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New Mexico Trauma System Funding Strategy

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NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

BY

RAZVAN NICHOLAS PREDA

A scholarly project submitted to the College of Nursing
in partial fulfillment of the requirements
for the degree
Doctor of Nursing Practice

University of New Mexico
College of Nursing
Albuquerque, N.M.

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Date of submission: May 8, 2017
"New Mexico Trauma System Funding Strategy"

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Trauma is the leading cause of death among individuals 1 to 44 years of age. Nationally, one individual dies of traumatic injuries every three minutes. In the United States, the financial impact of trauma is estimated to be approximately $671 billion annually, spent on direct trauma care and associated costs, such as loss in productive days and rehabilitation. The New Mexico trauma system registered dramatic development over the past 10 years. In 2007, the state had only three designated trauma centers, and today there are 12. However, over the same period, trauma system funding registered an equally dramatic decrease of approximately 70%. Having a functional trauma system in New Mexico is an absolute necessity. The purpose of this project was to identify potential sources of sustainable revenue for the New Mexico’s trauma system and to take the initial steps towards introducing legislation that will secure trauma system funding for the future. The work on this project resulted in initiating the first legislative step of this process.
DEDICATION

I dedicate this to Imbri, the most wonderful partner I could have ever wished for. I cannot thank her enough for her support and patience. She has always been helpful and not even once complained about all the time I spent between work and school. I promise to always show her how much I love her and how grateful I am for having her in my life.

To my father, for his unwavering confidence in me and my abilities to accomplish my goals and dreams. To my daughter, for being a constant inspiration to me, with her determination, kindness, optimism, and power to overcome everything, always with a smile. To our best friend, Asia, who has always been steadfast by my side, encouraging, and always ready to help. To all my classmates, Johanna, Chet, Joy, and especially Mela, for being there for me, for allowing me to be there for them, and for providing me with a second family through this amazing journey. I am forever grateful to all of them, and may the bond that we created between us never break.
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ACKNOWLEDGEMENTS

I will take this opportunity to deeply thank the following people who made this project a success. Dr. Christine Delucas, you have been the driving force behind this project. You helped me with the initial idea and saw its great potential better than anyone. Then, you have been there every step of the way, through its completion. You knew best when to guide me, when to push me, when to support me. You discovered in me abilities that I did not know existed. I could never thank you enough, and you will always be the most amazing educator I have ever had. Thank you from the bottom of my heart!

Deborah Walker – simply, I could not have done this without you. Your experience, patience, and determination were inspirational every step of the way. I have learned so much from you, and I truly hope this was only the beginning. You took my hand and opened doors that revealed a new world of possibilities to me. Thank you so much!

Dr. Therese Hidalgo, thank you for your help and guidance. Thank you for taking significant time to be there for me and support my efforts when I had to testify before the legislative committees!

Dr. Kim McKinley, you have always been there for me, encouraging, helping, and supporting me. Thank you for teaching me everything I know about trauma and assisting me every step of the way as I was learning!
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LIST OF ACRONYMS

ABI/INFORM: Full-text business titles database

ACA: The Affordable Care Act

ACP: American College of Physicians

CEO: Chief executive officer

CINAHL: The Cumulative Index to Nursing and Allied Health Literature

DOH: Department of Health

DSH: Disproportionate Share Hospital

EBSCO: Elton B. Stephens Co. (EBSCO Information Services)

EMBASE: Excerpta Medica Database

EMS: Emergency medical services

FDSys: Federal Digital System (America’s Authentic Government Information)

GPO: US Government Publishing Office

ISS: Injury severity score

KI: Key informants

MEDLINE: Medical Literature Analysis and Retrieval System Online

PICOT: Problem, intervention, comparison, outcome, time

PoP: Play or pay

REIMBR: Reimbursement ratio

TRIP: Turning research into practice

TS: Trauma system

TSFA: New Mexico Trauma System Fund Authority

STROBE: Strengthening the Reporting of Observations Studies in Epidemiology
CHAPTER 1

Introduction and Background

Designated as a rural state, New Mexico faces specific challenges. Yet over the past decade there has been significant improvement in the trauma system. New trauma centers are in development, and the state infrastructure is evolving, thus becoming more robust and flexible. Despite the characteristic challenges of a rural state and the financial constraints imposed by legislation and the recent financial crises, the New Mexico Trauma System is consistently working to improve its trauma system, as evidenced by the establishment of the New Mexico Trauma System Fund Authority (TSFA) and the activities of the Trauma Performance Improving Committee.

Trauma funding in New Mexico is coordinated by the New Mexico Trauma System Fund Authority, with the declared purpose of administering “funding to sustain existing trauma centers, support the development of new trauma centers and develop a statewide trauma system…” (New Mexico Trauma System Fund Authority, 2006, p. 1). The state has a line item budget for the trauma system. The funds appropriated to the trauma system come directly from the state’s general fund budget. From the final amount assigned to the trauma system, the budget line item dedicates 5% to the state Department of Health (DOH). These monies, used by the DOH for the State Trauma Program, provide for staff salaries, administration, and support the state trauma registry. As the amount apportioned to trauma has been consistently shrinking since 2007, the goal of this project is to develop a legislative initiative that provides for the development and recommendation of a new strategy for sustainable trauma funding.

Comparing the current New Mexico trauma funding structure with those in Arizona, Colorado, Texas, and Mississippi, proved helpful in identifying new strategies to address funding
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in New Mexico. Arizona, Colorado, and Texas, as neighboring states, interact on a regular basis with New Mexico’s trauma system by sharing trauma patients, based on established transfer protocols. Information about their trauma systems proved useful for generating an overall picture of trauma care in this area. The state of Mississippi was included in this comparison for similarities pertaining to trauma system structure and population. Mississippi implemented a trauma system state law that the author considers valuable to this project.

The literature review revealed a dearth of information on the subject of trauma system funding. Extensive searches were carried out regarding trauma system policy, finance, and funding. The intrinsically difficult task of evaluating the impact of trauma funding on outcomes, directed the investigation towards expanding the search to the structure of trauma systems in general, as well as to trauma care expenses, reimbursement, and policy.

Zarzaur, Croce, and Fabian (2012) analyzed the results of a state trauma funding law in Mississippi. As a result of the negative impact of trauma funding on patient care, the state passed House Bill 1405. This bill introduced a new financial model that required all trauma centers in Mississippi to participate in the trauma system or pay a fee of up to $1.5 million per hospital, dependent on their trauma level. As a result, the financial status of the state trauma system improved significantly. The payer mix changed by keeping more patients in the state instead of transferring them to neighboring states, which directly increased reimbursements into the state trauma fund (Zarzaur et al., 2012). This article directly explored the impact of a policy to a statewide trauma system.

Mann, MacKenzie, Teitelbaum, Wright, and Anderson (2004), interviewed representatives from all 50 states, asking them to characterize the current structure of trauma care in their states, while also identifying strengths, weaknesses, and threats facing trauma care
delivery in their respective areas. The results indicated an across-the-board agreement on three main areas: inadequate funding, staff recruitment, and staff retention.

Another significant challenge facing trauma care is unreimbursed care. Selzer et al. (2000) demonstrated the dependence of trauma centers on disproportionate-share hospital governmental funds. Disproportionate-share hospitals serve a disproportionately higher number of low-income patients; and thus receive reimbursement from the Centers for Medicaid and Medicare Services to cover the costs of providing care for those patients (Health Resources and Services Administration, n.d.). The number of uninsured and underinsured patients levies a major financial cost impact on hospitals and statewide trauma systems in general. The Affordable Care Act (ACA) may potentially decrease the impact of this issue, but the actual results will take years to become apparent.

**Problem Statement**

In 2007, the New Mexico legislature allocated $5 million for the development of the trauma system in the state. At that time, three trauma centers were designated as trauma centers. Over the past 10 years, the number of trauma centers quadrupled, to 12 currently, and two others are in development. Over the same period, however, funding for the state’s trauma system decreased dramatically, by almost 70%, or approximately $3.4 million. The lack of funding directly threatens the viability of rural trauma hospitals and the trauma system in general.

**Study Purpose/PICOT Question**

The purpose of this study was to gather data to assist in the identification of sustainable sources of revenue for the trauma system in New Mexico. The data gathered will contribute to recommendations for the next steps toward securing adequate funding.
for the trauma system. The PICOT question for this scholarly project was: “For the trauma system in New Mexico, will the proposed funding strategy, by comparison to other trauma funding strategies used in other states/trauma systems, be able to secure adequate and sustainable financial support by the 2017 legislative session?”

Objectives and Goals

The short-term goal of this qualitative study was to identify, recruit, and interview a group of trauma of key informants (trauma system experts, stakeholders, and legislators). The collected data will ascertain the status of trauma system funding, and potentially identify approaches to sustainable trauma revenue. An additional objective was to introduce a legislative memorial during the 2017 regular session of the state Legislature, which was accomplished. A memorial is way of petitioning Congress or other government agencies or, most commonly, asking a state agency to study an issue (New Mexico Fiscal Policy Project, 2009). Memorials can be House or Senate memorials or joint memorials, in which case they require passage by both chambers. Memorials do not require the governor’s signature (New Mexico Fiscal Policy Project, 2009). This joint memorial had a double objective: to raise awareness of the dire situation of the state’s trauma system and to create a task force charged with exploring possibilities and recommending to the Legislative Health and Human Services Committee suitable and sustainable sources of revenue for the state’s trauma system.
CHAPTER 2

Review of the Literature

This scholarly project focused on investigating strategies for the sustainable funding for New Mexico’s trauma system. A systematic review of the literature for trauma system funding revealed a dearth of information on this subject. Extensive searches performed included trauma system policy, finance, and funding. The difficult task of evaluating the impact of trauma funding on outcomes, directed the investigation toward expanding the search to the structure of trauma systems in general, as well as the expenses, reimbursement, and policy of trauma care. The scarcity of studies covering this subject prompted an expansion of my research beyond the medical and nursing fields and into the disciplines of business and law.

The literature review conducted for the period of January 2000 to April 2016, utilized WorldCat, PubMed, Cochrane Library, CINAHL, Google Scholar, EBSCO, Embase, ACP Journal Club, NGC, Web of Science, Global Health, Political Science Complete, FDsys, ProQuest Congressional Publications, GPO, MaricreWeb DOCS, HeinOnline, LexisNexis Academic, LegalTrac, ABI/INFORM Complete, Business Source Complete, and Thompson ONE. Key words used included: trauma policy, trauma finance, trauma costs, trauma grants, trauma system funding, trauma revenue, trauma law, finance policy, finance law, grant writing, memorial of law, bill of law writing, trauma federal grants, and trauma funding law. The following eight of 10 studies most readily pertained to the subject matter:

Zarzaur et al. (2012) conducted a study to evaluate the impact of a state trauma law in Mississippi. The Play or Play (PoP) measure, which was a House of Representative bill, required each trauma center in Mississippi to participate in the trauma system or pay a fee up to $1.5 million. The authors included patients living in the PoP state at the time of injury who were
admitted to a regional Level I trauma center between 2006 and 2009. The patients’ Injury Severity Score (ISS), patient demographics, and payer sources, as well as reimbursement ratio (REIMBR), were recorded for each patient. The REIMBR represented the adjusted reimbursement, including the CHARGE-REIMBR and the COST-REIMBR. The CHARGE-REIMBR was calculated by dividing the reimbursement received by the total hospital charges, and the COST-REIMBR was calculated by dividing the reimbursement received by the cost to the hospital. The data from patients admitted prior to the passage of the law was compared to that from patients admitted after the PoP law.

Initial trauma center participation was 70 of 107 facilities (65%), and after the state law was passed, the number of participating hospitals increased to 85 of 106 (80%), which was statistically significant (p = 0.05). Also, the number of transfers of Mississippi residents to the regional Level I trauma center increased from 30% pre-law, to 36.8% post-law. By the end of 2010, almost 21% of trauma revenue was generated from the fees levied on nonparticipating or under-participating hospitals. Due to decreasing revenue for trauma, Mississippi introduced this law so that all hospitals would be required to participate in the trauma system. Nonparticipating hospitals incurred fines up to $1.5 million per year, depending on the trauma center level. This is the only identified study that analyzed the impact of a state policy on the trauma system.

Porgo, Shemilt, Moore, Bourgeois, and Lapointe (2014) analyzed trauma center performance evaluation based on costs, through a systematic review of cohort studies. Their study described how data on costs have been used to evaluate the performance of acute trauma care hospitals. The authors used MEDLINE, EMBASE, Web of Science, The Cochrane Library, CINAHL, TRIP, and ProQuest to identify the studies. Two of the authors screened and abstracted the data independently. They also used seven criteria from the Strengthening the
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Reporting of Observational Studies in Epidemiology (STROBE) tool to evaluate the quality of the methodology. Of 6,635 identified studies, 10 met the eligibility criteria. Of the 10, four (40%) were considered to be of good methodological quality. The results indicated that in 2013, the average cost for trauma care per patient in the United States, varied between $2,568 and $74,435.

Rarely studies attempted to evaluate trauma center performance based on costs. The authors reported most of the existent studies are charge-based rather than cost-based, and their methodological quality was low. The strength of this article is that it provides a novel approach on evaluating trauma centers’ performance as the authors use costs versus charges. The results offer an estimated range of costs for the care of trauma patients. However, as a limitation, these numbers are relative, and the results could not be extrapolated due to the low number of studies and the high variability of conditions, population, structure, and costs among facilities.

Mann, MacKenzie, Teitelbaum, Wright, and Anderson's (2005) goal was to assess the current structure and viability of state trauma systems in the United States, by ascertaining strengths, weaknesses, and opportunities for each state trauma system. The authors used a standardized survey made available to all 50 states, along with a grant mechanism as an incentive. The states were required to convene a panel of trauma and Emergency Medical Services (EMS) experts to complete the survey. Representatives from all 50 states offered feedback about the status of their trauma systems, identifying strengths and weaknesses. Across the board, the main identified issues were inadequate funding, and staff recruitment and retention. It was a highly valuable study, giving a big-picture perspective on the common challenges and struggles of trauma systems across the nation.
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The study by Selzer et al. (2001) study demonstrated the dependence of Level I trauma centers on disproportionate share hospital (DSH) governmental funds and tax dollars. Disproportionate share hospitals are facilities that receive federal funding for providing care to indigent patients who are not covered by health insurance. Furthermore, specific injury groups have a greater dependence on these funds. The authors reviewed 553 trauma patients admitted to a public urban Level I trauma center during a six-month period. The researchers grouped the patients by type of injury (blunt, penetrating, or thermal). Data collected for each group reflected charges, costs, payments, and sources of reimbursement. Additionally, the authors compared profit and loss margins with and without government funds. The study results identified a net loss of over more than $2.1 million, which was significant in an era of diminished DSH funds and tax dollars. Due to the number of uninsured patients, trauma care suffers significant losses without the benefit of DSH and tax dollars.

In his article, Ashley (2010) related the story of Georgia’s trauma system. The author reviewed the history of Georgia’s trauma system, covering the last 30 years, starting with the state’s first trauma center designation in 1981. He emphasized the struggles to obtain funding and then to develop and maintain a state trauma system. The battle that made a difference in Georgia for trauma system survival was the above-average death rates when compared to the national average. The next step was to recruit multiple groups of stakeholders, including physicians, EMS representatives, nursing associations, hospital associations, state and local governments, and the public. The author made a point by stating the importance of those multiple groups as a common front with a consistent message, while assiduously working together toward the goal of saving lives.
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In 2005, Minnesota was one of nine states that did not have a formal system for coordinating trauma care. Larson and Held's (2005) article described the background of an initiative of developing a statewide trauma system and the steps that Minnesota took toward that goal. The plan involved including all hospitals in the state in a network of trauma care. Some of the components of the plan were educating staff at small rural hospitals, developing and implementing improvement programs, and establishing a state trauma registry. The estimated benefits of a trauma system included: 9% reduction in motor-vehicle accident-related deaths, a 15% to 20% improvement in trauma patient survival rates, increased productive years, and improvement in statewide disaster preparedness. The estimated cost for the trauma system administration was $550,000. This estimate assumed that approximately 90% of hospitals would voluntarily participate in the trauma system, and a portion of $550,000 would cover trauma center designations and reverifications. At the time of publication, the state law was working its way through the Minnesota’s legislature so the result of the initiative was not available. However, this article provided an excellent example of a statewide effort toward developing a trauma system, which relates to this project.

Kristiansen et al.'s (2012) study, conducted in Norway, evaluated the implementation of a set of trauma system criteria. These criteria, including recommendations regarding trauma system regionalization, trauma team training, preparedness, and level of medical direction, were published in 2007 in Norway. The study included 19 hospitals that provided care to more than 2,000 trauma patients annually. The authors used telephone interviews and a structured questionnaire to collect data. The questions were based on 17 criteria and definitions selected from the Norway trauma system recommendations published in 2007. Of the 17 criteria, the
median number of fulfilled criteria across hospitals was 12, and there was no identified relation between the size of the hospitals and the number of fulfilled criteria.

Results of the study identified two major shortcomings in the regionalization process of trauma care: training of personnel and protocol for inter-hospital trauma patient transfer. This study was interesting because it compared trauma systems structure and recommendations in Norway and in United States. The authors’ goal was not to make a direct comparison between the Norwegian and U.S. trauma systems but to provide an analysis of the trauma system in Norway. However, there were cross-references with the American system in several areas. For example, there was a direct comparison relative to inter-hospital transfer policies between the two countries. The articles provided a different perspective on trauma system organization. However, it is noteworthy to mention that the recommendations, definitions, as well as the challenges and shortcomings proved to be significantly similar to those faced in the United States.

In 2003, MacKenzie et al. provided a complete account of trauma centers existent at that time in the United States and their distribution. The authors accomplished this by conducting interviews, from September 2001 to April 2002, with directors of trauma centers and by compiling data from the American Hospital Association’s Annual Survey of Hospitals (2002), and the U.S. Health Resources Administration File (2001). The study excluded pediatric trauma centers. Data were collected through phone interviews, conducted by a person with more than 20 years of experience as a trauma program manager. The researchers also examined the geographical distribution and the characteristics of trauma centers by comparison with non-trauma centers. All of the trauma centers identified were designated and verified by a state or regional authority or by the American College of Surgeons Committee on Trauma. Study results
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indicated that in 2002, there were 1154 trauma centers in the United States, including 190 Level I centers and 263 Level II centers. Another statistic the authors generated was that the number of Level I and II trauma centers per million population ranged from 0.19 to 7.8 by state. In the article, the authors defined the trauma center levels and explained their role in trauma systems. The study results indicated that the number of trauma centers doubled between 1991 and 2002. This article was useful in providing a historic view of the development of trauma systems in the United States and along with the details on how the trauma systems were set up in different states, this study constituted a valuable resource for my project.

**Literature Summary**

The literature review provided useful concepts for this study, although directly relevant studies were rare and limited in scope. Elements such as background information on the development of some trauma systems and legislative initiatives that reshaped other trauma systems assisted in framing the methodology of this project. Furthermore, learning what type of research and data were available underscored future research opportunities in this area.
CHAPTER 3

Theoretical Model

Action Research was used as the theoretical model for this project. Action Research is a specific type of collaborative approach to inquiry and investigation and thus provides a means to resolve particular issues and to identify systematic actions (Stringer, 2013). The basic premise of this model incorporates three fundamental elements, within a simple yet powerful framework: Look, Think, and Act (see Figure 1).

(Francis II, 2011)

*Figure 1. Action Research, Look-Think-Act Model*

This model provided the most appropriate framework for this project. Action Research is often recommended for real-life situations rather than for experimental studies. Its primary focus is to solve real-life problems versus addressing experimental questions. It is also used in circumstances when the situation is too ambiguous to permit a precise research question.
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Furthermore, and more importantly, the Action Research approach allows for flexibility, when change must take place quickly (O’Brien, 1998). The trauma system funding project required all of the above. It is a real-life situation and its primary focus is to solve the real-life problem of funding a trauma system. Data gathering required a significant amount of flexibility, i.e. in scheduling interviews, location, and type of interview (in-person, web conference, or phone).

Interviews and data analysis processes employed the concepts of collaborative enquiry and action learning. Per O’Brien (1998, p. 1) “there is a dual commitment in action research to study a system and concurrently to collaborate with members of the system in changing it in what is together regarded as a desirable direction.” This statement mirrors the approach used in this study. The system was studied through interviews. The collaboration in changing it was represented by the subsequent joint memorial introduced during the 2017 New Mexico legislative session.

One of the goals of Action Research is to reach a deeper understanding of current practice and to develop a specific action. It involves a systematic process of examining the evidence with critical reflection as the tool for achieving a specific goal. Reflection provides a deeper understanding of how events occurred as they did and how those outcomes could assist in addressing the overarching question. Reflection is a powerful learning experience and is an essential part of Action Research (Riel, 2016).

For this project, data interpretation that led to legislation development was based directly on reflection as part of data analysis. The reflection process allowed for identifying the necessary elements that later translated into legislation language, guiding the memorial structure and the type of information included.
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Methodology

This was a qualitative study the utilized key informant interviews. Twelve of 16 (75%) interviews were completed. Nine interviews took place in person, and the remaining three were conducted via telephone. There were three sets of questions, each targeting the particularities of each group of key informants (see Appendix A). Verbal permission to audio-record the interviews was obtained prior to each interview. All transcriptions were carried out by the student researcher/co-investigator, who also conducted the interviews.

Study Population

Initially, 16 key informants agreed to participate in the study. There were three categories of key informants: trauma system managers, hospital administrative executives, and legislators. The key informants were selected for specific reasons. The trauma system managers were chosen based on their location – the four states neighboring New Mexico (Arizona, Colorado, and Texas) in which frequent patient transfers were expected among these states. Another state, Mississippi, was selected because of its implementation of legislation that dramatically changed its trauma system. The hospital administrative executives were chosen based on the size and geographic distribution of their facilities, in an attempt to cover as much of New Mexico as possible. The legislators were approached based on their involvement with the Health and Human Services and Finance Committees of the state Legislature.

The trauma system managers were administrators, directly involved in trauma management at the state levels. Six trauma system managers from five states were contacted for interviews. One of the key informants, who initially agreed to participate, canceled and postponed scheduled interviews three times, and ultimately stopped responding to additional
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attempts to reschedule. Interviews occurred with five key informants from four states. Two of the key informants were from the same state.

The hospital administrative executives were the chief executive officers from the five largest hospitals in New Mexico, based upon bed size. Three of these hospitals are trauma centers, the fourth one is a trauma center in development, and the fifth is not a trauma center and has no plans to pursue trauma designation. All key informants in this group agreed to and completed the interviews.

The initial group legislators numbered five key informants, four senators and one representative, of whom four were Democrats and one was Republican. Three of these informants agreed to the interview, and two did not respond. One legislator who agreed to meet, cancelled due to scheduling conflicts. Consequently, one senator and one representative, both Democrats, completed the interviews.

**Ethical Issue/Risk to Participants**

Confidentiality of the key informants was protected throughout the process. Their names were not associated with their states or hospitals and never were mentioned during presentations. Prior to being entered into the matrix tool used for analysis, the data was de-identified by using numbers instead of names of each participant. All key informants willingly agreed to participate, and prior to the start of each interview, the interviewer asked for verbal permission to record the conversation. All recordings and data were kept in locked drawers in locked offices. For transcription and data processing, the computer that was used was encrypted and password protected.
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Sources of Data

While in-person interviews are the ideal interview technique, only nine of the 12 (75%) key informants agreed to this technique. A preferred alternative to in-person interviews, Zoom, a web-based video conference tool, was offered to the remaining three; however, only one accepted the offer. Due to technological difficulties, the interview ultimately was conducted over the telephone. The other two informants declined to acknowledge web conferencing as a possibility, and as a result, the interviews were completed over the phone.

Data Collection Process and Tools

The interviews used approved questions for each of the three categories of key informants, which were trauma system manager, legislators, and hospital CEOs. All key informants agreed to recorded interviews utilizing a battery-powered voice recorder. Upon completion of the interviews, the student-researcher transcribed the interviews and included observations from field notes taken during the interviews. Subsequently, a data interpretation matrix provided the methodology to compile the data generated from the interviews. The matrix facilitated data analysis, interpretation, and identification of concepts and themes (see Appendix B). Sequential coding, thematic analysis, and matrix analysis were used as part of data processing while using this tool.

Data Protection Plan

The voice recorder used for the interviews was kept locked in a drawer, in a locked office and badged secured area at all times between interviews. The recordings were saved and processed on a password-protected computer, kept in a locked office. The computer was also protected by a firewall that provided data encryption. Data will be destroyed upon completion of this project.
Timeline

All protocol timelines and endpoints were met, with the exception of partial compliance with the recruitment phase. For the recruitment phase, all initial interview requests were sent out by the established timeline. However, in eight instances, follow-up emails and/or phone calls were necessary to complete the recruitment process. All 12 interviews took place by the stated date, November 30, 2016. The transcriptions were completed by December 31, 2016, and the data analysis was completed by March 5, 2017, ahead of the stated deadline of March 31, 2017.

Budget

There was no budget set up for this project. The student-researcher absorbed the incurred costs associated with travel to the interview sites and the time investment for interviews, transcriptions, and data analysis. Key informants donated their time for the interviews.
CHAPTER 4

Results and Discussion

Results

The data generated by the interviews was compiled and entered into a matrix for analysis and interpretation. The results were categorized in groups aligned to the interview questions. There were 10 questions for trauma system managers, four for legislators, and three for chief executive officers (see Appendix A). Three of the questions contained in the legislator and CEO groups were identical. The matrix included all questions, and its structure reflected the overlap of those three questions.

Following are two samples of the matrix tool:

<table>
<thead>
<tr>
<th>Questions</th>
<th>Trauma System KIs (5)</th>
<th>Legislative KIs (2)</th>
<th>Hospital Administrator KIs (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS structure</td>
<td>• All trauma center levels</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• Inclusive system and voluntary: hospitals can choose to be designated as trauma centers or not</td>
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<tr>
<td></td>
<td>• Even non-designation is considered a “designation” category in which, hospitals must agree to transfer trauma patients within 2 hours as per contracts with trauma centers</td>
<td></td>
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<tr>
<td></td>
<td>• All trauma center levels (3 Level I and 13 Level II, plus III and IV, for a total of 81 trauma centers)</td>
<td></td>
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<tr>
<td></td>
<td>• EMS Act empowered the Department of Health through the Emergency Systems Bureau to develop a trauma system</td>
<td></td>
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</tr>
</tbody>
</table>
• Not a system that requires mandatory participation
• Some funds were initially dedicated to facilities to encourage participation in the trauma system
• Trauma centers of all levels, except Level II
• New trauma centers take approximately two years to develop
• Level III and IV trauma centers are accredited by the state
• Voluntary system; no hospital is mandated to participate
• 10 Level I, 5 Level III, and 24 Level IV. No Level IIs
• One Level I has pediatric designation

Figure 2a. Matrix Sample 1

Figure 2a illustrates the general structure of the matrix. The first column lists the interview questions. The next three columns contain the individual answers, by key-informant category. The highlighted numbers represent the de-identified key informants.

Figure 2b shows the data for the second and third key-informant categories. It also displays the overlap between the questions for these two groups:

<table>
<thead>
<tr>
<th>Questions</th>
<th>Trauma System KIs (5)</th>
<th>Legislative KIs (2)</th>
<th>Hospital Administrator KIs (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potential sources of revenue</td>
<td>N/A</td>
<td>2:</td>
<td>5:</td>
</tr>
</tbody>
</table>
NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

Figure 2b. Matrix Sample 2

For the trauma system manager group, there were 13 components identified for the “TS structure” question, 10 for the “TS funding” question, eight for the “State-level revenue sources” question; all answers were negative for the “Federal revenue sources” question; there were 11 distinctive elements for the “TS administration” question, 14 for the “Trauma/EMS collaboration” question, 13 for the “What works well” question, eight for the “Improvements”
question, seven for the “Challenges” question, and eight for the “Sufficient funding?” question. For the legislator group, three components were identified for the “TS knowledge” question; all of the elements were negative for the “TS legislative requests” question; there were three distinct answers for the “Importance of TS Revenue” question, and five for the “Potential sources of revenue” question. For the third category, the CEO group, there were nine distinct components for the “TS knowledge” question, seven for the “Importance of TS revenue” question, and 17 ideas for the “Potential sources of revenue” question.

Findings

There were 147 total data elements collected from interviews and entered in into the matrix tools. Following are the identified patterns that resulted from the data elements, organized by question:

* TS structure:
  * TS structure varies widely, ranging from non-designation to limited designation, to all levels of trauma centers.
  * An average of two years is required from start to full implementation of a trauma center.

* TS funding:
  * Sources for funding trauma centers vary, ranging from none, to limited state funding, to federal funding, to one-time tobacco tryst fund money, to citizen initiatives such as gaming funds.
  * Trauma centers pay for their designation and for subsequent re-verifications. In one of the states studied, this was the only source of revenue for the trauma system administrators.
NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

- State-level revenue sources:
  - Sources vary broadly from no revenue source, to monies from moving violations, vehicle sales, motor vehicle licensure, state level general funds, fund sharing, or fees for nonparticipation in the trauma system.
  - Future sources are needed (e.g. small tax on cell phones, etc.).

- Federal revenue sources:
  - In this study, no trauma systems received federal funding.

- TS administration:
  - In most cases, the state’s Department of Health administers the state trauma system.
  - In many cases, the administrative bodies at state level include several stakeholders.
  - Reporting hierarchy varies broadly with the setting.

- Trauma/EMS collaboration:
  - Some states have joint trauma/EMS state administrative bodies, while in other states they are separate and interact at various levels.
  - The levels of partnerships and input from EMS administrative bodies vary.
  - In all analyzed cases, the communication patterns between EMS and trauma system are robust and relatively efficient.

- What works well:
  - Things that are going well for different trauma system range from rural access, to education, to trauma data, and people dedication, all of which make the system work.

- Improvements:
  - Additional trauma centers of lower levels.
  - Data gathering and data processing.
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- Patient flow, trauma patients coming from the scene versus transfers from other hospitals.
- Changing the culture by making it about the patient and not about the money.
- Communication between stakeholders.

♦ Challenges:
- Trauma performance improvement.
- Number of trauma centers – too many trauma centers in urban areas.
- Funding and adverse political environment toward trauma system development.

♦ Sufficient funding:
- Funding is insufficient; in half of the trauma systems analyzed, funding does not meet its needs.
- One of the states identified the need for increased trauma funding and has a straightforward way of achieving that.
- Another state has “sufficient money” for high-level trauma centers, while there is no funding whatsoever for lower-level trauma centers and no mechanism of providing it.

♦ TS knowledge:
- Various levels of knowledge about the trauma system in New Mexico but generally such knowledge is very low.
- The overwhelming majority of key informants knew only that there are some trauma centers, with some of the informants assuming that all hospitals were trauma centers.
- Most knew that University of New Mexico Hospital is a trauma center.
- One of seven key informants knew that UNM was the only one Level I in the state, and the others knew nothing about levels of trauma centers, only that UNM is one.
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- The only way legislators received information regarding the trauma system was through testimonies during committee sessions, and that occurred for only two committees ever – the Interim Health and Human Services Committee and the Finance Committee.

- TS legislative requests:
  - Neither of the legislators interviewed ever received requests regarding trauma system funding.

- Importance of TS revenue:
  - All key informants, without exception, endorsed the need for trauma system funding
  - The descriptors they used regarding the need for trauma funding included “consistent”, “very important”, “vital”, and “critical”.

- Potential sources of revenue:
  - Taxing alcohol is the most prevalent potential source of funding from CEO’s and legislators perspective.
  - Other ideas were penalties for people behaviors, highway taxes, driver license fees, car registration fees, moving violations, and car insurance taxes.

**Interpretation of Findings**

The interviews provided a wealth of information regarding various aspects of trauma systems. The matrix analyses revealed the following themes:

- Trauma system structure varies widely among states.

- Among the states investigated, New Mexico had the lowest ratio of trauma centers to population among the states included in the study, with one trauma center for 174,000 people. The ratio for the other states included in this study ranged from one trauma center to 35,000 people to one trauma center to 158,000 people.
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- None of the analyzed states received federal funding for their trauma systems.

- A tax on alcohol was the most prevalent suggestion for a new funding source from the hospital CEOs and legislators’ perspective.

- Hospital CEOs and legislators have an extremely limited knowledge of New Mexico’s trauma system, if any at all.

- The key informants were most partial to sources of trauma revenue that taxed behaviors that could lead to trauma. For example, a tax on alcohol was the most frequent suggestion provided by key informants. Another significant finding was the limited knowledge about the trauma system among the legislator and hospital administrative groups.

The only common question among the three categories of key informants was regarding revenue sources. However, the question elicited different perspectives from the trauma system manager group and the other two groups. The answers of the trauma system managers generated data that indicated current sources of revenue for their states. Conversely, the answers from the hospital CEOs and legislators were prospective, suggesting potential sources of revenue for New Mexico’s trauma system.

Discussion

There is a saying among the trauma system managers across the country: “If you know one trauma system, then you know one trauma system”. The interviews with the key informants clearly reflected this statement. Trauma systems vary considerably by state, ranging from very well organized to no trauma system at all, just one of two isolated trauma centers. No two state trauma systems are identical. The only common element is the trauma center designation rules of the American College of Surgeons (ACS). These regulations are revised regularly and all ACS-designated trauma centers are re-verified every three years through survey visits. Initially, ACS
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developed these regulations for Level I and Level II trauma centers. Beginning in 2015, the ACS introduced regulations for Level III trauma centers. However, ACS verification is not obligatory, thus not all Level I and II trauma centers are ACS-accredited. In some states all Level I and Level II trauma centers are ACS-designated, in other states, some trauma centers are ACS-verified and others have state accreditation, while still other states have no ACS-accredited trauma centers. All the other elements pertaining to trauma system organization at state level are very much individualized by the particularities of each state.

New Mexico is the fifth largest state in surface area in the nation. Yet it is also the least populated of states analyzed. Trauma center distribution is calculated by both surface area and population. It is important to take into consideration both these elements when evaluating the efficacy of a trauma system. Although population is a strong determinant of access to care, especially in urban regions, surface and coverage area is essential for rural areas. One way of looking at the distribution of trauma centers is by the ratio of trauma centers to population. Based on this measure, New Mexico is classified last among the states analyzed, with one trauma center per 174,000 people. The other states included in the study ranged between 1/35,000 and 1/158,000. In large states, having trauma centers distributed strategically is the only way to ensure access to trauma patients within the “golden hour”. The golden hour is defined as the first 60 minutes following an injury. Patients receiving trauma care and stabilization within this interval have a dramatically increased chance of survival (Vanderschuren & McKune, 2015).

The number of trauma centers varied between 12 in New Mexico and 289 in Texas. Arizona has 42 designated trauma centers, Colorado has 81, and Mississippi, 85.

As stated, none of the states included listed any federal sources of revenue for their trauma systems. One of the trauma systems studied does not use any sources of revenue for
trauma centers. Some states augment their trauma system revenue by applying for and employing federal grants. However, federal grants are not considered sustainable sources of revenue because their number, amount, and characteristics are subject to change often.

One of the main goals of this study was to identify common sources of trauma system revenue that other states use and to identify potential sources of sustainable trauma system revenue for New Mexico. A tax on alcohol was the most frequent and consistent suggestion offered by key informants. Nevertheless, none of the trauma systems included in this study used taxes on alcohol as a source of revenue. Three of five key informants pointed out that taxing the causes of trauma makes the most sense, with alcohol being the obvious primary choice. This potential solution was explored thoroughly during the interviews and subsequent work with legislators. Two main reasons emerged, invalidating alcohol taxes as a realistic solution for New Mexico. The first was directly related to powerful legislative lobbying by alcohol industry. The second reason was related to the way taxes on alcohol have been used in the past. More specifically, although these funds were dedicated to specific alcohol-abuse prevention programs, in most they were cases re-directed areas unrelated to alcohol-abuse prevention or treatment.

**Implications**

It would be beneficial to implement a survey mirroring the methodology that MacKenzie et al. employed in their 2003 study. By using the same type of survey, a current similar analysis would illustrate the evolution of state trauma systems.

This project provided several valuable opportunities: educating legislators regarding the trauma system in New Mexico, securing a sponsor who carried a joint memorial, and developing a network of contacts that would continue the work toward identifying sustainable sources of trauma system revenue for New Mexico.
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The flowchart in Figure 3 illustrates the process of introducing a joint memorial, the SJM16 (Senate Join Memorial 16) - Trauma System Funding Task Force. This memorial requested a task force that would identify potential suitable and sustainable revenue sources for the trauma system in New Mexico and would generate a report to be presented in October 2017 to the Legislative Health and Human Services Committee.

Figure 3. Memorial Process Flowchart

Limitations and Strengths of the Study

Limitations

The primary limitation was the number of key informants, mainly restricted by the key informants’ schedule constraints and availability. A related limitation was the inability to
NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

complete all scheduled interviews due to some key informants’ declining to meet, availability, or scheduling conflicts. Ideally, for the highest quality of data, in-person interviews are the preferred format, though only 75% of the key informants agreed to this format. The second most favored format is web conference, which allows for both video and audio connection, providing the option of safely recording the session as well; however, technical difficulties and key informants declining to use the modality occurred. The third option, the phone interview, agreed to by three of the key informants (25%), does not allow observation of body language, behavioral indicators, and facial expressions.

**Strengths**

The main strength of this study was the variety of opinions expressed by key informants. Key informant from all three categories participated in the study. Seventy-five percent of the possible key informants completed the interview process. Data analysis identified valuable ideas and concepts generated during the interviews that resulted in generating the next phase of this project: introducing legislation related to the sustainable funding of the trauma system in New Mexico.

**Concluding Remarks**

This project provided not only a successful data-gathering opportunity but, most importantly, the chance to develop and introduce a joint memorial as the first legislative step to identify sustainable sources of revenue for the New Mexico trauma system. Subsequently, as a long-term plan, this memorial hopefully will emerge as the stepping stone of a future trauma system revenue bill.
References


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Appendix A

Interview Questions for Trauma System Key Informants, New Mexico Legislative Key Informants, and New Mexico CEO Key Informants

Trauma System Key Informants:
1. What is the general trauma system structure in your state?
2. How is the trauma system funded in your state?
3. What are the sources of trauma system revenue in your state?
4. What are the federal sources of revenue for the trauma system in your state?
5. What is the highest level administrative body for the trauma system in your state and how does it function?
6. How do trauma and EMS collaborate in your state?
7. What works well in the trauma system in your state?
8. What improvements would you consider necessary for the trauma system in your state?
9. What is the biggest challenge for the trauma system in your state?
10. How does the trauma funding meet the needs for your state system?

New Mexico Legislative Key Informants:
1. What do you know about the trauma system in New Mexico?
2. What kind of requests related to trauma system funding have you had?
3. How important do you consider is having sustainable trauma system revenue in NM?
4. In your opinion, what are some potential sources of revenue for the NM trauma system?

Hospitals Senior Administrative Leader Key Informants:
1. What is your role in your organization?
2. What do you know about the trauma system in New Mexico?
3. How important do you consider is having sustainable trauma system revenue in NM?
4. What are some potential sources of revenue for the NM trauma system in your opinion?
Appendix B

<table>
<thead>
<tr>
<th>Questions</th>
<th>Trauma System KIs (5)</th>
<th>Legislative KIs (2)</th>
<th>Hospital Administrator KIs (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>TS structure</td>
<td></td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>1.</td>
<td>• All trauma center levels</td>
<td></td>
<td></td>
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<tr>
<td>2.</td>
<td>• Inclusive system and voluntary: hospitals can choose to designate as trauma centers or not</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Even non-designation is considered a “designation” category in which, hospitals must agree to transfer trauma patients within 2 hours as per contracts with trauma centers</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>• All trauma center levels (3 Level I and 13 Level II, plus III and IV, for a total of 81 trauma centers)</td>
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<tr>
<td>7.</td>
<td>• EMS Act empowered the Department of Health through the Emergency Systems Bureau to develop a trauma system</td>
<td></td>
<td></td>
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<td></td>
<td>• Not a system that requires mandatory participation</td>
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<td></td>
<td>• Some funds were initially dedicated to facilities to encourage participation in the trauma system</td>
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<td>8.</td>
<td>• Trauma centers of all levels, except Level II</td>
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<td></td>
<td>• New trauma centers take approximately two year to develop</td>
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<td></td>
<td>• Level III and Level IV trauma centers are accredited by the state</td>
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</table>
## NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

<table>
<thead>
<tr>
<th>TS funding</th>
<th>Revenue sources</th>
</tr>
</thead>
</table>
| **• Voluntary system; no hospital is mandated to participate**  
**• 10 Level I, 5 Level III, and 24 Level IV. No Level IIs**  
**• One Level I has pediatric designation** | **• Moving violations**  
**• Point of sell for ATVs, motorcycles, and boats**  
**• Fees for non-participation (Play or Pay)** |
| **• State funded**  
**• Tobacco trust fund (one time) and used the interest from that** | **N/A**  
**N/A** |
| **• No funding**  
**• Trauma centers do not receive funds for trauma care**  
**• Trauma centers pay for designation and for subsequent re- verifications** | **N/A**  
**N/A** |
| **• “Poorly”**  
**• State general budget** | **N/A**  
**N/A** |
| **• General Fund appropriations from the Legislative Finance Committee**  
**• Some states receive critical access hospital funds, which is federal money, but not this state**  
**• Citizen initiative that established that Indian gaming funds will have a portioned designated to trauma care** | **N/A**  
**N/A** |
NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

<table>
<thead>
<tr>
<th>Federal revenue sources</th>
<th>1</th>
<th>None</th>
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<tbody>
<tr>
<td></td>
<td>4</td>
<td>None</td>
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<td></td>
<td>7</td>
<td>None</td>
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<td></td>
<td>8</td>
<td>None</td>
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<tr>
<td></td>
<td>12</td>
<td>None</td>
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</table>

<table>
<thead>
<tr>
<th>TS administration</th>
<th>1</th>
<th>DOH administers the TS through the Board of Health</th>
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<tbody>
<tr>
<td></td>
<td>4</td>
<td>The Governor has a Trauma Advisory Council that advises the DOH</td>
</tr>
<tr>
<td></td>
<td>12</td>
<td>State Emergency Medical and Trauma Services Advisory Council,</td>
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<table>
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<tr>
<th>4</th>
<th>None</th>
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<td>7</td>
<td>None</td>
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<tr>
<td>8</td>
<td>None</td>
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<tr>
<td>12</td>
<td>None</td>
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| N/A | N/A | N/A |
which is a 25-member governor appointed board with an additional seven ex-officio members, representing both EMS and Trauma
- Members: rural EMS, urban EMS, rural and urban hospital administrators, rural and urban county commissioners, trauma surgeons, trauma nurses, and flight crew representation
- Meeting quarterly

Within the administrative body of the Department of Health, the Epidemiology and Response division, the Emergency Medical System Bureau, and finally the Trauma Program
- The trauma system manager reports to the EMS bureau chief, who reports to a deputy director, who reports to a director, who reports to deputy secretary’s secretary and to then the Governor

- Trauma Advisory and System Stakeholder Committee
- Trauma Performance Improvement Committee
- Department of Health Services
- State Trauma Advisory Board with members appointed by the director
| Trauma/EMS collaboration | 1. EMS plays a vital role in the Trauma Advisory Council  
   • The Governor appoints members to the State EMS Advisory Council  
   • Trauma is well represented on the EMS Advisory Council  
2. In 2000 trauma and EMS were joined together by statute  
3. From a regulatory standpoint collaboration happens by necessity  
   • Good collaboration, as the trauma program is part of the EMS Bureau, so there is intrinsic collaboration, but it’s still not always smooth  
   • At macro level there is still room for improvement  
   • Not always good communication between ground level less developed EMS systems and trauma and/or hospitals  
4. Working very closely at State level  
   • Regionally, there are trauma advisory councils where trauma and EMS work together on making sure the right patients get to the right facilities for their definitive care | N/A | N/A |
NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

<table>
<thead>
<tr>
<th>What works well</th>
<th>N/A</th>
<th>N/A</th>
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<tbody>
<tr>
<td>1. Trauma data</td>
<td></td>
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<td>2. Trauma education for EMS, nursing, and physicians</td>
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<tr>
<td>3. Rural facility participation</td>
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<tr>
<td>4. Trauma system communication, working together to facilitate transports and patient care</td>
<td></td>
<td></td>
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<tr>
<td>5. Some facilities’ dedication to provide better care as well as better trauma data</td>
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<tr>
<td>6. The people with a genuine desire to improve trauma care and provide for their communities</td>
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<tr>
<td>7. The process of trauma system development works very well</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. The state involvement and support in this process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Good access to trauma for rural areas</td>
<td></td>
<td></td>
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<tr>
<td>10. Stable EMS community</td>
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</tbody>
</table>

- There is another state advisory board for EMS
- They don’t step on one another but refer issues that fall another the other one’s purview
- Also, the two advisory boards “cross-pollinate” their members
- Very good collaboration and communication between trauma and EMS
<table>
<thead>
<tr>
<th>Improvements</th>
<th>Challenges</th>
</tr>
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<tbody>
<tr>
<td>Predictable call volume</td>
<td>• Performance improvement in part due to high DOH staff turnover</td>
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<tr>
<td>Predictable revenue</td>
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<tr>
<td>Good trauma registry</td>
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<tr>
<td><strong>Improvements</strong></td>
<td></td>
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<tr>
<td><strong>1.</strong></td>
<td><strong>1.</strong></td>
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<tr>
<td>Increase in patient coming directly from the scene versus transfers from other hospitals due to new destination guidelines</td>
<td>Performance improvement in part due to high DOH staff turnover</td>
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<td><strong>2.</strong></td>
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<tr>
<td>Working towards changing the culture of trauma care and making it more about the patients and not about the money</td>
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<td><strong>3.</strong></td>
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<tr>
<td>Data gathering and data processing</td>
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<td><strong>4.</strong></td>
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<tr>
<td>Funding</td>
<td></td>
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<tr>
<td>Accountability of the facilities’ administrators to the trauma program that they committed to</td>
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<tr>
<td><strong>5.</strong></td>
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<tr>
<td>Communication between stakeholders, meaning facilities, and administrations</td>
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<tr>
<td><strong>12.</strong></td>
<td></td>
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<tr>
<td>A couple more Level III trauma centers</td>
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<tr>
<td>“It would be great if we could change the funding stream so would incentivize hospitals based on their patient demographics so that we could have Level Is, Level IIs, and Level IIIs instead of all Level Is”</td>
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## NEW MEXICO TRAUMA SYSTEM FUNDING STRATEGY

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<td>4</td>
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<tr>
<td></td>
<td>- Trauma center competition in urban areas</td>
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<td>- Gathering trauma data from everyone in the state</td>
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<td>7</td>
<td></td>
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<tr>
<td></td>
<td>- Funding: diminished funding and an adverse political environment</td>
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<tr>
<td></td>
<td>- Working with some facilities that have been part of the system for a long time and convincing them of the need to change and evolve. Helping them build flexibility into their systems and processes</td>
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<tr>
<td></td>
<td>- New facilities that are just developing to understand their own limitations</td>
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<td>12</td>
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<td></td>
<td>- Too many Level I trauma centers</td>
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<td>- Requests to designate more Level I trauma centers cannot be denied by the state, therefore diluting the patient volume and subsequently becoming increasingly difficult to maintain the necessary skill levels</td>
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### Sufficient funding?

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<td></td>
<td>- No. Receiving about 14 million out of the 70 million needed</td>
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<td>- Low reimbursement on the hospital activation fees</td>
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<td>4</td>
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<td>- The state will increase designation and re-</td>
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<td>N/A</td>
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41
verification fees, because the fees they set up six years ago do not cover their costs anymore

7:
• “Needs are perceived and perceived needs are real needs”
• The perception right now is that the funding is inadequate

8:
• Current trauma funding is just a drop in the bucket. These funds would help offsetting some of their trauma-related expenses, or help with trauma education, or trauma equipment

12:
• “Apparently there’s sufficient money in our system to support a pretty strong group of trauma centers”
• Level IV trauma centers would need more funding but there is no mechanism of providing that

**TS knowledge**

<table>
<thead>
<tr>
<th>2:</th>
<th>UNM is the only Level I in the state</th>
</tr>
</thead>
<tbody>
<tr>
<td>3:</td>
<td>Not sure whether there are any other levels in the state</td>
</tr>
<tr>
<td>4:</td>
<td>Presentation to the LHHS a few years back – hit and miss, depending on who’s at the committee meeting on that particular day</td>
</tr>
<tr>
<td>5:</td>
<td>30 years in the healthcare field, knows a lot about trauma system – Trauma system focused on UNM</td>
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<tr>
<td>6:</td>
<td>Various designations</td>
</tr>
<tr>
<td>7:</td>
<td>Knows the differences between different trauma center levels</td>
</tr>
</tbody>
</table>

N/A
<table>
<thead>
<tr>
<th>TS legislative requests</th>
<th>N/A</th>
<th>2:</th>
<th>No</th>
<th>3:</th>
<th>No</th>
<th>N/A</th>
</tr>
</thead>
<tbody>
<tr>
<td>Importance of TS revenue</td>
<td>N/A</td>
<td>2:</td>
<td>“It’s critical”, it’s a critical component • The public expects it and they don’t have any concept of why they wouldn’t have it</td>
<td>3:</td>
<td>“Very, very important” – combination of state appropriation, new</td>
<td>5:</td>
</tr>
</tbody>
</table>
federal sources, and a new revenue stream that would be unique to the program

- “Very important”
  - “It’s vital, because trauma is unfortunately a constant theme”
  - “I think it’s critical”
  - As operating a high functioning trauma program comes at a significant cost, and considering that these resources are not necessarily used every day, it’s the lack of funding that forces facilities to not being able to provide trauma care.

- “Very important”
  - Part of the reason is that physician outside the major hospitals don’t want to pull trauma calls, as they would have to give up a whole day of their earning capacity in order to accommodate being on call and frequently, people involved in traumatic injuries have inadequate insurance

<table>
<thead>
<tr>
<th>Potential sources of revenue</th>
<th>N/A</th>
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<tbody>
<tr>
<td>2:</td>
<td>Some sort of fees on hospitals and hospital beds that can be worked into their rates and reimbursed through Medicaid or other insurances</td>
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<tr>
<td>5:</td>
<td>General fund revenues</td>
</tr>
<tr>
<td></td>
<td>Highway taxes</td>
</tr>
<tr>
<td></td>
<td>Taxes on motorcycles and on motorcycle helmets</td>
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<tr>
<td></td>
<td>“Penalties for people”</td>
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<tr>
<td>Add-on fee on automobile transactions ($5)</td>
<td></td>
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<tr>
<td>Fees on moving violations turned out not to work well</td>
<td></td>
</tr>
<tr>
<td>A small add-on to workers comp insurance</td>
<td></td>
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<tr>
<td>Sin taxes, such as on alcohol and marijuana, which are connections that make sense to people</td>
<td></td>
</tr>
<tr>
<td>Increase the auto excise tax to 7% (from 3% currently) and dedicate something like 1% to trauma.</td>
<td></td>
</tr>
</tbody>
</table>

| Linking people’s financial responsibilities to their behaviors |
| Managed-care operations (BlueCross BlueShield, Molina, United, and others) |
| State revenues |
| Federal revenue |
| “Taxing causes of trauma, such as guns and alcohol” |
| Motor vehicle insurance |
| Adding an additional cost to moving-violation traffic fines |
| Dedicate a part of the state taxes that we pay to trauma |
| Additional fees on alcohol consumption |
| Have some sort of penalty or tax-based revenue stream |
| Driver license fees |
| Car registration |
| Taxes on alcohol |