OKLAHOMA TRAUMA SYSTEM FUNDING
Alternatives for Strengthening Trauma Care

BACKGROUND

Oklahoma experienced a crisis over several years in the ability of the state's major trauma centers in Tulsa and Oklahoma City to handle overwhelming demand for care of the seriously injured from throughout the state. The most critical issue was the declining number of physicians in major trauma specialties such as neurosurgery and orthopedics who were available to participate in trauma call. Other issues included a substantial proportion of uninsured trauma patients and the lack of a state system to assure that patients received necessary care at the appropriate trauma hospital.

Due to strong and effective leadership, Oklahoma's hospitals, physicians, pre-hospital personnel and policymakers have forged a common quest for timely access and excellence in care for the seriously injured. Significant state financial resources have been committed, a series of initiatives have been launched to stabilize the system, and an organizational structure has evolved to carry them out.

The State of Oklahoma has carried out several initiatives in support of trauma care in conjunction with trauma system development. Significant among those initiatives has been an expansion of Medicaid eligibility for Oklahoman's. Small business initiatives and other state mandates have also been enacted to provide even broader coverage to the working uninsured, and those whose family incomes are above the Federal Poverty Guidelines without access to affordable health insurance.

In addition, Oklahoma hospitals receive enhanced Medicaid reimbursement, at Medicare rates, for trauma patient care. This provides significant financial support to trauma hospitals minimizing losses on trauma patients covered by the Medicaid program. Level I through Level III trauma centers in Oklahoma also receive incremental Medicaid outpatient reimbursement on all Medicaid outpatients who present to hospital Emergency Departments. Level I and Level II trauma centers are also paid \$300 per Medicaid outpatient; Level III trauma centers receive \$200; and Level IV and non-designated hospitals receive \$100.

Oklahoma physicians providing trauma care in teaching hospitals and EMS ground transport also receive enhanced Medicaid reimbursement at Medicare rates.

The Oklahoma Trauma Fund established in 2001 provides between \$24 and \$27 million per year to participating trauma centers, physicians, ground, and air ambulance services providing care to injured patients with an Injury Severity Score greater than 8.

At this point, a major objective is to assess the funding system's strengths and weaknesses and modify it as appropriate to strengthen this permanent, ongoing support structure that will enable optimum use of trauma care resources, support continual

development of the trauma system, and expansion into other “time sensitive” emergency services such as stroke and heart attacks for the next decades.

CURRENT TRAUMA FUND PAYMENT SYSTEM

The Oklahoma Trauma Care Fund provides support to hospitals, EMS agencies, and physicians providing trauma care to uninsured patients traumatically injured in Oklahoma. Initially, the fund provided support to hospitals and EMS agencies only; however, in December 2005, physician reimbursement was added to the support program.

Of the total collections of $80 million for the period August 2001 through April 2008, $72 million, or 90%, has been allocated to healthcare providers for uncompensated trauma care, and $8 million, or 10%, has been allocated to the Department of Health-Trauma Division for operating funds. A summary of $72 million in Trauma Fund and the corresponding $168 million in total uncompensated care costs by sector is as follows:

- $61.6 million/$150.7 million to support hospital care
- $5.2 million/$11.2 million to support EMS (Ground 10%; Air 90%)
- $4.9 million/$6.0 million to support physicians

Overall, and since its inception, the Oklahoma Trauma Fund has reimbursed providers forty-three percent (43%) of uncompensated costs for the treatment of trauma patients with Injury Severity Scores of nine (9) and above. There is therefore, $96 million to date of unfunded trauma care being provided in Oklahoma. This supports continued work on behalf of the citizens, visitors, and providers of trauma care in Oklahoma to seek additional sources of funding over and above the current system which relies primarily on Tobacco Tax initiatives.

Payment Parameters

Eligibility for payment from the Trauma Fund to hospitals has been established including payment only to State of Oklahoma verified trauma centers (Level I through IV), for cases with an Injury Severity Score greater than 8.

Eligibility for payment from the Trauma Fund to EMS ground agencies has been established based upon a base rate plus mileage, for trauma cases with an Injury Severity Score greater 8. Payment for uncompensated air transport is based upon the same methodology; although at significantly higher rates. The Trauma Fund receipts are allocated 70% to hospital and EMS providers, with unclaimed physician funds being available as well.

In December 2005, the first payments were made to physicians providing uncompensated care to trauma victims. Eligibility for payment from the Trauma Fund to physicians has been established including development of two tiers of physician specialties (Tier A and B), for cases with an Injury Severity Score greater 8. To date,

there have been five physician distributions, and ten hospital/EMS agency distributions. The Trauma Fund receipts are allocated 30% to physician providers. Due to administrative burdens, physicians in Oklahoma as a whole do not provide sufficient dollars in eligible claims to the fund, leaving unused dollars available for the hospital and EMS providers.

To date, over $12 million of unclaimed physician funds have been redistributed to hospitals and EMS agencies.

OKLAHOMA TRAUMA FUND PROBLEMS & OPPORTUNITIES

The Oklahoma Trauma Fund has been in existence since 2001 distributing funds to trauma care providers in Oklahoma to compensate them for uninsured trauma patient care. Overall, the way the funding was structured has been successful, and the Trauma Fund has been responsive to requests from significant stakeholders like physicians who were added as eligible providers in 2005. Seven (7) years since its inception, it is time to thoroughly review the program and to look at additional enhancements or changes that should be considered for the future.

Significant challenges for the Trauma Fund are outlined below:

- Administrative and patient care burdens are the responsibility of the State, physicians, hospitals and EMS agencies.
- Significant disparities exist in cost to charge ratios among the Level I and Level II providers located in Oklahoma City and Tulsa
- Hospital payment for call coverage is widespread in Regions 7 and 8; but generally not so in rural areas
- There is a need to review and possibly reduce the number of physician specialties eligible for payment (Tier A and B)
- Administrative capabilities vary between the larger (Regions 7 and 8) and smaller RTAB's which suggests grouping smaller RTAB's together for administrative purposes may make sense
- A new low severity Level II Trauma Center in Oklahoma City wouldn't get paid for the majority of its volume (ISS 0-8); lower severity volume has a higher proportion of self pay patients than higher severity volume (ISS >8)
- There is a need to assess other state payment models (NM, WA, TX, and GA)
- Currently there is no provision in the rule for payment to Rehab facilities

EMS/TRAUMA SYSTEM VISION

An integrated EMS/Trauma Division within the Oklahoma Department of Health is recommended for the future to enhance synergies that exist within the two agencies.

The vision for an integrated EMS/Trauma Division in Oklahoma should incorporate the following concepts for the Trauma Fund.

- Oklahoma's Trauma Fund should fund the optimal trauma system for injured Oklahoman's
- It should also continue to support hospital involvement in uninsured and underinsured trauma care
- It must increase support for physician involvement in trauma care, particularly in rural Oklahoma
- It must support rural trauma care including endeavors such as:
  - Upgrading of Norman, Lawton, Enid, Muskogee, and McAlester Trauma Centers
  - Consider the notion of grouping LIV's contractually to function on a combined basis as rotating LIII's
  - EMS Co-ops and other resources to support the crisis in rural EMS in Oklahoma
- It should support Oklahoma trauma system infrastructure development for example,
  - RTAB empowerment to determine regional distributions
  - Funding for feasibility studies to explore upgrading a trauma center's current level of designation
  - Other support to continue to build the system

TRAUMA FUND ALLOCATION MODEL ALTERNATIVES

There are two basic models available to analyze Oklahoma Trauma Fund allocation alternatives. The models are:

1. System Sector Pool Allocation
2. Regional Allocation

System sector pool allocation involves allocating funding into primary system sector pools for hospitals, EMS providers, and physicians. Then within each primary pool, creation of sub-pools is an option to consider.

Regional allocation involves allocating funding in three major types of regions; urban regions, rural regions with significant trauma resources, and rural regions without significant trauma resources. Within these three types of regions needs among providers vary due to the level of resources, or lack thereof that exists in relation to the demand for trauma care.

Although funding alternatives may require rule changes in order to accomplish, it is always desirable to review and have flexibility to update the funding requirements as circumstances change in the marketplace.

ALLOCATE FUNDS TO SYSTEM SECTOR POOLS & SUB POOLS

System sector pool allocation involves allocating funding into primary system sector pools for hospitals, EMS providers, and physicians. Then within each primary pool, creation of sub-pools is an option to consider which provides a mechanism to assure funding for specifically identified priorities.

The following is a graphic example of the funding allocation under the current model with two primary system sector pools; hospital/EMS and physicians, compared to an expanded system which incorporates primary pools and sub-pools.

	2008	2009
A. Trauma Hospitals	**77%**	**X%**
o Regional Trauma Centers (1, 2 & S3)		x%
o Rural Hospitals		x%
o Trauma Rehab		x%
o Development of Additional TC Capacity		x%
B. Trauma Physicians	**6%**	**X%**
o Regional Trauma Centers		x%
o Scarce Specialty Support		x%
o Rural Communities		
C. EMS	**6%**	**X%**
o Air/Ground Transport Uncompensated Care		x%
o EMS Co-ops/Resources		x%
D. Infrastructure Development/Admin.	**10%**	**10-15%**
o Trauma Division Operations		x%
o OKC & Tulsa Transfer System		x%
o RTAB Support/Dev. Grants		x%
	100%	**100%**

TRAUMA HOSPITAL POOL & SUBPOOLS

A. Regional Trauma Centers (LI, LII, Backup/Regional LIII's)

- Region 7 & 8 LI/II/Backup LIII's, plus new OKC LII
- Other LII/III's (Norman, Lawton, Enid, Muskogee, McAllister)
- Pay based upon severity adjusted portion of uninsured care pool
- Pay flat rate for performance/readiness costs
- Develop Quality Bonus Program for Backup/Regional LIII's
- Physician payments are made through hospital (physician pool)

B. Rural Hospitals (Level III & Level IV)

- Pay based upon severity adjusted portion of uninsured care pool. (point sys).
- Physician payment thru hospital (see physician pool)
- Consider performance threshold determined by local resources/capacity for care provided in own community based upon Dr. Cathey's assessment. Incorporate into Quality Bonus Program similar to CMS.
- This provides an incentive for hospitals to keep trauma patients that they can treat instead of simply transferring them to a higher level of care; often unnecessarily.

C. Trauma Rehabilitation

1. Full costs of:
    - Avoidable acute care days
    - Current unfunded trauma care in rehab facilities
    - Unfunded trauma care paid for by hospitals
    - Longer rehab LOS with funding (cost unknown)
    - Additional rehab patients drawn by funding
2. Less cost of avoidable days (at 150% of cost of rehab day)
3. Net cost applied proportionately to pool, or until exhausted (approx $707K/Yr)
4. Set payment at Medicaid rate (or ½ of hospital payment; approx $500/day) with a cap on total amount available for rehab per year.
5. Payment mechanism
    - Pay through hospital with reimbursement from rehab pool
    - Set up direct payment system

D. Quality/Performance Bonus Pool

CMS was the first payor to establish increased reimbursement for higher rates of quality and/or performance in the hospital and physician setting. Given this model, the Trauma Fund should consider the benefit of rewarding providers who demonstrate higher performance than their peers, or than was provided previously. An example of such would be a trauma center or physician group that forms a community-wide resource for hand trauma, or facial trauma. These resources are in short supply throughout Oklahoma which will require unique solutions to solve.

<u>Scarce Specialty Support</u>

- DOH directly contracts with physician entities who commit to provide hard to find specialty coverage (hand, ophthalmology)
- Offer community contract through RTAB
- Provide bonus payments
- Customize arrangements as needed

E. Development of Additional Trauma Center Capacity

- Provide financial support to hospitals seeking to upgrade their designation (Planning assistance to St. Anthony's and Comanche County for example)
- Development grants for LII-LIII Trauma Centers in targeted regions (Muskogee and McAlester) for Feasibility studies/Planning/Trauma Registry/TNC development, etc.
- Payment for portion of ISS 0-8 for new LII in OKC
- If unused, then back to hospital pool
- Consider up to 5% of annual Trauma Fund dollars, or $1.0-$1.2 million from Trauma Division operating funds; would necessitate increasing the Administrative allocation from 10% to 15%.

TRAUMA PHYSICIAN POOL & SUBPOOLS

A. Regional Trauma Centers

- Physician pool divided by severity adjusted proportion of care provided by hospital (modified physician data based point system)
- Need to reconsider which specialties are eligible; see GA guidelines.
- Performance pay on uninsured (can be tiered response fee for uninsured patients based upon ISS score or patient priority (1, 2, 3); keep it simple.
- Readiness/call pay needs to be provided in all of Oklahoma. OK trauma physicians who care for the majority of trauma patients injured in OK (LI, LII, and Backup LIII's) are already receiving significant amounts of payment to be on call
- Physician pool distributed thru hospitals builds collaboration between hospital and physicians-develop a webinar

B. Rural Communities

- In the near term, its anticipated that the majority of rural hospitals in OK will need to pay for ED call in order to sustain ED coverage
- Rural-All Other LIII's, All LIV's - All hospital and physician dollars are distributed to hospitals based upon the relative volume of trauma care being provided (point system)
- Giving dollars to hospitals for distribution to physicians will foster collaboration for both parties to work together more closely
- Consider performance threshold determined by local resources/capacity for care provided in own community based upon Dr. Cathey's assessment. Payment made only to those who meet threshold (or partial payment)

EMS POOL

- Fee for service Trauma Fund reimbursement for EMS isn't getting out to the small rural EMS agencies that most need it
- Establish separate sub-pools for Ground, Air, and Co-op Grants
- Develop proportional transport rates based on all runs; Standard Air (X), Short Ground (Y), and Long Ground (Z)
- Potential for Performance Bonuses for EMS providers
- Increase uncompensated ground transport reimbursement to more adequately cover ground transport costs
- Cap uncompensated air transport reimbursement at two times ground reimbursement for <u>appropriate air transports only</u>
- Combine management of EMS and Trauma Division to promote a more integrated organization

INFRASTRUCTURE DEVELOPMENT & ADMINISTRATION POOL

- Trauma Division Operations
- Transfer System
- Contract
- Consolidation of the two Trauma Referral Centers (TReC) into a single TReC

- RTAB Support
- Other

ALLOCATE FUNDS TO REGIONS

Regional allocation involves allocating funding in three major types of regions; urban regions, rural regions with significant trauma resources, and rural regions without significant trauma resources. Within these three types of regions needs among providers vary due to the level of resources, or lack thereof, that exist in relation to the demand for trauma care.

A. Urban Regions 7 & 8
- Regional Trauma Centers (LI, LII, and LIII Backups in OKC)
- Development of Additional Trauma Center Capacity
- Trauma Physician Support
- Scarce Specialty Support (i.e. Hand Surgery)
- EMS - Air/Ground Transport Uncompensated Care-needs little
- Trauma Rehabilitation

B. Rural Regions with Significant Resources
- Regional Trauma Centers (LII/III's at Norman, Comanche County, St. Mary's)
- Development of Additional LIII Trauma Center Capacity in Muskogee & McAlester.
- Trauma Physician Support
- EMS Air/Ground Uncompensated Care-needs more
- EMS Co-ops/Resources

C. Rural Regions without Significant Resources
- Trauma Hospitals-Balance of LIII & LIV's
- Trauma Physician Support
- EMS Co-ops/Resources-needs most

D. Statewide Infrastructure Development/Admin.
- Trauma Division Operations
- OKC & Tulsa Regional Transfer Systems
- RTAB Support

OKLAHOMA MEDICAID TRAUMA CENTER/PHYSICIAN/EMS SUPPORT
- Oklahoma hospitals receive enhanced Medicaid reimbursement for trauma care at Medicare rates
- LI-LIII trauma centers also receive incremental Medicaid Outpatient reimbursement on all Medicaid outpatients who present to the ED
- Oklahoma physicians in teaching hospitals receive enhanced Medicaid reimbursement for trauma care at Medicare rates

- EMS Ground Transport Medicaid reimbursement in Oklahoma was increased to Medicare rates in 2005

FRAMEWORK FOR MOVING FORWARD

Trauma and emergency care in Oklahoma is well funded compared to other states due to enhanced Medicaid reimbursement, Trauma Fund support, and significant levels of payment for call coverage in urban areas.

However, the ongoing goal for the Trauma Fund should be to fund the optimal trauma care system in Oklahoma, including expansion of the existing system, and to assure continued stabilization. Ongoing political action to sustain the existing level of receipts various sources of Tobacco Tax and to pursue legislation for additional funding sources is recommended since roughly $96 million per year is still incurred by providers in uncompensated care.

EMS in rural Oklahoma has already been identified as a crisis and will need support to shore up and develop the fragile system.

Physician ED coverage in rural Oklahoma is also a high priority and will require financial support for readiness (physician ED call coverage).

Oklahoma's Department of Health-Trauma Division distributes the Trauma Fund biannually with input on recommended allocation changes from OTSIDAC.