

TIME CRITICAL DIAGNOSIS PROJECT

Missouri Department of Health and Senior Services

April 2020

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I. Executive Summary

Dean A. Linneman, MHA
Director, Division of Regulation and Licensure
Missouri Dept. of Health and Senior Services
PO Box 570
Jefferson City, MO 65102

Dear Mr. Linneman,

In February 2019, Havron & Associates, LLP was contracted to evaluate Missouri's Time Critical Diagnosis (TCD) program, including: data architecture; review funding source practices of other states; meet with and engage stakeholder feedback; and make recommendations on future considerations that are action oriented, cost-sensitive, and focused on the needs of the stakeholders. This report provides a summary of these evaluations and our recommendations.

The prevention, care for, and rehabilitation of TCD patients involves a complex interplay of skilled multidisciplinary prehospital and hospital medical providers. While data aggregation and patient outcomes are primary goals, we strongly believe foundational program organizational elements are essential to the success of the TCD program.

Information regarding the current TCD program and suggestions for the program's growth was collected through stakeholder and staff interviews, committee member meetings, survey tools, and data element analysis. Sustainable funding options were also researched for the program. Further, our assessment highlighted that there have been other assessments and priorities set that remain incomplete. Our overall findings and recommendations have been summarized in this report.

As the TCD program continues to evolve over time, the priority of the program should be refined, the mission validated, and the enhanced vision updated. In our assessment, today, trauma, stroke, and STEMI programs remain constant and managed separately, without integration of staff, data, tools, or state standards. This further highlights our recommendation for a foundational program governance structure, including transparency of initiatives. To accomplish this initial goal, we support the recommendation for the TCD program to be aligned to an new Division of Emergency Care and believe it is necessary for innovation, accountability, and the future achievement of other recommendations within the assessment.

Havron & Associates, LLP would like to thank you for the opportunity to participate in this project.

Sincerely,



Douglas Havron, RN, BSN, MS
Chief Executive Officer

II. Deliverables

Havron & Associates, LLP understands that the Missouri Time Critical Diagnosis (TCD) system is a statewide structure designed to bring together the 911 communication centers, ambulance providers, and hospital systems in a coordinated way to provide quicker and higher quality treatment to critical patient populations. We recognize the system has evolved over time and has increased survival and recovery rates of traumatic injury, stroke, or heart attack patients. From our research, the initial system was built upon Missouri's existing trauma system regulations developed in 1999 and underwent multiple enhancements during its early years. Under the leadership of Department of Health and Senior Services, the TCD program expanded in 2012, and by 2013 Missouri had become the first state in the nation to enact legislation authorizing the creation of a statewide system of care for stroke and STEMI patients. Over recent years, through other consulting engagements and detailed assessments, the program has been given several recommendations.

Additionally, stakeholders have shared that “while Missouri was to first to coin the model and begin to implement the system, Missouri has never been able to deliver on resources to providers for education, tools or system improvement.” Stakeholders shared that statewide systems operate in a fragmented manner or in isolation of different providers. Havron & Associates, LLP understands that patient outcomes are needed for continuous quality improvement and the use of technological systems to capture, trend, and report patient data are innovative and often efficient; however, fundamental governance, funding, and oversight priorities continue to go unresolved.

That said, Missouri stakeholders voiced their desires to further expand the TCD program to include public health emergencies and disaster victim tracking. While common operating mechanisms, standardized data sets, and reporting procedures for a larger number of patients would align to current the data sets, there is a lack of strategic vision (short and long-term), primary objective accomplishment, and accountability of deliverables.

It is clear the Missouri Department of Health and Senior Services, the Missouri Hospital Association, and statewide healthcare stakeholders generally want the program to meet multiple expectations. For this to occur, strong programmatic leadership is needed to drive stakeholder and staff activities toward clear and transparent prioritized goals.

A. Deliverable A: Evaluation

Havron & Associates evaluated the current data systems and the associated datasets used by stakeholders for initial data collection and reporting into the Time Critical Diagnosis (TCD) system of care, including components of emergency and disaster preparedness. Our findings are provided in three parts.

1. Identification of Stakeholders & Data Sources

Through the discovery process, stakeholders throughout the State of Missouri were telephonically interviewed. Stakeholders represented Missouri Department of Health and Senior Services, hospitals, emergency medical service providers, the state TCD workgroup members, Missouri Hospital Association, Missouri State Medical Association, Missouri Ambulance Association, Missouri EMS Association, the American Heart Association, the State EMS Advisory Council, Missouri Healthcare Coalitions, or other state associations. Through collaboration with TCD leadership, 26 individuals, from 15 organizations/associations, were interviewed, as detailed in **Appendix A**.

In collaboration with Mr. Linneman, our team developed a detailed stakeholder survey aimed at assessing emergency medical services and hospital stakeholders for the trauma, stroke, and STEMI initiatives. Survey questions sought to clarify current TCD perspectives, completion of prior TCD objectives and recommendation, and provide a understanding of future program vision and direction. The final version of these results were provided on October 15, 2019, see **Appendix C**.

A common theme identified during the interview process related to the completion of prior program initiatives. Members' perspectives were that conflicting Department priorities and alignment to regulation and licensing expectations routinely became a higher priority. Our assessment, stakeholder interviews and review of past program evaluations support this concern.

Recommendation: Develop a Division of Emergency Care tasked by the Department of Health and Senior Services to align and unify the Time Critical Diagnosis program with Emergency Medical Services and Hospital standards.

Recommendation: Fund a full-time position to oversee the daily operations of the program specific staff with focus on alignment of activities, development of efficiencies in process, and overall programmatic oversight, vision, and funding.

Recommendation: Develop a 12, 24, and 36-month set of objectives tasked to the Division of Emergency Care staff.

2. Gathering TCD Information

Havron & Associates, LLP systematically gathered information necessary to propose an updated TCD system for real-time, or near real-time, use cases scenarios. These use cases were intended to support the TCD system and emergency preparedness and response integration opportunities. Our team reviewed the systems identified in the assessments, assessed underlying data sources and mapped relevant elements in the worksheet accompanying this report. See TCD Data Crosswalk Worksheet, **Enclosure A**.

Recommendation: While data aggregation system can certainly be explored in parallel to other initiatives, TCD member bandwidth is limited. As such, data aggregation systems are

recommended after standard program vision, structure, alignment and associated funding are reached. Our recommendation is current systems continue to be used until these program pillars are in place.

3. Data Component Recommendations

Healthcare stakeholders are currently using numerous systems throughout the state, including different versions of single systems. While it is recognized that various levels of duplication exist, human and technical cost avoidance could be realized, and resources could be shared; there is a lack of system expectations and common vision across trauma, stroke, STEMI and other emergency care initiatives. Our data recommendations and system needs were provided on December 5, 2019, see **Appendix B**. A single TCD registry would require a multi-phase, multi-year approach to design, testing, implementation, and user buy-in through training and education. In our review, unsolicited single system proposals have been submitted to the TCD Committee. During our review, there has been very limited actions taken to move to an integrated single solution.

Recommendation: Consider available data integration services in conjunction with single data registry options, including timelines and cost.

Recommendation: Form a data integration sub-committee comprised of data scientists, medical record system architects, and IT leaders to partner with clinical staff for the evaluation of TCD data sharing options.

Recommendation: Develop and issue a Request for Information (RFI) allowing multiple vendors to highlight potential data integration solutions and data registry options, further educating stakeholders on options and pricing within the market.

Recommendation: As a part of a 3-5 year vision, consider mandatory real-time HL7 ADT (admission / discharge / transfer) file transfers from all Missouri hospitals to a central data repository or aggregation engine, providing near real-time patient tracking and family reunification information during a mass casualty incident or public health emergency.

B. Deliverable B: Funding Structures

Our team conducted a comprehensive review of TCD funding structures in use by other states or otherwise documented in the literature and developed funding recommendations which could be implemented in full, or in part, by the State of Missouri. Our team conducted outreach to all 50 States. A detailed summary of this research and outreach was provided on December 5, 2019, see **Appendix D**.

Recommendation: Implement Emergency Medical Technician initial and renewal application fees.

Recommendation: Consider a 2 or 3-year application renewal period.

Recommendation: Apply for the Paul Coverdell Grant.

Recommendation: Research and apply for other grant funding (at all funding levels).

Recommendation: Align DHSS Brain Injury Program and TCD programs.

Recommendation: Identify a Time Critical Diagnosis Program legislative advocate and create a Funding Subcommittee tasked to identify violations/fines/fee mechanism to be recommended as funding sources, including, but not limited to: speeding violations fine, recreational motor vehicle purchase surcharge, tobacco sur-charge, alcohol surcharge.

C. Deliverable C: TCD Report (this document)

Havron & Associates, LLP submits this report to the DHSS and MHA with the expectation that recommendations are provided to appropriate stakeholders. The Havron & Associates team plans to present these findings to the stakeholders on April 16, 2020.

These findings have been vetted with some stakeholders via in-person meetings, teleconferences, and routine communication with Mr. Linneman. Further, our team in conjunction with subject matter expert, Dr. David Marcozzi highlighted the importance of this project based upon our years of expertise, the unique approach by the State of Missouri compared to other State solutions, and known best practices in time sensitive diagnosis patient tracking, data sharing, and analytics.

D. Deliverable D: TCD Workgroup Meetings

Havron & Associates facilitated interviews and in-person meetings of the Missouri TCD Committee members, as outlined in the Scope of Work. During this process some members were unaware of other members participation, committee reporting structures, and there was a general inconsistency and understanding of TCD Committee priorities. Some members were unaware of TCD committee or workgroup meetings.

Recommendation: Develop and document a TCD governance structure, including, but not limited to: committee members roles, representative of the stakeholders (e.g. rural EMS, urban hospitals, trauma, stroke, STEMI); committee members' names and assignments; committee goals and associated deadlines; and meeting date/times posted with transcribed minutes.

III. Appendix

A. Stakeholder Interviews

Time Critical Diagnosis Stakeholder Interviews

Ackerson, Teri - Women's Health Council
Alexander, Mark - Cox Health EMS
Andrews, Dr. Lynthia - MOSAIC Life Care
Blackwell, Jami - Cox Health
Bradley, Gene - MAA
Braithwaite, Dr. Sabina - Washington University
Chambers, Dale – Missouri Healthcare Coalition
Coughenour, Dr. Jeffery - University Hospital and Clinics
Ellsworth, Terry – DHSS
Gatz, Jaclyn – Missouri Healthcare Coalition
Jackson, Pam - St. Luke's Hospital
Saathoff, Kayli - American Heart Association
Kiser, Robin - American Heart Association
Leoni, Debbie - Southeast Health
Linneman, Dean - DHSS
Luebbert, Sarah / Mills, Patrick - Missouri State Medical Association
Lucas, Heidi – Missouri Nurses Association
Mehrer, Ruby - LifeFlight Eagle
Nix, Dr. Sean - St. Luke's Hospital
Ostendorf-Morris, April - St. Francis Medical Center
Panagos, Dr. Peter - Washington University
Probst, Kat - Adair County Ambulance District
Roark, Theresa / Willson, Sarah - Missouri Hospital Association
Wallace, Mike - MARC
Williams, Dr. Randall - DHSS
Gamm, Nicole / Huddleston, Peggy / Koebel, Bill – DHSS

B. Interviews and Data Assessment Memo

Missouri Department of Health and Senior Services

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Deliverable A.2: Gathering TCD Data Information

As outlined in the Missouri Time Critical Diagnosis Scope of Work, Havron & Associates, LLP has gathered information necessary to propose an updated TCD system for real-time, or near real-time, use cases scenarios. These use cases were intended to support the TCD system and emergency preparedness and response integration opportunities. Havron & Associates reviewed all of the systems identified in the assessments, identified underlying data sources and mapped relevant elements in the worksheet accompanying this report.

I. Summary of Findings and Recommendations

a) Stakeholder Interviews

As a part of stakeholder interviews, there was consistent interest in timely feedback associated to patient outcomes and the desire for comparative reporting. However, stakeholders did not generally articulate a vision for a single aggregated TCD system, but rather voiced interests that were specific to a certain patient population (e.g. hospital, EMS, stroke, STEMI, trauma) quality needs.

Recommendation 1: While data aggregation system can certainly be explored in parallel to other initiatives, TCD member bandwidth is limited. As such, data aggregation systems are recommended after standard program vision, structure, alignment and associated funding are reached. Our recommendation is current systems continue to be used until these program pillars are in place.

b) System Assessments

Healthcare stakeholders are currently using numerous systems (including different versions of single systems) throughout the state. While it is recognized that various levels of duplication exist, human and technical cost avoidance could be realized, and resources could be shared; there is a lack of system expectations and common vision. System needs have been outlined in Appendix A. A single TCD Registry would require a multi-phase, multi-year approach to design, testing, implementation, and user buy-in through training and education. In our review, single system proposals have been submitted to the TCD Committee without action. During our review, there has been very limited actions taken to move to an integrated single solution.

Recommendation 2: Consider available data integration services in conjunction with single data registry options, including timelines and cost.

Recommendation 3: Form a data integration sub-committee comprised of data scientists, medical record system architects, and IT leaders to partner with clinical staff for the evaluation of TCD data sharing options.

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Recommendation 4: Develop and issue a Request for Information (RFI) allowing multiple vendors to highlight potential data integration solutions and data registry options, further educating stakeholders on options and pricing within the market.

c) Emergency Preparedness and Response Integration Opportunities

Several stakeholders acknowledged emergency preparedness integration would be helpful during a large-scale patient tracking and family reunification initiative. However, data registries for Trauma, Stroke, and STEMI are generally not used real-time or near real-time in most instances or documented in separate systems altogether.

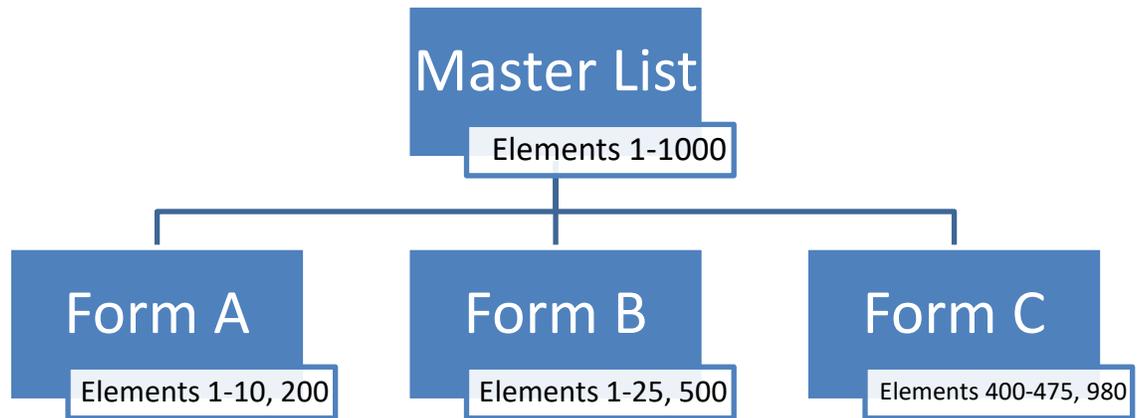
Recommendation 4: As a part of a 3-5 year vision, consider mandatory real-time HL7 ADT (admission / discharge / transfer) file transfers from all Missouri hospitals to a central data repository or aggregation engine, providing near real-time patient tracking and family reunification information during a mass casualty incident or public health emergency.

II. Usage Guide

a) What are Master Lists?

Where possible, data standards which utilize a common structure across various versions/disciplines have been organized utilizing a master list. This master list allows for the rapid addition of additional lists and provides a single location for updating of data elements which may appear in multiple versions/disciplines. The American College of Cardiology (ACC) and NEMESIS lists are organized in this manner.

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b) Hospital Centric Lists

Hospital centered data standards which focus on specific diagnosis and/or treatment paths are highlighted individually and are populated from a Master List (where applicable). These lists exist to provide extra detail about potential data points. For accuracy the latest official published version of any standard should be consulted when validating data.

c) EMS Centric Lists

EMS centric data standards are generalized for all encounters and are therefore organized according to the version of the data standard being used. They are populated from a Master List. These lists exist to provide extra detail about potential data points. For accuracy the latest official published version of any standard should be consulted when validating data.

d) How to Read the Crosswalk

The crosswalk is divided into four sections, Trauma, NEMESIS, ACC NCDR and GTWG data elements. Inside most sections¹ is the data element's identifier, its title, and a valid data format or specific selection.

- Data elements that are alike or a match to elements of another standard are on the same row.
- Commonalities between the standards is predictably highest in patient demographic and identity data.

¹ The element identifiers for Get With the Guidelines are not publicly available. While the crosswalk uses titles to associate like data points there are no associated codes on the GTWG list.

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- Commonalities do exist also amongst patient history data and in some treatment data points.

e) How does NEMESIS use Common Data Classifications?

NEMESIS, rather than mandating certain codes to apply to specific medications or procedures, has a list of recommended code values along with a much larger range of allowed values. This results in a high potential to receive multiple codes for the same procedure or medication depending on an EMS Providers vendor or preferences. It is recommended that TCD members collaborate with Missouri EMS data managers to identify desired codes and utilize the existing NEMESIS framework to enforce their usage.

III. Common Data Classifications

a) RxNorm

As part of the Unified Medical Language System (UMLS), RxNorm provides normalized names for clinical drugs and links its names to many of the drug vocabularies commonly used in pharmacy management and drug interaction software, including those of First Databank, Micromedex, Gold Standard Drug Database, and Multum. By providing links between these vocabularies, RxNorm can mediate messages between systems not using the same software and vocabulary.

RxNorm now includes the United States Pharmacopeia (USP) Compendial Nomenclature from the United States Pharmacopeial Convention. USP is a cumulative data set of all Active Pharmaceutical Ingredients (API).

In this document, RxNorm is used primarily to identify medications which the patient has been prescribed and medications given to the patient during the encounter.

b) SNOMED CT

SNOMED CT as a product of SNOMED International is a comprehensive system of clinical findings like signs and symptoms. It includes tens of thousands of surgical, therapeutic and diagnostic procedures. It includes observables (for example heart rate), and also includes concepts representing body structures, organisms, substances, pharmaceutical products, physical objects, physical forces, specimens and many other types of information that may need to be recorded in or around the health record.

In this document, SNOMED CT is used to document patient's past medical history, procedures performed on the patient, some medications given the patient and patient outcome data.

c) LOINC

LOINC (Logical Observation Identifiers Names and Codes) was developed to provide a definitive standard for identifying clinical information in electronic reports. The

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LOINC database provides a set of universal names and ID codes for identifying laboratory and clinical test results in the context of existing HL7, ASTM E1238, and CEN TC251 observation report messages. One of the main goals of LOINC is to facilitate the exchange and pooling of results for clinical care, outcomes management, and research. LOINC codes are intended to identify the test result or clinical observation. Other fields in the message can transmit the identity of the source laboratory and special details about the sample.

In this document, LOINC is used to identify a patient's height and weight.

d) HL7

Founded in 1987, Health Level Seven International (HL7) is a not-for-profit, ANSI-accredited standards developing organization dedicated to providing a comprehensive framework and related standards for the exchange, integration, sharing, and retrieval of electronic health information that supports clinical practice and the management, delivery and evaluation of health services. HL7 is supported by more than 1,600 members from over 50 countries, including 500+ corporate members representing healthcare providers, government stakeholders, payers, pharmaceutical companies, vendors/suppliers, and consulting firms.

In this document, HL7 is used primarily as an identifier for patient's race.

e) ICD-10-CM

ICD-10-CM is the United States' clinical modification of the World Health Organization's ICD-10. The term "clinical" is used to emphasize the modification's intent: to serve as a useful tool in the area of classification of morbidity data for indexing of health records, medical care review, and ambulatory and other health care programs, as well as for basic health statistics. To describe the clinical picture of the patient the codes must be more precise than those needed only for statistical groupings and trend analysis.

In this document, ICD-10-CM is used primarily for provider impressions, external causes of injury, location types and patient signs and symptoms.

f) FIPS

Federal Information Processing System (FIPS) codes are numbers which uniquely identify geographic areas. The number of digits in FIPS codes vary depending on the level of geography. State-level FIPS codes have two digits, county-level FIPS codes have five digits of which the first two are the FIPS code of the state to which the county belongs.

In this document, FIPS codes are used primarily to identify cities, counties and states.

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Havron & Associates, LLP would like to thank you for the opportunity to participate in this portion of the project. We understand data aggregation and comparison from various different systems and purposes can be challenging. While data aggregation and patient outcomes are primary goals, we strongly believe foundational program elements need immediate attention, while data vision is further defined and agreed upon by the stakeholders.

Sincerely,

Douglas Havron, RN, BSN, MS
CEO and Senior Planner

C. TCD Survey Findings

Time Critical Diagnosis Project

State of Missouri

October 10, 2019

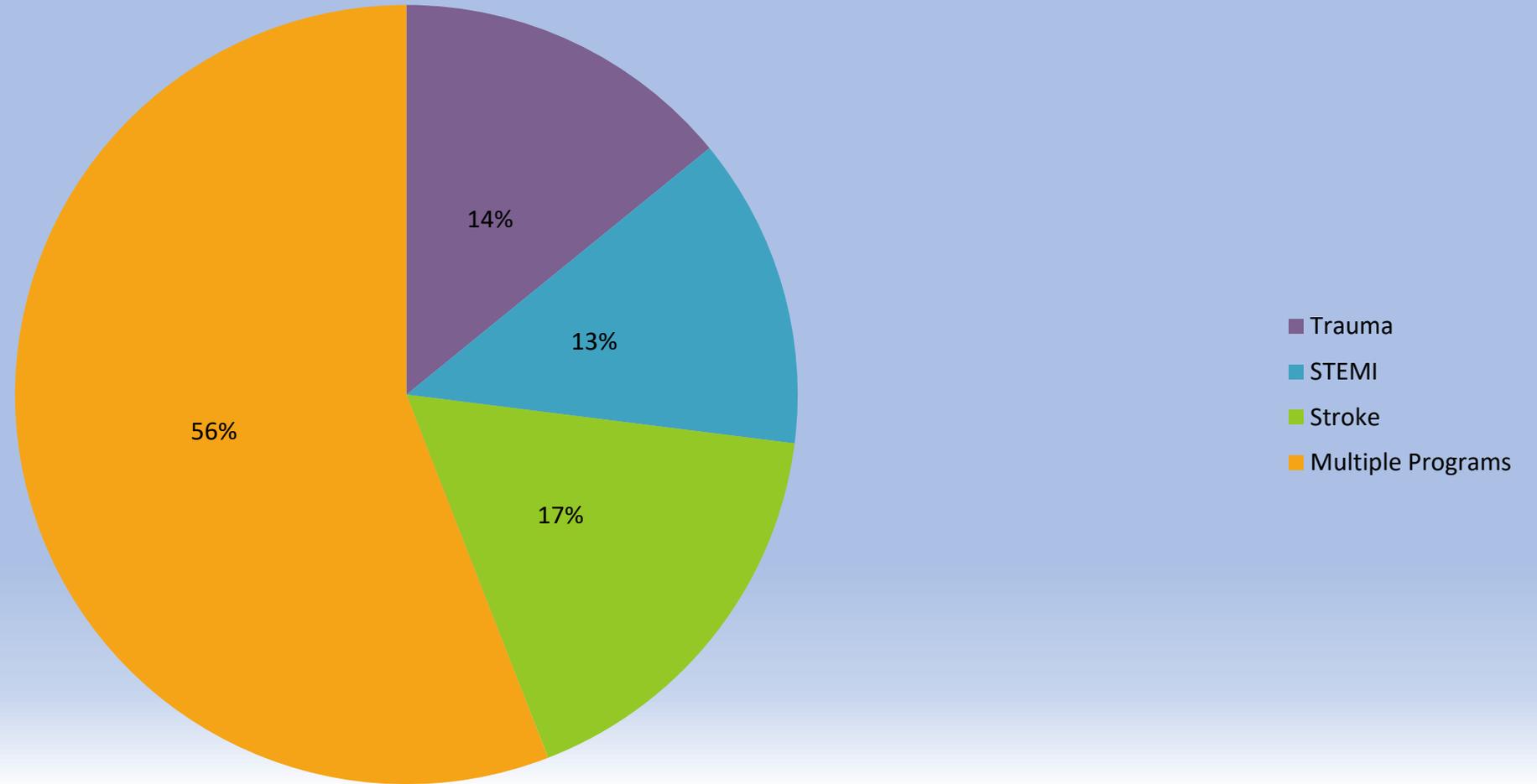
Agenda

- **Welcome**
 - **Dean Linneman, Director, Division of Regulation and Licensure, DHSS**
- **Project Plan Update**
 - **Douglas Havron, RN, BSN, MS**
 - Identification of Stakeholders
 - Data Sources
 - Survey Results
 - Funding Structure
- **Question & Answer Session**
- **Closing Remarks**

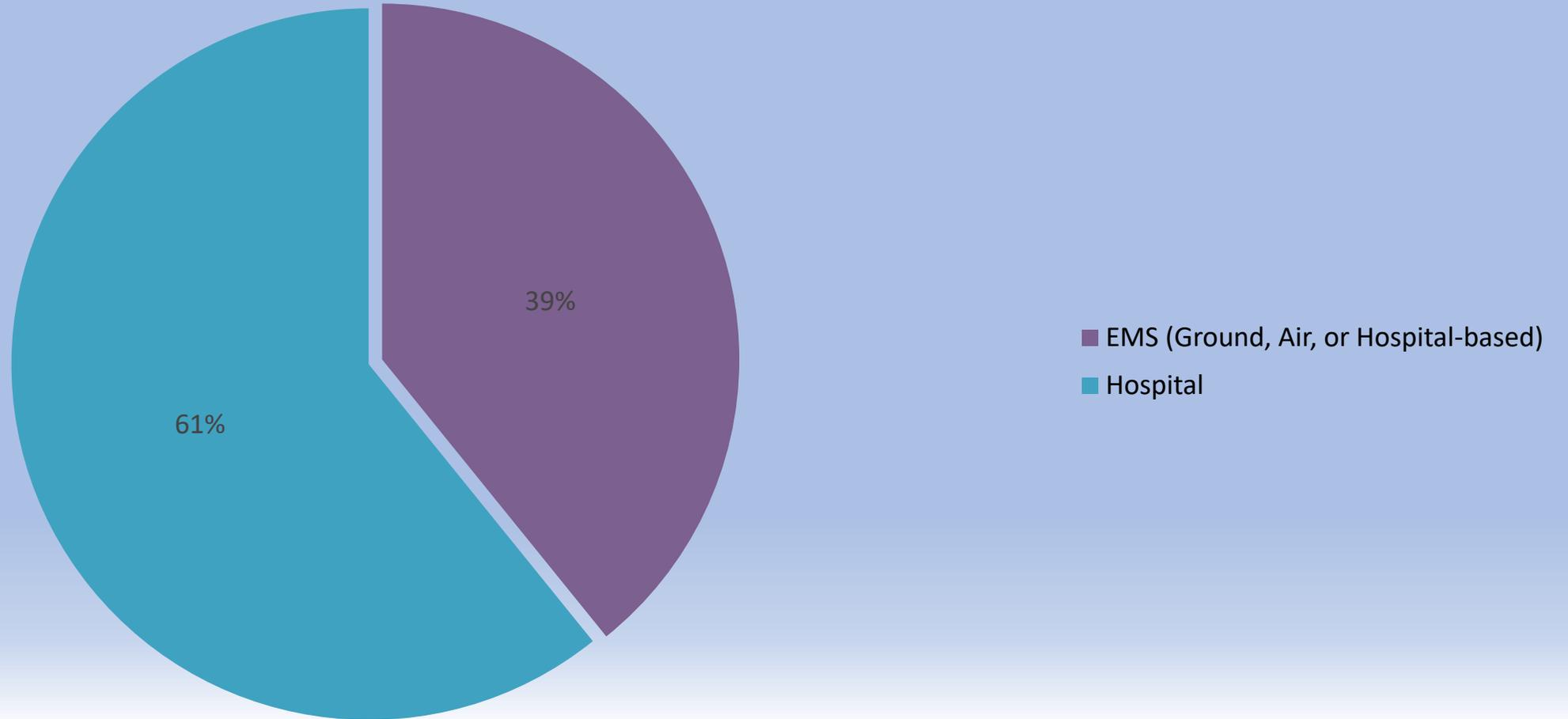
Evaluate and Make Recommendations

- Identification of Stakeholders
 - Talked with 23 of the 28 TCD Committee members
 - Talked with TCD staff
 - Talked with EMS SAC members
- Gathering TCD Information
 - Survey available September 2019
 - 664 invited participants / 173 responses
 - 26% response rate
 - 68.2% completed survey
 - 31.8% partially completed survey

1. Which TCD Program are you associated?



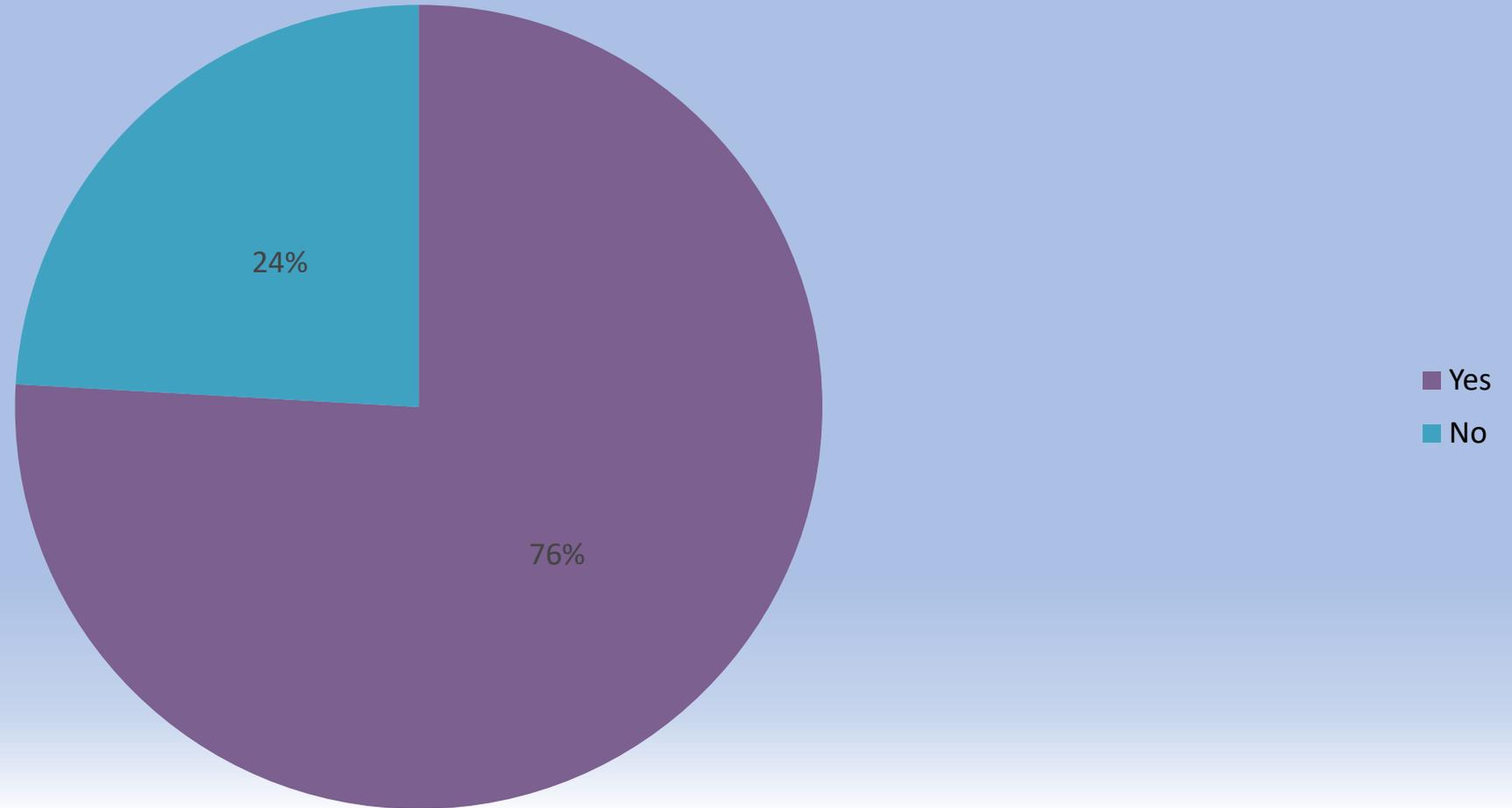
2. Which organization type do you represent?



Observations

- TCD updates are provided via EMS State Advisory Committee
- TCD staff participation in committee meetings
- Based upon discipline, we have heard various visions of the TCD program
- Patient outcomes vs regulations and licensure
- “Lack of direction/prioritization/leadership of the program”
- Office of Emergency Care

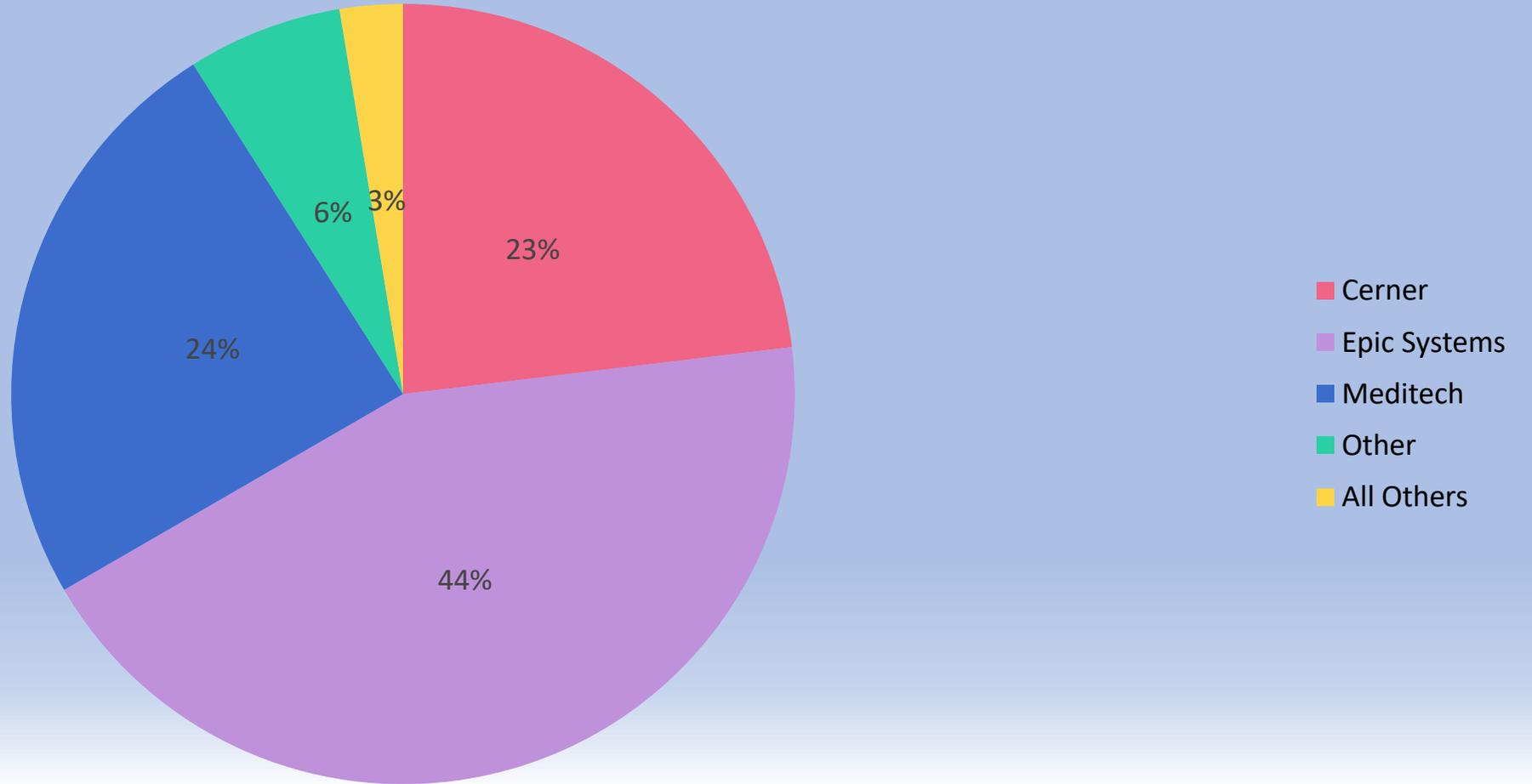
16. If an Office of Emergency Care was created within the Department of Health and Senior Services which unifies the TCD, Emergency Medical Services, Emergency Preparedness, and Emergency Response Center, would this be helpful?



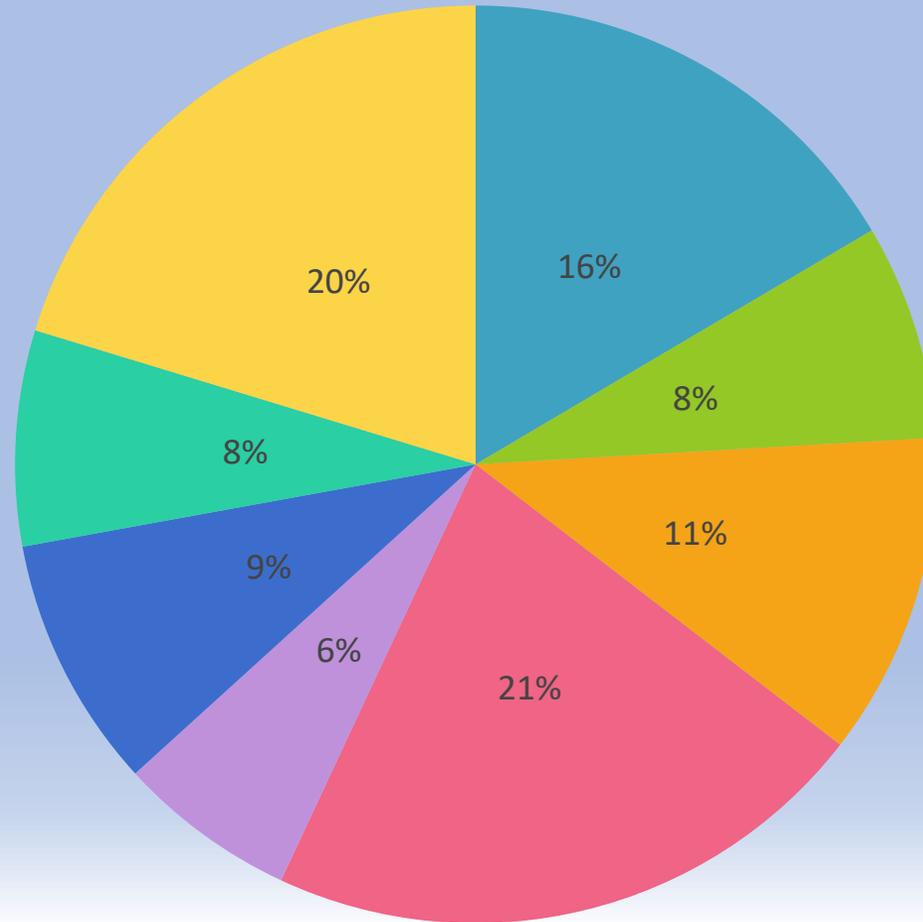
Evaluate and Make Recommendations

- Data Sources
 - Conducted survey for hospitals and EMS agencies
 - Consolidated like-based systems for analytical purposes (e.g. NCDR)
 - Began mapping data elements (collection system components) across systems
 - Began development of a TCD data set and data dictionary
 - Began development of patient tracking during disaster recommendations

14. What hospital EMR/EHR system does your organization use?

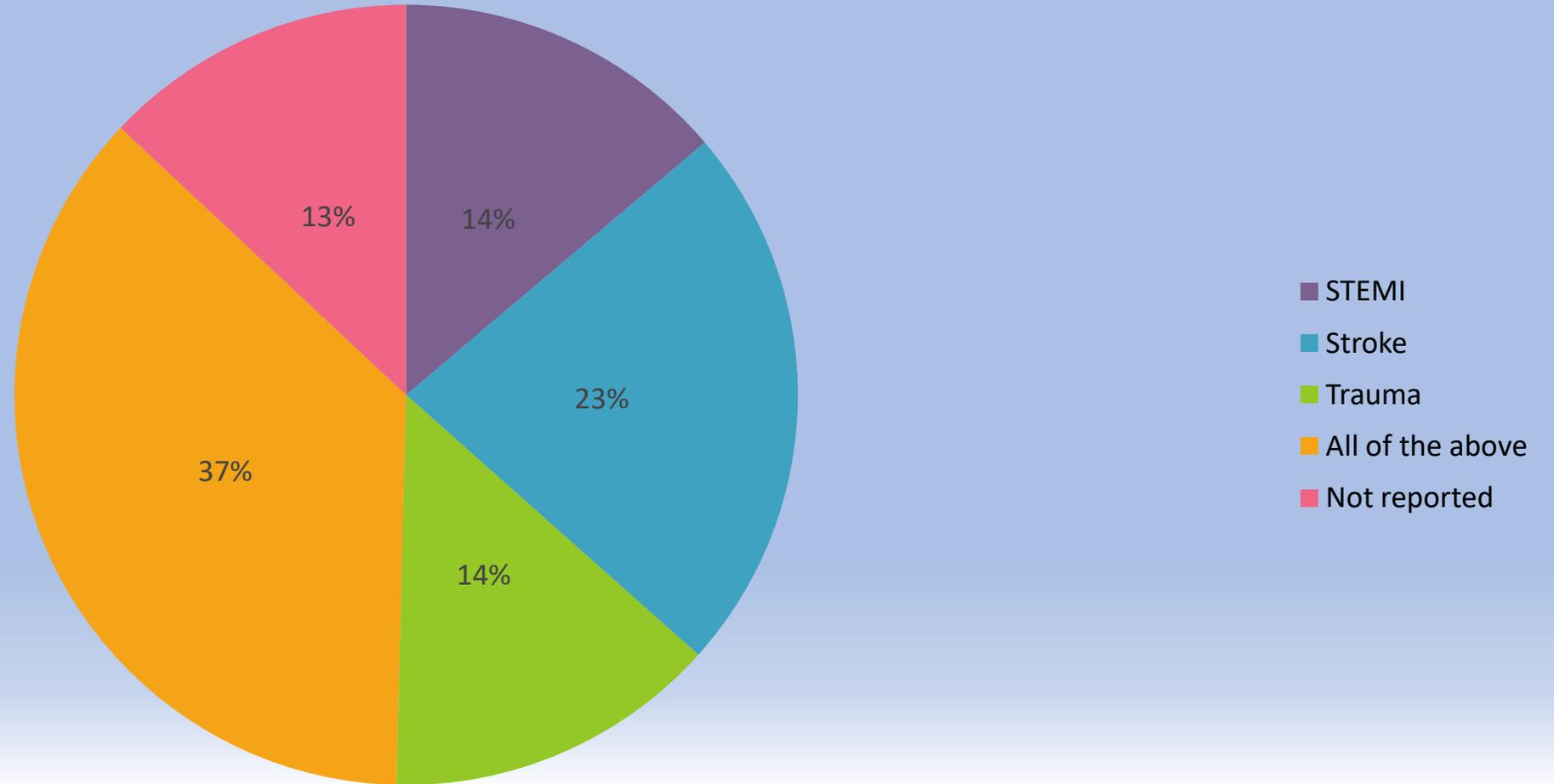


4. What system does your hospital use to report data?

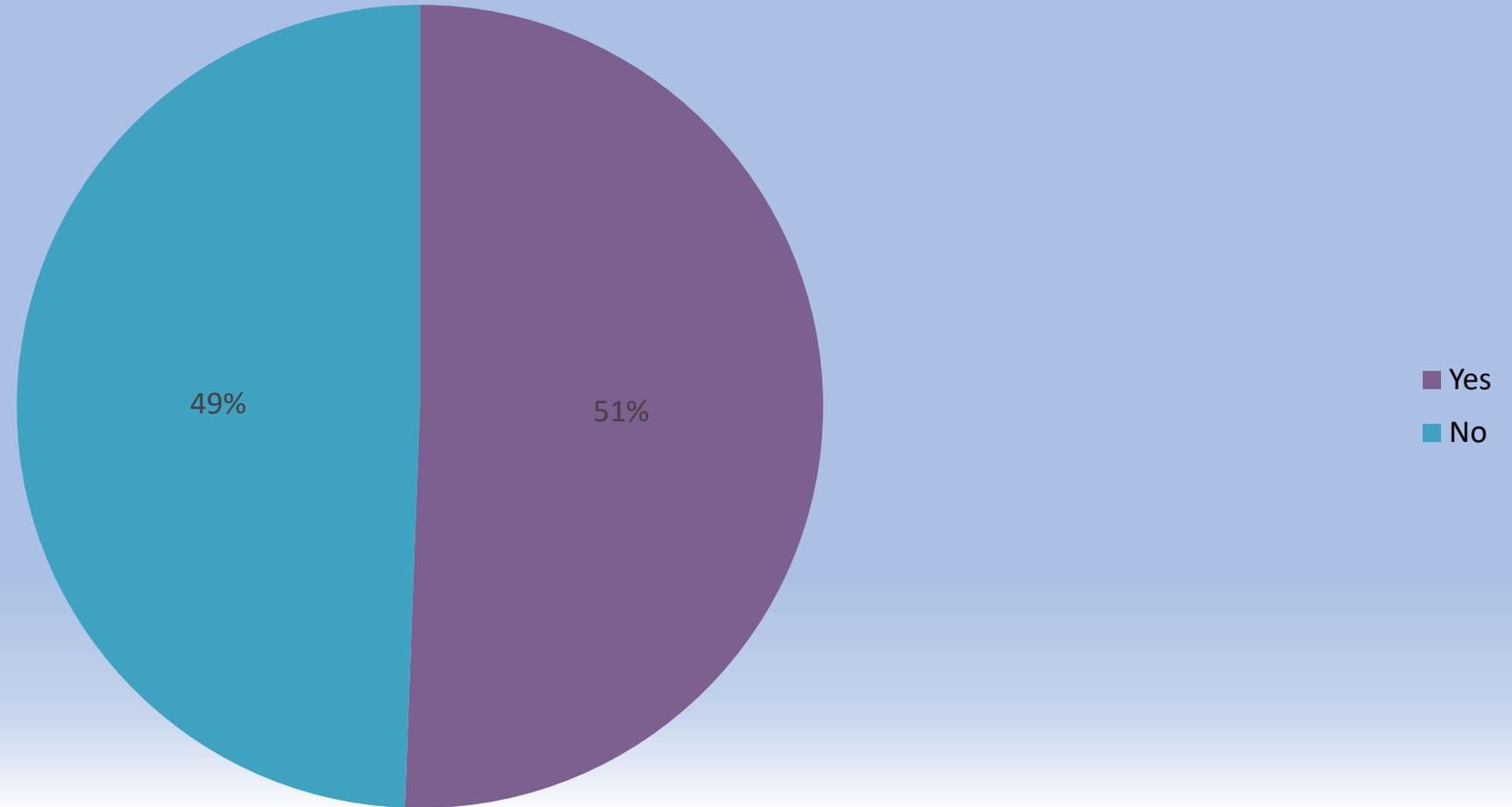


- DI Collector
- Get With The Guidelines-CAD Registry
- ImageTrend
- IQVIA Get with the Guidelines
- NCDR
- NCDR Action Registry
- NCDR Cath-PCI
- Other - Write In

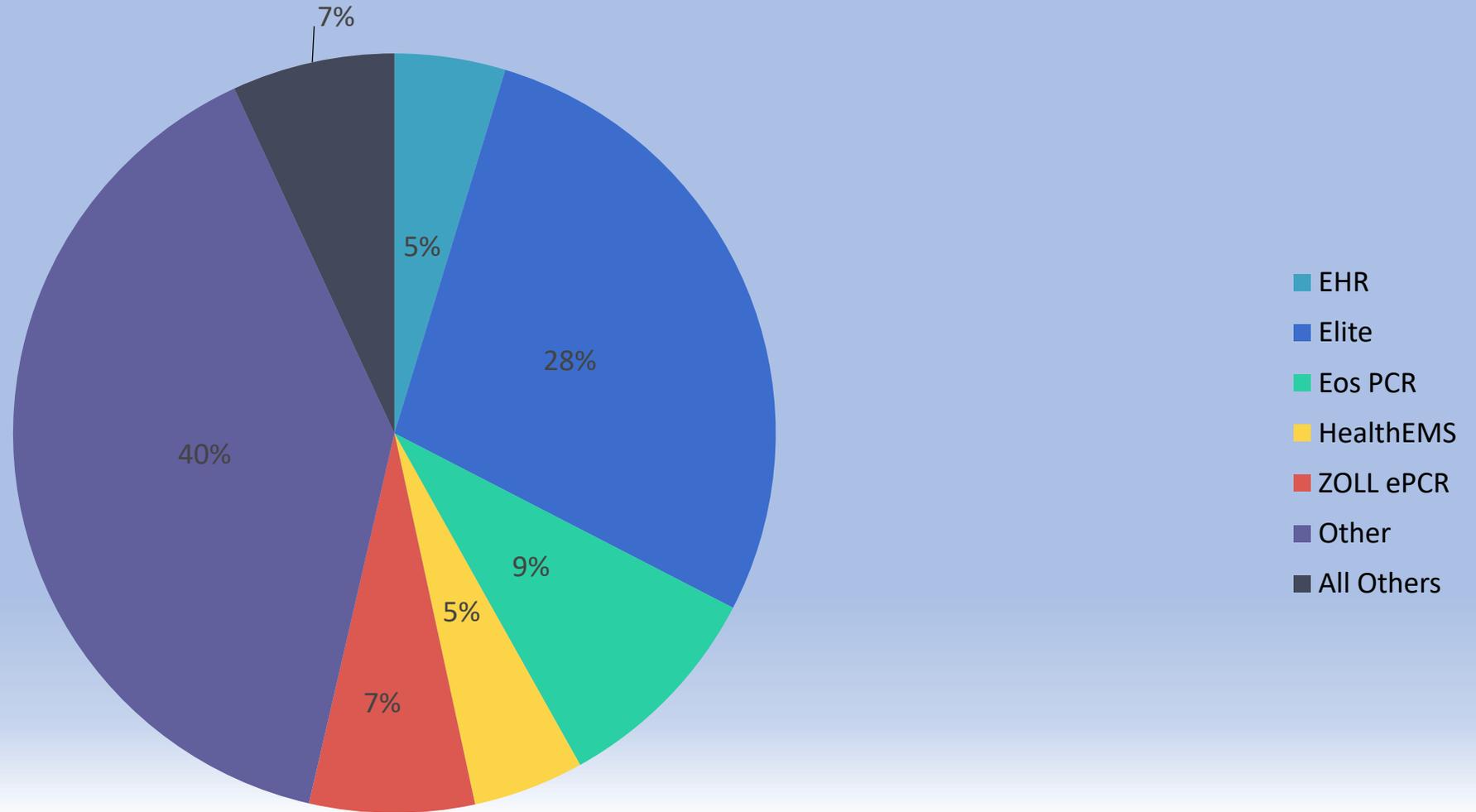
5. What type of TCD data is reported?



6. Does your hospital receive feedback on the data reported?

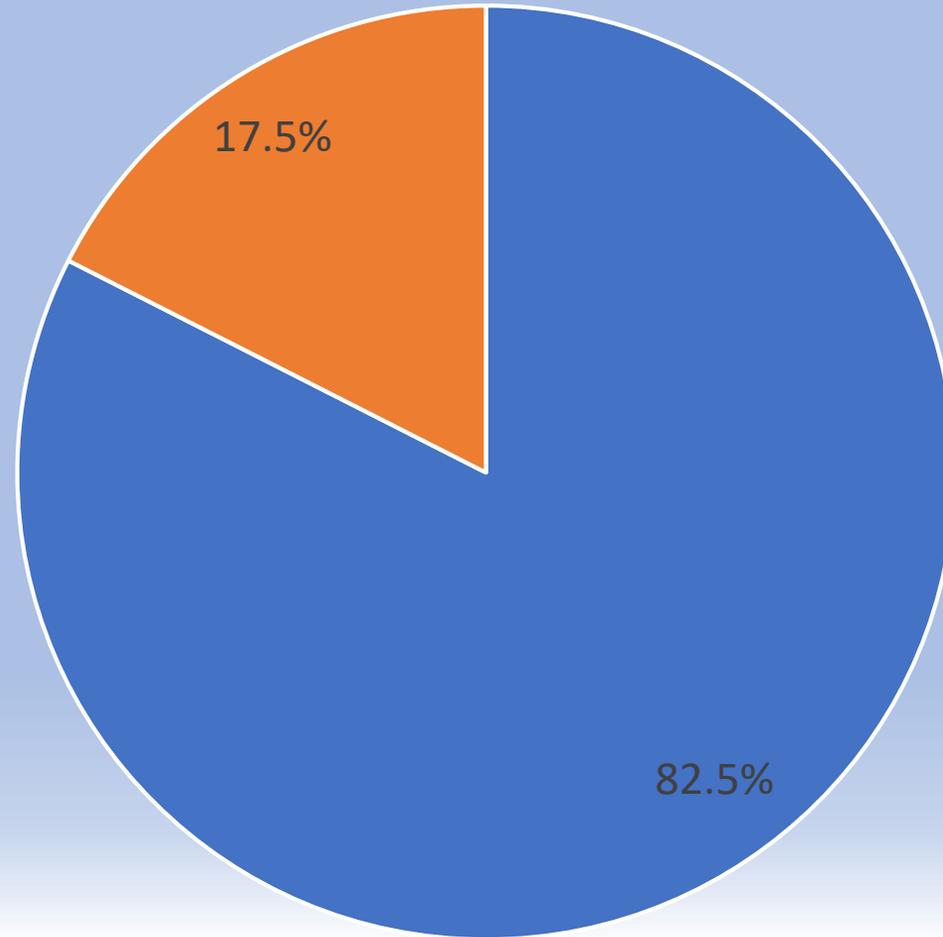


13. What EMS electronic patient care reporting system does your agency use?



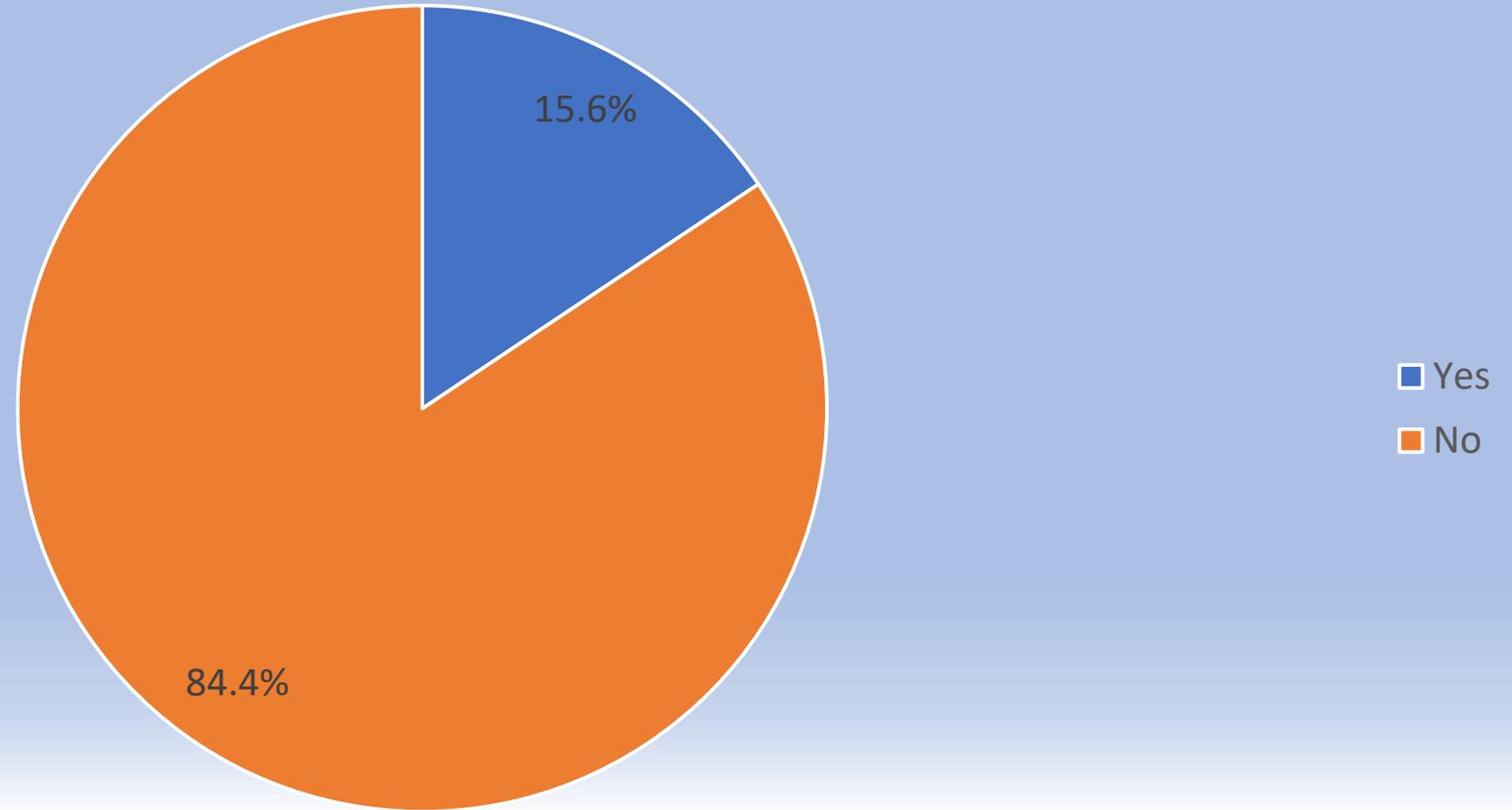
“Other” – Further investigation underway to detail these systems.

3. Is your organization/agency collecting data for the TCD Program?

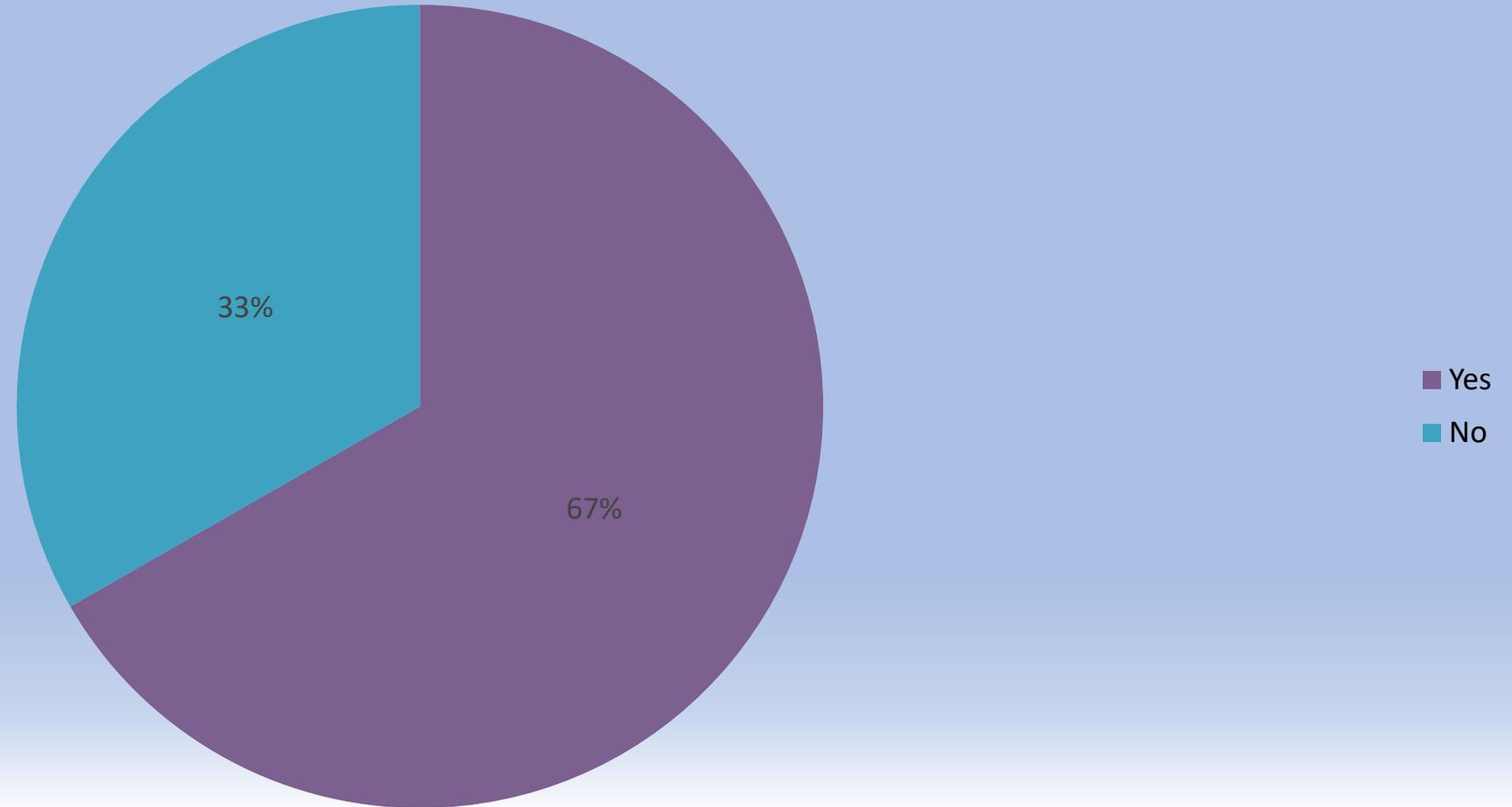


■ Yes
■ No

7. Has your agency requested data reports from the TCD Program?

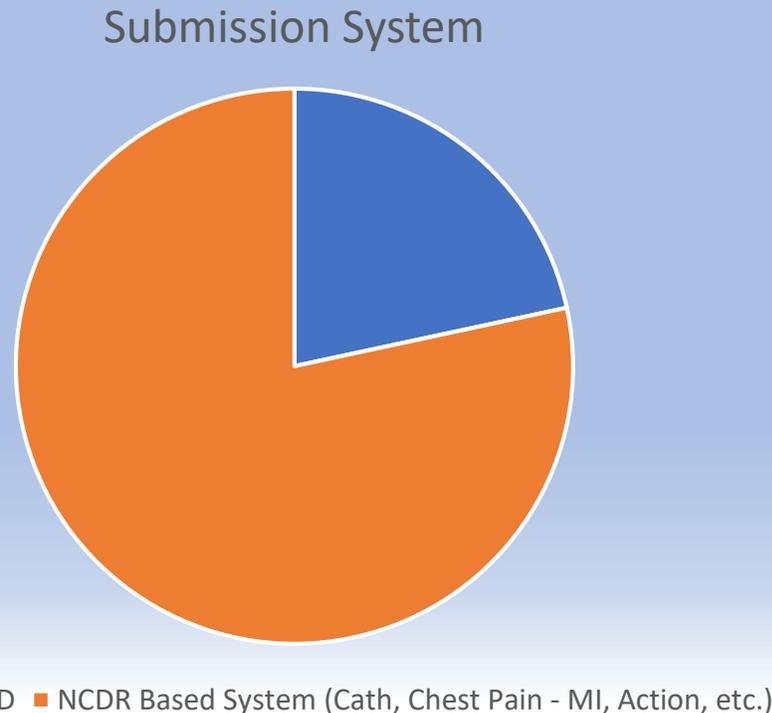


8. Did your organization receive the requested data?



Survey Results: STEMI Reporting Tools

Missouri Hospital Systems Reporting Paths

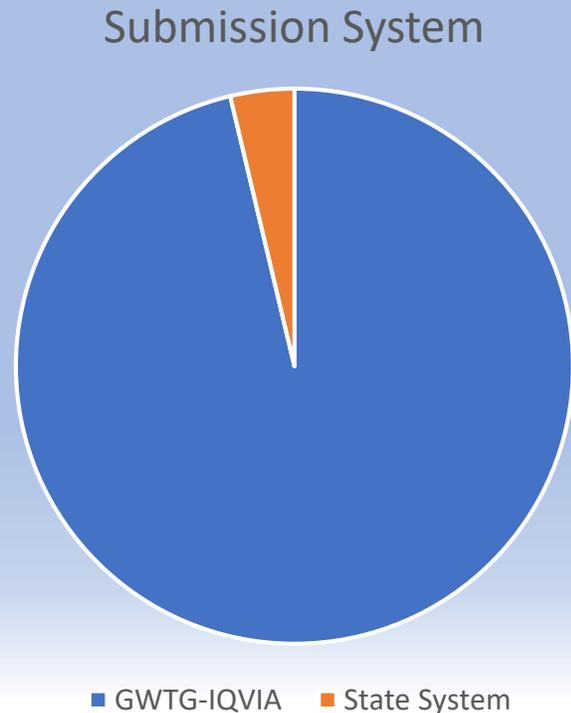


Considerations

- Is comparative analysis possible across systems?
- Is a “like/like” criteria in place?
 - Door to balloon vs contact to balloon?
- Is there a patient centric continuity regardless of point of care?

Survey Results: Stroke Reporting Tools

Missouri Hospital Systems Reporting Paths



Considerations

- What is the “State System”?
- Is the focus on the “State System” growth to bridge gaps or transition for data unification?
 - TCD may need to consume GWTG data sets vs. dual entry / separate system?

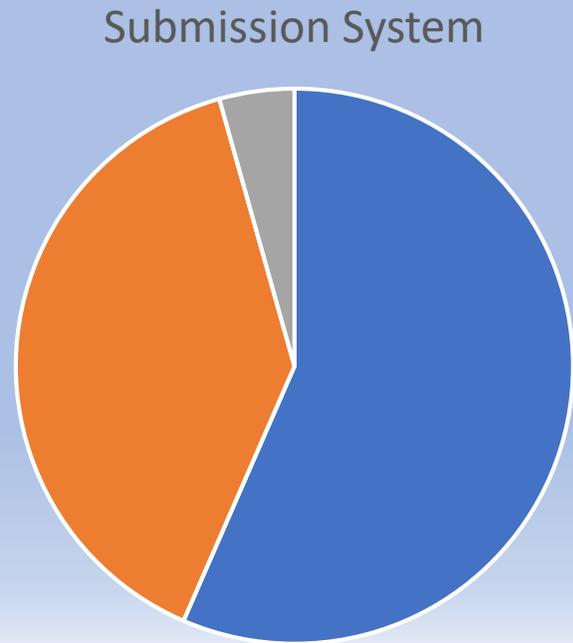
Hospital Level Data and Research

“National aggregate benchmark data, usually obtained from the PMT, may not be used as comparative data in any published format, including abstracts, manuscripts, webpages, etc.”

<https://www.heart.org/en/professional/quality-improvement/quality-research-and-publications/hospital-level-data-and-research>

Survey Results: Trauma Reporting Tools

Missouri Hospital Systems Reporting Paths



■ Digital Innovation Collector ■ ImageTrend ■ Clinical Data Management

Considerations

- Isn't comparative analysis possible across systems using National Trauma Data Standard (NTDS)?
- Is there a patient centric continuity regardless of point of care?

Observations

- Goal are patient care and quality improvement
- Urgency varies by care discipline (Stroke, STEMI, trauma)
- Priorities are misaligned:
 - Data integration vs. systems planning
 - Does data drive funding or funding drive data?
- Iterative development is needed and it should align to a strategic multi-year vision

Other Survey Results

- Prior recommendations and stakeholder perception

What positive traits of the TCD program should be maintained?

- Levels of care
- State certifications/certifications at an affordable cost
- Regional collaboration/organization
- Cooperation/communication between hospitals and EMS
- Flexibility to use state plan or regional plan
- Getting the right patient to the right facility
- Concepts are good
- Focus on improving patient outcomes

What do you see as barriers to the TCD program's success?

- Funding
- Regulation change process too cumbersome
- Regulations do not keep up with current best practices
- Lack of direction/prioritization/leadership of the program
- Data sharing/reports not available
- Not based on quality and process improvement
- Lack of participation/buy-in
- Inconsistency of interpretation of regulations by state surveyors

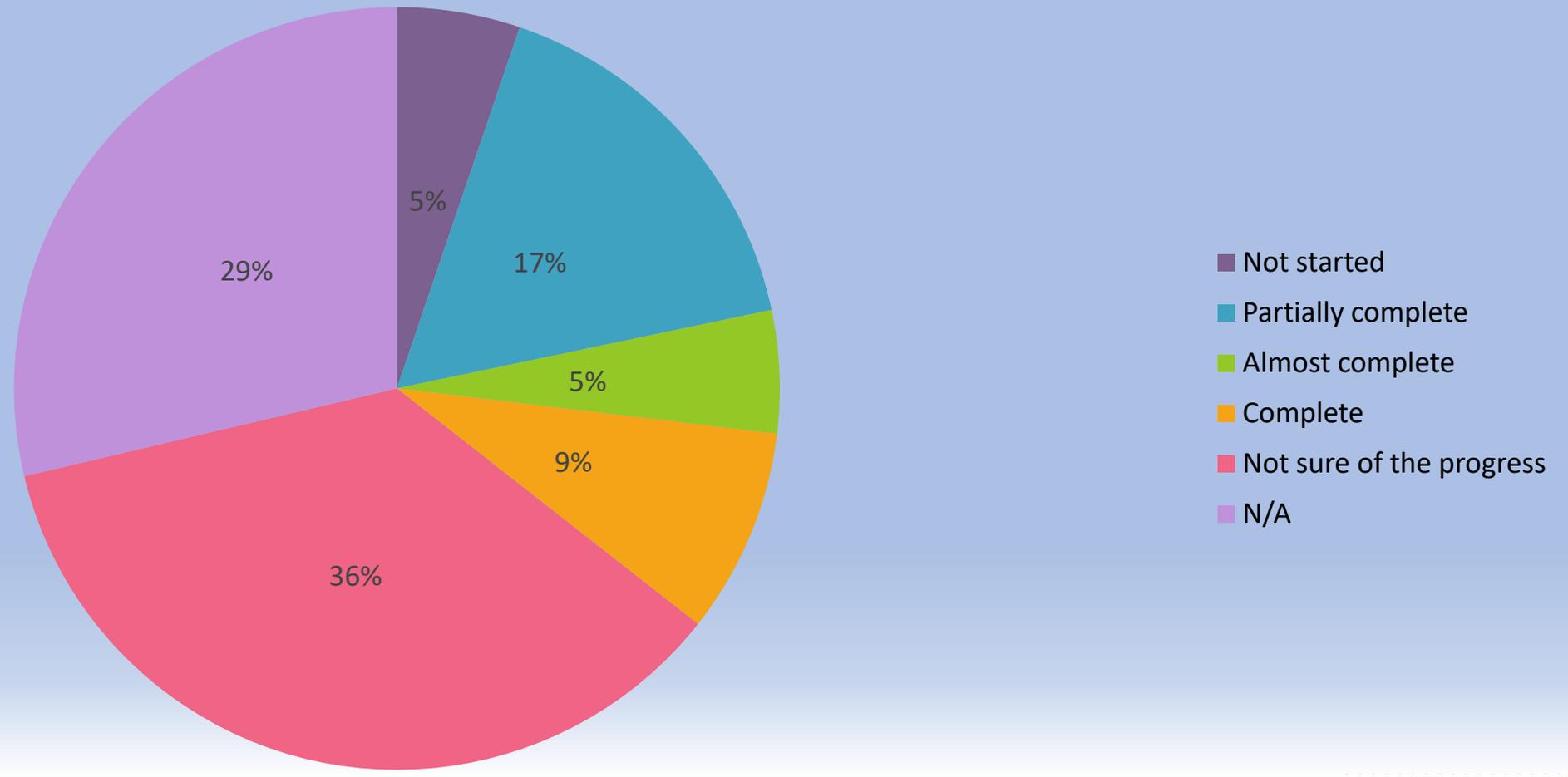
What could be done to improve the TCD program?

- Regulations not so restrictive to allow for guideline changes
- State focus on data collection/publication/outcomes and less on guidelines
- Standardize interpretations of regulations for surveyors
- One system for all to use to collect TCD data and receive outcomes
- TCD regional directors to coordinate and ensure standardization
- Sustainable funding
- Resources to promote prevention

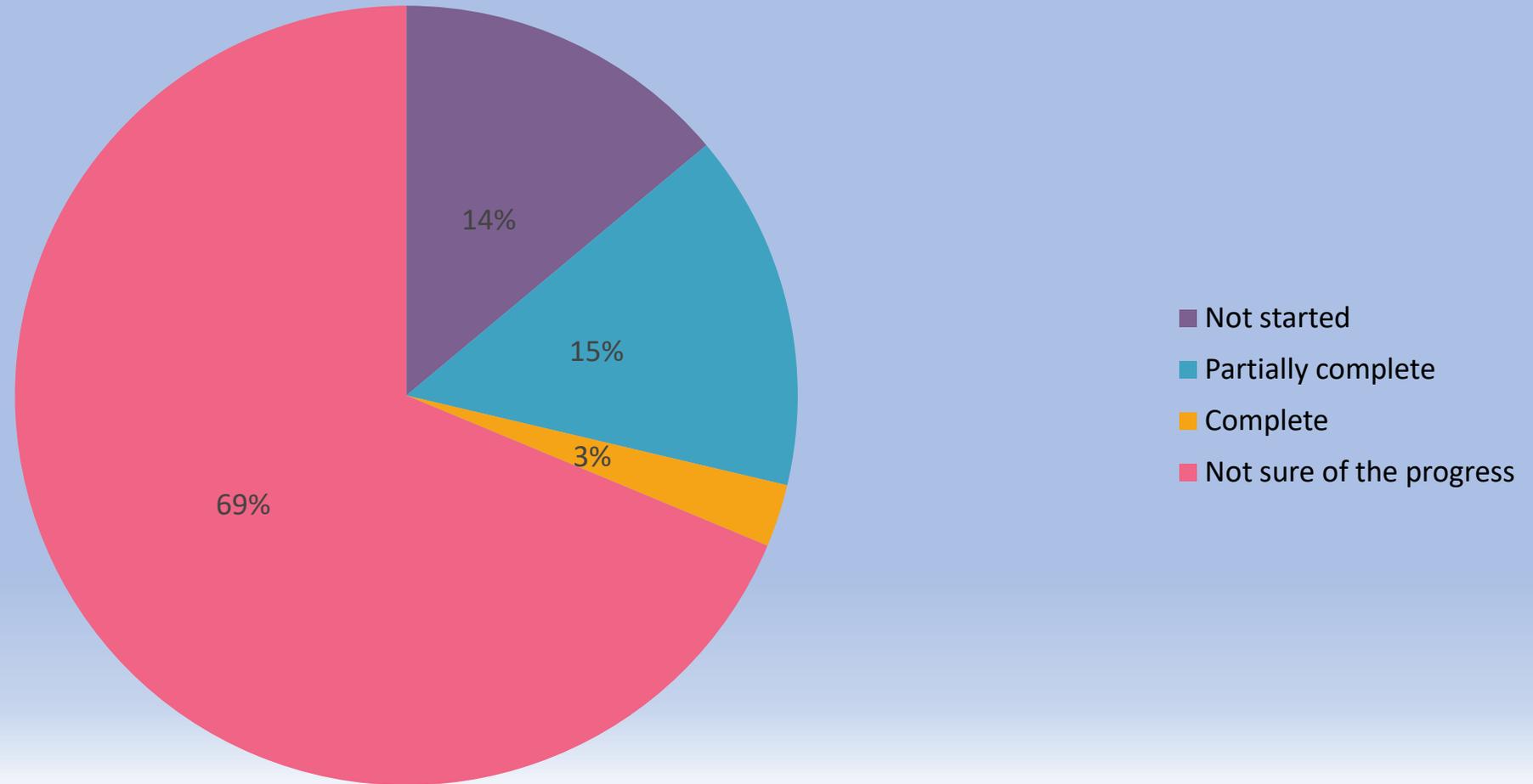
What could be done to improve the TCD program?

- Designated subcommittee groups for each TCD program
- Ability to pull from EHR
- Regional data
- Participation from all in regional TCD committees
- Continue to allow alternate paths for TCD designation
- Properly collect data with validity and reliability

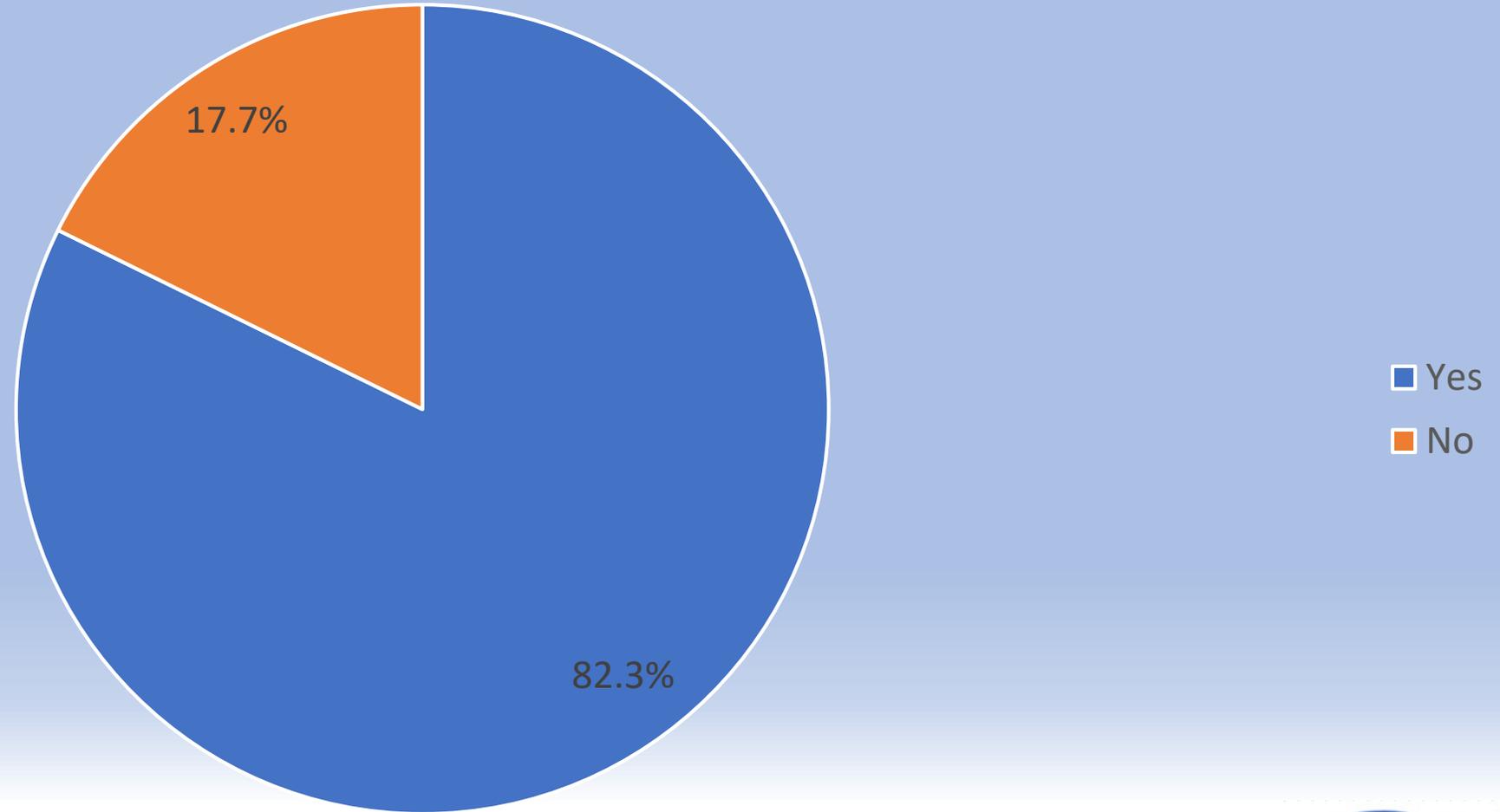
15. Trauma center designation regulations have been revised to adopt, meet, or exceed, by reference, the current version of "Resources for the Optimal Care of the Injured Patient"



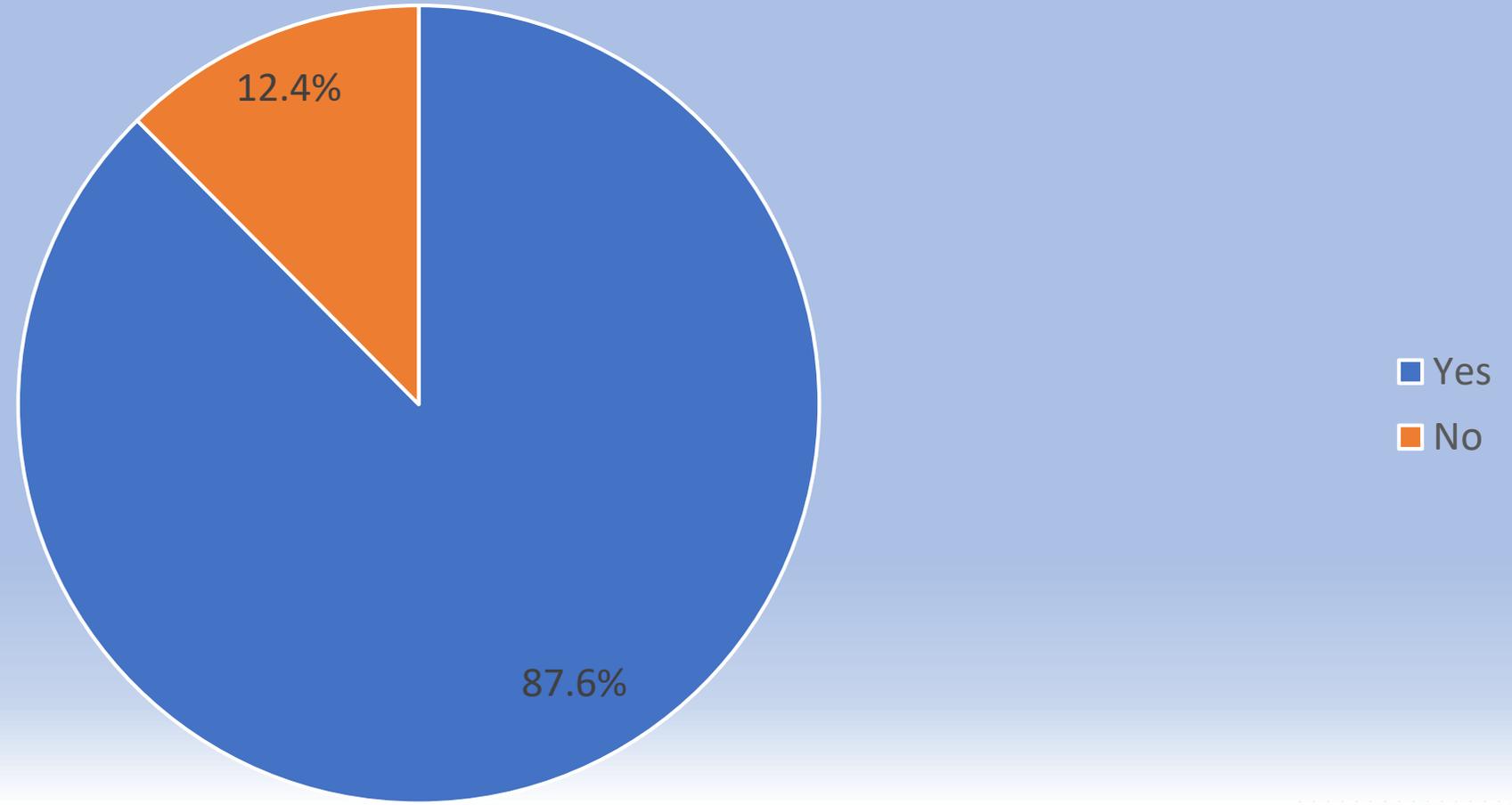
17. Workshops on community engagement and coalition building have been provided to further develop and enhance the State's ability to work effectively with constituency groups throughout the state.



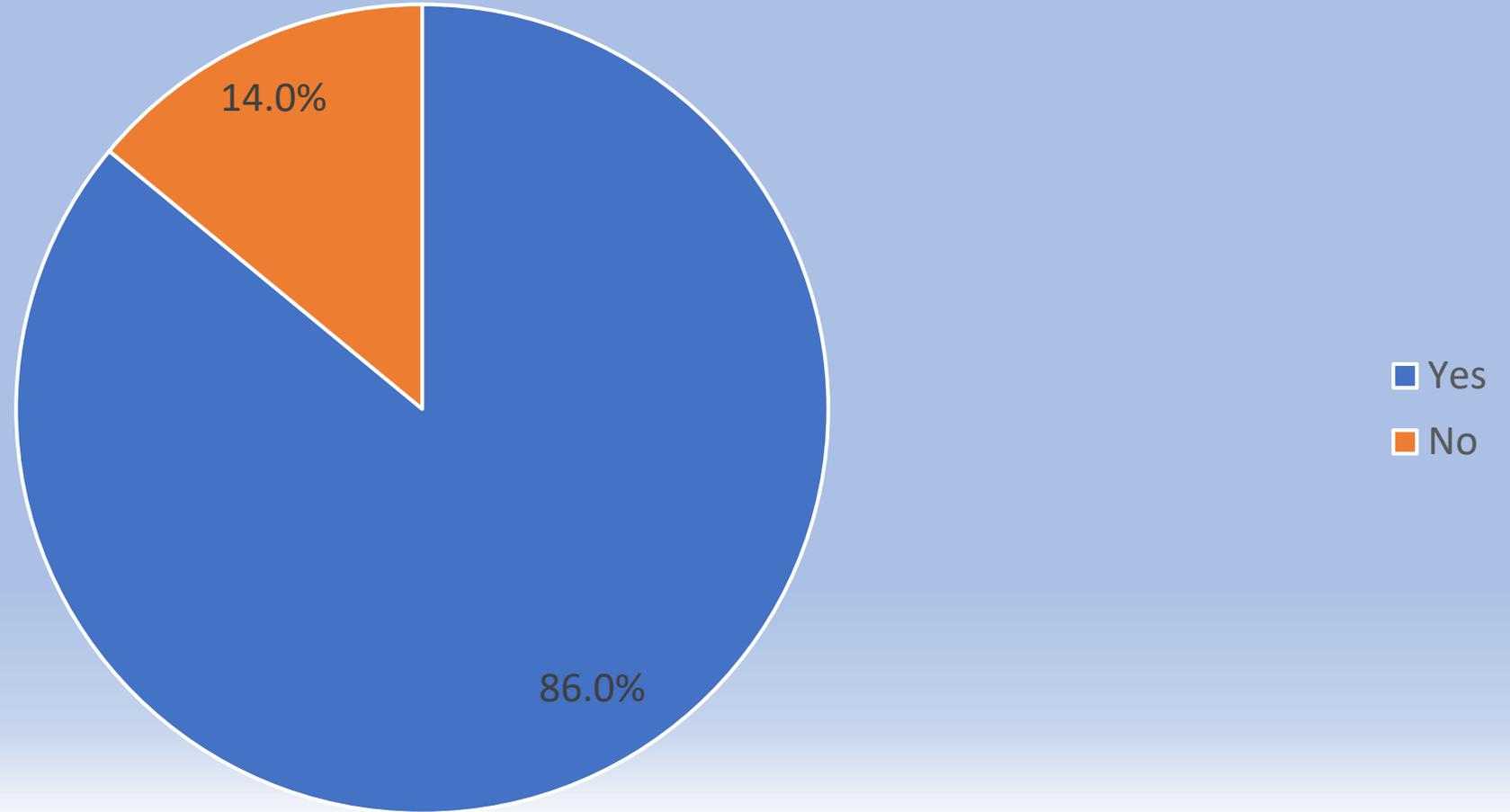
18. Would you support a full-time dedicated trauma nurse lead position if the position was created within the lead agency?



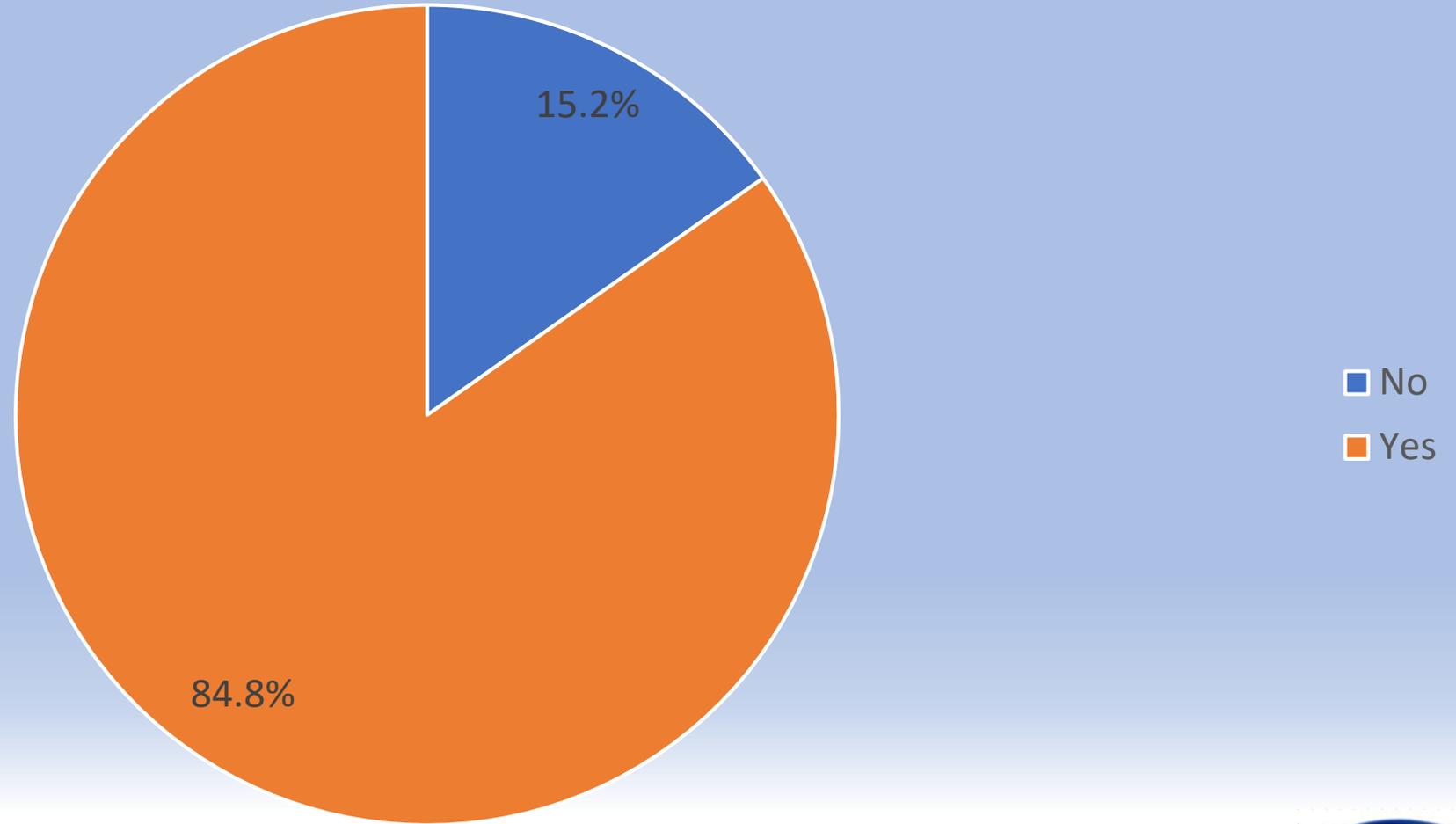
19. Would you support a full-time dedicated stroke nurse lead position if the position was created within the lead agency?



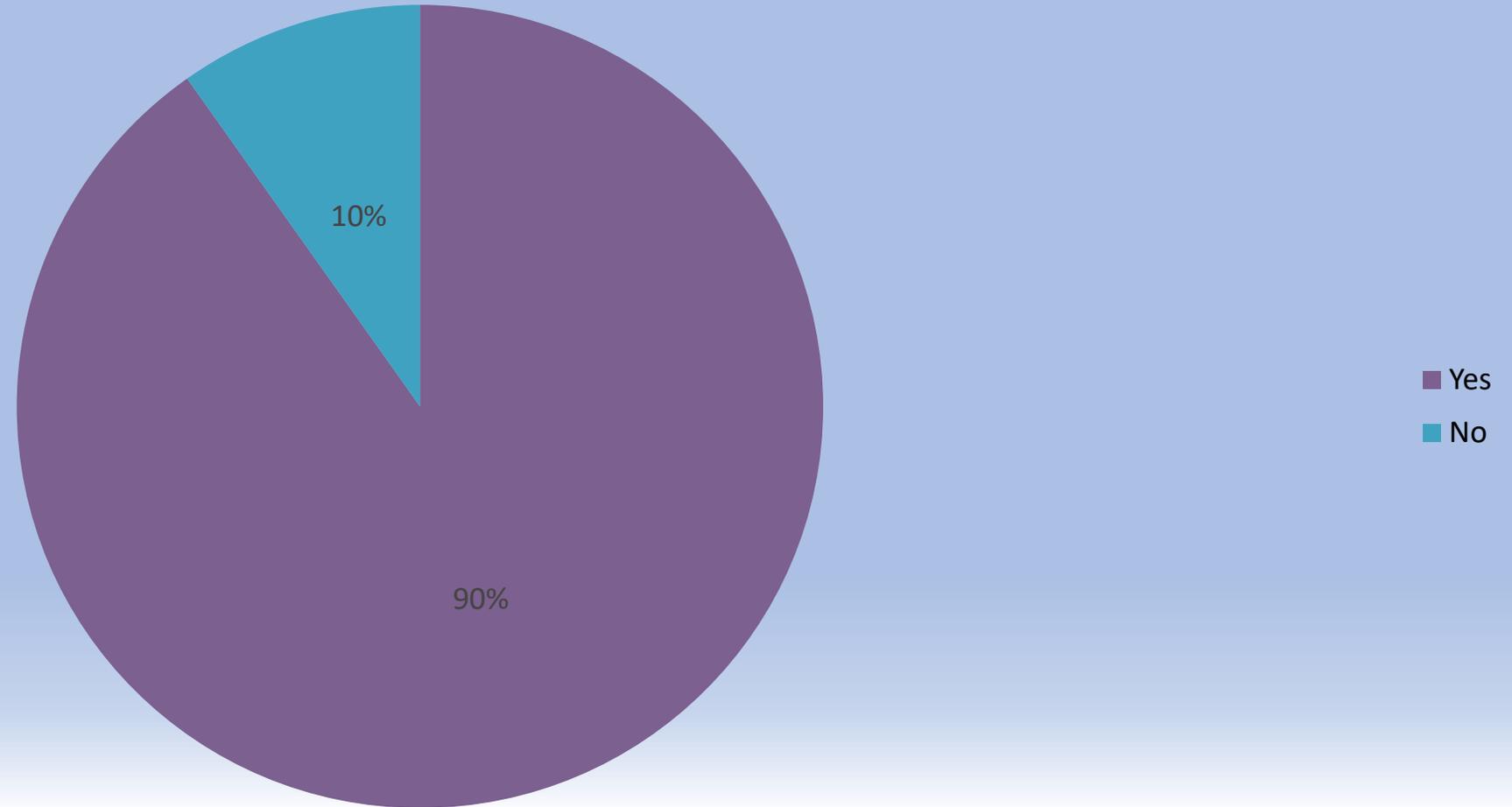
20. Would you support a full-time dedicated STEMI lead position if the position was created within the lead agency?



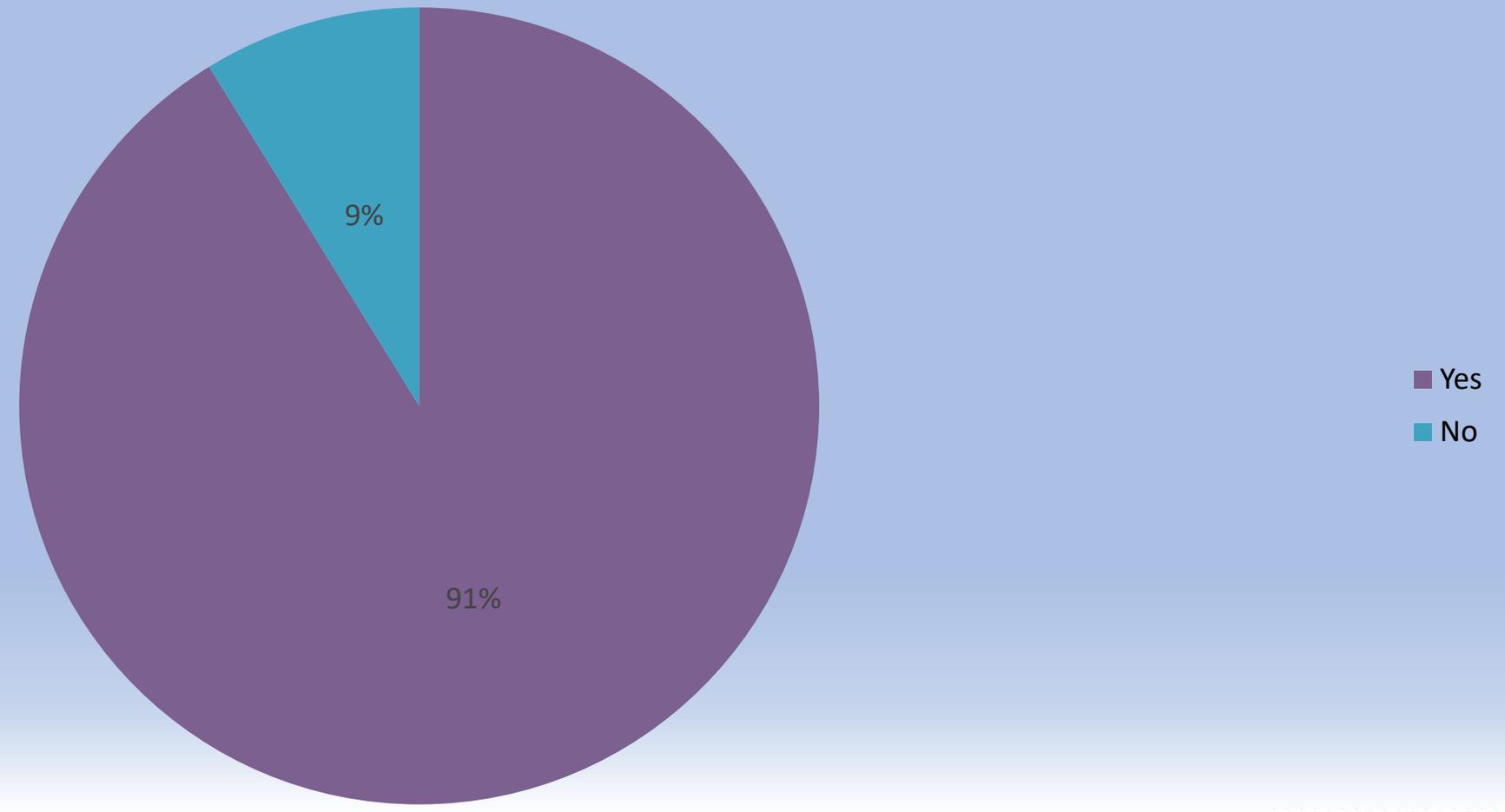
21. Would you support a DHSS funded leadership position for an Office of Emergency Care Medical Director if the position was created within the lead agency?



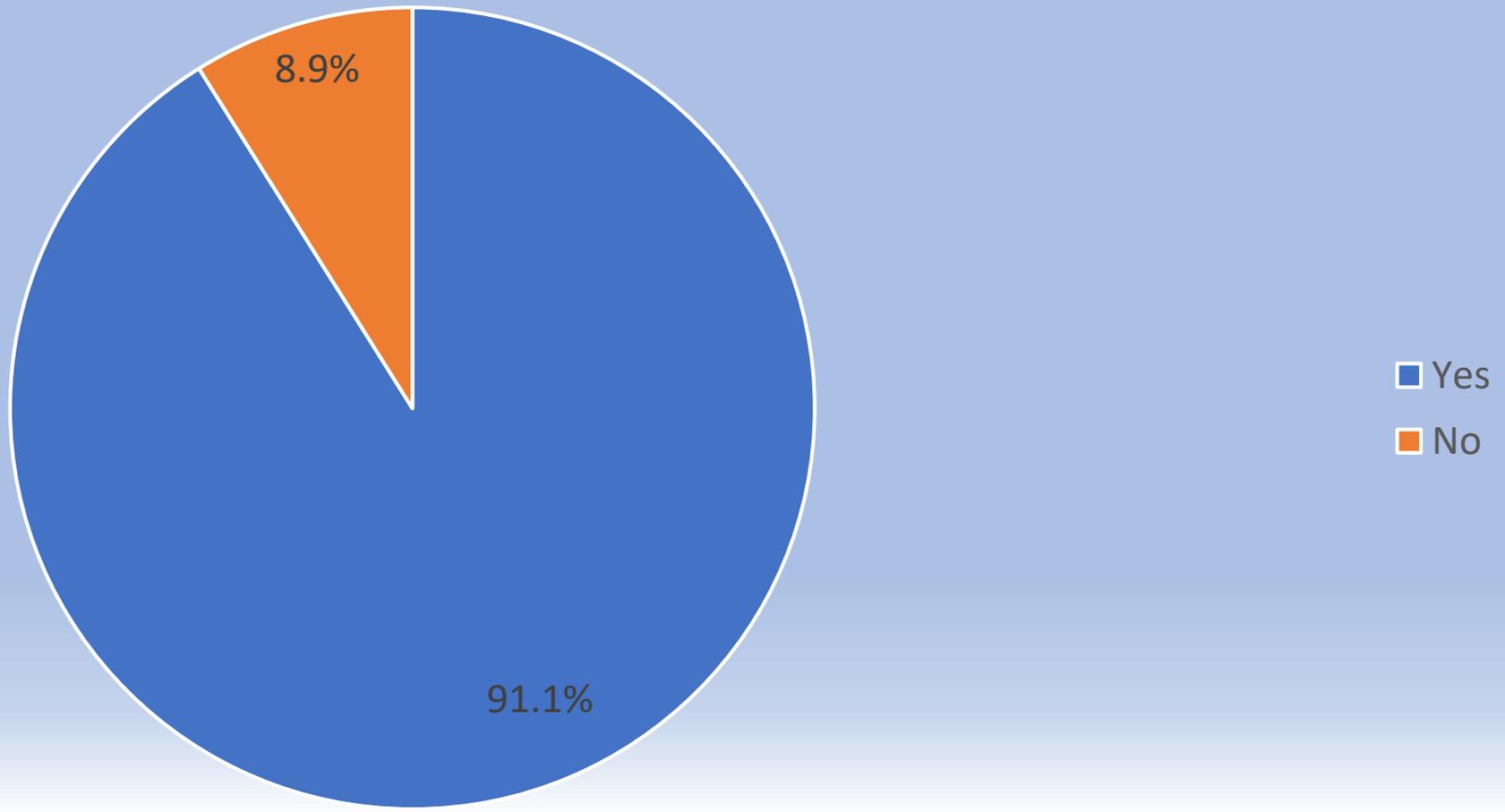
22. Would you like to see a comprehensive strategic plan developed for the further design, development, implementation, and ongoing improvement of a statewide, integrated, regional based/driven trauma system?



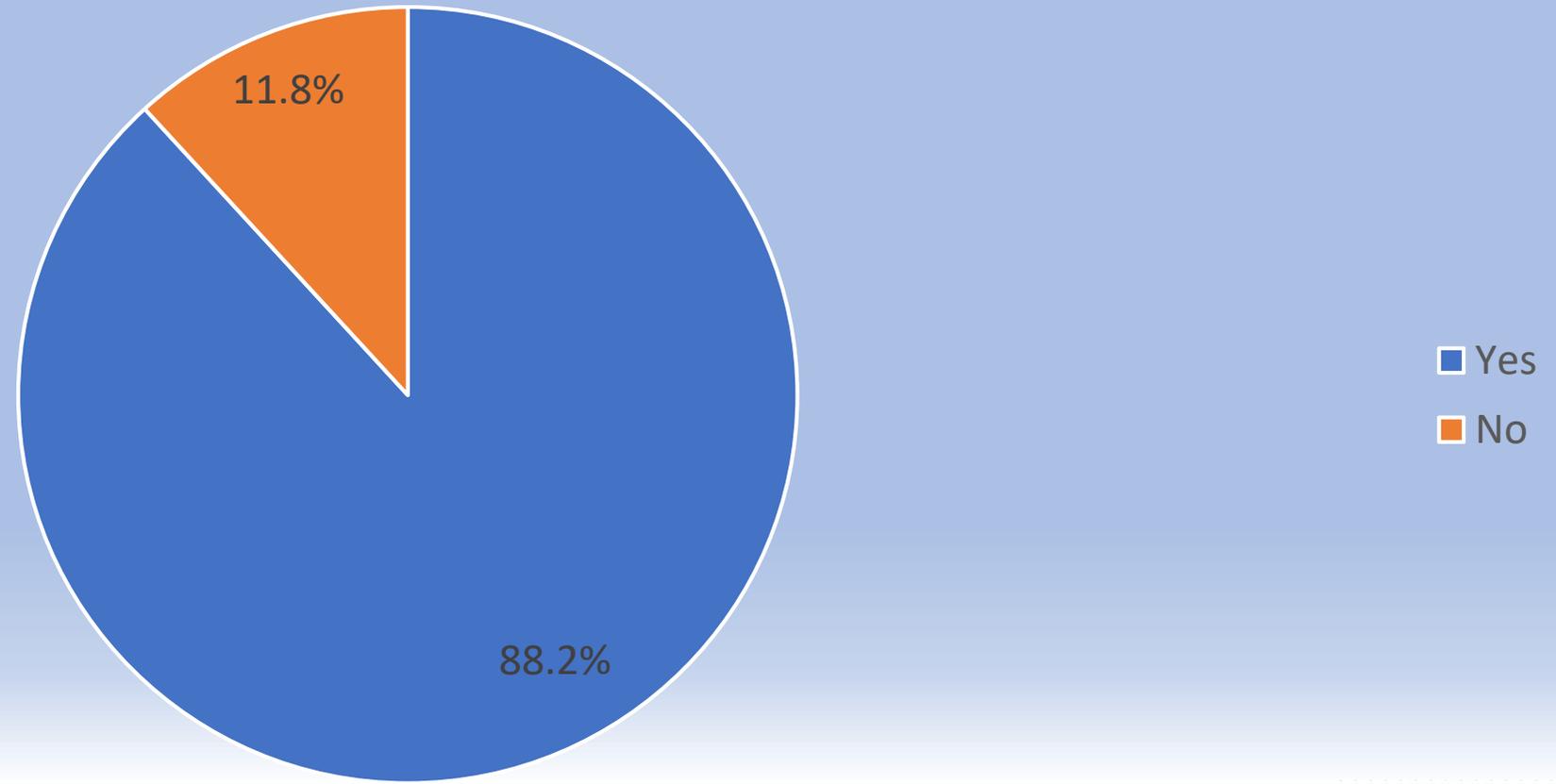
23. Would you like to see a specific budget within DHSS developed to support TCD system development and oversight?



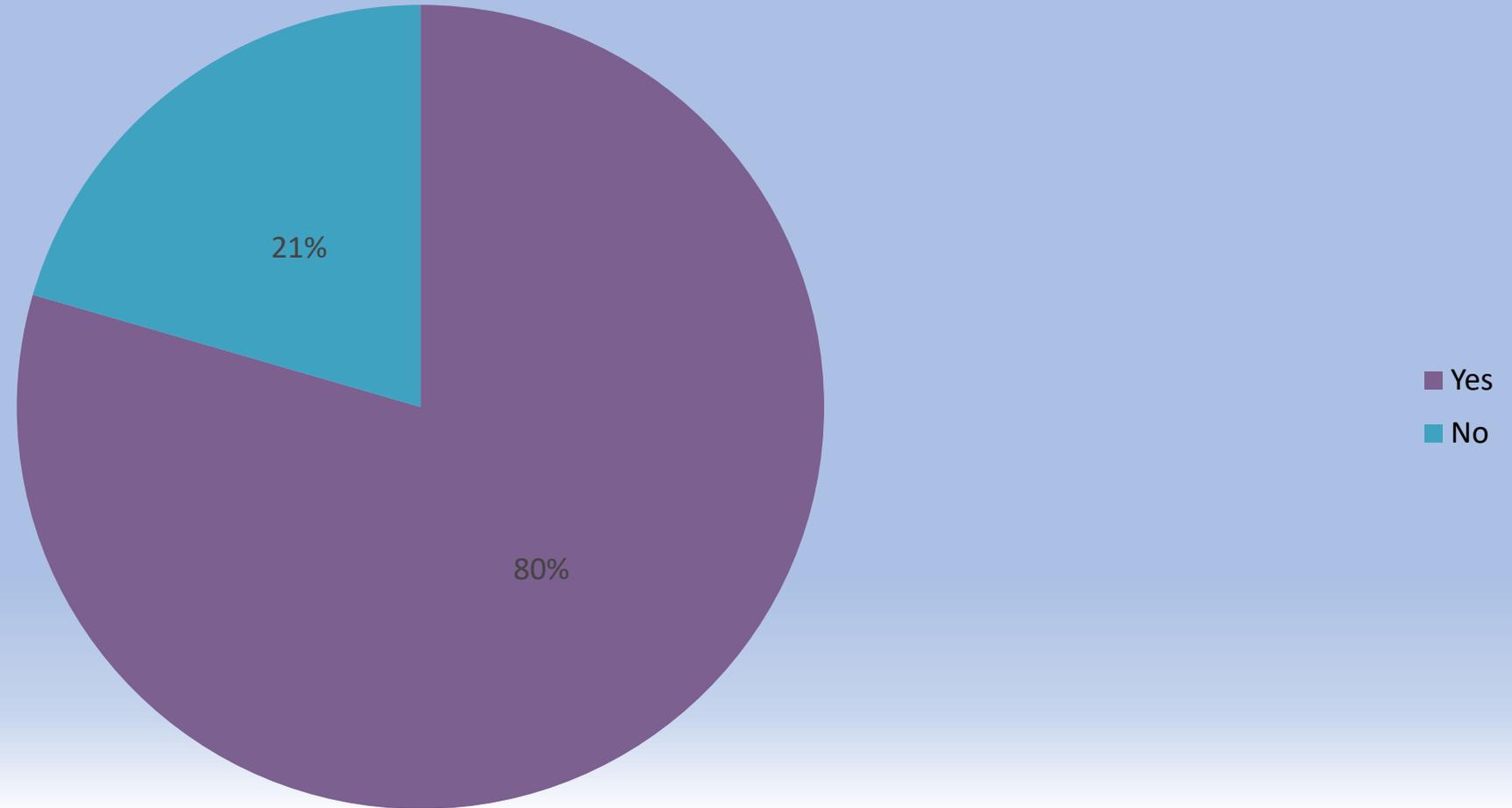
24. Would you like to see roles, responsibilities, and accountabilities defined for all acute care facilities in an inclusive system related to emergency care?



25. Would you like to see a consensus vision and plan for Emergency Care Performance Improvement created? The vision and plan would include which forum will be utilized, who will be responsible for it, who will participate in it, which filters/parameters will be utilized first, and which data sources will be used.



26. Would you like to see all acute care hospitals required to participate in the timely submission of injury data (limited subset) as part of both emergency care center designation (participating hospitals) and hospital licensure (non-participating acute care facilities)?



9. Rank your organizations needs from the TCD Program?

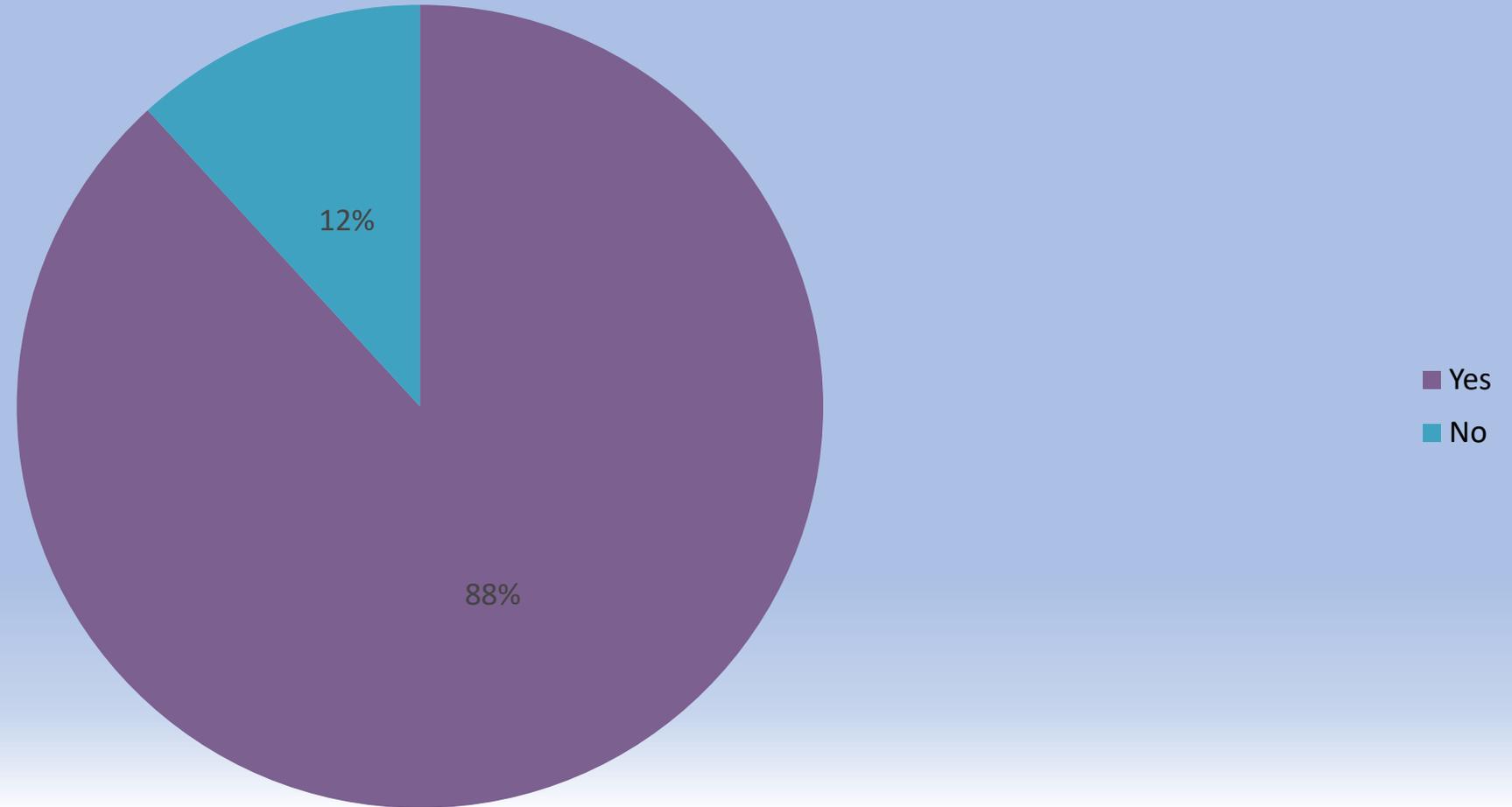
1-Greatest Need to 15-Lowest Need

1. Sustainable funding
2. Standard communication between EMS and hospitals
3. Integration of care for the region
4. Integration of systems for data exchange
5. Ease of data submission
6. Collaborative relationship and buy-in
7. Reports from data submitted

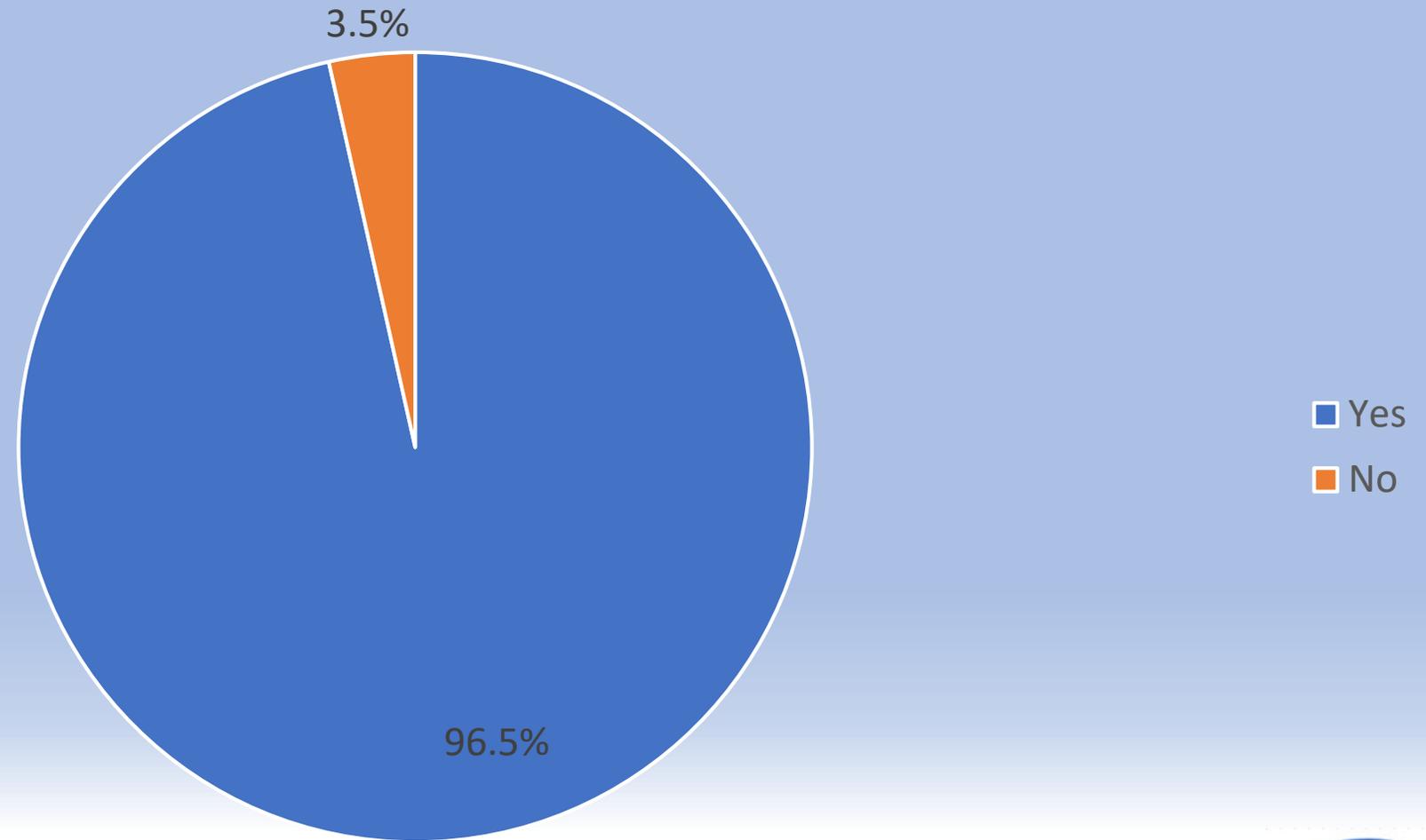
9. Rank your organizations needs from the TCD Program?

8. State leadership expertise in all three areas of TCD Program
9. Leadership
10. Less specific detail in the TCD regulations
11. Participation from all hospitals
12. Strategic alignment of data to include all aspects of care
13. Ability to modify/change the regulations quickly
14. More responsibility at the regional level
15. Educate/provide financial support for rural hospitals

27. Would you like to see all EMS agencies required to complete and submit a MARS compatible record for all patient contacts?



28. Would you like to see TCD Data System and MARS data systems managed in a manner that assures reliability and validity of data and is capable of producing reports that can be used to inform emergency care policy?



Observations

- Need transparent strategic plan
- Provided TCD initiative updates regularly to stakeholders
- Regulations imbalanced (EMS vs hospitals)
- Program champion needed (Dr. Jermyn)
- Increasing interest in regional plans and reporting
- Leverage data integrations (e.g. EHRs)
- Need subcommittee / leaders for each sub-program
- Set timeline for goals and accountability

Funding Structure

- Past analysis considered “attorney client privilege”
- Missouri funding options are possible
- Continue to explore state funding vehicles for all programs
- Written summary of findings and recommendations due Q1 2020

Summary

What is priority of TCD program?

- What is the vision?
- What is mission?

Questions?

Closing Remarks

Dean Linneman, Director
Division of Regulation and Licensure, DHSS

Thank you!

D. Funding Recommendations Memo

Missouri Department of Health and Senior Services

Time Critical Diagnosis Project

Deliverable B: Funding Structures Recommendations

As outlined in the Missouri Time Critical Diagnosis (TCD) System Scope of Work, Havron & Associates conducted a comprehensive review of TCD funding structures in use by other states or otherwise documented in the literature. The intent of the review was to develop funding recommendations which could be implemented in full, or in part, by the State of Missouri. These recommendations do not include funding from the state's general revenue.

I. Summary of Findings

Of the 50 states reviewed, 26 states receive funding for one or all three programs (Stroke, STEMI, and Trauma). Funding is received through grants, legislative funds, and fees collected throughout various state programs.

It is noteworthy, that the State of Idaho has implemented a Time Sensitive Emergency (TSE) Program, which includes their trauma, stroke, and STEMI programs. The Idaho Registry is operated by the Idaho Hospital Association and includes all three separate systems within the one (1) registry. The program funds two (2) FTEs and funds are received from charging hospitals for designation. The amount of the designation cost depends on the level of designation. The Idaho TSE Program is a mandatory program. The program also receives a small amount of money from the EMS General Fund. There is also a \$0.25 on vehicle registrations which goes to EMS Bureau. The state is divided by TSE Regions.

A review of all 50 states regarding EMT/Paramedic Application Fees was also completed. Of the 50 states reviewed, 35 states collect some level of EMT/Paramedic Application Fees. The fees range from late renewal fees only to \$165 for initial application and are higher in some states for late renewals or reinstatement processing.

a) Stroke Funding Findings

Of the 50 states reviewed, eleven (11) receive funding for a stroke program. Of those, nine (9) receive funding from the Paul Coverdell Grant. The Paul Coverdell Grant is a five-year competitive grant administered through the CDC. Grants are awarded from \$700,000 - \$800,000. The new grant cycle was to begin in 2020, but the current grant cycle has been extended for another year. The new grant cycle is currently set to begin in 2021.

One (1) state receives state funding through the tele-stroke program provided through a state university. And one (1) state receives funding as a start-up for their Stroke and STEMI programs.

Individual state information regarding stroke program funding can be found in **Appendix A**.

Missouri Department of Health and Senior Services

Time Critical Diagnosis Project

b) STEMI Funding Findings

Of the states that responded, only one (1) state has funded a STEMI Program and the program was funded as an initial start-up for the STEMI and Stroke Programs. Individual state information regarding STEMI Program funding can be found in **Appendix B**.

c) Trauma Funding Findings

Of the states that responded, twenty (20) states have funded Trauma Programs. Funding is provided through a variety of taxes, vehicle registrations, violations/fines, and limited legislative funding. In some states, funding includes payments to hospitals and administrative costs.

Individual state information regarding Trauma Program funding can be found in **Appendix C**.

d) EMT / Paramedic Application Fees Findings

Of the states that responded, thirty-five (35) states collect some degree of EMT/Paramedic Application Fees. The fees range from late fee renewal only to \$126 for initial application.

Individual state information regarding EMT/Paramedic Licensure Fees can be found in **Appendix D**.

e) Missouri Brain Injury Fund

Havron & Associates was also asked to specially look at the Missouri Brain Injury Fund. Per a November 2018 memo from Brenda Rackers, "...there is currently a brain injury fund where all criminal cases including violations of any county ordinance or any violation of criminal or traffic laws of this state, including an infraction shall be assessed a surcharge in the amount of two dollars. This money goes into a fund titled Brain Injury Fund for the use of DHSS."

II. Recommendations

The Missouri Department of Health and Senior Services is encouraged to explore the following recommendations for funding for the Missouri TCD Program.

a) EMT/Paramedic Application Fees

As seen in the completed review in Appendix D, 70% of the states collect some level of application fee. The fees range from late fees only to \$165 initial application fees, when applicable. Many states apply an escalated fee structure, based upon the level of license / certification. Many others, levy various fees for late renewal and recertification processing.

Missouri Department of Health and Senior Services

Time Critical Diagnosis Project

Example:

If the State of Missouri implemented a \$50.00 licensing fee for each of the approx. 18,600 EMTs/paramedics in the state, revenue generated would be approximately \$186,000 annually. This initial funding could be used to fund TCD advocates, specifically focused on TCD organizational structure and future funding.

Funding Recommendation 1a: Implement Emergency Medical Technician initial and renewal application fees.

Funding Recommendation 1b: Consider a 2 or 3-year application renewal period.

b) Grants

Several states receive grants to fund their trauma, stroke, and/or STEMI programs. Specifically, the Paul Coverdell Grant funded through the CDC is available for state stroke programs. The grant runs in a 5-year cycle and is available again in 2021. One state receives \$750,000 as a recipient of the Coverdell Grant. The awarded grant range is from \$700,000 to \$800,000.

Funding Recommendation 2: Apply for the Paul Coverdell Grant.

Funding Recommendation 3: Research and apply for other grant funding (at all funding levels).

c) Brain Injury Fund

The Missouri Department of Health and Senior Services Time Critical Diagnosis Program should partner with the DHSS Brain Injury program to leverage funding mechanisms and patient care alignment for Stroke and Trauma Programs.

Funding Recommendation 4: Align DHSS Brain Injury Program and TCD programs.

d) Fees and Violations/Fines

Several states have funded millions of dollars to trauma systems through various fees, taxes, and violations/fines.

Example:

The State of Mississippi charges a point-of-sale fee of \$50.00 on ATV/Motorcycle purchases. Mississippi also receives funding from various violations such as speeding, traffic violations, and uninsured motorist penalties. The state also receives trauma funding from various fees related to license plates. Mississippi's current funding for trauma is \$28 million.

Missouri Department of Health and Senior Services Time Critical Diagnosis Project

Funding Recommendation 5: Work to pursue any and all funding mechanisms through fees and violations/fines.

Funding Recommendation 6: Identify a Time Critical Diagnosis Program legislative advocate and create a Funding Subcommittee tasked to identify violations/fines/fee mechanism to be recommended, including, but not limited to: speeding violations fine, recreational motor vehicle purchase surcharge, tobacco sur-charge, alcohol surcharge. The program advocate and subcommittee should be identified by January 31, 2020.

Havron & Associates, LLP would like to thank you for the opportunity to participate in this portion of the project. Missouri's dedication to advancing their TCD program should be recognized, as it is unique and forward-thinking.

Sincerely,

Douglas Havron, RN, BSN, MS
CEO and Senior Planner

Appendix A: Stroke Funding Findings

A. Stroke Programs Funded

- Arkansas - \$9 million per year funded. The state has a tele-stroke program through the University of Arkansas. Funding for stroke carry over from trauma. Stroke is a voluntary program in the state.
- California – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Georgia – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Massachusetts – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Michigan – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Minnesota – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Mississippi - \$450,000 to start Stroke and STEMI programs
- New York – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Ohio – funded by Paul Coverdell Grant (\$700,000-\$800,000)
- Washington - \$750,000 per year. Stroke funded through the Paul Coverdell Grant. There are 4 staff members and they provide small grants to hospitals
- Wisconsin – funded by Paul Coverdell Grant (\$700,000-\$800,000)

B. Stroke Programs Not Funded or Unknown

- Alabama – No funding currently and no registry. Possibility for NIH Grant Funding.
- Alaska – Pending response
- Arizona – No funding and no registry
- Colorado – Pending response
- Connecticut – No funding and no registry
- Delaware – Pending response
- Florida – No funding and no registry
- Hawaii – Pending response
- Idaho – Registry just started 1/2019
- Illinois – No funding
- Indiana – No funding and no registry
- Iowa - No funding. Get with the Guidelines registry
- Kansas – Pending response
- Kentucky – No funding
- Louisiana – Pending response
- Maine – Pending response
- Maryland – No funding
- Montana – Pending response

Appendix A: Stroke Funding Findings

- Nebraska – No funding. Adopting Get with the Guidelines registry
- Nevada – Pending response
- New Hampshire – Pending response
- New Jersey – Pending response
- New Mexico – No funding and no registry
- North Carolina – No funding
- North Dakota – Pending response
- Oklahoma - Pending response
- Oregon - Pending response
- Pennsylvania - Pending response
- Rhode Island - Pending response
- South Carolina - Pending response
- South Dakota – No funding and no registry
- Tennessee - No funding. State registry through university in Tennessee.
- Texas - Pending response
- Utah - Pending response
- Virginia – No funding and no registry
- West Virginia – No funding and no registry
- Wyoming - Pending response

Appendix B: STEMI Funding Findings

A. STEMI Programs Funded

- Mississippi - \$450,000 to start Stroke and STEMI programs

B. STEMI Programs Not Funded

- Alabama – No funding and no registry. Program just beginning October 2019
- Alaska - Pending response
- Arizona – No funding and no registry
- Arkansas – No funding. The STEMI registry was just developed and a recently formed STEMI Council. STEMI is a voluntary program in the state.
- California – No funding and no registry
- Colorado - Pending response
- Connecticut – No funding and no registry
- Delaware - Pending response
- Florida – No funding and no registry
- Georgia - Pending response
- Hawaii - Pending response
- Idaho – Registry just started 1/2019
- Illinois – No funding and no registry
- Indiana – No funding and no registry
- Iowa – No funding and no registry
- Kansas - Pending response
- Kentucky – No funding
- Louisiana - Pending response
- Maine - Pending response
- Maryland – No funding
- Massachusetts - Pending response
- Michigan – No funding and no registry
- Minnesota - Pending response
- Montana - Pending response
- Nebraska – No funding
- Nevada - Pending response
- New Hampshire - Pending response
- New Jersey - Pending response
- New Mexico – No funding and no registry
- New York - Pending response
- North Carolina – No funding
- North Dakota - Pending response
- Ohio – No funding and no registry
- Oklahoma - Pending response
- Oregon – Pending response

Appendix B: STEMI Funding Findings

- Pennsylvania – Pending response
- Rhode Island - Pending response
- South Carolina - Pending response
- South Dakota – No funding and no registry
- Tennessee – No funding and no registry
- Texas -
- Utah - Pending response
- Vermont - Pending response
- Virginia – No funding and no registry
- Washington – No funding. Working on funding through legislature for 2020.
- West Virginia – No funding and no registry
- Wisconsin - Pending response
- Wyoming - Pending response

Appendix C: Trauma Funding Findings

A. Trauma Programs Funded

- Arizona - \$23.5 million per year funded. 28% of tribal gaming tax goes to trauma hospitals/EMS. About \$18 million of the \$23.5 million goes to hospitals. 90% of the funding goes to Level 1 trauma centers. \$400,000 administrative fees from funding.
- Arkansas - \$20 million per year funded. Percentage of tobacco tax goes to the trauma fund. Some of the fund is allocated for administrative activities, but most of the fund goes back to the trauma centers.
- Colorado - \$7.2 million per year. There is a \$2 fee on car registrations. Almost all the \$7.2 million was distributed to EMS through grants. Funding does not support trauma patient services but does cover administrative costs.
- Florida – \$15.5 million per year. \$13 million is from a portion of traffic fines (specifically red-light camera). This money goes directly to hospitals. \$2.5 million of the \$15.5 million is for administrative costs including staff and costs of hospital surveys each year. Approximately half of the \$2.5 goes to survey costs. They are strongly considering ACS verification only.
- Georgia - \$22,565,420 per year. Total funding \$22,565.420 for FY19. Trauma funding from fireworks tax (\$805,214) and Super Speeder Collection (\$5,016,127). Legislative funding also. Funding includes EMS; allocations to hospitals/trauma centers; staffing and operations.
- Idaho - \$300,000 per year. Idaho has a TSE (time sensitive emergency) program which includes trauma, stroke, STEMI. The registry is through the Idaho Hospital Association. There is 1 registry which has 3 separate systems within the 1 registry. There are 2 FTEs for the program. Funds from charging facilities to designate, pay depending on level of designation. Mandatory to participate. Small amount of money from EMS general fund. \$0.25 on vehicle registrations goes to EMS Bureau. State is divided by TSE Regions.
- Illinois - \$3.5 - \$5 million per year. Trauma Center Fund comes from traffic violations in the state. Traffic fines stay in the region (11 regions) where fined. The Department of Human Services (Medicaid) provides extra funding. State only has Level 1 and 2 trauma centers. They are moving toward 1 record which includes 1 event and importing EMS data.
- Indiana - \$175,000 - \$750,000 per year. Trauma funding from NITSA grant - \$175,000. Spinal cord and brain injury fund - \$1.4 million and they are permitted to use up to 50% of that fund for trauma. They only use approximately \$200,000 of the \$750,000 available to them.
- Iowa - \$300,000 per year. 75% grant funded. \$250,000 funded from PHHS Block Grant. \$65,000 funded from the state for 2.35 employees. Department leverages other programs in the state (for example the Hospital Preparedness Program has provided almost \$800,000 over the past 2 years. They rely a lot on local partners.

Appendix C: Trauma Funding Findings

- They also receive a small amount from other departments who don't use all their grant money in a year (\$2,000-\$3,000).
- Louisiana - \$2.5 million per year. LERN trauma system includes stroke and STEMI. Funding includes trauma, stroke and STEMI. Funding from state general fund and federal LNCCA (low-income and needy care collaboration agreement) funds.
 - Maryland - \$12.7 million per year. \$5 on all car registrations every 2 years (\$2.50 per year). Fund pays for hospitals, physicians, follow-up care of trauma patients on Medicaid and \$200,000 administrative costs.
 - Michigan - \$3.5 million per year. Funded from Crime Victim Services fee.
 - Mississippi - \$28 million per year. Trauma Care Systems funding from the following fees: Speeding, Reckless, & Careless Driving Violations \$80.00; Point-of-sale Fee ATVs/Motorcycles \$50.00; Distinct License Tag Plate Fees \$44.00; Implied Consent Law Violations \$30.00; Special License Tag Fees (EMS Technicians) \$25.00; Special License Tag Fees (Trauma Care) \$24.00; Special License Tag Fees (EMS Supporter) \$24.00; Traffic Violations \$15.00; License Plate Tags/Decals \$4.00; Uninsured Motorist Liability Insurance Penalties Amount Varies; EMS Operating System - Implied Consent Law Violations \$15.00; EMS Operating System - Traffic Violations \$5.00.
 - New Mexico - \$50,000
 - Nebraska - \$1.2 million per year. Funding for trauma from motor vehicle registration tax. 2001 tax adopted but not increased since adoption. Small amount (\$20,000) from Preventative Health Block Grants for training/books.
 - Oklahoma - \$14 million - \$20 million per year. Funding from traffic fines, tobacco, criminal fines, and moving violations.
 - South Dakota - \$200,000 - Funding received from EMS, STEPP grant, HPP grant, FLEX grant. Money from grants pays for out of state reviewers for Level 4 & 5 designations completed by the state.
 - Tennessee - \$7.5 million per year. Funding through \$.02 per pack of cigarettes sold. Funding has decreased over the years. 1 staff paid through funding. They do both ACS and state verifications. No cost to state for verifications, hospital pays all costs.
 - Washington - \$20 million per year. Medicaid program matches funds (written into legislature). Fee on car sales and traffic tickets.
 - West Virginia - Funding for staff (5 FTEs) through legislation. They don't fund/reimburse hospitals.

B. Trauma Programs Not Funded

- Alabama – No funding
- Alaska – No funding

Appendix C: Trauma Funding Findings

- California - MADDY funds for uncompensated care. No state funding. 33 local EMS agencies throughout the state and each agency manages own funding. L.A. and Alameda Counties receive a portion of property assessments for funding.
- Connecticut – No funding
- Delaware – No funding
- Hawaii – Pending response
- Kansas – Pending response
- Kentucky – No funding
- Maine – No funding
- Massachusetts – No funding
- Minnesota – No funding
- Montana – No funding
- Nevada - No funding
- New Hampshire – No funding
- New Jersey – No funding
- New York – No funding
- North Carolina – No funding
- North Dakota - Pending response
- Ohio – No funding
- Oregon – No funding
- Pennsylvania - Pending response
- Rhode Island – No funding
- South Carolina - Pending response
- Texas -
- Utah - No funding
- Vermont – No funding
- Virginia – No funding. 2018 trauma funding was \$8 - \$8.5 million from driver's license reinstatement fees. Old legislation revoked a driver's license when a Virginia resident didn't pay child support, jaywalking, etc. Legislation changed in 2019 to update the driver's license reinstatement to vehicle related incidents only. Due to an admin error, the fund was zeroed out and they now have no funding. They are working on funding for 2020, but don't know if they will be successful.
- Wisconsin - Pending response
- Wyoming - Pending response

Appendix D: EMT Application Fee Findings

A. States Collecting Paramedic Licensing Fees

- Alabama - \$12/2yrs initial/renewal; \$62 expired renewal
- Alaska - \$25 application/renewal; \$50 expired renewal
- Arkansas - Initial \$20 recertification fee: EMT \$20.00, AEMT \$20.00, Paramedic \$25.00
- California - Multiple schedules - generally \$75 initial and renewal
- Colorado - \$2.55 charge for all initial and renewal EMS provider applications. \$39.50 FBI + \$10 vendor fee payable to the fingerprint collection vendor you choose
- Delaware - \$10 fee
- Florida - Emergency Medical Technician Fees Certification Application Fee \$35; Exam Fee \$80 (payable to NREMT); Paramedic Fees Certification Application Fee \$45; Exam Fee \$125 (payable to the vendor); Refresher Equivalent Exam Fee \$80 (payable to NREMT)
- Georgia - EMT B is \$25, EMT I is \$50, and Paramedic is \$75
- Hawaii - \$20 application fee
- Idaho - Advanced EMT and Paramedic candidates must include a \$35 application fee with their reciprocity application; \$100 for new nation registry application
- Illinois - \$45 initial fee; Applying for Reciprocity must submit the \$50 application fee as well as the amount of the initial license
- Indiana - \$50 reapplication fee
- Iowa - \$30 fee must be paid prior to license issuance; Renewals FR/EMR/EMT-B/EMT No Fee; EMT-I/AEMT \$10; EMT-PS/PARAMEDIC \$25
- Kansas - EMR \$20; EMT \$30; AEMT \$30; Paramedic \$50; Double fees for late renewal
- Kentucky - "EMT Initial \$40 Fee (\$30 Certification Fee + \$10 Application Fee)/\$25 Renewal Fee; EMT Reciprocity \$165 Fee (\$125 Reciprocity Fee + \$30.00 Certification Fee + \$10 Application Fee); EMT Reinstatement \$240 Fee (\$150 Reinstatement Fee + \$30 Certification Fee + \$10 Application Fee + \$50 Late Fee); EMT Temporary Cert - \$165 Fee (\$125 Temporary Fee + \$30 Certification Fee + \$10 Application Fee)
- Louisiana - Many variations (municipal, private, military, etc.); Initial - EMR \$10 / EMT \$15 / AEMT \$40 / Paramedic \$50; Renewal - EMR \$5 / EMT \$10 / AEMT \$35 / Paramedic \$45
- Maine - \$80 fee; Reciprocity EMT \$25 / AEMT \$50 + \$21 background check
- Massachusetts - \$150

Appendix D: EMT Application Fee Findings

- Michigan - \$40 initial fee; Renewal fee \$25; \$50 late renewal fee
- Minnesota - National Registry fee - \$70; No charge for state, initial or renewal.
- Mississippi - Generally \$40; Extensive grid of pricing
- Montana – Application fees: \$30 EMR / \$50 EMT / \$70 AEMT / \$100 Paramedic. Paid to the Dept. of Labor every 2-years.
- Nebraska - \$45.25 background check fee
- Nevada - Certification renewal - \$24; Certification and Attendant License renewal - \$34; Instructor Endorsement Renewal is an additional - \$15; Late Renewal fee - \$50
- North Carolina – No application fee. Do collect \$38 for FBI background check processing.
- New Mexico - EMT \$30 / EMTI \$40 / EMTP \$50; Late 3x amount; Reinstatement 6x amount
- New York - Fee is \$25 for EMT, and \$50 for all advanced EMT levels
- Ohio - \$75
- Oklahoma - EMT \$85; AEMT \$160; Paramedic \$210
- Oregon - EMR - \$45; EMT - \$110; AEMT - \$125; Oregon EMT-Intermediate - \$125; Paramedic - \$290
- Rhode Island - EMT and AEMT-C Application Fee \$120; EMR, AEMT, and Paramedic Application Fee \$80
- Tennessee – Application Fees EMR \$24 / EMT/AEMT \$65 / Paramedic \$75 / Paramedic CC \$90 Late fee (<60 days) \$25 Reinstatement fee (late > 60-days) \$100
- Texas - Initial Fee ECA or EMT \$64; Advanced EMT or EMT-P \$96; Licensed EMT-P \$126; Reciprocity (all levels) \$126
- Utah – Initial application fee \$108 / Renewal \$60. Only certification is EMT.
- Wisconsin – No initial application fee; however, does charge \$50 later recertification fee.

B. States Not Collecting or Unknown EMT Application Fees

- **No application fees**
 - Arizona – No application fee
 - Maryland – No application fee
 - New Hampshire - No application fee

Appendix D: EMT Application Fee Findings

- New Jersey – No application fee
 - North Dakota – No application fee
 - Pennsylvania – No application fee
 - South Dakota – No application fee
 - Vermont – No application fee
 - Virginia – No application fee
 - Washington – No application fee
 - West Virginia – Pending response
 - Wyoming – No application fee
-
- **No inquiry response**
 - Connecticut – No response/Unknown
 - South Carolina – No response/Unknown

IV. Enclosure

A. Data Crosswalk

See "Enclosure A - Data Crosswalk" Excel worksheet.