



MINUTES

EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM (EMSTS)

DIVISION OF COMMUNITY HEALTH

TRAUMA NEEDS ASSESSMENT TASKFORCE (TNAT)

April 19, 2017 - 3:30 P.M.

MEMBERS PRESENT

John Fildes, MD, Chairman, UMC
Amy Doane, Vice Chair, Sunrise Hospital (via phone)
Kim Cerasoli, RN, UMC
Jason Driggars, Paramedic, EMS Provider (Private)
Frank Simone, Paramedic, EMS Provider (Public)
Shirley Breeden, Public Representative (via phone)
Stephanie Miller, Southern Hills Hosp (Alt.)
Karen Port, HCA (Alt.)

Sean Dort, MD, St. Rose Siena Hospital
Sajit Pullarkat, Centennial Hills Hospital
Kim Dokken, RN, St. Rose Siena (via phone)
Daniel Llamas, Sunrise Hospital
Stacy Johnson, RN, Mountain View Hospital
Kelly Taylor, LVMPDEHWT
Danita Cohen, UMC

MEMBERS ABSENT

Adam Rudd, Southern Hills Hospital
Deborah Kuhls, MD, UMC
Alma Angeles, RN, Sunrise Hospital

Chris Fisher, MD, Sunrise Hospital
Jennifer Renner, RN, HCA
Gail Yedinak, UMC

SNHD STAFF PRESENT

John Hammond, EMSTS Manager
Michael Johnson, PhD, Dir. of Community Health
Laura Palmer, EMSTS Supervisor
Michelle Stanton, Recording Secretary

Joseph P. Iser, MD, Chief Health Officer
Christian Young, MD, EMSTS Medical Director
Lei Zhang, Public Health Informatics Scientist

PUBLIC ATTENDANCE

Erin Breen, UNLV

CALL TO ORDER – NOTICE OF POSTING

The Trauma Needs Assessment Workgroup convened in the Red Rock Trail Conference Room at the Southern Nevada Health District (SNHD), located at 280 S. Decatur Boulevard, on April 19, 2017. Chairman John Fildes called the meeting to order at 3:31 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 Committee 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: 03/21/2017

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

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

A. **Review/Discuss Domain (1) Population**

Dr. Fildes noted that staff has done a number of analyses and invited them to review for the taskforce where they are at with that in terms of clarity and completion for this domain.

Mr. Hammond stated that they have decided to use the county demographer's data in this regard. As they break it down based on geographic area they can use zip code growth for those particular areas. Mr. Zhang has presented that work and asked the taskforce to review the handouts.

Dr. Fildes identified that they have actual and projected populations and population densities by zip codes for 2015 and 2020 that show the projected growth areas. In addition, the other population that has been looked at as a sub group is where the population of patients who required transportation because they satisfied trauma field triage criteria (TFTC). Finally, the sub group of that is the population of patients who meet TFTC at the step 3 and step 4 levels from 2013 thru 2016.

Mr. Hammond stated that he had just received data for 2015 and 2016 trauma registry admits by year and by hospital. He reviewed the data with the taskforce and stated he would send it out by email for everyone to review.

Dr. Fildes summarized the domain by stating there has been a general population by the demographer and this has been broken down by zip code both the present and the projected. Then there has been the population of patients who satisfy TFTC, the subset of that, the population of those patients who meet step 3 and 4 criteria and where they arise from by zip code. He added that then they narrow from historical data the population of patients seen at each of the existing trauma centers. They will be able to in some way discuss domain #6 which is the Injury Severity Score (ISS) > 15 based on that group of patients.

Ms. Doane questioned benchmarks they are going to set as a threshold to consider for population growth. She gave an example of a proposed center meeting or exceeding current valley wide population growth.

Mr. Hammond felt that it should be a combination of gross growth but also the benchmark of growth in regard to those trauma patients.

Dr. Fildes suggested having a series of yes/no questions. He felt that a series of yes/no answers would arrive at a description of an area that has a need. That may be a process that is easier to perform and is likely to satisfy the question better than trying to set a number.

Mr. Pullarkat felt that a yes/no would make it simple as long those are clearly defined so that any future applicant would know the guidelines.

Ms. Taylor stated that she agreed with Ms. Doane in regard to creating a threshold when it comes to the population in general. Is the population growing, yes, but is it growing in excess of what the average is for the valley.

Dr. Fildes suggested that can be another one of the yes/no questions.

Dr. Young questioned how you define the population within an area.

Mr. Hammond reported that currently they consider the trauma service area (TSA) as being the entire county. In consideration for the applicants, the only provision they added was for the zip codes they wished to service. They've discussed diamond and star formation graphs representing transport times. He added that currently they are working with FirstWatch to get latitude and longitude in their downloaded reports. By using that as a surrogate for the data, they could possibly see population growth, transport times and trauma growth in those areas.

Dr. Fildes stated by using that technique you would be able to model a proposed primary service area and then look in that unique trauma service area for current population growth, projected population growth, number of TFTC, number of step 3 and 4's, as a way of doing an analysis of the population changes.

Mr. Hammond stated that it gets tricky when you have a particular 15 minute star or diamond around a hospital but that hospital is not interested in being a trauma center. He questioned if they would approach the next closest hospital if that were the case.

Dr. Fildes stated that it is going to become clearer as we dig a little deeper. He stated that he is already looking at the maps and seeing gaps in North Las Vegas and it doesn't appear that there is a prepared hospital partner at the moment. He added that doesn't mean there won't be one and it doesn't mean that the neighbors of North Las Vegas can't service it for the time being. Those are practical considerations that have to be made.

Ms. Taylor questioned if they would just shift the market and the patients. Dr. Fildes stated that would be one strategy.

Ms. Cerasoli questioned what the existing current transport time is. Ms. Palmer stated it was a little over 15 minutes. Ms. Cerasoli questioned that if they are already at what has been established as the average benchmark, how are they going to exclude anyone from being a suitable candidate by service area.

Ms. Taylor stated that it is currently over 15 minutes and the 15 minutes would be an improvement on the current.

Ms. Cerasoli concluded that if they are already at what we are striving to reach essentially within the .6 of a minute, don't we need to be more aggressive with time if we actually need to make these more meaningful criteria.

Mr. Hammond stated that it would be difficult to get less than 15 minutes for transport time.

Ms. Cerasoli agreed and stated that was her point.

Dr. Young stated that the NBATS tool uses the total TSA population and then multiple cutoffs with TSA being Clark County.

Dr. Fildes added that the other term used was proposed primary service area which is the service area specific to the center.

Dr. Young stated that in using the star maps and traffic on each hospital there will be some overlap in some parts of town and not an overlap in other parts of town. The NBATS tool assigns points based upon four elements: population, transport time, community support, and number of severely injured patients (ISS > 15) discharged from centers in the TSA that are not Level I, Level II, or Level III trauma centers. The final score provides a guideline for the number of trauma centers needed in the TSA.

Dr. Fildes believes that the NBATS tool is written to predict where a trauma center is needed in a place that has never had one but not necessarily to add them to a new system. To add them to a new system you have to look at all the relevant pieces that are currently in play. The domains themselves are a good

starting point for discussion and within each of the domains we seem to be able to accumulate relevant measures from reliable sources that can guide the decision making. To weight the result you can then either answer yes or no to these things.

Dr. Young agreed and stated that the population is again one domain of that. It is not that the threshold here equals a new trauma centers but it is one step towards having a discussion.

Dr. Fildes asked the taskforce if there were any or additional or new ways to look at population.

Mr. Pullarkat questioned what the key yes/no questions would be under population domain.

Dr. Fildes stated the following:

- Is the population increasing yes/no
- Would the population increase be considered small/medium/large
- Is the projection of population growth going up
- Is the projection assessed to be small/medium/large
- Are the number of TFTC patients in that area going up yes/no
- Are the number of TFTC patients that meet step 3 or 4 going up yes/no
- Is this area growing faster than the rest of the valley is growing yes/no

Mr. Simone questioned the consideration for primary response area with regard to transport time. Mr. Driggars added to Mr. Simone's question by asking when using the word "area" does that refer to a 15 minute circle around a particular facility.

Dr. Fildes stated that you begin with that 15 minute circle but as they get deeper in the discussion the operationalization of the primary responders and certain geological layouts need to be looked at.

Dr. Young asked if he envisioned that happening in parallel for all hospitals in the system at any given time or just for the trauma centers.

Dr. Fildes felt that if the technique was not difficult, it would be interesting to build a star or a diamond around every hospital to see whether they have complete overlap or whether they have complete independence. If this were hospitals that were applying then that would create a new conversation.

Ms. Taylor summarized that they are not doing a pin map based on the current trauma centers because we are trying to figure out a need. She understood that they were going to take each facility in the pin map and do 15 minutes total transport time around that hospital and then identify within that 15 minutes circle what are the trauma levels. She added that then it would be broken down to: here is the hospital; here is the 15 minutes; within that 15 minutes what was the trauma identified; and finally how many with step 3's and 4's to see if there was a need within their primary service area.

Dr. Fildes answered in the affirmative.

Mr. Hammond informed the taskforce that in regard to the pin map issue with particular calls and transport times broken down by segments of time, Mr. Zhang has been working with county GIS and received a map from them. Unfortunately he was unable to email that out because the map is very precise and that would be a HIPAA violation. He stated he will bring this to the next meeting to see how they actually fall out.

Dr. Fildes stated that he believed that clarified a lot of the discussion on point one about how to use population and then it blends with it domain #2 Median Transport times.

B. Review/Discuss Domain (2) Median Transport Times

Dr. Fildes stated that they should be selecting median transport times better than the current average but still achievable.

C. Review/Discuss Domain (3) Lead Agency/System Stakeholder/Community Support

Dr. Fildes stated that they haven't spent a lot of time in this domain. He felt that it seems self explanatory on some levels and confusing on others. He would be interested to hear this group's take on it and what they might use as relevant measures.

Mr. Hammond felt this was probably the most difficult section to obtain a good score on in the previous applications received because the trauma service area is being defined as the entire county. There are 8 municipalities and government entities within the county that could effect that result and they go by percentage. If you get 50% of them you get a certain number, if you get 25% of them you get a certain number. He didn't think any of the applicants received more than one or two and it didn't move the needle at all because you have to get 25% in that regard. He questioned those individuals who are sitting in the City of Las Vegas, if they have to just get support from the city or both the city and then the county. He then questioned those individuals in unincorporated Clark County, if they have to get it from the township they are in and the county to make that worth something at least under the current way it is defined on the NBATS.

Dr. Fildes stated that another way to try and assess support is the way the American College of Surgeons (ACS) does. When they do a site visit, they require statements of support from the hospital board, resources, and the desire to provide the service.

Mr. Hammond stated that they currently have that same requirement during the application process; they have to show that they have the financial wherewithal and the desire to finish the mission.

Dr. Fildes added that Medical Staff commitment is also needed. He added that another of the key stakeholders would be the people who are paying for it. He noted that Dr. Iser has stated before that is probably not in the mission of the Health District but in some form that stakeholder group is going to have to speak.

Dr. Iser clarified that is not how the Health District would look at it but that is how the Board of Health (BOH) certainly would look at it and did last time. They took into account the letters from community members and from the insurers.

Dr. Fildes expressed the fact that as they pass our recommendations to the Regional Trauma Advisory Board (RTAB) and above they could say that the conversation should be planned or that a conversation should take place. He added that in regard to lead agency support, it sounds as though the Health District has some thoughts on what that support should look like or how they would express that to an applicant.

Mr. Hammond answered in the affirmative, adding that the data will support their decision to support or not support an application.

Dr. Fildes stated that a body like this taskforce would put forward to the RTAB that the Health District has a position on how to articulate this support feature.

Dr. Iser answered in the affirmative.

Dr. Fildes stated that on the final piece of this domain is community support and they have identified some of the important pieces. He added that on the governmental level he doesn't have any other good ideas on how to create measurable support. This taskforce will pass along that they don't have a specific recommendation in that part of the domain.

Ms. Doane added that it should be a requirement that an applicant understand the necessity to prove the letters of support to the BOH and also there be a public opportunity for letters of defense to be expressed.

Dr. Iser agreed and added that it wouldn't impact our ability to give a recommendation from a staff point of view.

Ms. Doane understood and stated that this again would be part of the greater scrutiny required at that higher level.

Dr. Fildes felt this was an acceptable position.

D. Review/Discuss Domain (4) Severely Injured Patients (ISS > 15) Discharged from Acute Care Facilities not Designated as Level I, II, or III Trauma Centers

Dr. Fildes stated that he believes that the data was completed and available for this domain. He questioned if there was any discussion on the trustworthiness of the source material.

Mr. Hammond advised that the material is as presented in the trauma registry that could be easily validated. The NBATS tool assigns points based upon the volume of severely injury patients seen at those existing centers and questioned if they were going to hold on to the breakdown by assigning points or go through the yes/no process. He also questioned what would be the threshold of what we are comfortable with being discharged from a non-trauma center with an ISS >15 and does it exceed whatever that designated "X" number.

Mr. Driggers asked if it would make more sense to make that an unacceptable percentage of the total trauma patients in general and then that would be the trigger.

Mr. Hammond felt that the background of this domain is to measure how many severely injured people are being taken to a non-trauma center because that is all there is. He stated that you can look at it as a percentage of how many TFTC or trauma patients as a whole but felt wasn't the spirit of the measurement.

Dr. Fildes stated that it also identifies centers that get large numbers of drop offs that sometimes happen in a dense urban center.

Mr. Hammond stated that would be more of an indication of need in that particular area. He added not only is it a measure of those severely injured but that they are kept there rather than transferred to another facility for definitive care.

Ms. Port stated that as a system she felt they are really good at getting those patients transferred even if they come by EMS or private vehicle. She felt that this measure doesn't affect the system as much as it would maybe in the NBATS tool.

Dr. Dort agreed adding these are not the patients to look for when evaluating for level III center. This is what you would evaluate either outside of an urban center or for Level I or II centers inside of an urban center. He felt this would not carry this weight as some of the other parameters.

Dr. Fildes stated that kind of reintroduces a concept discussed before about how much weight do you assign per domain and felt that they just heard for example some discussion around domain 3, lead agency stakeholder community that may have a little lighter weight and then this would have a lighter weight as well.

Mr. Hammond agreed.

E. Review/Discuss Domain (5) Level I Trauma Centers

No discussion

F. Review/Discuss Domain (6) Numbers of Severely Injured Patients (ISS > 15) Seen in Trauma Centers Already in the TSA

Dr. Fildes stated that the RTAB and Trauma Medical Advisory Committee (TMAC) review this data on a regular basis and they know relative to historic high water marks where centers are in terms of historic demonstrated capacity. He felt that last year was a particularly strong year and they could be inching up towards these historic high water mark measures. He stated that he would be willing to accept that analysis for this domain and asked the taskforce for their thoughts.

Mr. Hammond stated that it was an historic high water mark for those step 1 and 2 patients.

Dr. Fildes stated that they could create (3) different scenarios:

- Step 1 and 2 patients
- ISS > 15
- Direct to Operating Room or ICU

It would be the number of high acuity patients seen in each of the 3 centers. You would need to ask if it exceeds historic high benchmarks or documented historic capacity. If the answer to that was yes then that would be time to be looking for more centers.

Mr. Pullarkat observed that because they are looking at severely injured patients ISS > 15, you are talking about step 1 and step 2 patients. Any new applicant that comes into the system is applying as a

level III so he felt it is more appropriate for a facility that wants to come in as a level II or a Level I this would not really necessarily apply. He added that this was good data to look at.

Dr. Fildes stated that they could give this a lower weight in the consideration of an application for a Level III.

Mr. Hammond commented that they could break it down by step as well. Those hospitals that are already here and would like up their level would be able to look at that data in a similar manner.

Mr. Taylor stated that she views both Domains 5 and 6 as a progression within the system and not an entry level but felt it needs to be included in our discussions looking at system vs. application.

Dr. Fildes felt that it was useful to create a framework now that can be used going forward for other decisions.

Dr. Young referred to the NBATS tool with regard to par numbers and how it is structured and questioned if that would be feasible for this system.

Ms. Taylor asked that at the next meeting a sample survey with the entire yes/no questions that have been discussed be available for review. She would also like to be able to plug in the current values of the NBATS tool to evaluate.

Dr. Fildes stated that Vice Chair Doane made a presentation at a previous meeting and suggested using that same format in a hypothetical way and apply it exactly as asked to see what it might look like with the data rolled into it. He added that he would volunteer to work on that.

G. Next Meeting and Agenda Items (5/16/2017)

Dr. Fildes stated that the next TNAT meeting is scheduled for Tuesday, May 16, 2017 at 2:30pm.

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 adjourned the meeting at 4:32 p.m.