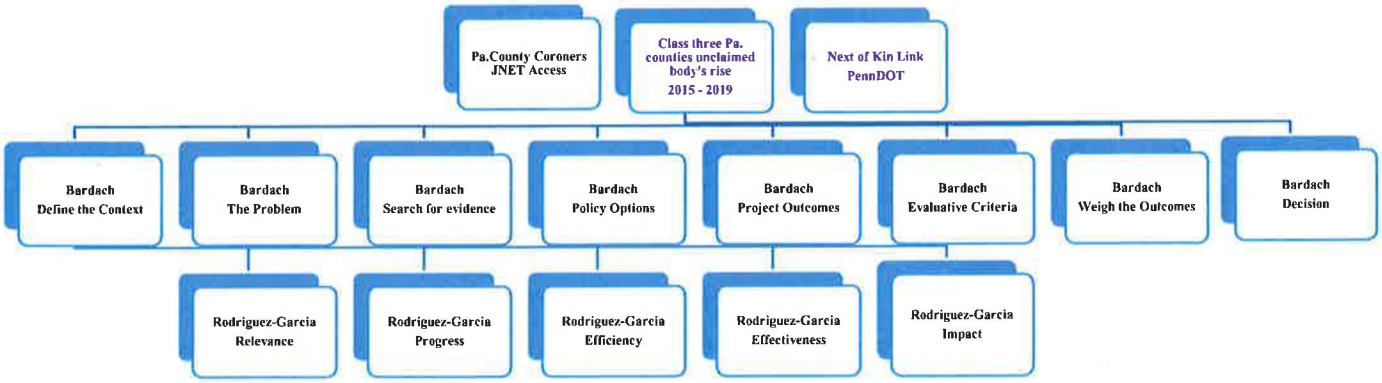


Figure 3

Once the data is collected, Rodriguez-Garcia's five step model (Figure 3) to assess the proposed intervention can also be applied. The five-step model includes: relevance, progress, efficiency, effectiveness, and impact. This assessment process will provide the foundation and rationale of the existing Florida initiative and how that implementation can occur within Pennsylvania. It was Olsen's vision to have the Florida Department of Transportation add next of kin information to their driver's license database. Olsen continues to rally other states to incorporate the Florida initiative within their own states. Olsen's initiative has relevance and progress beyond her imagination. Florida's link is part of the initial and renewal process of the driver's license and identification registration. The location of the next of kin designation link provides efficiency in registering all Florida residents. The TIFF initiative has proven its effectiveness as over 17 million citizens are registered. The impact of the TIFF initiative is soaring across the United States and is the foundation for this healthcare policy analysis project.

There are many elements required to successfully implement strategies in relation to this healthcare policy analysis project. One of the first elements needed for Pennsylvania to implement next of kin on driver's license and identification cards was the need for the county coroner's to have JNET access. Through a rather simple questionnaire, in a yes/no format, all 67 county coroners were asked if they currently (pre-intervention) had access to JNET. Special focus was given to the 12 Third-Class counties as well as the seven Fifth-Class counties highlighted in this healthcare policy analysis project. Using the Rodriguez-Garcia's five step model (Collins, 2005) to evaluate the JNET component during the pre-intervention phase, the following was learned:

- Relevance: County Coroners must have access to the JNET driver's license system to be able to benefit from the overall policy objective to have next of kin designation on Pennsylvania driver's license and identification cards.
- Progress: The progress of the JNET pre-implementation survey was well received with 100% compliance from all 67 counties. The responses were received prior to the 14-day requested deadline.
- Efficiency: The lack of counties with JNET access was an important finding. There is no cost associated to having JNET access. A step by step protocol (Appendix A) was designed and disseminated to all 67 counties so that they were able to apply for JNET access efficiently and effectively. Counties were also asked to apply within 45 days of receiving the protocol.

- Effectiveness: The data gleaned from the pre-assessment was dependent on the reporting county. There was no indication that the information was not accurate. Knowing 14 out of 67 counties already had access to JNET was critical to the overall success of this healthcare policy analysis project.
- Impact: The impact from the pre-analysis of JNET use was a complete success with all 67 counties responding.

The second phase of the healthcare policy analysis project was completing the registration for access to the JNET system. Phase two was given a 45-day timeframe for county coroner compliance. Following the 45-day period, a second JNET survey, post intervention, was resent to all 67 Pennsylvania counties. Using the Rodriguez-Garcia's five step model (Collins, 2005) to evaluate the JNET component during the post-intervention phase, the following was learned:

- Relevance: Since JNET access was established by executive order June 6, 1999 (Shanaman, 2020), it was critical to educate all Pennsylvania coroners that JNET was available to them under this executive order established by former Governor Tom Ridge.
- Progress: The protocol was distributed to all 67 counties with the request to complete their registration within 45 days of the email. The initial feedback from this email was positive.
- Efficiency: Following the 45-day period for the county coroners to apply for partial JNET access, a post assessment was sent by email to ascertain how many additional county coroner offices applied, had received access, or approval for access was still pending.

- Effectiveness: The post assessment response relied on the individual coroner's office to respond. There was no indication that the reported data was incorrect. Coroners need to have partial JNET access so they have basic information displayed on driver's license and identification cards which will include next of kin.
- Impact: The impact for having partial JNET access is critical for coroners. The JNET link provides a primary resource for locating the decedent's next of kin. If a coroner's office chose not to participate, then the process for locating next of kin may not improve. This process is voluntary for all 67 coroners offices. 30 counties applied for JNET access but are still awaiting approval.

The third component for this project is requesting PennDOT to move the "Emergency Contact Information System" link to a more visually prominent site such as during driver's license initiation and renewal as well as for the identification card system. A letter was sent by the Pennsylvania State Coroners Association President to the Secretary of PennDOT requesting a virtual meeting to discuss moving the "Emergency Contact Information System" link to a more prominent location on their website. As of October 30, 2020, there has been no reply to this email. The Rodriguez-Garcia's five step model (Collins, 2005) will be used to evaluate Penn DOT's ability to move the Emergency Contact Information System link. As the PennDOT website does not currently incorporate this link in the application or renewal process for Pennsylvania driver's licenses or identification cards, the following was learned:

- Relevance: Having the next of kin link part of the access window for coroners is critical to the job they do in notifying next of kin in the event

of sudden death. Additionally, if critical illness or injury occurs, EMS and law enforcement responders would also be able to notify next of kin who could provide critical medical information to the emergency department personnel.

- Progress: A letter has been sent to Penn DOT's Secretary asking her to meet and discuss the recommendation to move the Emergency Contact Information System link to a more prominent location within the application and renewal windows.
- Efficiency: Due to the current COVID-19 pandemic, it is unlikely that the meeting request can be honored until additional COVID-19 restrictions are lifted, and state employees return to their Offices. Currently, most state employees are working remotely until July 2021.
- Effectiveness: Pre-intervention, Penn DOT did not track how many Pennsylvanians used the current "Emergency Contact Information System" link thus there was no data prior to project implementation.
- Impact: COVID-19 has impacted the ability to progress further at this time. The Pennsylvania State Coroners Association will receive a copy of this manuscript and plan to continue the discussion with PennDOT following the COVID-19 pandemic restrictions.

The final component for this project is requesting Representative Sue Helm of the 104th Pennsylvania Legislative District, House of Representatives to ask PennDOT to move the "Emergency Contact Information System" link to a more visually prominent site such as during driver's license initiation and renewal process. It was determined through meeting with

Representative Helm that new legislation is not necessary but rather a change to current policy. Representative Helm will also be asking to have the "Emergency Contact Information System" link to be incorporated to the online renewal website. Finally, if a Pennsylvanian wishes to use a paper application or renewal form, Representative Helm will be asking for the clerk to verbally ask and assist the customer with adding the next of kin information to their license or identification card. The PennDOT website does not currently incorporate this link in the application or renewal process for Pennsylvania driver's licenses or identification cards, therefore the following was learned:

- Relevance: Having the next of kin link part of the electronic license application and renewal process will make it easy for Pennsylvanians to use. If Pennsylvanians choose the paper application and renewal forms, then the clerk at PennDOT will ask if the customer would like to add next of kin information on the license or identification cards.
- Progress: A meeting with Representative Helm and Executive Director Shelly was held regarding the requested PennDOT policy changes. Director Shelly is going to contact PennDOT regarding this change request.
- Efficiency: Due to the current COVID-19 pandemic, Director Shelly will be reaching out remotely and updating Representative Helm. This type of request can take 60- 90 days under normal conditions. Currently, most Pennsylvania state employees are working remotely until July 2021.
- Effectiveness: This healthcare policy analysis project data collection and predictive analytics demonstrates the importance for this policy change.

- Impact: COVID-19 has impacted the ability to progress further at this time. The Pennsylvania State Coroners Association, Representative Helm, and Director Shelly will receive a copy of this manuscript and plan to continue the discussion with PennDOT following the COVID-19 pandemic restrictions to change current policy.

Collaborative Decision-Making Process

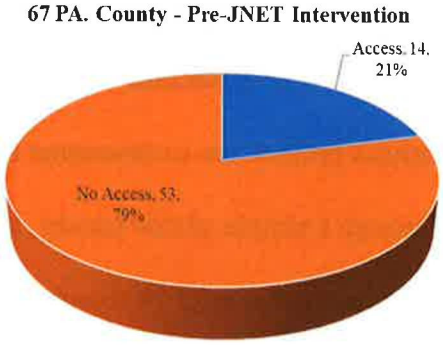
Bardach and Patashnik (2020) point out that political life is present within policy analysis through channeling conflict and building the community. Through this healthcare policy analysis project, key stakeholders, the Pennsylvania State Coroners Association, Third-Class and Fifth-Class county coroners were important in project decisions. Early in the project implementation phase, it was learned that JNET was available to Pennsylvania coroner offices. The county coroners had to apply for partial access through the Pennsylvania Justice Network. For the county coroner offices to be considered for JNET, the coroners needed to fill out the application. Upon reviewing the application and approval through the Pennsylvania Office of Attorney General access could be given. When Pennsylvania adds next of kin to the driver's license and identification cards, the coroners would have access to the next of kin information, home addresses and decedent's current photos.

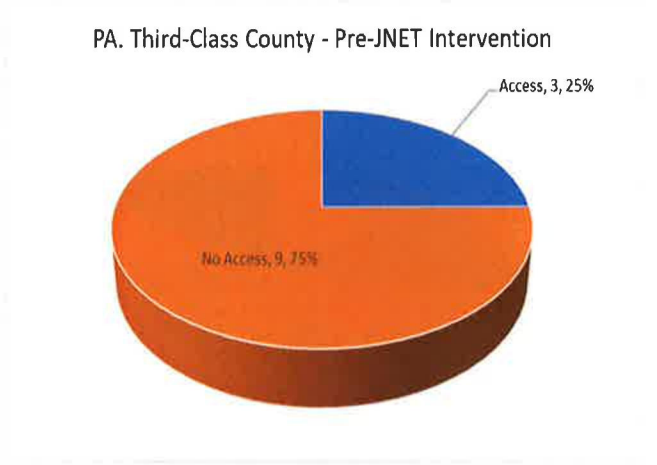
Findings

Currently, there are 10.3 million Pennsylvanians who have a driver's license. The first step for this healthcare policy analysis project was to determine if Pennsylvania coroners knew or had JNET access currently. Through a simple yes/no survey, all 67 counties were queried (Table A). Out of 67 counties in Pennsylvania, only 14 counties had already been approved and were using JNET. Of the 12 Third-Class and seven Fifth-Class counties which were the focus of

this healthcare policy analysis project (Table B), only three of the Third-Class counties and one of the Fifth-Class counties had partial JNET access and were using it as part of their death investigations. 45 days after sending the procedure and application for the coroners to register for JNET, another yes/no inquiry was sent to all 67 counties. The second survey post intervention revealed: 30 counties had registered for partial JNET access but had not yet been approved, 15 had not applied, seven counties declined JNET, one county administrator denied coroner access to JNET, and 14 had partial access to JNET prior to the intervention (Table A). Out of the Third-Class counties used in this project, three had partial access to JNET prior to the intervention, six counties had registered but had not yet been approved, two had not responded, and one county declined JNET access (Table B). In contrast to the Third-Class counties were the Fifth-Class counties where: one had partial access to JNET prior to the intervention, four counties had registered but not been approved, one county did not respond, and one had declined (Table B & Table C). The Pennsylvania State Coroners Association will continue to work with the 30 counties who do not have JNET access and will continue to follow up with those counties who have been denied access.

AIM III - JNET Access Data





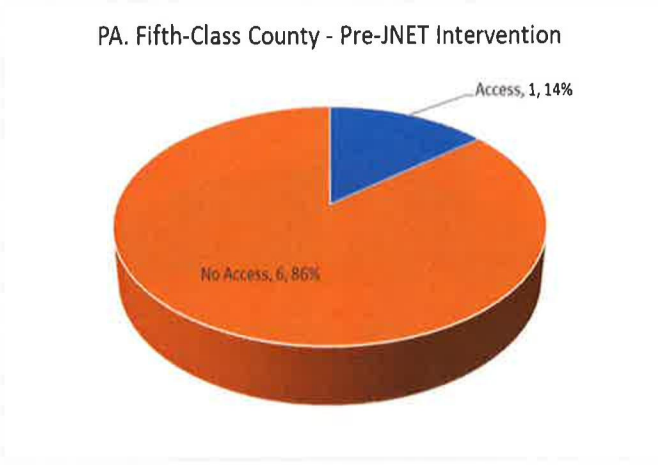
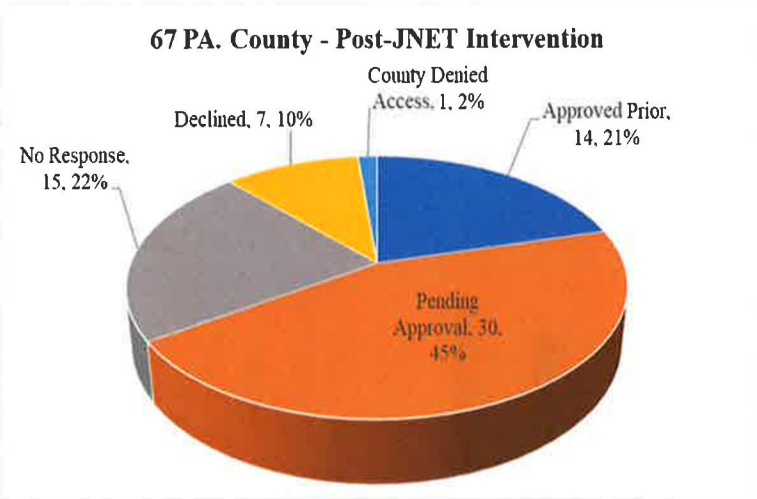


Figure 4

Post-AIM III Policy Implementation



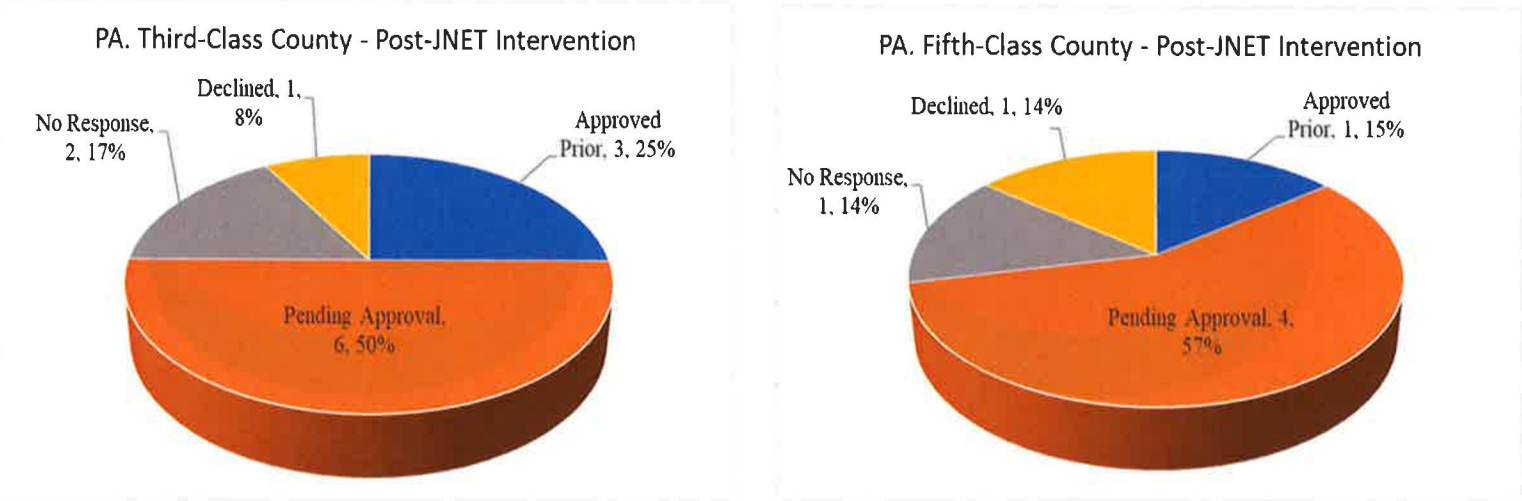


Figure 5

The second analysis assesses whether the Third-Class and Fifth-Class Pennsylvania counties saw an increase over a five-year period 2015-2019 (Appendix B and Appendix D). When comparing 2015 through 2019, there is a clear rise in unclaimed decedents across all twelve Third-Class counties and within six of the seven Fifth-Class counties as well.

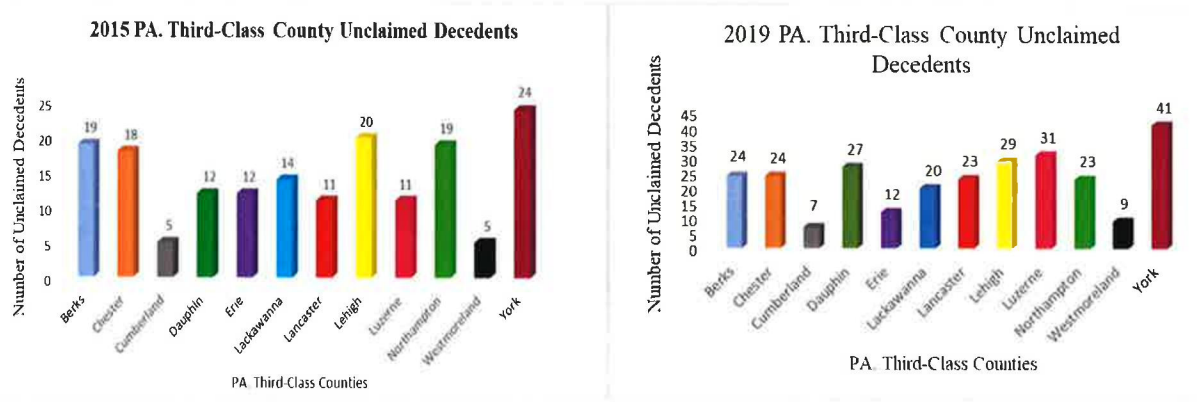


Figure 6

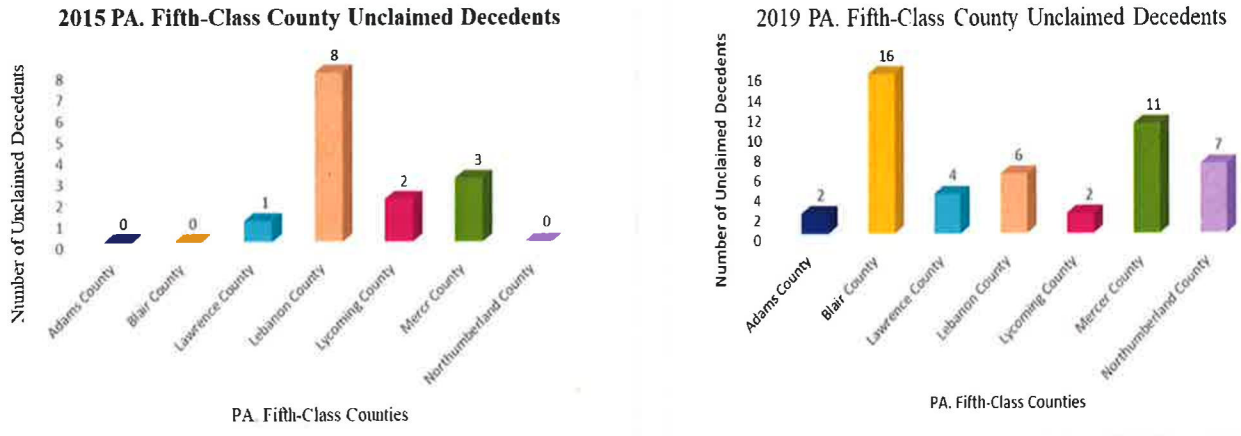


Figure 7

An unclaimed decedent is defined as; a decedent who is in the care and custody of the county coroner's office with no known next of kin, or next of kin who is refusing to claim the decedent. The coroner's office then becomes responsible for the final disposition of that deceased individual.

Limitations

Throughout the implementation of the healthcare policy analysis project, there were several outliers in the data collected. Data collection was only as accurate as reported by county coroners. Although these limitations need to be discussed, the impact on the success of this healthcare policy analysis project was minimal. One such finding was the way in which county coroner's define "unclaimed decedents." In most Pennsylvania counties unclaimed decedents are usually defined in relation to the failure of identifying living next of kin or the inability of families to financial afford burial services. York County is a third-class county in Pennsylvania and has also experienced a significant rise in unclaimed bodies over the five year look back period. In York County, there are two funeral homes that perform cremations free of service and then return those cremains to their family. This practice is not the general practice among most

Pennsylvania funeral directors. Most counties do not return the cremains but bury the cremains in a Potter's Field within mass graves.

In contrast to how York County handles their unclaimed decedents, Florida's model demonstrates and defines unclaimed decedents much differently than Pennsylvania. A comparison study with Florida and the handling of unclaimed decedents was not possible. There are several factors which impact the inability to compare Florida and Pennsylvania processes of the unclaimed which include: medical examiner system versus coroner system, responsibility for decedent care and legislation which is not synonymous between the states. York County has the highest rates of unclaimed decedents as compared to the other Third-Class counties that were analyzed.

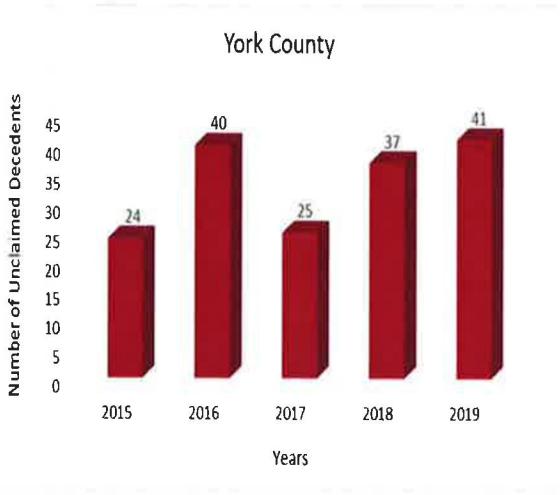


Figure 8

Another limitation that occurred in the beginning of this healthcare policy analysis project was implementation of the JNET application process. Out of 67 Pennsylvania counties, only fourteen had partial JNET access and were using that system during death investigations. The remaining fifty-three counties all began applying for partial JNET access. JNET needed four to six weeks to process all the outstanding requests. The end date for data collection was September 30, 2020. This delay did not cause a negative impact to this healthcare policy analysis project.

The final limitation during this healthcare policy analysis project was the ability to meet and discuss recommendations with Penn DOT officials. COVID-19 has placed most state employees in a remote working environment. This restriction will remain in effect at least

through July 2021. A copy of the approved manuscript will be given to the Pennsylvania State Coroners Association so they can continue to follow up with Penn DOT following COVID-19 restrictions being lifted. Currently, there is no way to determine when COVID-19 restriction maybe relaxed or lifted.

Implications for healthcare policy

Implication to healthcare policy is designed to identify a problem and to develop a solution which enhances and improves healthcare for the community. Collins (2005) states, "most frameworks proposed in health policy literature use particular concepts and models in order to explain health policies in abstract, theoretical terms and focus mainly on macro-analysis of political systems." This health policy has compared Pennsylvania policy with Florida and Ohio. It was determined early into this analysis, that multiple and complex political systems at the state and local level would be involved. Stakeholders such as the Pennsylvania State Coroners Association, Pennsylvania State legislators, Dauphin County Coroner's Office, TIFF Initiative board and our Floridian political partners were key to implementing policy change recommendations in Pennsylvania. Although a direct comparison between Pennsylvania and Florida was not possible, the policy analysis result would have the same potential outcome, to notify next of kin in a timely manner.

This policy analysis would have three key components for Pennsylvania: partial JNET access issues, assessing the unclaimed rise in Third-Class and Fifth-Class Pennsylvania County Coroners Offices from 2015 - 2019, and moving the "emergency contact information link" on PennDOT's website to a more visual area such as in the driver's license and identification card application and renewal process. Since feedback from Penn DOT was not possible, it was decided to discuss this proposal with a member of the legislator to assist in proposed policy

change. A meeting was held with State Representative Sue Helm of the 104th Legislative District-Pennsylvania House of Representatives and Executive Director of the Pennsylvania Republican Research, Transportation Director Josiah Shelly. It was decided the Director Shelly would reach out to PennDOT asking for the following policy changes: to display the Emergency Contact Information System link on their website in a more prominent location, add the next of kin designation question to the electronic renewal process for both driver's licenses and identification cards, and to have clerks at the PennDOT centers ask the consumer whether or not they wish to designate next of kin which the clerk can then manually enter data for the consumer. According to Director Shelly this project does not require legislation but rather a change to existing legislative policy.

COVID-19 has also impacted the number of unclaimed decedents in Pennsylvania. Through interactions with county coroners, another key area which can be assessed in the future was the next of kin designation in Pennsylvania nursing homes, assisted living and personal care facilities. During the COVID-19 pandemic, many Pennsylvania coroners were asked to recover the decedents in nursing care facilities. Pennsylvania County Coroners stated that, "on admission to the facilities, the admission did not also document a next of kin contact person" (Interview with Simpson, July 15, 2020). This issue was not part of the policy analysis but could easily be a separate policy analysis since nursing care facilities in Pennsylvania are required by Department of Health regulation to have next of kin listed on the resident's record. Additional stakeholders who could be key to this analysis project would include: Pennsylvania Department of Health, Pennsylvania Department of Aging, Pennsylvania Office of Attorney General Medicaid Fraud Control Unit and Healthcare Fraud sections, Pennsylvania Association of Non-Profit Care

Facilities (PANPHA), and Pennsylvania Director of Nurses Association (PaDONA) to name a few.

An additional aspect where this healthcare policy analysis project could build on, is assessing the data collected at one, three, and five-year post policy analysis intervention. Through predictive analytics, the status quo will be very costly to Pennsylvania County Coroner's if change does not occur. Predictive analytics based on the known data from Third and Fifth-class counties (Figure 8) demonstrated a clear need for healthcare policy changes to occur in Pennsylvania. These predictive analytics of potential unclaimed decedents across all 67 Pennsylvania counties were assessed and analyzed. Using data collected from the Third-Class and Fifth-Class counties provided the foundation to complete the projections (Table D). It was learned that there would be an approximate range of 1.77 to 13.33 rise per 100, 000 population in unclaimed decedents if no policy changes were made. The median rise across all 67 counties would be 6.32 decedents per 100,000 population. As discussed in the cost benefit analysis, this cost would be substantial and ultimately passed on to the county taxpayer.

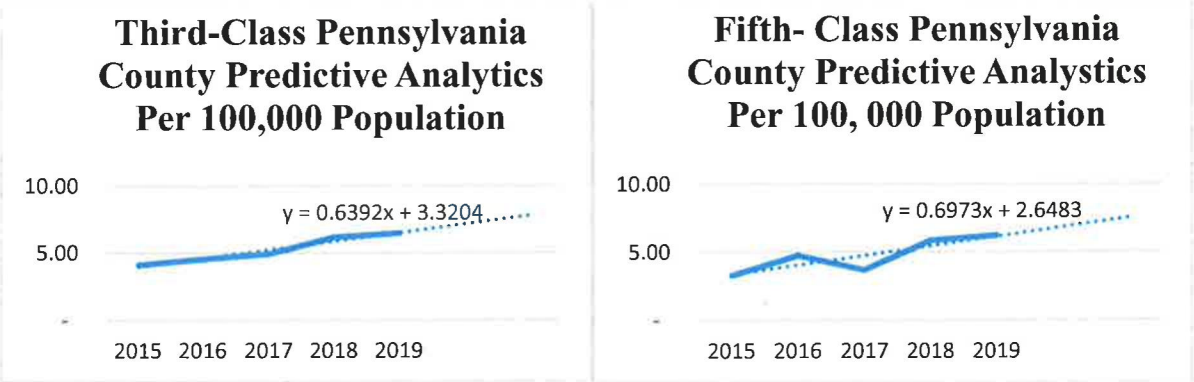
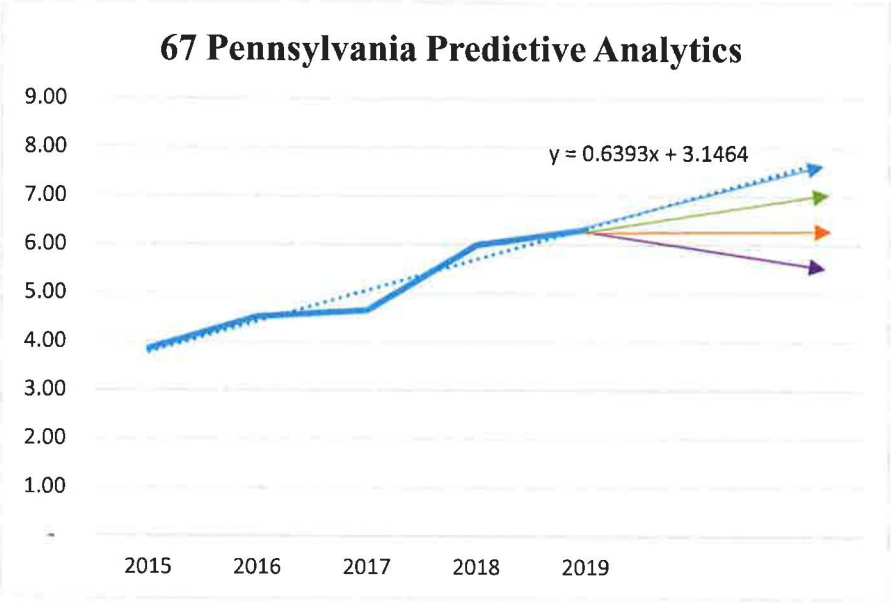


Figure 9



However, if the legislator is successful in creating the suggested changes, then predictive analytics would be able to demonstrate the decrease of unclaimed decedents over a three year period of time.

Figure 10

It is estimated that this decrease would occur over time with conservative predictor of 12.5, 25, and 50% respectively over a three year period (Figure 10).

Conclusion

In conclusion, this healthcare policy analysis project was designed to assist Third and Fifth-Class Pennsylvania counties in notifying next of kin during a death investigation or critical emergency. The impact from this project would benefit all 67 county coroners in Pennsylvania although Third-Class and Fifth-Class counties were assessed for this healthcare project analysis. The Bardach eight step policy analysis method was used to guide the project. The Rodriguez - Garcia Model was also used to assess the implementation of the policy analysis interventions. Early in the implementation process, it was determined that 79% (53 out of 67) of Pennsylvania Coroners did not have access to the partial JNET system. This provides basic Pennsylvania driver's license information. In the Third-Class counties which were one of the primary project sample, only 25% (three out of twelve) Third-Class counties had partial JNET access and were

using the system as part of next of kin notification process. Fourteen percent (one out of seven) of the Fifth-Class counties had partial JNET access and were using the system as part of the next of kin notification process.

Following the first project intervention, applying for JNET access, 30 of 67 Pennsylvania counties had applied. A letter was then sent to the Secretary of Transportation requesting a meeting. When that was not able to occur, the legislative process was then chosen. Through a detailed meeting with Representative Helm and Director Shelly, it was determined that new legislation was not necessary but rather a change to existing policy. Representative Helm through Director Shelly began that process immediately following the meeting. It is expected the following changes will be forthcoming: to display the emergency contact link on their website in a more prominent location, add the next of kin designation question to the electronic renewal process for both driver licenses and identification cards, and to have clerks at the PennDOT centers ask the consumer whether or not they wish designate next of kin. Through these changes, Pennsylvanians will be able to designate next of kin on their driver's license and identification cards. Not only will these changes assist county coroners in returning loved ones to their families, but it will also provide a critical role in identifying next of kin when a citizen cannot speak for themselves. This healthcare policy analysis project has been successful and will continue to improve the lives of Pennsylvanians. Follow up studies should occur at the initial one-year benchmark as well as at five-year intervals so that additional changes can be made if needed.

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Tables/ Figures

Table A

67 JNET County List	Pre-Intervention	Post - Intervention
Adams	No Access	Pending Approval
Allegheny	Access	Approved Prior
Armstrong	No Access	No Response
Beaver	No Access	No Response
Bedford	No Access	Pending Approval
Berks	No Access	No Response
Blair	No Access	No Response
Bradford	Access	Approved Prior
Bucks	No Access	Pending Approval
Butler	No Access	Pending Approval
Cambria	No Access	Pending Approval
Cameron	No Access	Declined
Carbon	No Access	Pending Approval
Centre	No Access	Pending Approval
Chester	No Access	Pending Approval
Clarion	No Access	Pending Approval
Clearfield	No Access	No Response
Clinton	No Access	Pending Approval
Columbia	No Access	Pending Approval
Crawford	No Access	No Response

Cumberland	No Access	Pending Approval
Dauphin	No Access	Pending Approval
Delaware	Access	Approved Prior
Elk	No Access	No Response
Erie	No Access	Declined
Fayette	No Access	Pending Approval
Forest	No Access	No Response
Franklin	No Access	No Response
Fulton	No Access	County Denied Access
Greene	No Access	Pending Approval
Huntington	No Access	Pending Approval
Indiana	Access	Approved Prior
Jefferson	No Access	Pending Approval
Juanita	No Access	Pending Approval
Lackawanna	Access	Approved Prior
Lancaster	No Access	Pending Approval
Lawrence	No Access	Pending Approval
Lebanon	No Access	Pending Approval
Lehigh	Access	Approved Prior
Luzerne	No Access	Pending Approval
Lycoming	Access	Approved Prior
McKean	No Access	Declined
Mercer	No Access	Pending Approval

Mifflin	No Access	Pending Approval
Monroe	No Access	Declined
Montgomery	Access	Approved Prior
Montour	No Access	Pending Approval
Northampton	No Access	No Response
Northumberland	No Access	No Response
Perry	No Access	No Response
Philadelphia	Access	Approved Prior
Pike	No Access	Pending Approval
Potter	No Access	Declined
Schuyikill	No Access	Pending Approval
Snyder	No Access	No Response
Somerset	No Access	Pending Approval
Sullivan	Access	Approved Prior
Susquehanna	Access	Approved Prior
Tioga	No Access	Declined
Union	No Access	Declined
Venango	No Access	No Response
Warren	No Access	Pending Approval
Washington	Access	Approved Prior
Wayne	Access	Approved Prior
Westmoreland	Access	Approved Prior
Wyoming	No Access	No Response
York	No Access	Pending Approval

Table B-PA. Third-Class Counties

JNET PA. Third-Class County List	Pre-Intervention	Post-Intervention
Berks County	No Access	No Response
Chester County	No Access	Pending Approval
Cumberland County	No Access	Pending Approval
Dauphin County	No Access	Pending Approval
Erie County	No Access	Declined
Lackawanna County	Access	Approved Prior
Lancaster County	No Access	Pending Approval
Lehigh County	Access	Approved Prior
Luzerne County	No Access	Pending Approval
Northampton County	No Access	No Response
Westmoreland County	Access	Approved Prior
York County	No Access	Pending Approval

Table C-PA. Fifth-Class Counties

JNET PA. Fifth-Class County List	Pre-Intervention	Post-Intervention
Adams County	No Access	Pending Approval
Blair County	No Access	No Response
Lawrence County	No Access	Pending Approval
Lebanon County	No Access	Pending Approval
Lycoming County	Access	Approved Prior
Mercer County	No Access	Pending Approval
Northumberland County	No Access	Declined

Table D - Descendant Projection per 100K Population (Based on 2019 Data)
(projected using average rates for all counties with actual case data)

County	Population	Actual Cases (if available)	Projected Cases	Cases / Projection per 100k population
Berks	421,164	24	N/A	5.70
Chester	524,989	24	N/A	4.57
Cumberland	253,370	7	N/A	2.76
Dauphin	278,299	27	N/A	9.70
Erie	269,728	12	N/A	4.45
Lackawanna	209,674	20	N/A	9.54
Lancaster	545,724	23	N/A	4.21
Lehigh	369,318	29	N/A	7.85
Luzerne	317,417	31	N/A	9.77
Northampton	305,285	23	N/A	7.53
Westmoreland	348,899	9	N/A	2.58
York	449,058	41	N/A	9.13
Adams	103,009	2	N/A	1.94
Blair	121,829	16	N/A	13.13
Lawrence	85,512	4	N/A	4.68
Lebanon	141,793	6	N/A	4.23
Lycoming	113,299	2	N/A	1.77
Mercer	109,424	11	N/A	10.05

Northumberland	90,843	7	N/A	7.71
Allegheny	1,216,045		76.4	6.29
Armstrong	64,735		4.1	6.29
Beaver	163,929		10.3	6.29
Bedford	47,888		3.0	6.29
Bradford	60,323		3.8	6.29
Bucks	628,270		39.5	6.29
Butler	187,853		11.8	6.29
Cambria	130,192		8.2	6.29
Cameron	4,447		0.3	6.29
Carbon	64,182		4.0	6.29
Centre	162,385		10.2	6.29
Clarion	38,438		2.4	6.29
Clearfield	79,255		5.0	6.29
Clinton	38,632		2.4	6.29
Columbia	64,964		4.1	6.29
Crawford	84,629		5.3	6.29
Delaware	566,747		35.6	6.29
Elk	29,910		1.9	6.29
Fayette	129,274		8.1	6.29
Forest	7,247		0.5	6.29
Franklin	155,027		9.7	6.29
Fulton	14,530		0.9	6.29
Greene	36,233		2.3	6.29

Huntington	45,144	2.8	6.29
Indiana	84,073	5.3	6.29
Jefferson	43,425	2.7	6.29
Juanita	24,763	1.6	6.29
McKean	40,625	2.6	6.29
Mifflin	46,138	2.9	6.29
Monroe	170,271	10.7	6.29
Montgomery	830,915	52.2	6.29
Montour	18,230	1.1	6.29
Perry	46,272	2.9	6.29
Philadelphia	1,584,064	99.6	6.29
Pike	55,809	3.5	6.29
Potter	16,526	1.0	6.29
Schuylkill	141,359	8.9	6.29
Snyder	40,372	2.5	6.29
Somerset	73,447	4.6	6.29
Sullivan	6,066	0.4	6.29
Susquehanna	40,328	2.5	6.29
Tioga	40,591	2.6	6.29
Union	44,923	2.8	6.29
Venango	50,668	3.2	6.29
Warren	39,191	2.5	6.29
Washington	206,865	13.0	6.29
Wayne	51,361	3.2	6.29

Wyoming	26,794	1.7	6.29

Third-Class Counties are highlighted in GREEN

Fifth Class Counties are highlighted in YELLOW

Appendix A

How to access JNET for Pennsylvania Coroner's

Suzanne Sheaffer RN-C, MSN, NHA, CDLTC
Duquesne University Doctoral Intern
Susan Shanaman, ESQ.
Pennsylvania Coroner Association

History

The Pennsylvania Coroner Association has learned that many Coroners within the Commonwealth have had difficulty gaining access to the JNET system. JNET provides driver's license and identification card information to law enforcement agencies throughout the Commonwealth. An approval process is required for access to the JNET system.

Purpose:

To inform Pennsylvania coroners on how to apply for JNET access.

Directions

I. Accessing JNET

A. Go to: https://www.pajnet.pa.gov

1. Click on "Who we serve"
2. Then, click "New Agencies"

B. Locate PDF form entitled "Agency Access Request Form"

1. Complete request form
2. Return form to:
   Todd Sackett, JNET Communication Manager
   @ tsackett@pa.gov
   717-214-7459

II. Trouble shooting access problems

A. Find out who in your county is the JNET Coordinator

B. Have JNET County Coordinator assist if application is rejected

C. Unable to identify JNET County Coordinator, contact Todd Sackett, JNET Communication Manage

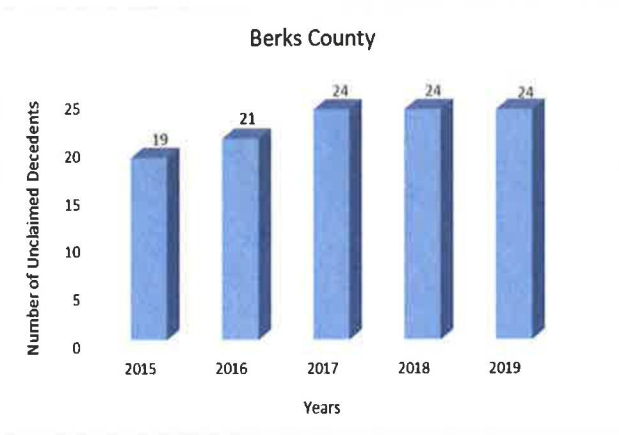
D. Contact the Pennsylvania State Coroner's Association for further guidance

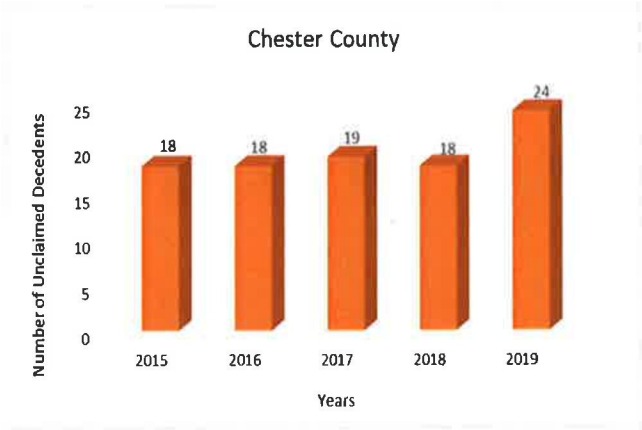
Related Information

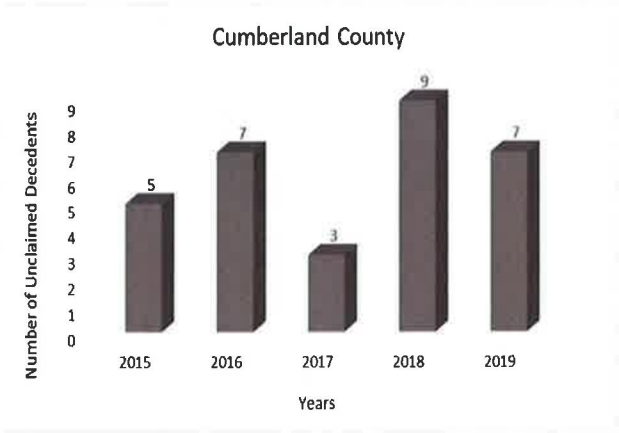
- JNET access will be limited to the driver's license screen and photo's
- If next of kin contact information is added to the Pennsylvania driver's license, it is this associations goal to have access for county coroners as well. Updates on this issue TBA.

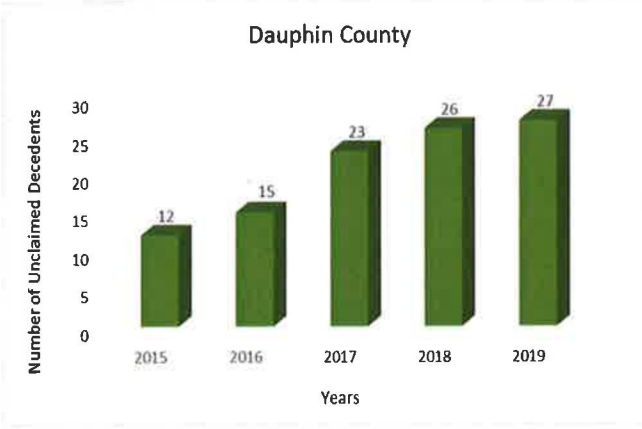
Appendix B

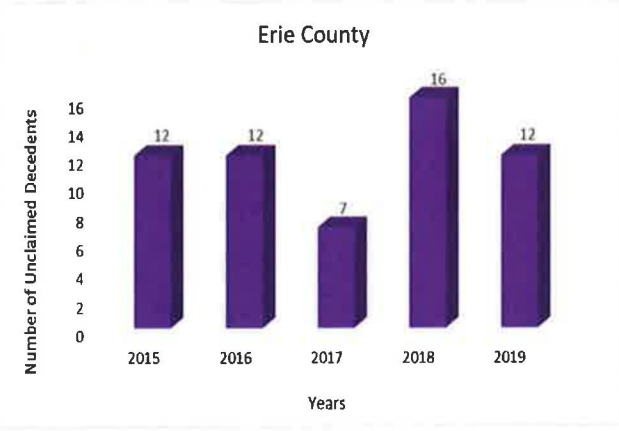
Pennsylvania Third-Class Counties - A 5yr Review

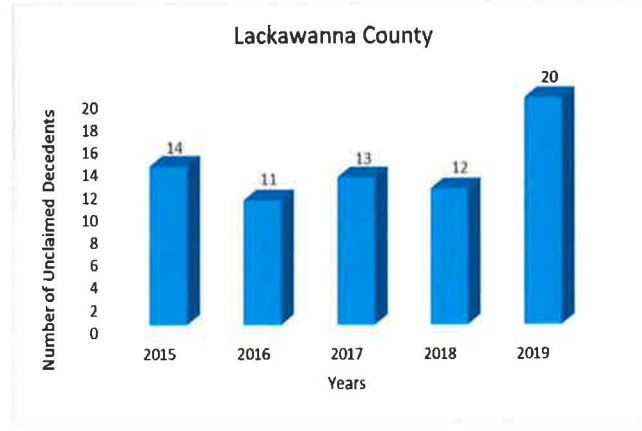


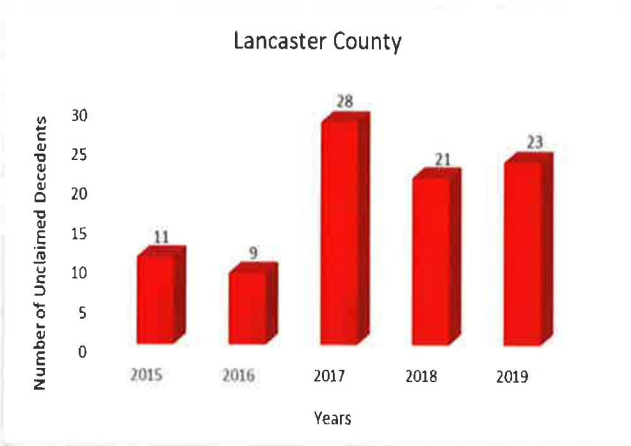


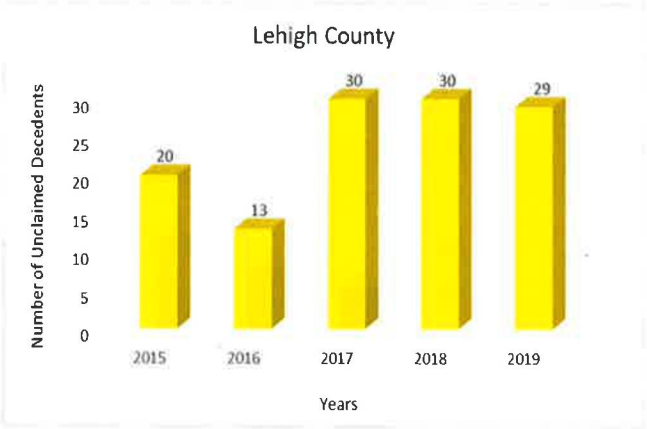


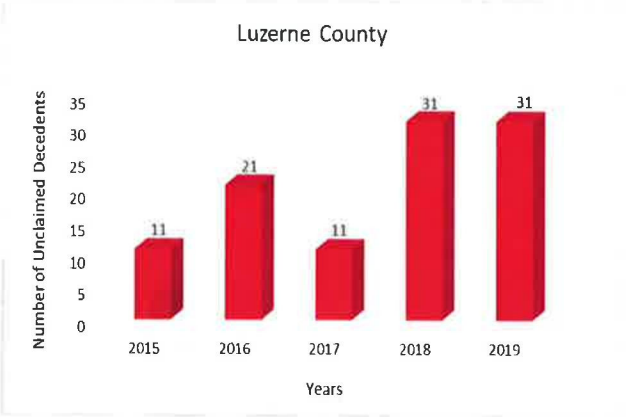


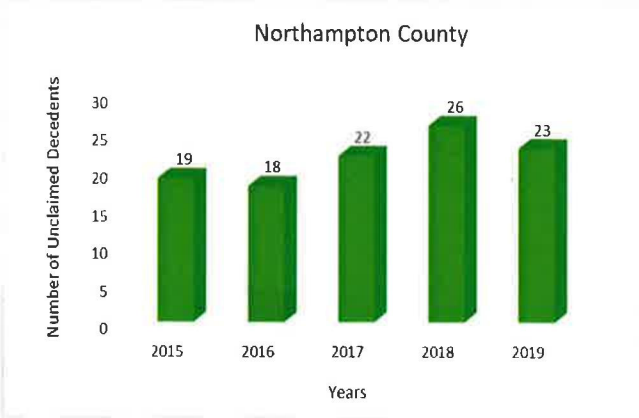





Lancaster County
Number of Unclaimed Decedents
30
25
20
15
10
5
0
11
9
28
21
23
2015
2016
2017
2018
2019
Years


Lehigh County
Number of Unclaimed Decedents
30
25
20
15
10
5
0
20
13
30
30
29
2015
2016
2017
2018
2019
Years


Luzerne County
Number of Unclaimed Decedents
35
30
25
20
15
10
5
0
11
21
11
31
31
2015
2016
2017
2018
2019
Years


Northampton County
Number of Unclaimed Decedents
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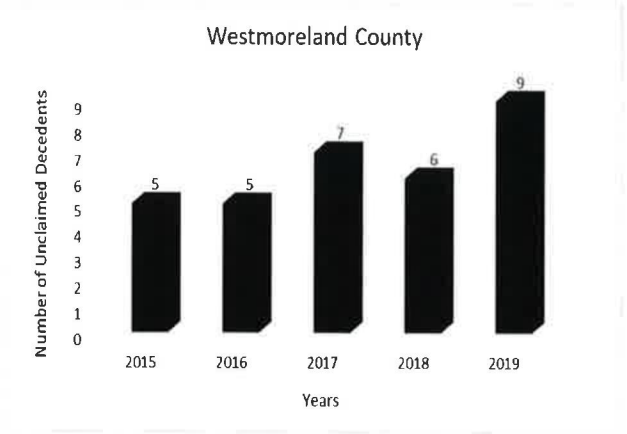
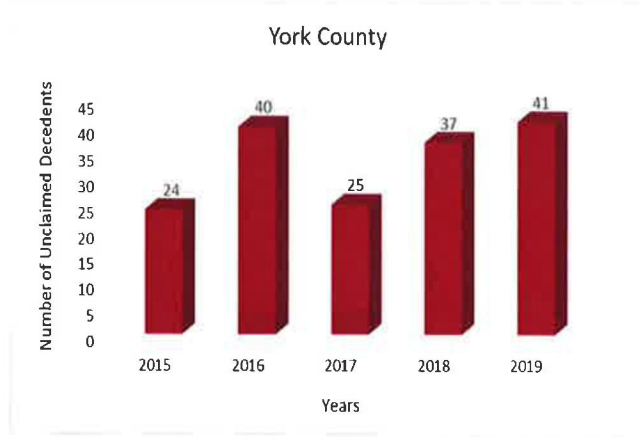
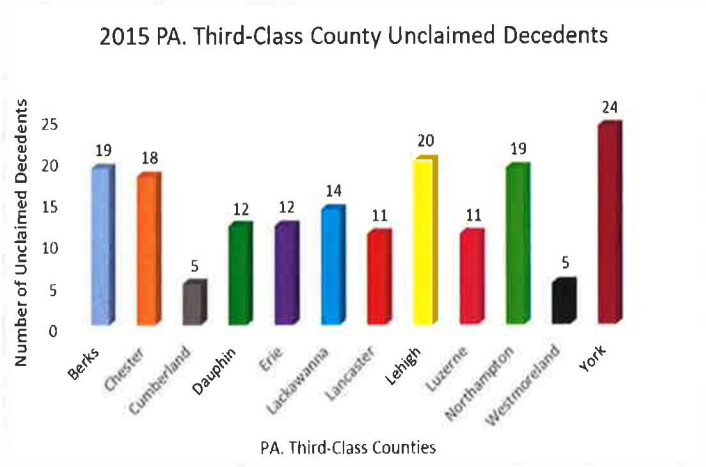
25
20
15
10
5
0
19
18
22
26
23
2015
2016
2017
2018
2019
Years

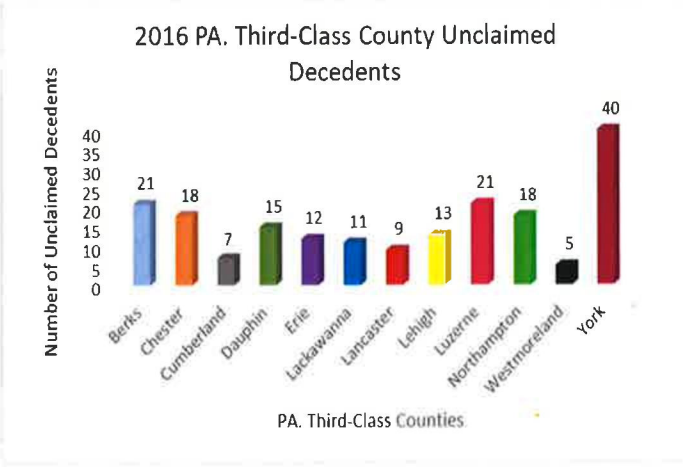

Westmoreland County
Number of Unclaimed Decedents
9
8
7
6
5
4
3
2
1
0
5
5
7
6
9
2015
2016
2017
2018
2019
Years

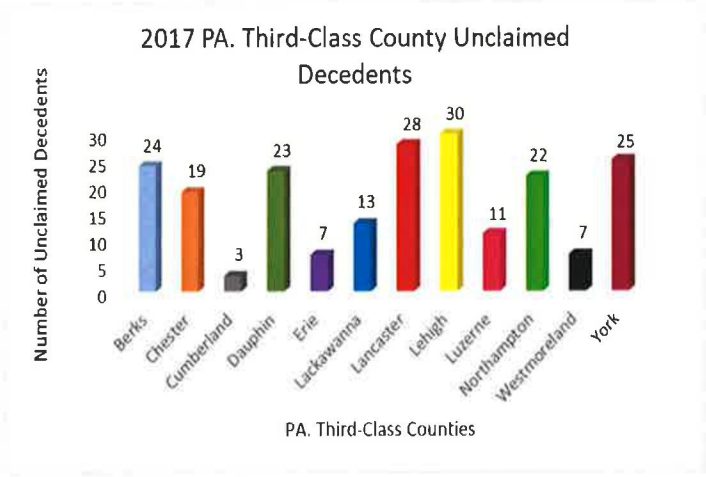

York County
Number of Unclaimed Decedents
45
40
35
30
25
20
15
10
5
0
24
40
25
37
41
2015
2016
2017
2018
2019
Years

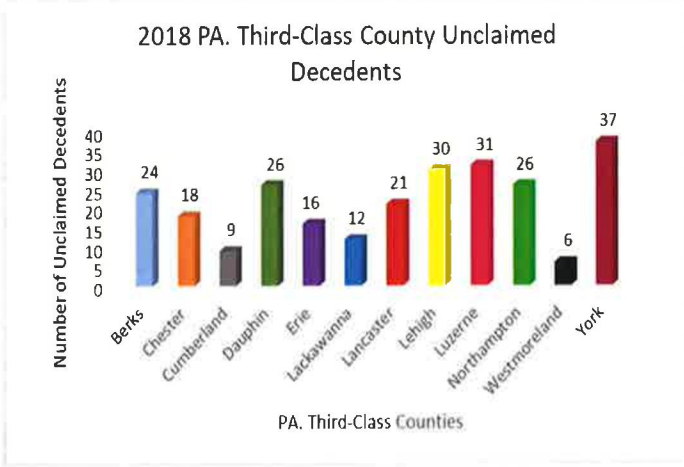
Appendix C

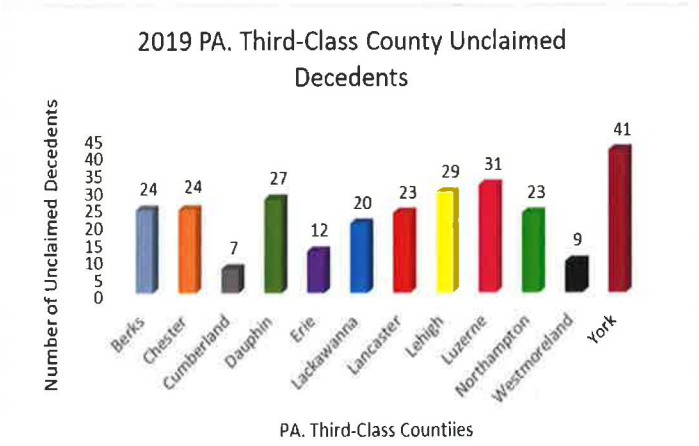
Pennsylvania Third-Class Combine County Data by Year





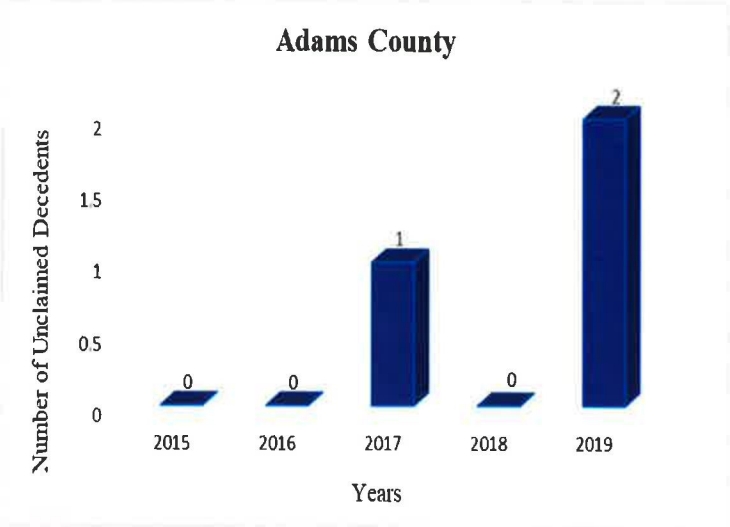


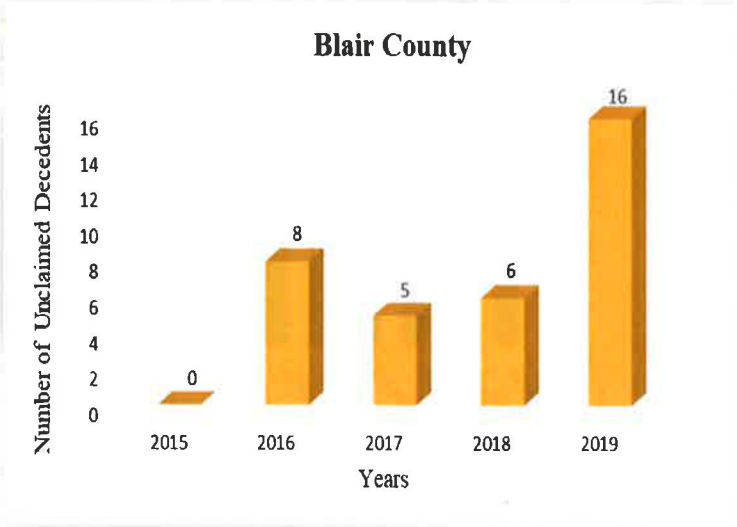


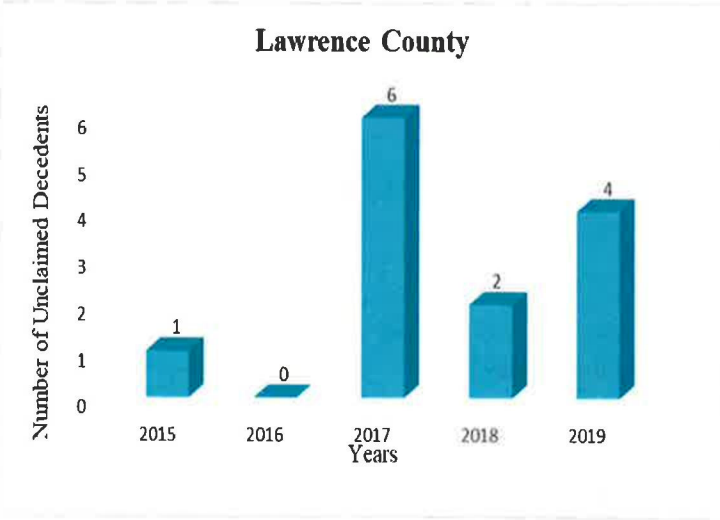


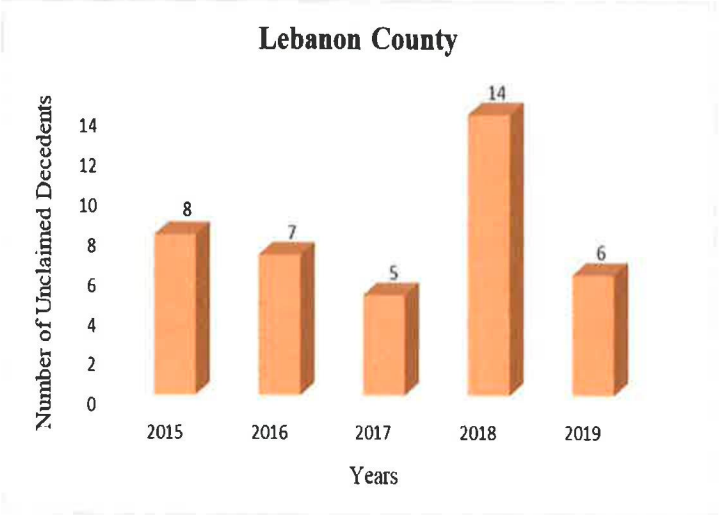
Appendix D

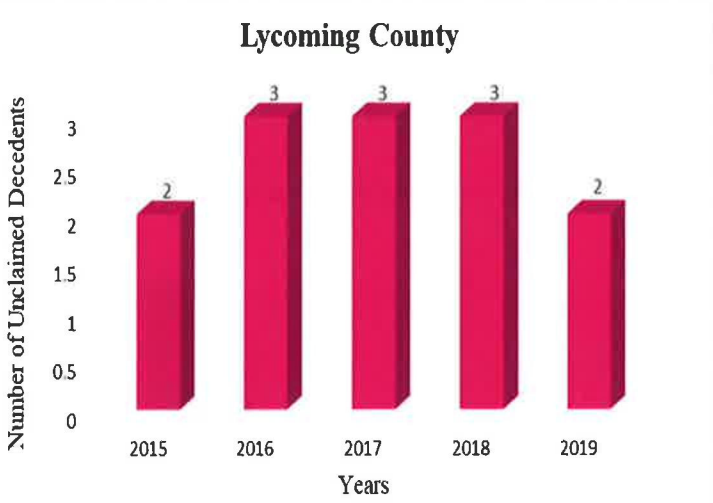
Pennsylvania Fifth-Class Counties - A 5yr Review

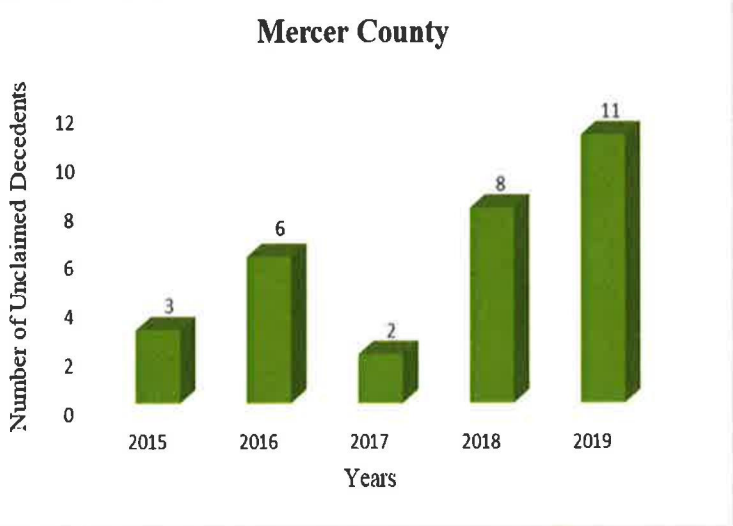


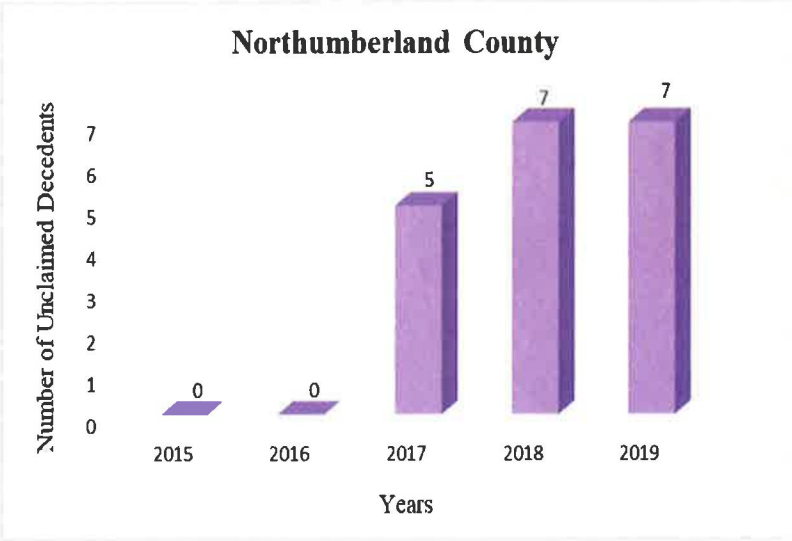






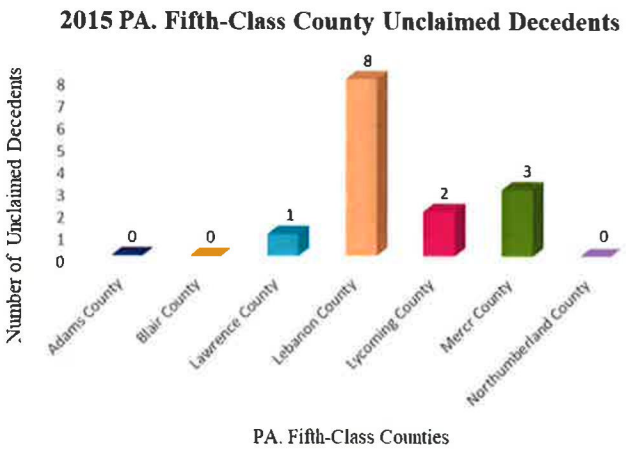

Lycoming County
Number of Unclaimed Decedents
3
2.5
2
1.5
1
0.5
0
2
3
3
3
2
2015
2016
2017
2018
2019
Years

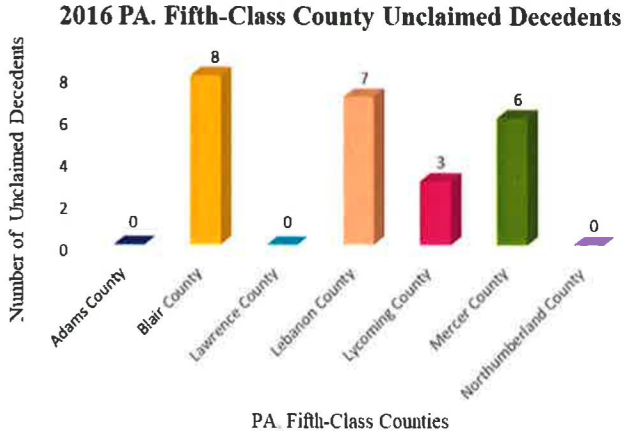

Mercer County
Number of Unclaimed Decedents
12
10
8
6
4
2
0
3
6
2
8
11
2015
2016
2017
2018
2019
Years

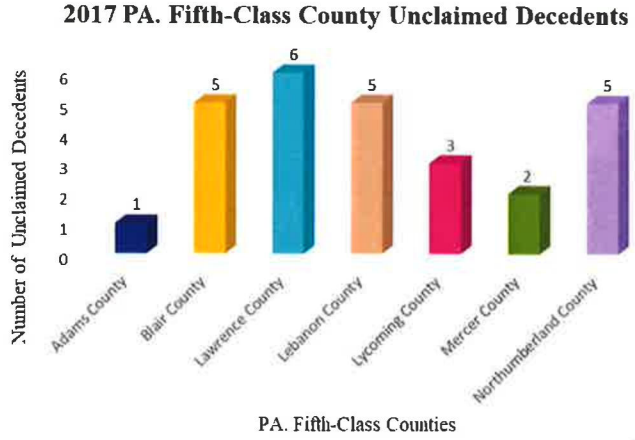

Northumberland County
Number of Unclaimed Decedents
7
6
5
4
3
2
1
0
0
0
5
7
7
2015
2016
2017
2018
2019
Years

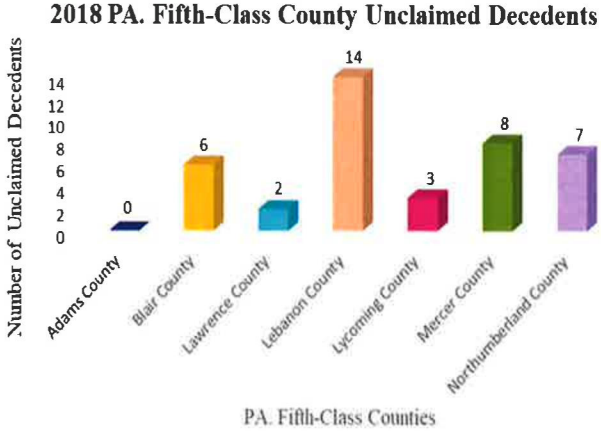
Appendix E

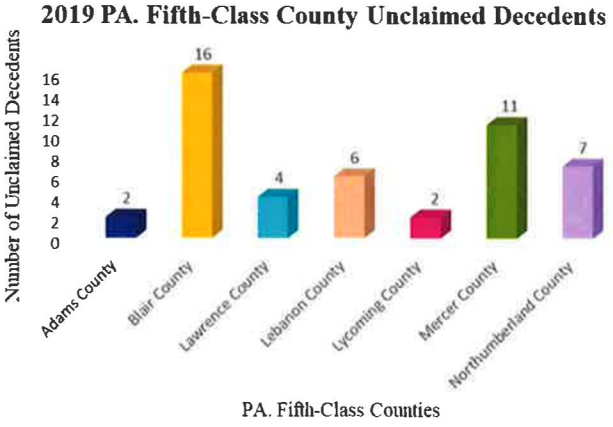
Pennsylvania Fifth-Class Combine County Data by Year







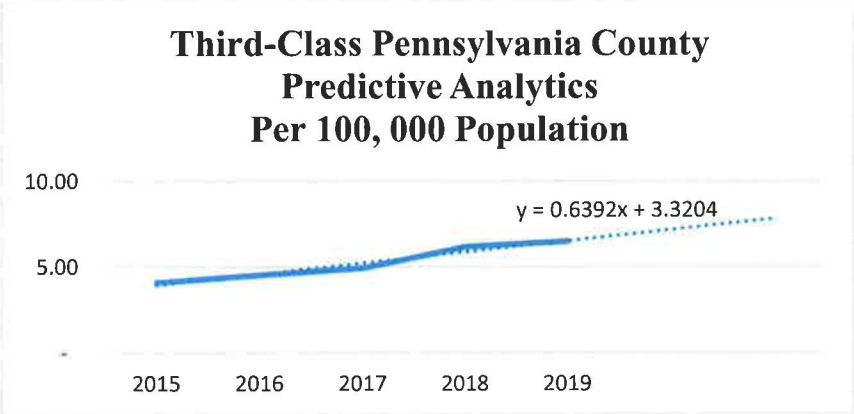




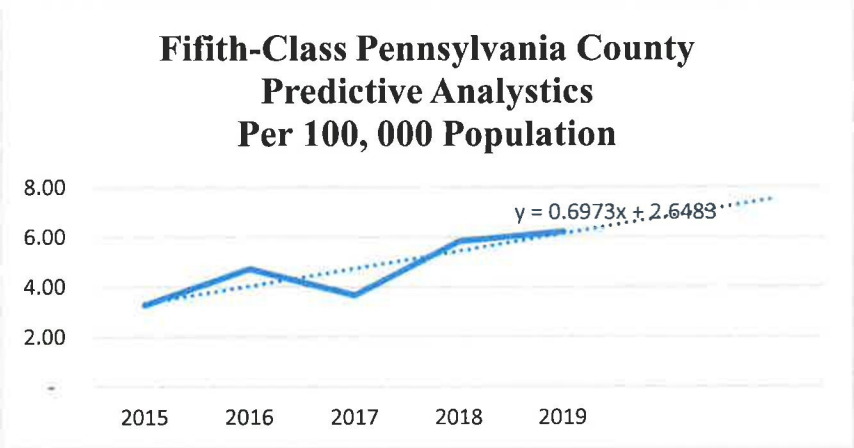
Appendix F

Predictive Analytics

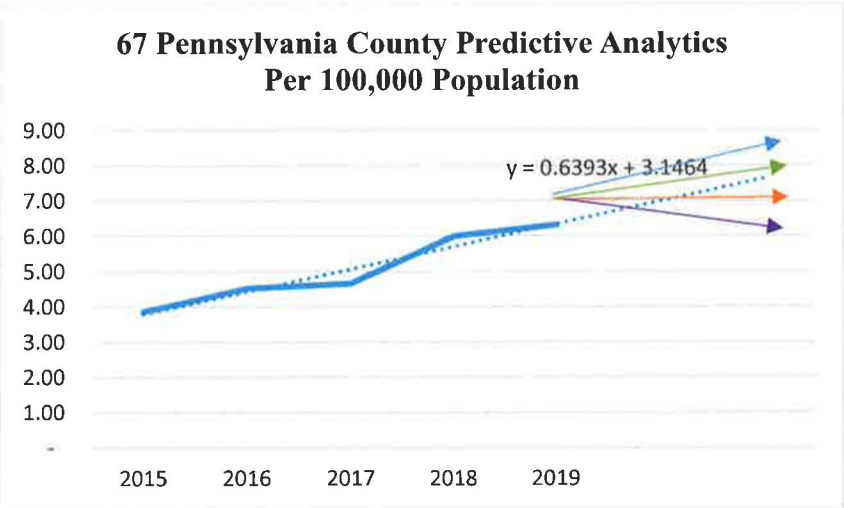
Third Class Pennsylvania County Analytics



Fifth Class Pennsylvania County Analytics



67 Pennsylvania County Predictive Analytics



Acknowledgements

This project would not have been possible without the assistance of many committee and community members which include:

DNP Committee

Dr. Catherine Johnson-Faculty Mentor

Graham Hetrick-Dauphin County Coroner and Clinical Mentor

Alisha Simpson-Deputy Coroner Dauphin County and Clinical Mentor

Susan Shanaman-Solicitor Pennsylvania Coroners Association-Legislative Mentor for Project

Chief Doug Higgins-Dallas Township Police Department-Law Enforcement Mentor

Karl Gibson-Program Analyst, MHA, BS, BPhil and Project Statistician

Caitlyn Hunter-Primary Editor, Duquesne University Writing Center

Bradley Britvich-Editor, Duquesne University Writing Center

Christine Olsen-Founder-To Inform Families First Initiative (TIFF)-Florida

State Representative Sue Helm-104th Legislative District-Pennsylvania House of Representatives

Josiah Shelly-Pennsylvania Republican Research, Transportation Executive Director

With Deepest Gratitude to:

My husband and daughter Katye who endured countless hours of watching me work and always encouraging me to continue.

To the Pennsylvania State Coroners Association who believed in this project and worked diligently for all our data requests.

My cohort, ladies I will never forget. We truly bonded especially after our trip to Rome. Thank you for the nonstop encouragement and lifelong friendship.

All my nursing faculty at Duquesne University School of Nursing especially Dr. Loughran, Dr. Johnson (Faculty Mentor), and Dr. Evatt. Your constant encouragement and support was greatly appreciative.

Healthcare Policy Analysis: Next of Kin Contact Information on Driver's License and its Use in Emergency Notification

Suzanne F. Sheaffer R.N., M.S.N., NHA.,CDNLTC

Dr. Catherine Johnson PhD, FNP, PNP

Faculty Mentor

Coroner Graham Hetrick M.S., F.D., B.C.F.E., D-ABMDI

Deputy Coroner Alisha Simpson M.S., D-ABMDI

Clinical Preceptors

DUQUESNE UNIVERSITY

School of Nursing

Disclaimer

Due to the sensitive nature of this project, the pictures used within this healthcare policy analysis project presentation are used with the permission of the original photographer or owner of the photograph.

Healthcare Problem

- Increase in number of unclaimed decedents in Pennsylvania Counties
- Increase in opioid deaths
- Inability to identify/notify next of kin
- Inability of family to make burial decisions
- Lack of family closure
- Taxpayer burden related to increasing cost of cremation

Setting and Population

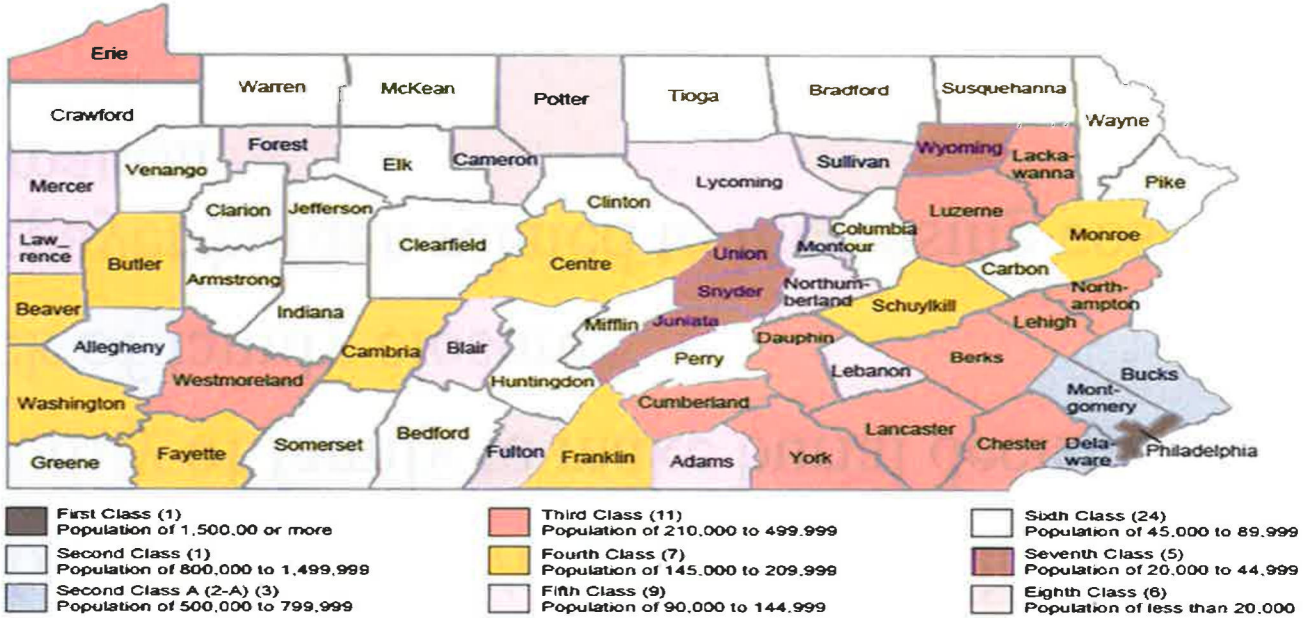


Image 2. Map of Pennsylvania Counties (2015) https://printable-maps.blogspot.com/2015/05/map-of-pennsylvania-counties.htm

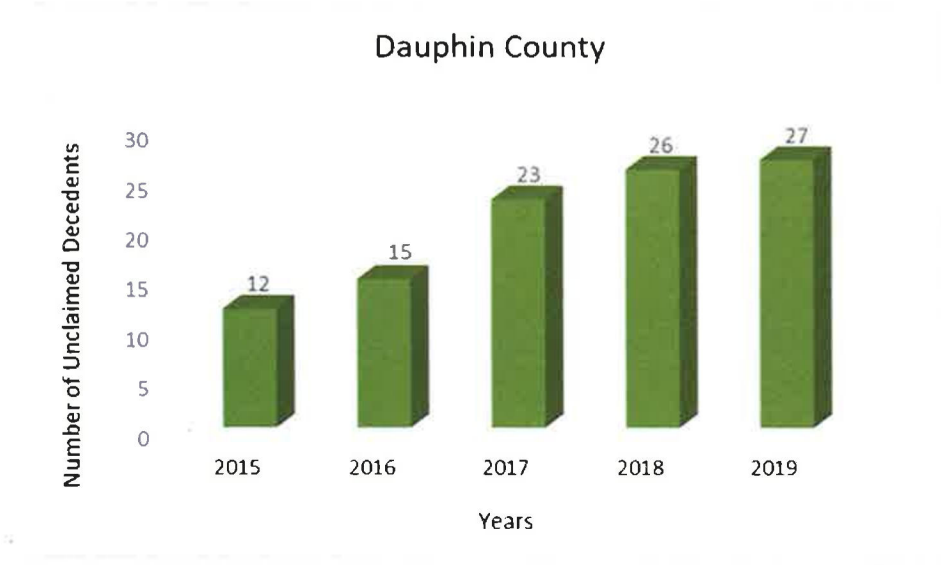
- Setting
  - Pennsylvania Third and Fifth Class County Coroner Offices
  - Pennsylvania Department of Transportation
- Population
  - Decedent in Third-Class and Fifth-Class Pennsylvania Counties
  - Projections of decedents across all 67 counties

Leadership *Defined...*

DUQUESNE UNIVERSITY
School of Nursing

Project Background

- Montgomery County - in 2015 compared to 2014: there was a 19% increase in unclaimed decedents: (Frolik, 2015).
- Dauphin County 26 unclaimed decedents 2018: increase of three decedents compared 2017 (Vendel, 2019).



Leadership *Defined...*

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School of Nursing

Identification of:

- Stakeholders
  - Coroners
  - County Commissioners
  - Decedent families
  - Funeral homes
  - Legislator
  - Governor
  - Pennsylvania citizens
  - Pennsylvania Dept. of Transportation
  - Police Departments
  - Community bereavement services
  - Emergency Medical Services
  - Emergency Departments
- Team members
  - DNP faculty mentor
  - 2 Forensic Experts from Dauphin County Coroner Office
  - Police Chief Expert
  - Solicitor PA. State Coroners Association
- Topic Contributors
  - Decedent family member
  - Pennsylvania legislative member
  - Project sponsor
  - Project supporters

Synthesis of Findings

- **Non- research**
  - TIFF's Initiative - 17 million next of kin in Florida
  - Dauphin County, unclaimed decedent count increasing every year since 2014 (Vendel, 2019).
    - Hetrick, substantiates in 2017: 23 unclaimed decedents (Vendel, 2019)
    - Hetrick, substantiates in 2018: 26 unclaimed decedents (Vendel, 2019)
  - Dauphin County Coroner opioid epidemic statistics: 104 deaths in 2017 and 2018 had 128 opioid deaths, increase of 23% as compared to 2017 (Vendel, 2019)
- **Research**
  - Opioid deaths had increased 242% between 1991 and 2010 (Gomes et al., 2014)
  - Coroner offices cremate unclaimed bodies, the burial of ashes done in mass graves (Rugg and Holland, 2017)
  - Burden of latent family notification and failure to provide closure to these to families (Castex, 2007)

Two Key Project Terms

Pennsylvania Justice Network aka JNET

Penn College Police (2005)

Potter's Field

To Inform Families First (TIFF) : Florida's Next Of Kin Initiative

- History of TIFF
- Implementation on October 6, 2006
- Emergency Contact Information link placed as part of the application for Florida driver's license and identification cards
- Zero to 17 million next of kin registrants, which continues to rise
- Olsen states that there are "at least one million new registrants annually in Florida"

Florida's D.O.T. Emergency Contact Information Registrations

From Zero to Over 16 Million in 14 Years !

Month Year	January	February	March	April	May	June	July	August	September	October	November	December
2020	15,988,053	16,097,527	16,168,919	16,177,745	16,233,866	16,327,234	16,419,446	16,514,652	**16,615,163**			
2019	14,675,146	14,779,378	14,892,010	15,000,404	15,108,381	15,219,658	15,343,830	15,460,561	15,559,813	15,674,768	15,769,003	15,870,316
2018	13,274,086	13,384,674	13,507,633	13,619,155	13,735,073	13,858,811	13,988,105	14,127,106	14,234,576	14,358,076	14,462,661	14,557,777
2017	11,835,933	12,046,048	12,163,861	12,263,462	12,372,230	12,491,512	12,606,664	12,731,992	12,815,211	12,936,871	13,046,363	13,152,531
2016	10,739,199	10,838,028	10,940,031	11,029,163	11,115,670	11,221,558	11,325,840	11,440,741	11,539,540	11,639,753	11,735,658	11,835,933
2015	9,525,228	9,612,783	9,700,910	9,794,804	9,884,882	9,966,977	10,068,770	10,170,907	10,268,095	10,458,156	10,547,987	10,648,374
2014	8,254,656	8,379,467	8,491,657	8,609,504	8,718,866	8,822,432	8,933,984	9,052,393	9,162,724	9,265,635	9,364,599	9,438,342
2013	6,858,885	6,985,506	7,105,996	7,229,845	7,348,884	7,466,955	7,581,941	7,710,486	7,836,451	7,943,363	8,055,138	8,150,093
2012	5,370,335	5,489,669	5,611,379	5,736,960	5,859,307	5,984,384	6,113,853	6,251,318	6,393,756	6,513,559	6,644,272	6,755,857
2011	4,072,815	4,176,718	4,279,517	4,392,277	4,492,150	4,593,467	4,707,703	4,819,314	4,942,206	5,051,661	5,158,925	5,262,915
2010	2,988,871	3,068,496	3,157,387	3,256,984	3,327,799	3,392,326	3,471,726	3,571,065	3,677,830	3,776,568	3,878,931	3,974,154
2009	1,726,660	1,830,132	1,930,130	2,038,629	2,139,163	2,228,618	2,333,253	2,449,679	2,601,703	2,694,340	2,792,285	2,877,215
2008	843,848	893,133	934,975	971,811	1,012,593	1,054,168	1,102,571	1,212,470	1,313,040	1,422,998	1,539,932	1,626,979
2007	391,285	418,774	439,067	456,088	468,130	483,137	499,984	562,049	632,140	684,454	744,901	798,007

Florida Highway Safety and Motor Vehicles (2020)

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Policy Recommendations

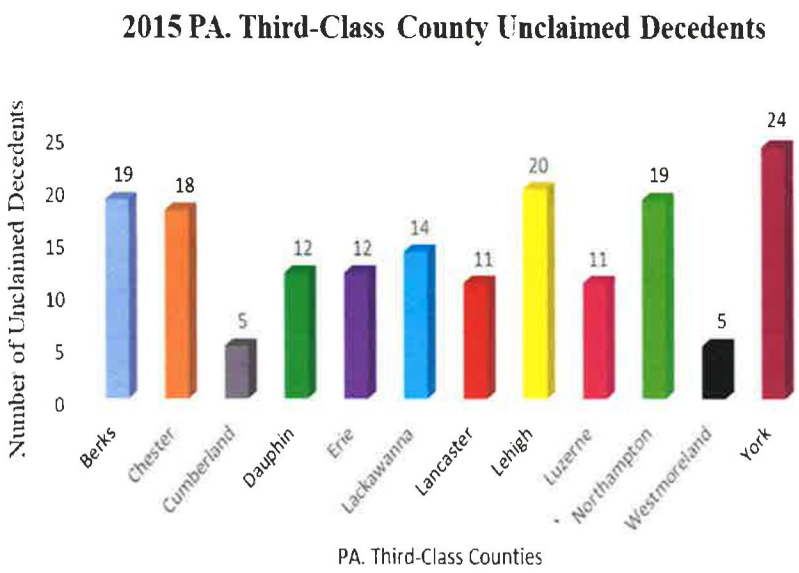
Through a healthcare policy analysis format, this project will:

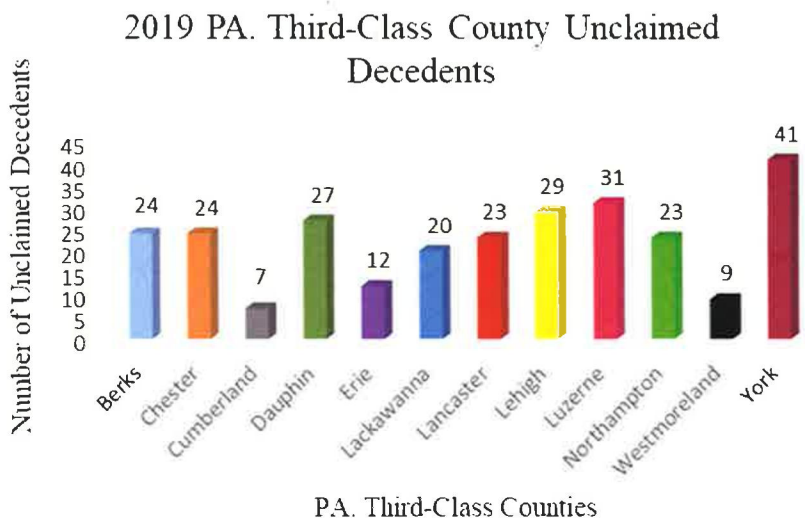
- Compare the Florida TIFF initiative to Pennsylvania next of kin notification process
- Use the Bardach and Rodriguez-Garcia models to substantiate the data necessary for policy analysis and change in Pennsylvania
- Raise awareness for the need of next of kin notification in Pennsylvania
- Establish a communication plan to notify Pennsylvanians on the availability to the emergency contact link (aka next of kin) link on PennDOT's existing site.

Purpose Statement for Healthcare Policy Analysis

- To conduct a scholarly healthcare policy analysis, which can aide in changing current practice in Pennsylvania
  - To decrease the number of unclaimed decedents in all 67 Pennsylvania Counties
  - To return the decedent to their families for burial and closure
  - To decrease decedent care cost in all 67 Pennsylvania Counties

Unclaimed Decedents: 2015 Compared to 2019





54% increase of unclaimed decedents over a 5 yr period

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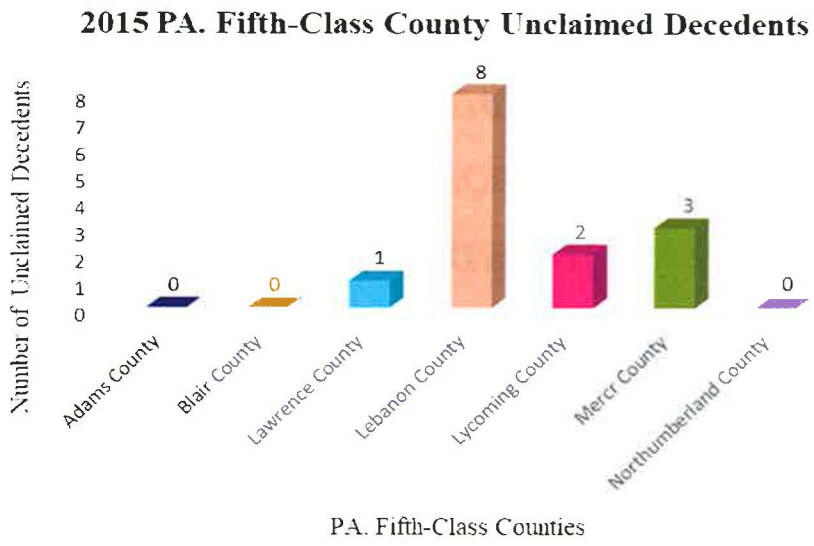
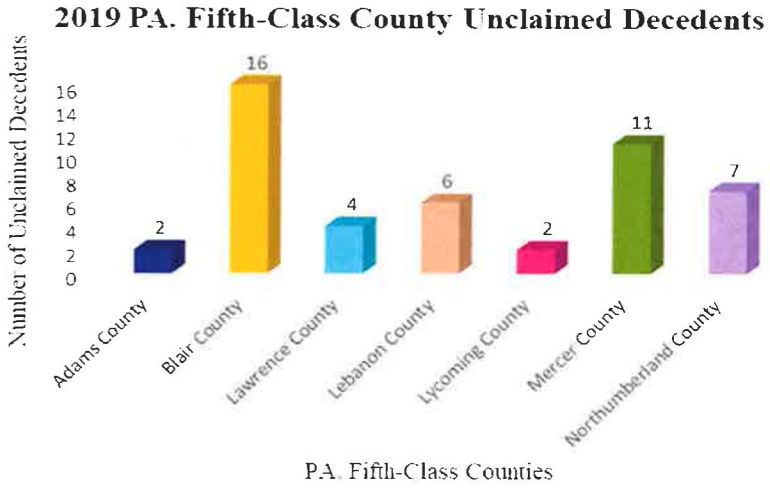
Unclaimed Decedents: 2015 Compared to 2019





29% increase of unclaimed decedents over a 5 yr period

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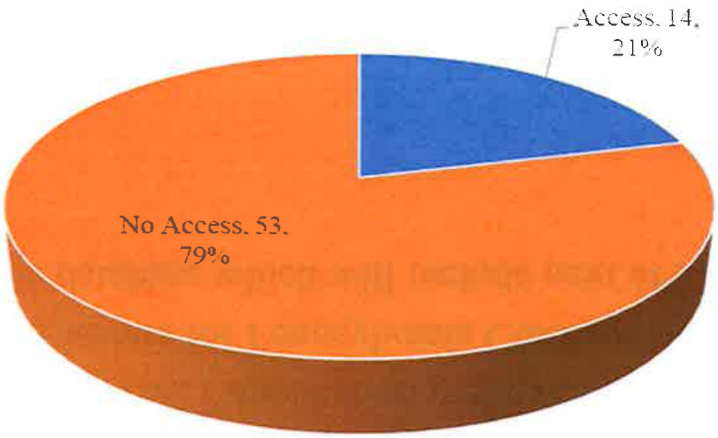
AIM 3 - JNET Implementation

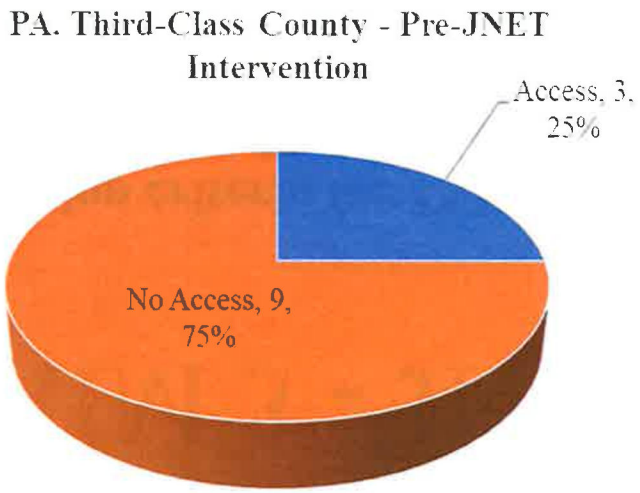
Develop criteria for JNET implementation in order to access next of kin contact information in Pennsylvania

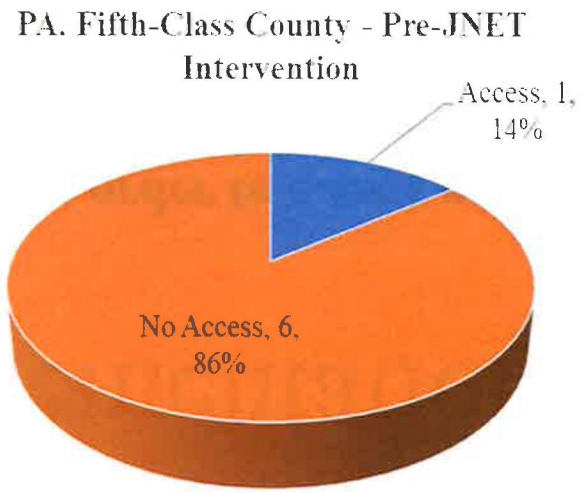
Objectives:

1. Survey the existing number of Pennsylvania Coroner's that have JNET access
2. Implementation of JNET application process
3. Establish JNET access for Pennsylvania Coroners through PennDOT's driver's license database which will include next of kin contact information

Pre-JNET Intervention







JNET Application Process

Directions

I. Accessing JNET

A. Go to: https://www.pajnet.pa.gov

1. Click on "Who we serve"

2. Then, click "New Agencies"

B. Locate PDF form entitled "Agency Access Request Form"
Complete request form
Return form to:
Todd Sackett, JNET Communication Manager
@ tsackett@pa.gov
717-214-7459

II. Trouble shooting access problems

A. Find out who in your county is the JNET Coordinator

B. Have JNET County Coordinator assist if application is rejected

C. Unable to identify JNET County Coordinator, contact Todd Sackett, JNET Communication Manager

D. Contact the Pennsylvania Coroner's Association for further guidance

Related Information

JNET access will be limited to the driver's license screen and photo's

If next of kin contact information is added to the Pennsylvania driver's license, it is this associations goal to have access for county coroners as well. Updates on this issue TBA.

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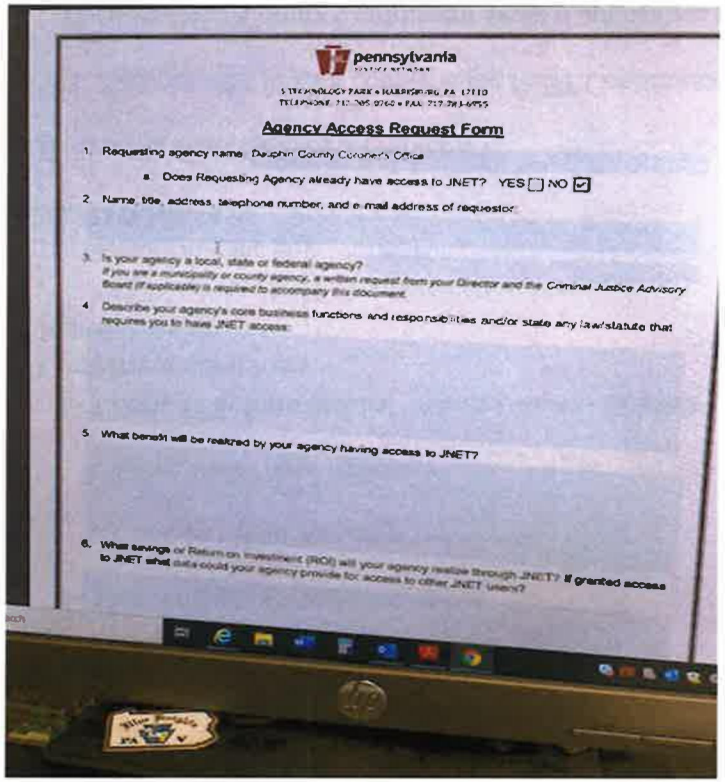
Completing the JNET Application

JNET Application



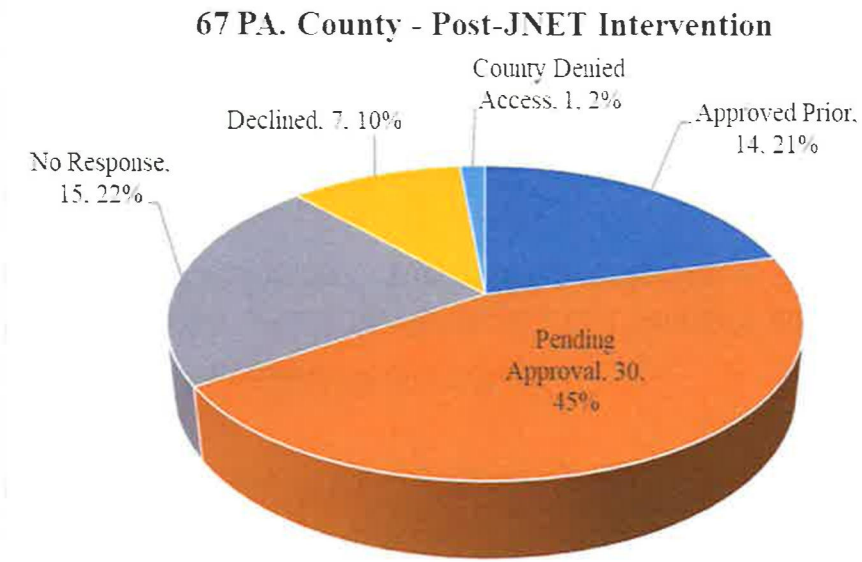
pennsylvania

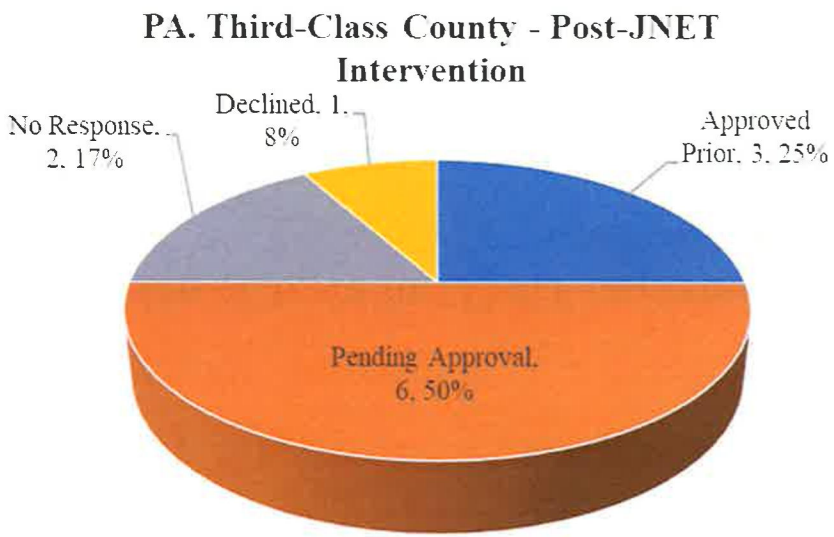
Agency Access Request Form

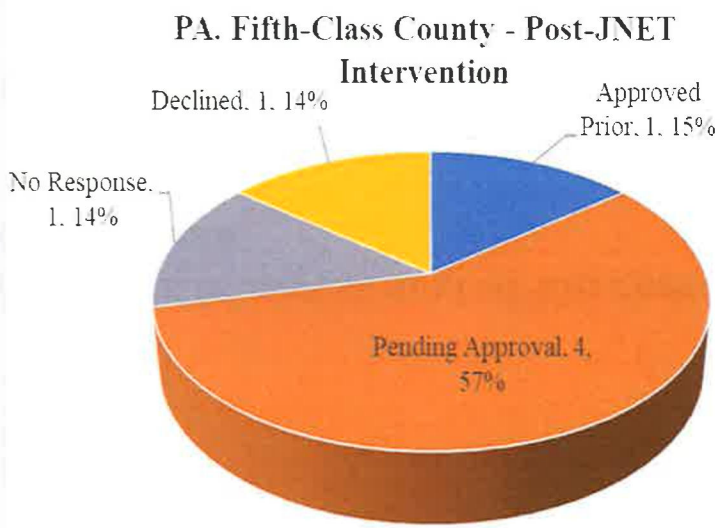
1. Requesting agency name: Dauphin County Coroner's Office
   a. Does Requesting Agency already have access to JNET? YES ☐ NO ☑
2. Name, title, address, telephone number, and e-mail address of requestor:
3. Is your agency a local, state or federal agency?
   If you are a municipality or county agency, a written request from your Director and the Criminal Justice Advisory Board (if applicable) is required to accompany this document.
4. Describe your agency's core business functions and responsibilities and/or state any law/statute that requires you to have JNET access:
5. What benefit will be realized by your agency having access to JNET?
6. What savings or Return on Investment (ROI) will your agency realize through JNET? If granted access to JNET what data could your agency provide for access to other JNET users?

Completing Application

Post-JNET Intervention







Results: AIM 3

Develop criteria for JNET implementation in order to access next of kin contact information in Pennsylvania

1. **Objective:** Survey the existing number of Pennsylvania Coroner's that have JNET access

   Results:

   - 14 of 67 (21%) counties acknowledged having JNET access
   - All 67 counties responded to initial inquiry.

2. **Objective:** Implementation of JNET application process

   Results:

   - Directions were disseminated to all 67 counties

3. **Objective:** Establish JNET access for Pennsylvania Coroner's through PennDOT's driver's license database which will include next of kin contact information

   Results:

   - 30 counties (45%) in Pennsylvania are pending JNET approval.

AIM 3 - Met

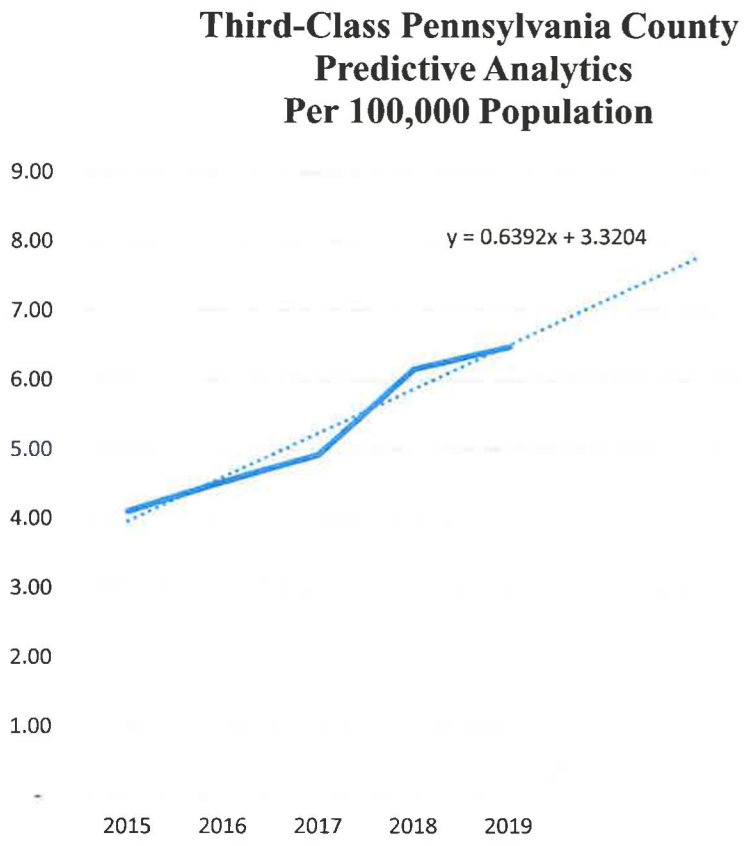
AIM 4

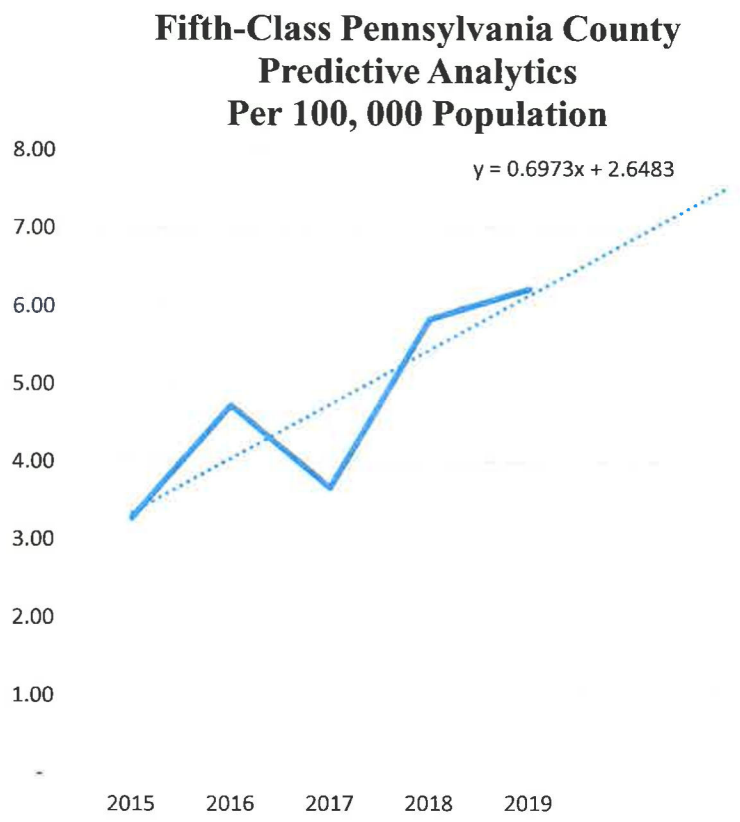
Weigh project outcomes and create final policy recommendations

Objectives:

1. Evaluate stakeholder feedback
2. Implement policy recommendations that are relevant, progressive, efficient, and impactful based on data collected
3. Cost benefit analysis in healthcare policy analysis
4. Create a projection of unclaimed decedent populations across all 67 counties based on a conservative estimate of 12.5, 25 and 50%.
5. Legislative collaboration

Predictive Analytics





—— : denotes collected data

- - - : denotes increase in unclaimed decedents overtime

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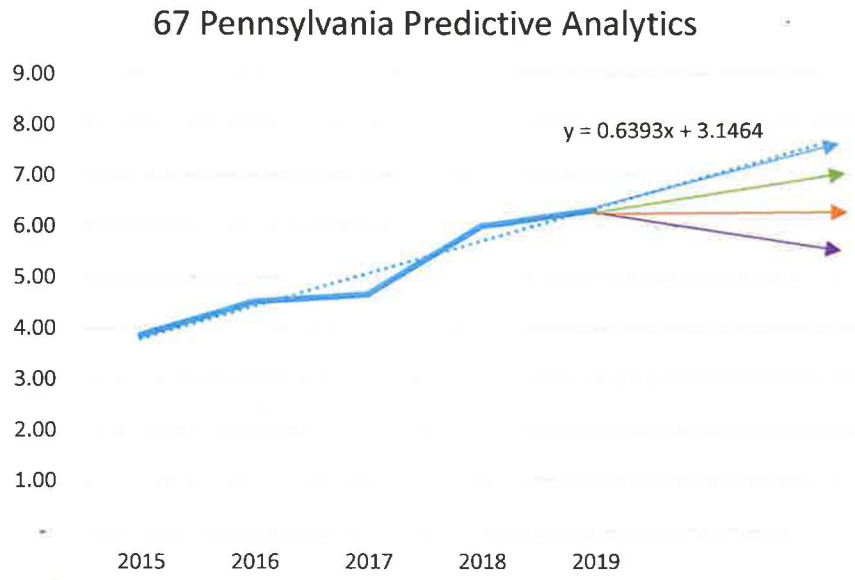
Pennsylvania
Decedent Projection per 100K Population



- :denotes collected data
- :denotes increase in unclaimed bodies
- :denotes 12.5% decrease (1st year of implementation)
- :denotes 25% decrease (2nd year of implementation)
- :denotes 50% decrease (3rd year of implementation)

The average projection of unclaimed decedents within all 67 counties was 6.32 on average

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Legislative Collaboration

PA House of Representative Collaboration through Rep. Sue Helm (104th District):

- Will inquire the status on the JNET applications that were submitted
- Will request that PennDOT display the emergency contact information system link in a more prominent location on the PennDOT website
- Will request that PennDOT's online application/renewal forms for PA driver's licenses and identification cards will prompt for next of kin information
- DMV clerks will ask customers to list next of kin on data entry process during in person registration/application

Results: AIM 4

Weigh project outcomes and create final policy recommendations

1. **Objective:** Evaluate stakeholder feedback

   Results:

   - Presented at the Pennsylvania State Coroners Association Annual meeting

2. **Objective:** Implement policy recommendations that are relevant, progressive, efficient, & impactful based on data collected

   Results:

   - Policy recommendations were shared with stakeholders
   - Health care policy analyses to address next of kin contact information
   - Concerns by stakeholders in personal care, assisted living and long-term care facilities.

3. **Objective:** Cost benefit analysis in healthcare policy analysis

   Results:

   - Cost benefit analysis was assessed based on current trends
   - County cost per decedent, $250.00 to $2500.00

4. **Objective:** Create a projection of unclaimed decedent populations across all 67 counties

   Results:

   - Projections were completed based on data known and unknown
   - 6.32 representing the median number of unclaimed decedent increase annually ($1580.00 - $15,800.00)

5. **Objective:** Legislative collaboration

   Results:

   - Request that PennDOT display the emergency contact information system link in a more prominent location
   - PennDOT's online application/renewal forms for PA driver's licenses and identification cards will prompt for next of kin information
   - DMV clerks will ask customers to list next of kin on data entry process during in person registration/application

Potential Barriers & Overcoming Barriers

- Potential Barriers
  - PennDOT cooperation
  - JNET and PennDOT approving JNET access to PA. Coroners
  - PennDOT willingness to allow changes to website
- Overcoming Barriers
  - Educate PennDOT on the importance of moving the link
  - Media campaign to provide awareness to PA. residents regarding next of kin designation capability on PA. driver's licenses & state issued identification cards
  - Follow up by the PA. State Coroners Association after policy analysis completion

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Approved: Catherine Johnson

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Dedicated To

Loving Memory of Our Angel Children

Tiffiany, Sarah, and Billy

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Questions