



MINUTES

EMERGENCY MEDICAL SERVICES & TRAUMA SYSTEM (EMSTS)

DIVISION OF COMMUNITY HEALTH

TRAUMA NEEDS ASSESSMENT TASKFORCE

July 20, 2016 - 2:30 P.M.

MEMBERS PRESENT

John Fildes, MD, Chairman, UMC
Sean Dort, MD, St. Rose Siena Hospital
Kim Dokken, RN, St. Rose Siena (via phone)
Dineen McSwain, RN, UMC
Jennifer Renner, RN, HCA
Kelly Taylor, LVMPDEHWT
Danita Cohen, UMC
Jason Driggars, Paramedic, AMR
Gail Yedinak, UMC
Stephanie Miller, Southern Hills

Amy Doane, Vice Chair, Sunrise Hospital
Abby Hudema, RN, UMC
Alma Angeles, RN, Sunrise Hospital
Sajit Pullarkat, Centennial Hills Hospital
Stacy Johnson, RN, Mountain View Hospital
Daniel Llamas, HCA
Shirley Breeden, Public Representative
Dale Carrison, DO, MAB Chairman
Deborah Kuhls, MD, University of Nevada

SNHD STAFF PRESENT

John Hammond, EMSTS Manager
Michael Johnson, PhD, Dir. of Community Health
Heather Anderson-Fintak, Esquire
Kathryn Barker, Epidemiology
Judy Tabat, Recording Secretary

Christian Young, MD, EMSTS Medical Director
Laura Palmer, EMSTS Supervisor
Edie Mattox, Administrative Secretary
Lei Zhang, Public Health Informatics Scientist

PUBLIC ATTENDANCE

Jeanne Freeman, Div of Public & Behavioral Health (via phone)

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 July 20, 2016. John Hammond called the meeting to order at 2:37 p.m. and the Affidavit of Posting was noted in accordance with the Nevada Open Meeting Law.

I. WELCOME AND INTRODUCTIONS

Mr. Hammond opened the meeting by asking all members in attendance to introduce themselves.

- II. 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 Board of majority vote.

Mr. Hammond 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.

III. DISCUSSION OF CREATING TRAKSFORCE VERSUS WORKGROUP

Mr. Hammond stated that the focus of this meeting is to develop a set of metrics to determine whether or not a new trauma center needs to be added to the system. The last workgroup looked at the Needs Based Assessment of Trauma Systems (NBATS) tool from the American College of Surgeons (ACS) and has determined that some changes need to be made to make it more applicable to the future needs of Clark County. He advised that this group has to decide on the structure of this meeting. Taskforces are typically comprised of experts in specified areas of knowledge brought together to accomplish a specific objective. A taskforce is a publically noticed meeting that has to have a members and a quorum and is usually in effect until the task assigned is done. A workgroup is a little looser, members are not required, a chair is not required, but there are still minutes and it would probably be in effect until the task is completed.

Heather Anderson-Fintak, Associate Counsel for the Health District stated that whether this group is named a taskforce or a workgroup is important, however, it also depends upon the delegation that this entity received from the RTAB, as well as the Board of Health (BOH). If the BOH asked for a specific entity to make a recommendation; a recommendation under Nevada Open Meeting Law, means that there needs to be a fixed membership and would need to have quorum. If it's a workgroup then it's again much like Mr. Hammond described, it's a little bit looser.

Mr. Hammond added that if the individuals currently present today are committed to the process, he didn't have any problem with making the committee this size. He reminded the group that the RTAB used the language "taskforce" in the motion, and asked the group how they would you like to proceed in this regard.

After considerable discussion, it was decided to make this group a taskforce to include a chair, vice chair and members.

Mr. Hammond entertained nominations for selection of a chair and vice chair.

Dr. Fildes stated that he would be happy to serve as chair of this taskforce. Mr. Llamas nominated Amy Doane as chair. Ms. Doane stated that she would be happy to serve.

Mr. Hammond asked if there were any further nominations, seeing none he called for a vote.

Dr. Fildes received 10 votes

Ms. Doan received 7 votes

Ms. Hammond stated that Dr. Fildes has been nominated as Chair and asked Ms. Doane if she would accept the position of Vice Chairman. Ms. Doane agreed.

Mr. Hammond added that he will submit a set of bylaws for the next meeting for review and approval.

IV. FURTHER DEVELOP STANDARDIZED MEASURES FOR ASSESSING THE NEEDS OF THE TRAUMA SYSTEM

Dr. Fildes referred to the trauma needs worksheet that was included in the handouts stating that was a rough draft of some measures that could be relevant to the development of a data set for this trauma system. The measures were loosely derived from the needs based assessment tool that arose from a needs based consensus conference in Chicago by the ACS. Dr. Fildes asked the

group for their thoughts about the measures as they stand.

The first domain that the NBATS tool addressed was total population of the Clark County service area. He stated that the people living in Las Vegas are concentrated pretty tightly in the city, and it gets very sparse outside the confines. The actual trauma system modeling that takes place outside the urban center is quite different from inside the urban center. He stated he would like to try to concentrate on measurement of population, and measurement of population densities, and moving densities within the valley for the urban center. It was first recommended to engage the county demographer to try to show population by density throughout the county, particularly within the urban center and then to look for shifting densities within the urban center. The statement on the rough draft that reads, "Areas of population density increases by greater than 30%" may not be a good measure. They may find that someplace that had no people living and now have two people have a 200% increase, or they may find that important areas have had maybe a 15% increase that's relevant and significant. The first communiqué would be to perhaps omit the greater than 30% and try to find some other guidance for that.

Ms. Doan questioned if there was an executive summary of that needs based assessment that was conducted in Chicago that would perhaps provide some guidance and objective points of reference for them to review as they go through this process. Dr. Fildes answered in the affirmative. Ms. Doan added that with regard to the population in looking at the urban center, she would be curious to 1) how to define that; and 2) while the total population of the Clark County service area would be important county-wide. She felt uncertain that density would be the best metric but they might also want to factor in a population % growth total for the county. Dr. Fildes agreed and added that was his point in his earlier statement.

Dr. Fildes stated the easiest way to define an urban center is to look at a recent NASA satellite photo of Las Vegas at night. The problem is as you get to the edge of the valley, the zip codes get extended almost to infinity and become much more difficult to use since some parts of the zip codes represent uninhabited Clark County.

Ms. Angeles questioned if they were going to take the time component as a consideration with regard to growth. Mr. Hammond asked the group how far back they would consider being an accurate assessment. Ms. Renner felt it would be when the last assessment of the trauma system was done. Mr. Hammond stated that study was in 2011 when they assessed population and growth and a copy of that study is online.

Ms. Doane questioned how is this group will categorize what those of areas of population density and volume increases should be.

Dr. Fildes stated that you look where the population movement is, and then you look at the number of runs originated in different areas. There may be areas where the populations are rapidly decreasing yet still experiencing high violence rates where transports go up despite population going down. He added that they need to overlay all of these things to get a sense of where service is required, and whether or not the transport times to connect the event with the service is reasonable.

Mr. Pullarkat suggested that when looking at the population piece they also consider their visitor volume traffic. Dr. Fildes agreed adding that a good proposal might be to have the existing trauma centers bring forward a report of how many visitors they treat, and for what. He stated that he will add that as a parameter to be measured.

Ms. Doane questioned if they should take into account the regional population growth data outside of Clark County by looking at northern Arizona, southern Utah, and the areas immediately north and west of Clark County because the trauma system here is a regional provider. Ms. Hudema stated that southern Utah and Flagstaff, AZ already have their own trauma centers. Dr. Fildes agreed stating that they have actually seen a reduction from California and felt they need to start with Las Vegas first.

Dr. Fildes stated that the next item for discussion is "median transport time for Clark County Service area" and turned the discussion over to Mr. Hammond.

Mr. Hammond stated that the initial NBATS tool asked for median transport times for ground ambulances, regardless of level, to a trauma center. Looking at the 2015 data he determined the median transport time to be 16 minutes. Looking at the 90th percentile of any trauma patient transported to a trauma center, 92% of the time they're making it there in less than 30 minutes. He added that he could break down specific areas by zip code and determine transport times out of there. He stated that he used zip codes as his surrogate for area so it's going to be difficult to use something other than that.

Dr. Fildes asked if those geo-referenced run files are available. Mr. Hammond stated that Lei Zhang who is the Informatics Scientist for the Health District does the background work in that regard. Dr. Fildes questioned when the EMS data is received, does it come with a geo-reference pick up locations. Mr. Zhang stated that 95% of the TFTC data received includes the latitude/longitude unless the patient is transferred by a private vehicle. Dr. Fildes questioned how the record is submitted and how contemporary is the record submission. Ms. Palmer stated that the TFTC data has been submitted up to and included May 2016 for all the trauma centers. Mr. Hammond explained that the EMS providers don't submit data directly; it is collaboration between First Watch and the trauma centers.

Dr. Fildes asked the group how or what they would like to see that analysis begin to look like.

Ms. Renner questioned at what time they start tracking. Mr. Hammond stated when the provider either uses their mobile data terminal and hits "en route to the hospital," or when they verbally say on the radio, "dispatch I'm heading to UMC trauma." Ms. Renner asked if that includes the time that it took EMS to get on scene, packaged, and en route to hospital. Mr. Hammond stated that transport time does not include those parameters. Dr. Fildes added that in general they're dispatched from closest available unit, so the arrival at the scene time is usually fairly compact. The scene time is dictated by the scene. When the tires start turning and the ambulance makes way to the hospital, that's when the transport time begins, and it ends when the tires stop turning. Ms. Renner felt it would be interesting to not only track transport times, but overall dispatch time to hospital. Ms. Johnson agreed adding that it will give a picture of how long it took the patient to get to definitive care from their time of injury versus just the time en route. Dr. Carrison stated that the response times are tracked for the franchise agreement. Dr. Young stated that from a system level it is a good question but there is a little bit of a mission creep on how it applies to the goals of this taskforce. Ms. Palmer agreed adding there are situations where crews are holding short for an extended period of time and situations where there is extrication so it may not be an accurate snapshot.

Dr. Fildes stated that return to service time was important to the EMS providers. He added that he is going to make a notation that they look at transport times, return to service times and dispatch to arrival time.

Ms. Doane asked if there is any additional traffic study information that would be available and useful for this group. Mr. Hammond stated that HCA generated a traffic study a few years back but didn't know what they used it for. Ms. Renner stated she will look into it. Ms. Angeles stated that data was available through UNLV, Traffic Research Center. She added that they collect multiple data sets and can provide it in a manner that is presentable and applicable to their purposes.

Dr. Fildes believed that there is value in looking at traffic modeling because some of the combinations of centers and hospitals reside along major highways where there is few impediments to transporting. Modeling shows delay the farther away from highways you go, and the more neighborhood have to be traversed.

Mr. Pullarkat commented that with regard to the transport time piece he would be curious about the 8% that are over 30 minutes and where are those areas located. Mr. Hammond stated that they did a pin-map, of more than 30 minutes and can show that as well.

Dr. Fildes stated that in terms of examining transports, they look some transportation modeling relative to centers and potential centers. He asked the group if there any other issues surrounding transportation and transport.

Mr. Llamas questioned if the First Watch data included air. Ms. Hammond stated that it doesn't. He added that they can include Mercy Air's calls but felt they should break them out because they don't drive on the streets. Dr. Fildes stated that getting that information would be interesting. It would parse out what are transports that are inter-facility versus what's really in the domain of EMS. Mr. Hammond stated he wouldn't have that data, it would have to come from the actual provider.

Dr. Fildes stated that the next domain is the "lead agency/stakeholder/community support". The NBATS itself isn't really clear on the type, number, or rating of some of these things, and felt that this group will have to try and come up with something. Mr. Hammond agreed stating when it mentions community support, it means the governing body of that entity be it county or city. The way the NBATS is written it's the entire trauma service area, which would include Mesquite, Boulder City, Henderson, Clark County, and Las Vegas. It would be a percent of the entire trauma service area that you have supporting the addition of a trauma center. He felt it should be a little more localized than what is in the NBATS currently.

Ms. Doane questioned whether this type of support data is the function of this taskforce or should the RTAB take these support counts into consideration separately. Mr. Hammond stated that it is part of the NBATS criteria. Ms. Doane felt that it was a bit subjective for the purpose of this group. Dr. Fildes suggested they take this as a homework assignment in open discussions with each of their groups and come back with something that they can actually count, measure or discuss. Ms. Doane felt that the objective criteria around population, growth and transports are the criteria that allow this body to make a recommendation. Ms. McSwain didn't believe that population is the only consideration for this group. She felt that you also have to consider community interest. Ms. Renner stated that part of the NBATS tool, is that it's not a complete product yet and it still needs some work. She felt they are just replicating the NBATS tool with this list and they are not modifying it to meet the needs of this system. Dr. Fildes observed that it is the groups wish to omit lead agency/stakeholder/community support. Ms. Taylor agreed adding that they need to take the subjectiveness out of this taskforce. Ms. Doane stated that she understands the importance of community input but felt those recommendations are a function of the greater RTAB and maybe not one of the goals of this taskforce. Ms. Dokken disagreed stating that the function of this taskforce was to set up a tool and didn't feel that they can eliminate lead agency and community support from that tool. Dr. Fildes stated that this group will be going through this list until the task is done and felt that this domain may receive less weight than the other domains of this worksheet. He added that he would insist though that some financial or business analysis be associated with this. He stated that when he sat on the National Committee with the CDC and wrote the trauma field triage criteria (TFTC), the fellow government stand was that there was a growing number of over-triaged patients that were receiving excessive and expensive care that wasn't saving lives, and the CDC had been disciplined by fellow payers to re-write the TFTC to correct that over-triage problem. Locally, they have seen a rise in the over-treatment of people with minimal injuries and felt that this discussion cannot be hidden any longer. This group may agree at the end of the day that it is true but not related or choose to model the system that tries to reduce over treatment.

Ms. Doane questioned the parameters that would be included in that financial analysis. Dr. Fildes stressed that certainly the one that should concern everyone is center viability, or the hospital's viability to stay in the game and be stable. Ms. Renner asked if there are any recommendations from ACS for a level II or III to be clinically competent. Dr. Fildes stated that they haven't because in many cases they are in rural communities that see very few patients.

Mr. Hammond emphasized that they are going to have to be very specific on the financial component because as Dr. Iser mentioned in the BOH, it is not the position as a Health District to determine what a trauma center makes on a particular case.

Dr. Fildes informed the group that they used the tipping point analysis of the business plan of an applicant or a business plan of a currently functioning center to help them determine their shutdown point. He added that you can't build a system that has more centers than that.

Ms. Doane declared that there are several tools that can provide projection of population growth by zip code and break those down by age demographics to look at future potential and criminal volume need. She felt that part of that study would perhaps give a little bit better of a picture of a viability story without delving into financial waters. Dr. Fildes stated that was done in 2005 and then 2008 came along and 20% of the population move out. Ms. Doan stated that projection can go either way.

Mr. Driggars questioned if they are drawing an equivalency between the population size of a particular zip code and the frequency of trauma calls in that zip code. Dr. Fildes answered in the affirmative and added that they can do that by having the county demographer help them see what the density map looks like and add an overlay geo-reference EMS run data to try and determine what the ratio of calls to population might be.

Mr. Driggars questioned that when this group is using the term population, is that population of citizens in the area or is that population of patients in the area. Dr. Fildes stated that it would end up being both. He added that a lot of times it comes down to municipality lines and then it comes down to service areas for whoever the EMS provider is or the service group. He stated that he will try and make sense of all these comments and get this written out so that this group can go over this again.

Dr. Fildes stated that the next domain is about severely injured patients (ISS>15) which can be viewed through a number of different lenses. One recommendation here is to look for severely injured patients that are discharged from acute care facilities that are not level I, II, or II trauma centers. He specified that the Trauma Medical Advisory Committee (TMAC) reviews this on a quarterly basis.

Mr. Hammond stated that they actually have some of that data now with the trauma registry being active for the non-trauma centers. As they move forward, he will get those data extracts and they will be able to see their score.

Dr. Fildes stated that it is usually an ICD derived ISS score and it is usually taken off the UB05 discharge data set and questioned what the Health District was using. Mr. Zhang stated that he uses the hospital discharge data so they get the ISS code as derived from the abbreviated injury scale (AIS).

Dr. Fildes felt that the TMAC has a pretty good handle on this particular issue.

Mr. Hammond suggested that with the advent of having some of that non-trauma center data, he felt that they could add it to the TMAC agenda to discuss rather than just the non-trauma center deaths.

Dr. Fildes stated that the next domain has to do with the Level 1 centers and their role within the system. There is a scale that is assigned here and I'm not sure it is entirely relevant; he recused himself and asked Dr. Dort to conduct this portion of the discussion.

Dr. Dort stated that the primary concern of not just the committee but of the county should be that the Level 1 center has the numbers it needs to continue its leadership, research and education. He viewed this process as they are fixing a system that is really not broken but that they want to put more resources in place before it does break. He felt that they should have hard numbers that tell them when a system is getting close to the point where they need to consider helping it out by way of capability and resources. Most of these items look at needs based on population and location from the outside, he felt there should be some parameter on the inside saying they are close to capacity or not close to capacity.

Ms. Doan agreed and stated that is why she felt this group could make great use of a needs based assessment from the conference in Chicago that Dr. Fildes reference earlier to see what benchmarks are coming out of that conference that we could apply here locally.

Dr. Fildes noted that he jotted down a statement here that says “to develop measures that indicate when a center is reaching capacity or when a center is struggling” and asked the group if they have any thoughts on what that might be.

Ms. Doane stressed that they would want to reference the needs assessment to see if there are benchmark indicators that they could apply here rather than try to pick it amongst themselves.

Dr. Dort felt that some of this is going to be ISS and some of this is going to be wait times.

Ms. Dokken suggested that not being able to transfer patients into the Level II or I be added as an indicator that the system is reaching capacity. Mr. Hammond agreed. Ms. Dokken also mentioned the trauma quality improvement program (TQIP).

Dr. Fildes stated that this will be a good starting point for our next working session. He suggested that they consider doing some site visits to look at the various centers. To actually walk through a place and look at its capacity and its layout will give you a sense of things. He expressed the fact that he doesn't know how to go forward with that thought but would like to introduce it as a point of more conversation later on.

Dr. Fildes stated that the 6th domain is the number of severely injured patients with ISS>15 that are scene at the level I and II. That data is readily available and measures of efficiency, capacity or capabilities are probably fairly straight forward. He invited recommendations from the group on what they ought to be.

Mr. Hammond commented that NBATS only asks for total number and it assigns it score based on that.

Dr. Fildes felt that it is intended to be a capacity measure and added that not all trauma centers are created equal. When the public says they have 2.1 million people and you should have a trauma center for every 500,000 that doesn't apply here because this system has a really unusual configuration that was built back in the 90's and still continues to work well.

Mr. Hammond asked the group that before the next meeting they think about what kind of metrics they would throw under these measures and start trying to assess that out and bring that forward to the next meeting for discussion.

Dr. Fildes stated that in addition he would hope that this group do some literature searches and bring some evidence forward that would support these so as we move forward to the BOH that this body is looked upon as reliable and truthful and transparent and that we bring a good set of measures that are locally relevant and then that be the foundation of the work done by this group.

- 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 Committee 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 Committee. 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 3:48 p.m.