Minutes
Emergency Medical Services & Trauma System (EMSTS)
Division of Community Health

Trauma Needs Assessment Taskforce (TNAT)
June 20, 2017 - 2:30 P.M.

Members Present

John Fildes, MD, Chairman, UMC
Amy Doane, Vice Chair, Sunrise Hospital (via phone)
Kim Cerasoli, RN, UMC
Daniel Llamas, Sunrise Hospital
Stacy Johnson, RN, Mountain View Hospital (via phone)
Shirley Breeden, Public Representative
Stephanie Miller, Southern Hills Hosp (Alt.)
Frank Simone, Paramedic, EMS Provider (Public)
Kathy Pate, Centennial Hills Hospital (Alt.)

Sean Dort, MD, St. Rose Siena Hospital
Kim Dokken, RN, St. Rose Siena
Alma Angeles, RN, Sunrise Hospital
Danita Cohen, UMC
Deborah Kuhls, MD, UMC (via phone)
Kelly Taylor, LVMPDEHWT
Jennifer Renner, RN, HCA (via phone)
Gail Yedinak, UMC

Members Absent

Adam Rudd, Southern Hills Hospital
Jason Driggars, Paramedic, EMS Provider (Private)

Chris Fisher, MD, Sunrise Hospital
Sajit Pullarket, Centennial Hills Hospital

SNHD Staff Present

John Hammond, EMSTS Manager
Michael Johnson, PhD, Dir. of Community Health
Scott Wagner, EMS Field Representative
Judy Tabat, Recording Secretary

Christian Young, MD, EMSTS Medical Director
Laura Palmer, EMSTS Supervisor
Heather Anderson-Fintak, Associate Attorney

Public Attendance

Stacey Smith, Centennial Hills Hospital
Scott Kerbs, UMC

Jennifer Kocis, Sunrise Hospital
Stephanie Lim, Spring Valley Hospital

Call to Order – Notice of Posting

The Trauma Needs Assessment Taskforce convened in the Red Rock Trail Conference Room at the Southern Nevada Health District (SNHD), located at 280 S. Decatur Boulevard, on June 20, 2017. Chairman John Fildes called the meeting to order at 2:35 p.m. and the Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law.
I. **PUBLIC COMMENT:** A period devoted to comments by the general public about those items appearing on the Agenda. Comments will be limited to five (5) minutes per speaker. Please step up to the speaker's podium, clearly state your name and address, and spell your last name for the record. If any member of the Board wishes to extend the length of a presentation, this may be done by the Chairman or the taskforce of majority vote.

Chairman Fildes asked if anyone wished to address the Taskforce pertaining to items listed on the Agenda. Seeing no one, he closed the Public Comment portion of the meeting.

II. **CONSENT AGENDA**

Chairman Fildes stated the Consent Agenda consisted of matters to be considered by the Trauma Needs Assessment Taskforce that can be enacted by one motion. Any item may be discussed separately per taskforce member request. Any exceptions to the Consent Agenda must be stated prior to approval.

*Approve Minutes/Trauma Needs Assessment Taskforce Meeting: 05/16/2017*

Chairman Fildes asked for a motion to approve the Consent Agenda. *Motion made by Member Breeden, seconded by Member Taylor and carried unanimously.*

III. **REPORT/DISCUSSION/POSSIBLE ACTION**

A. **Review/Discuss Presentation of Sample Level III Business Case Analysis**

Dr. Fildes provided the taskforce with a presentation (Attachment ) of a sample Level III business case analysis. He explained that earlier this year Ms. Doane delivered a presentation of the same title trying to show how the pieces and parts of their discussion may work together to move forward with the identification and business case for new Level III centers entering the system. He added that it was in that spirit that he put this information together to try and move the deliberations of this taskforce forward. He started by referring to the final and concluding slide of Mr. Hammond’s presentation at the Board of Health (BOH) meeting held on June 23, 2016. This slide stated that the Office of EMS & Trauma System (OEMSTS) cannot recommend authorization to seek designation as a Center for the Treatment of Trauma and this opinion was upheld by a vote of the BOH. The question then arose when is there a need for additional trauma centers and is that time in the near future. That discussion brought forward the TNAT and it started a conversation looking at the Needs Based Assessment Tool (NBATS) of the American College of Surgeons (ACS) as a representative start. The tool was used to guide the TNAT in developing measures that are really locally relevant and specific to the Southern Nevada Trauma System. He emphasized that the minutes state the taskforce should produce these products and deliverables to be taken back to the Regional Trauma Advisory Board (RTAB) and the BOH for the purpose of decision making. His presentation went on to review each step of the TNATs tool to include:

- Population
- Median Transport Times
- Lead Agency/System Stakeholder/Community Support
- Severely injured patients (ISS>15) discharged from facilities not designated as a trauma center
- Trauma centers currently in the Las Vegas Valley
- Number of severely injured patients (ISS>15) currently seen in the trauma system

He summarized his discussion by saying that there must be a significant increase in the number of TFFTC step 3 and 4 patients and these patients must be concentrated in an area. He added that a significant number of these TFFTC step 3 and 4 patients must have transport times greater than 15 minutes and there must be a hospital in this area with the capacity, capability, and willingness to serve as a Level III trauma center. This hospital should be in a unique trauma service area that minimizes duplication in the system. If authorized and verified, this center would be assigned to a catchment area designed by the SNHD with all other catchment areas adjusted to provide the necessary volume to the new center. He declared that this adjustment would insure that no center fell below its average number of TFFTC step 3 and 4 patients treated at their facility.
Ms. Doane stated that she appreciated Dr. Fildes efforts and work going into so much detail but expressed concern that it is not the assignment of this taskforce to address issues of catchment. She felt that would be a broader issue for consideration in RTAB and the BOH.

Dr. Fildes felt that they shouldn’t hand back a work product to the RTAB without some discussion of how the catchment zones might be addressed. That is not to say that they are advocating action, it would up to them to decide. He felt they were charged with creating a framework of thought and metrics for measurement that would be useful for them to turn into policy and procedure.

Ms. Doane agreed that it is a significant factor, but felt it wasn’t in this group’s best interest to get into that discussion at this level or make assumptions about proportionally adding or subtracting from all 3 systems equally given that there is unequal distribution in the market right now.

Dr. Fildes informed the taskforce that discussion can be up for debate but proportional redistribution is the only pathway that he will discuss.

Dr. Young stated that the term “area” and how it was viewed by the trauma center applicants in a neighborhood way of looking at it versus the way ACS and other systems look it needs to be defined. He questioned if there was any thought of standardizing what they mean when they discuss “area” and felt it is a term that may be beneficial to define with a little more specificity.

Dr. Fildes stated that he tried to present what was relevant in their discussions about the Las Vegas Valley. There are methods of defining a trauma service area; there are methods of defining catchment area. Those could be the next task that this group takes up if directed to by staff.

Ms. Taylor felt that the conversation about service areas had a lot to do with Ms. Doane’s presentation on the hospitals commitment to the neighborhood area and then defining their proposed area that they would serve.

Ms. Doane clarified that the purpose of her draft presentation that she shared with the taskforce by no means meant service area and catchment as interchangeable words. HCA would typically define a primary service area around a hospital as to where you have continuous zip codes where about 50% of the admissions come to your hospital.

Ms. Taylor felt that you have to combine them though because if you are getting transports in from EMS and they are looking at step 3 and 4 patients, it is going to change the market dynamic because if the catchment area needs to change, your market is going to change.

Ms. Dokken questioned how an increase of population in North Las Vegas should impact St. Rose’s catchment zone. She felt they should consider the number of increased patients beyond what the current trauma centers are getting out of those numbers.

Dr. Fildes stated that the facilities that are interested are along the better zip codes and along the beltway adding that he didn’t have any problem with that. The problem he has is that UMC stands in between you and them and the last time the trauma centers expanded, UMC gave up 100% of the patients required to start up the 2 new trauma centers. He expressed the fact that they are all in this together and there will be a proportionate redistribution of catchment areas. This is a pie chart that is not growing that fast and if you put new slices into it, everyone’s slice gets smaller.

Ms. Dokken stated that she understood but it is a different situation now, UMC was the only place to give up patients before.

Dr. Fildes specified that now there are 3 places to give up patients.

Mr. Llamas felt that this taskforce should focus on the task that was assigned to them. He felt this current discussion should be presented to the RTAB for them to discuss further.

Ms. Dokken commented that she does support Dr. Fildes. She stated that this taskforce needs to look at the end results, outcomes, and the impact on the trauma system.

Dr. Fildes stated that his mission today was only to summarize what is in the minutes and the work of each of those meetings was to identify tools and analysis that would guide the RTAB. He added that Ms. Doane had the opportunity to present her thoughts, he has had the opportunity, and staff has had
Mr. Hammond stated that NAC is very specific in what is need for a new trauma center. It is an increase in population in a particular geographic area that does not have access to trauma services and that is why the original applications were not successful in that regard. He added that with this new process it is going to make it more objective and it is going to eliminate some of those barriers for a new center to enter because that is a strong barrier to overcome. If they do population growth in particular area or an increase in TFTC step 3 and 4 patients with transport time increases it wouldn’t meet NACs definition but it will meet our definition that those patients need to be seen in a Level III trauma center. I think it will be easier and better in removing an insurmountable barrier.

Ms. Dokken agreed stating that it is the weights that need to be in black and white.

Dr. Fildes felt that population and transport times were the fastest and easiest to quantify.

Dr. Dort agreed.

Ms. Taylor questioned that if this is a tool for advancement as well would that change if you are evaluating a level II to go to a Level I.

Dr. Dort answered in the affirmative and added that if you are going from a Level II to a Level I, you have to start looking at ISS.

Dr. Fildes stated that the question on the table is how you predict the need for a new trauma center by regulation. This discussion is centered on that point.

Mr. Hammond felt that this tool is going to be robust enough to use it for advancement as well by just shuffling some of the weights.

C. Next Meeting and Agenda Items (07/19/2017 3:30pm)

No discussion

IV. INFORMATIONAL ITEMS/DISCUSSION ONLY

None

V. PUBLIC COMMENT: A period devoted to comments by the general public, if any, and discussions of those comments, about matters relevant to the Committee’s jurisdiction will be held. No action may be taken upon a matter raised under this item of this Agenda until the matter itself has been specifically included on an agenda as an item upon which action may be taken pursuant to NRS 241.020. Comments will be limited to five (5) minutes per speaker. Please step up to the speaker’s podium, clearly state your name and address, and spell you last name for the record. If any member of the taskforce wishes to extend the length of a presentation, this may be done by the Chairman or the Community by majority vote.

Chairman Fildes asked if anyone wished to address the taskforce. Seeing no one, he closed the Public Comment portion of the meeting.

VI. ADJOURNMENT

As there was no further business on the agenda, Chairman Fildes called for a motion to adjourn: a motion was made by Member Kuhl, seconded by Member Simone and passed unanimously to adjourn at 3:25 p.m.
their opportunity and somehow this taskforce has to get those to converge into a document or documents in concepts and measures that they can return to the RTAB.

After considerable discussion Mr. Hammond stated that it is a consideration in the application and authorization process to discuss what the effect will be on the existing trauma systems. He added that catchment areas will not be determined in this realm and will not be determined until the RTAB and Medical Advisory Board (MAB) discuss catchment area. There is a protocol development that occurs and that is the purview of the MAB. He stated that moving forward this does need to be included as a recommendation for discussion to the RTAB just like everything else that they have discussed and let the RTAB make those determinations.

Dr. Fildes stated that he will have the OEMSTS send out copies of his presentation and that it is posted on the website for the public to review. He added that he would invite email or phone call discussions between now and next meeting and invite any member of the taskforce to prepare their thoughts if they want to amplify any one part of this or try to create a structure for this where we can pass that to the RTAB. He stated that he would like to get to a place where even if they have a few topics that are still divergent that they can present them as divergent topics. This taskforce is in agreement with a lot more and should be able to put forward the consensuses and the controversies in an objective way and make the work product of this group something that can be done.

B. Review/Discuss SNHD Trauma Needs Assessment Tool
   a. Population
   b. Median Transport Times
   c. Lead Agency/System Stakeholder/Community Support
   d. Severely Injured Patients (ISS>15) Discharged from Acute Care Facilities not Designated as a Trauma Center
   e. Trauma Centers Currently in the Las Vegas Valley
   f. Number of Severely Injured (ISS>15) Seen in the Trauma System Currently

Dr. Fildes asked the taskforce if there was anyone who would like to open a discussion on the domains of measurement.

Ms. Taylor stated that when they looked at population growth she was understanding that they were going to define the Las Vegas valley in general and then have the hospitals identify the areas to which they thought they were going to serve and identify those same parameters within those areas.

Ms. Palmer stated that this is also meant to be used by her office to look and see if we don’t have anyone soliciting to become a trauma center for us to review and see if we need to put out an RFP.

Ms. Taylor stated that they previously discussed NTDB data and questioned if that was going to fall somewhere in here or was that our private discussion of measurement or data to be used.

Mr. Hammond stated that they receive that data from the state or the non-trauma centers.

Dr. Fildes added that the SNHD actually aggregates that.

Mr. Hammond stated that they have TFTC data from the trauma centers as well but from the non-trauma centers it is straight NTDB data.

Dr. Dort stated that they have 6 items listed in their TNATS tool but haven’t assigned weight to any of them. When talking about step 3 and 4 patients, he didn’t feel that including patients with ISS > 15 is going mean as much as population growth or long transport times. He proposed that they should have a sub set rather than just a list of 6 items.

Mr. Hammond agreed that the ISS>15 is probably not going to play a great role and suggested that staff work on that and bring it to the next meeting for discussion.

Dr. Dort stated that looking at the last slide; he felt that since population increases in step 3 and 4 patients would be driving the need for additional trauma centers there would be an increase somewhere enough that they shouldn’t be carving from all centers. Some of that 365 should be supplied by what is new there and that is what is driving the need.
ATTACHMENT

REVIEW/DISCUSS THE PRESENTATION OF A SAMPLE LEVEL III BUSINESS CASE ANALYSIS

JOHN FIELDS, MD
CHAIR
TRAUMA NEEDS ASSESSMENT TASK FORCE (TNAT)
JUNE 20, 2017
IS THERE A NEED FOR ADDITIONAL TRAUMA CENTERS AT THIS TIME?

Conclusion

- Based on NRS 450B, NAC 450B, Trauma System Regulations, the "District Procedure for Authorization as a Center for the Treatment of Trauma or Pediatric Center for the Treatment of Trauma", the American College of Surgeons' collected references and available EMS & Trauma System data the current system continues to meet the trauma needs of the trauma service area.
- The applicants have not demonstrated unmet need for additional trauma services.
- The OEMSTS cannot recommend authorization to seek designation as a Center for the Treatment of Trauma.
IS THERE A NEED FOR ADDITIONAL TRAUMA CENTERS IN THE NEAR FUTURE?

- The Trauma Needs Assessment Taskforce (TNAT) was formed

- The Needs Based Assessment Tool (NBAT):
  - Was developed by the American College of Surgeons and a nationally representative stakeholder group
  - Was used to guide the TNAT in the development of measures that are locally relevant to our Trauma System

- The work products and deliverables from the TNAT will be given to the RTAB and the Board of Health.
Community Trauma Assessment Tool checklist:

*Process Questions*

**Hospital Case Analysis**
- Hospitals bring forward case for Level III trauma to RTAB according to objective checklist created by TNAT
- Data required in checklist is all publicly available data to non-trauma facilities
- State and county requirements for time to reply to requests for information
- Meeting the checklist = move forward to Board of Health
- Board of Health and applying hospital would then work directly on further details and questions regarding Level III application
- Places responsibility on facilities to understand, monitor, and present case for their local service areas
Community Trauma Assessment Tool checklist:

*Process Questions: What a hospital review process could look like*

<table>
<thead>
<tr>
<th>Population Growth</th>
<th>Service area growth meets or exceeds market average</th>
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<tbody>
<tr>
<td>Population Density factor</td>
<td>Use as checkpoint to validate growth percentages</td>
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<table>
<thead>
<tr>
<th>Trauma volume</th>
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<tbody>
<tr>
<td>Request data from state registry: at or -5% St. Rose</td>
</tr>
<tr>
<td>Level III volume within proposed service area</td>
</tr>
<tr>
<td>Median transport times by zip code for Level III trauma from proposed service area</td>
</tr>
<tr>
<td>Overall incident time (dispatch to hospital arrival) for Level III traumas from proposed service area</td>
</tr>
<tr>
<td>Hospital review of ICD 10 data to illustrate trauma need</td>
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</tbody>
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| Community Support | Submission of at least three letters of support to move forward |

| Clinical Commitment | Demonstration of hospital’s commitment to emergency and trauma services according to ACS requirements |
POPULATION

- There must be a significant increase in the number of TFTC Step 3 and 4 patients in the Trauma System
- These TFTC Step 3 and 4 patients must be concentrated in an area
Southern Nevada Trauma System

Trauma Needs Assessment

1. Population

<table>
<thead>
<tr>
<th></th>
<th>YES</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.</td>
<td>Is the Las Vegas valley population increasing? (based on County demographer information)</td>
<td></td>
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<tr>
<td>B.</td>
<td>Is the Las Vegas valley population projected to continue increasing? (based on County demographer information)</td>
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<tr>
<td>C.</td>
<td>Is an area of the Las Vegas valley demonstrating population growth at a faster rate than the rest of the valley? (based on County demographer information)</td>
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<tr>
<td>D.</td>
<td>Are areas of population growth projected to continue growing at a faster rate than the rest of the valley? (based on County demographer information)</td>
<td></td>
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<tr>
<td>E.</td>
<td>Is there an increase in TFTC incidents in the area of population growth? (based on SNHD Informatics data)</td>
<td></td>
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<tr>
<td>F.</td>
<td>Are the TFTC incidents for the appropriate step level increasing (Step III and IV patients for a Level III center, Step I and II patients For a Level I or II center)? (based on SNHD Informatics data)</td>
<td></td>
</tr>
</tbody>
</table>
MEDIAN TRANSPORT TIMES

- There must be a significant number of these TFTC Step 3 and 4 patients that have Transport Times (Scene to Trauma Center) that are > 1.5 minutes
- Star Charts and Diamond Grids will be used
2. **Median Transport Times**

   A. Is the Southern Nevada Trauma System demonstrating transport times greater than 15 minutes? (based on SNHD Informatics data)

   B. Are transport times for the appropriate step level greater than 15 minutes (Steps III and IV for Level III center, Steps I and II for A Level I or Level II center) (based on SNHD Informatics data)

   C. Are transport times increasing for a population area demonstrating increasing growth? (SNHD Informatics/County demographer data)

   D. Map of 15 minute transport times from each facility (for reference)
TRANSPORT TIMES: A TWO WAY ANALYSIS

- The SNTS must also study the Star Charts and Diamond Charts surrounding potential trauma centers to:
  - Show a unique trauma service area
  - To avoid overlap
3. Lead Agency/ System Stakeholder/ Community Support
   A. Lead Agency Support – based on a demonstration of need for More trauma resources for the stability of the trauma system
   B. System Stakeholder Support – Including but not limited to Public EMS agencies, Private EMS agencies, Hospitals currently actively participating in the Southern Nevada Trauma System.
   C. Community Support - Including but not limited to City Council or County Commission members in the area of an applicant seeking to join the Southern Nevada Trauma System.
SEVERELY INJURED PATIENTS (ISS > 15) DISCHARGED FROM FACILITIES NOT DESIGNATED AS A TRAUMA CENTER

- This is a very small number
- This is not a problem in this Trauma System at this time
<table>
<thead>
<tr>
<th>Trauma Centers currently in the Las Vegas valley</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. UMC- lowest number of trauma cases:</td>
<td>3436</td>
</tr>
<tr>
<td>Highest number of trauma cases:</td>
<td>4836</td>
</tr>
<tr>
<td>Percentage of Step I and Step II patients:</td>
<td>10.03%</td>
</tr>
<tr>
<td>B. Sunrise- lowest number of trauma cases:</td>
<td>762</td>
</tr>
<tr>
<td>Highest number of trauma cases:</td>
<td>1322</td>
</tr>
<tr>
<td>Percentage of Step I and Step II patients:</td>
<td>16.10%</td>
</tr>
<tr>
<td>C. St Rose Siena- lowest number of trauma cases:</td>
<td>369</td>
</tr>
<tr>
<td>Highest number of trauma cases:</td>
<td>612</td>
</tr>
<tr>
<td>Percentage of Step I and Step II patients:</td>
<td>0.01%</td>
</tr>
</tbody>
</table>

(Statistics from SNHD Informatics Department, based on data from 2010-2016)
Step III/IV Average Per Center for years 2010-2016

- 3899 Patients (75%)
- 155 Patients (3%)
- 452 Patients (9%)
- 763 Patients (15%)

LUMC • Sanfte • St. Rose Siena
SUMMARY – PART 1

- There must be a significant increase in the number of TFTC Step 3 and 4 patients.
- These TFTC Step 3 and 4 patients must be concentrated in an area.
- There must be a significant number of these TFTC Step 3 and 4 patients that have Transport Times that are > 15 minutes (Scene to Trauma Center).
- There must be a hospital in this area with the capacity, capability, and willingness to serve as a Level 3 Trauma Center.
SUMMARY – PART 2

- This hospital should also be in a unique trauma service area that minimizes duplication in the system.

- This hospital should expect to begin by treating one activated patient per day.

- If authorized and verified this center would be assigned to a catchment area designed by the SNHD.
SUMMARY - 3

- The catchment areas of all other active trauma centers would be adjusted to provide the necessary volume to the new center.

- This adjustment would insure that no center fell below its average number of TFTC Step 3 & 4 patients treated at their facility.

- These guidelines would empower the SNHD to monitor the growth and contraction of the SNTS so that they could:
  - Respond appropriately to new applicants for Level 3 trauma centers
  - Identify community need and seek new hospital partners in the SNTS
365 patient's per center per year to be accomplished through catchment zone re-drawing.