2011 HOUSE HUMAN SERVICES

HB 1266

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
January 18, 2011
Job # 13002

☐ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Explanation or reason for introduction of bill/resolution:**

To have a state medical director in the State of North Dakota.

**Minutes:**

**Chairman Weisz:** Called hearing to order on HB 1266.

**Rep. Porter:** From District 34 in Mandan introduced the bill. Part of my legislative duty is that I am appointed to the state trauma committee as the legislative representative. Two sessions ago we had a comprehensive trauma bill that dealt with the study of our trauma system. We hired the American College of Surgeons to come in a do a comprehensive look at North Dakota's trauma system and that includes urban and rural facilities. We also had a bill that brought in the National Highway Institute of Safety (NHTSA) to study the EMS system in the state and make their suggestions. Last session we had bills that dealt with those recommendations. One was the component of mandatory licensure of quick response units. The trauma system and plan recommendations from the American College of Surgeons and (NHTSA) recommended that the state have a medical director. We did not deal with that last session, so this bill puts into place a state medical director for trauma and EMS. It is a contracted position so that it is not additional employees or an FTE. It is let out on bids and someone would bid how much they want per hour back to the State of North Dakota. The other pieces inside of this deal with the component that came out of the study. It talks about an associated trauma coordinator, so an assistant inside the Department of Health. That is an FTE position. Training dollars, increased money for trauma designation site visits and enhancement to the trauma registry which is the statistical gathering program for trauma calls. All the hospitals and all EMS currently submit data to it. Inside the trauma registry that one is just the hospitals'. EMS goes to a different registry. The bill in summation follows through with the American College of Surgeons and NHTSA recommendations off from the two studies that were performed and includes one FTE that would be the associated trauma coordinator position and a contracted physician position.

**Chairman Weisz:** If we are already reporting the data and I assume we have a registry, then why an additional $134,000?

**Rep. Porter:** That is an excellent question and I will let those from the department answer what enhancements they feel they need to that existing registry. There are some shortfalls inside of that registry on how the information and program works.

**Chairman Weisz:** What are we supposedly going to get for our $416,000?

**Rep. Porter:** I can give you my take on it, but I would be better off letting the trauma committee give their take on it and what the actual recommendation for the American College of Surgeons on how that position works. The medical director is the overseer of the medical protocols of the State of ND.

**Rep. Holman:** Who does this now?

**Rep. Porter:** No one.

**Kent Hoerauf:** Rural MD of Hettinger and the ND Medical Association representative on the State Trauma Committee testified in support of the bill. (See attached Testimony #1.)

**Rep. Paur:** (At this point all power was lost to the Capitol. No more recording.)

**Shelly Arnold:** The Trauma Service Manager at Medcenter One in Bismarck, ND testified in support of the bill. (See attached Testimony #2.)

**Tom Maren:** Director of EMS and Trauma with the Department of Health testified in support of the bill. Gave the job description of the trauma medical director. (See handout #3.)

**Rep. Holman:** Might there be shifting of existing services?

**Tom:** No shifting of responsibilities.

**Chairman Weisz:** You don't feel the medical director won't take current trauma director's duties?

**Tom:** No duplication of services.

**Chairman Weisz:** Anymore support? Any opposition to HB 1266? Hearing is closed.

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
January 25, 2011
Job #13395

☐ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:**

**Chairman Weisz:** Let's take up 1266. In a sense it adds some level of bureaucracy so let's talk about it. We will try and kick it out tomorrow at least by next week.

**Rep. Porter:** You and I had he discussion of this and going back to the whole position of American College of Surgeons (ACS) and the National Highway Traffic Safety Institute (NHTSI) and why this bill came forward. The cohesiveness of the trauma system both from the hospital standpoint and from EMS is very important as plans are developed and implemented that they follow best practices for the patient. Last session we mandated that all hospitals now have to participate in the trauma system. I wanted to go through the line item dollars. I'm going to start on line 22 and go up. Currently the trauma registry is mandated that the trauma facilities have to participate in that registry. The licensing of those is an expense to the hospital. That is what the $144,000 figure represents. A savings back to the hospitals that are currently paying for that system. The site visits when we added all facilities (Chairman Weisz interrupts).

**Chairman Weisz:** When you say hospitals, do you mean tertiary hospitals? Who is paying for that registry?

**Rep. Porter:** I thought it was just the level 2s. The six level 2s.

**Rep. Kilichowski:** Is that a one-time fee?

**Rep. Porter:** No that is the license fee for that registry on a biannual basis.

**Rep. Kilichowski:** So this would be a continuing expenditure?

**Rep. Porter:** That is correct. The $41,000 goes back into the system that we have developed into a mandatory trauma system. Currently the ACS verifies the level 2 facilities. The State Trauma Committee verifies the level 3s which as an example would be a Dickinson or Jamestown where they have 24 hour emergency room coverage. A level 4 is a rural facility where the physician is not on site, but on call and available 24/7. A level 5 trauma facility it can be a mix of coverage between an advanced practice nurse or a physician. They have to be inspected. The costs for those inspections goes back to the level 2s because of the nurses and doctors that go out as part of the inspection team.

**Chairman Weisz:** What involvement in the site visits does the current trauma coordinator in the Health Dept. have?

**Rep. Porter:** The trauma coordinator is with each one of these and coordinates the inspection. The leader of the team on how that approach goes is the state coordinator. The physician on the inspection team sits down with the hospital physician and discusses particular issues and can keep it on a professional level.

**Chairman Weisz:** Where is the cost being paid for now or is this just supposed to be increased number of site visits and that is where the dollars (inaudible).

**Rep. Porter:** With the passage of the bill last session there were only three or four facilities that weren't so this is to cover some of those costs for the ongoing process of site visits along with some of the new. The ATLS training that is not new and required by the ACS and that again is a cost being borne by those level 2s. In order to be a level 5 or any level trauma facility, the person who is covering the emergency room at a minimum has to be certified in advanced trauma life support. The additional position is $113,936. In discussion with the Chairman how can we meet with some of the requirements of the ACS and take baby steps into this program. I'd suggested that could be a half time position to start with and look at it again in two years. The contracted medical emergencies and trauma medical director would be the same. The person should be a retired physician.

**Rep. Holman:** Confused on shifting of responsibilities and funds. We are paying for something that is already being done in the existing budget and paying for it here so what kind of an adjustments?

**Rep. Porter:** The shift is away from the level 2 trauma centers and to the State of ND for their mandated trauma system. The money below the $21,000, $41,000 and $134,000 are all being paid right now by the level 2 trauma centers. This bill says it is the state's trauma system and the state has the mandate out there that everybody participate in it then they should also pay for those expenses that go along with provided that level of care.

**Rep. Holman:** So who is paying for it now?

**Rep. Porter:** The level 2 trauma centers. Except the nurse coordinator position that currently is in the Health Dept. The State of ND pays that position.

**Rep. Schmidt:** My running mate in the medical field thinks this is duplication on what the state is already doing and what this individual would be doing. I don't have any experience to know if that is true or not. I don't know what the separation of duties are.

**Chairman Weisz:** Would it help the committee if we had the State Trauma Coordinator come back down and explain?

**Rep. Paur:** Has there been anybody in the process of setting this up critical of it?

**Chairman Weisz:** I think initially some of the small hospitals had concerns about being bypassed. It appears those concerns have been addressed and I don't believe there is any opposition to the process.

**Rep. Anderson:** I wrote on my bill, that we won't see any duplication of services.

**Chairman Weisz:** I know it was brought out that the associated coordinator would be more responsible for making the site visits.

**Rep. Porter:** The process of the inspections is heavily going to rely upon volunteers and the assistants of those level 2 trauma centers. There is no doubt the state does not have the resources even with this addition to even do that. The state's function is that of the regulator. The regional trauma committee's function is that of the assistant inside of their region to make sure that trauma patients are being treated at the same standard of care through ND. There really isn't a duplication that can exist. One is the regulatory agency and the other is the supportive structure of the system itself.

**Rep. Louser:** This is all based on the recommendations for ACS?

**Rep. Porter:** That is correct. There were two assessments done. The first one was the ACS and the second was NHTSI and they assessed the EMS component and they made the same recommendation.

**Rep. Louser:** Would there ever be a visit to a state that doesn't have a trauma director there they wouldn't recommend having one?

**Rep. Porter:** Probably not because the central coordination of care has to come from someplace.

**Rep. Kilichowski:** Is this trauma registry up now?

**Rep. Porter:** Yes.

**Rep. Kilichowski:** Is any of this other stuff already in place?

**Rep. Porter:** Yes it is. The advanced life support trauma training, trauma designation site visits and the registry are all up and running today. The cost you see here is what it is costing the two level 2 trauma centers to subsidize the state for those services.

**Rep. Kilichowski:** Is this money going to be coming out of a special fund? We didn't get a fiscal note on it? What fund is this appropriation coming out of?

**Rep. Porter:** In section 2 of the bill up at the top on line 14, it comes out of the permanent oil tax trust fund.

**Chairman Weisz:** Does the committee want me to bring him back down?

**Rep. Schmidt:** If I'm the only one that is confused on that, I can take care of that myself.

**Rep. Damschen:** What I'm wondering about is with the legacy fund would the permanent oil tax trust fund go away? Where is that money coming from?

**Chairman Weisz:** It doesn't go away unless we make it go away.

**Rep. Damschen:** What funds if the oil money goes into the legacy fund?

**Chairman Weisz:** When a fund goes broke we transfer general fund money into that fund and they still pretend we are not using general fund money.

**Rep. Conklin:** Is there any reason why it is contracted besides the FTE thing?

**Chairman Weisz:** I would say so. Rep. Porter may want to respond to that.

**Rep. Porter:** We couldn't afford to hire a full time position. It certainly wouldn't look like that figure of $208,000 a year. In order to have a position it was felt by the state trauma committee to contract those services out and look for either a retired physician or a physician that wanted some extra responsibilities and duties.

**Rep. Conklin:** ...ongoing position..(Inaudible. Microphone not on).

**Rep. Porter:** It would be a two year contract if it was approved. In two year if there wouldn't be an appropriation there then there wouldn't be an extension of that contract.

**Chairman Weisz:** I'll have him come down when we take this bill up again so he can answer questions. Adjourned until tomorrow.

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
February 2, 2011
Job # 13871

☐ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:**

**Chairman Weisz:** Called meeting to order on HB 1266. This one has a substantial fiscal note and we have had discussions about cutting some of that out which will still leave it with a fair fiscal note.

**Rep. Damschen:** I don't have a copy of the fiscal note.

**Chairman Weisz:** It is in the bill. The original bill has a $726,00 appropriation. I've talked with some hospitals and trauma and they like what we have done so far. I was surprised that there was some concern about buy-in. Yet at this point having a director that is from their perspective is an additional layer of bureaucracy and a regulator in telling them what to do. They'll work with whatever we do.

**Rep. Paur:** I checked with my small local hospital on this and he said he saw no problem with it.

**Rep. Schmidt:** Sen. Schaible who I campaigned with is an EMS and has been for years and he said he doesn't see any reason for it. Karen Rohr works in MedCenterOne and she's read this and deals with this sort of stuff to a degree and she sees no value in it. I've checked with an emergency room nurse in Bismarck hospital. She's read it and sees no need in it. I will go along with my running mates and vote no on this.

**Chairman Weisz:** What do you want to do with this? You deal with as is or try and amend it.

**Rep. Porter:** We did an interim study in 2007 and did the biggest piece of ACS recommendations in the 2009 session which was the mandate portion and the other EMS portions. This was the piece that was left out by design.

**Chairman Weisz:** There has been some resistance from some of the smaller facilities. There was concern that maybe we need to let the smaller facilities get use to what we have done so far because they were afraid there was going to be even more push back on those that aren't wanted to get on board with this. Even if we toss this out at a reduced level we will have to make the sale to the Appropriations Committee. I'm inclined to give what we did a little more time now and look at running this up the flag pole two years from now.

**Rep. Porter:** I appreciate the comments that were made in regards to this. My name is on it because of the state trauma committee and being the legislative appointed member to that committee. This was part of the total plan that was presented back to the State of ND by the ACS and the NHTSI from two studies that we paid for somewhere around $130,000. At looking at it I know there is a certain level of concern about FTEs that is why the group wanted to hire a physician and was told how it was looked upon and it was decided to be a contracted position. Is everything on here important? Yes it is. Are there pieces of this that will be given a couple of more years that we put into place last session? I believe that to be the case too. By amending everything out accept the advanced trauma life support training and some of the funds of the trauma designated site visits and moving forward with it would still allow the transgression into the system we did last session. I don't disagree that we take it in smaller steps that what this would allow.

**Chairman Weisz:** To be clear, you are suggesting that we retain funding for the training and the site visits.

**Rep. Porter:** Not going to make the motion because I think this is one of those things that urban and rural need to buy off on. It is money that is for rural people for training that is mandated. It is money to send people from the urban centers out to help those rural facilities that we have mandated into this system are the two key line items. I'd drop the ATLS training grant line to $20,000 and drop the trauma site visit line down to $30,000 and let it go like that and then it can go right to the floor. I would change line 14 to be out of the general fund.

**Chairman Weisz:** Cover what we have already mandated in 2009.

**Rep. Porter:** Than is correct. The $134,000 is to supplant back to those facilities the cost we have mandated them into the trauma registry. That is what they are paying to be part of this system.

**Rep. Hofstad:** I think Rep. Porter answered my question, but just to be sure, when ACS came and did this visit and did those recommendations; the major recommendation was the medical director. Is that right? And are these some of the other recommendations that they specifically made or are there more out there that we haven't really addressed yet?

**Rep. Porter:** Out of this wish list from the trauma committee, the medical director is the component out of the survey. The associated trauma coordinator with the mandate having all facilities into the system, they felt they were overwhelmed with the amount of site visits by having only one person there.

**Chairman Weisz:** Can your advanced trauma life support training occur in EMS service?

**Rep. Porter:** No. That class is taught by physicians to physicians.

**Rep. Schmidt:** Were those changes you made Rep. Porter amendments you are proposing.

**Rep. Porter:** I wasn't making as a motion or amendments. I was just opening it up as a discussion.

**Rep. Kilichowski:** I move we overstrike "permanent oil trust fund" and put in "general fund" and overstrike line 18 and 19 and on line 21, make that $20,000. Overstrike $41,580 and make it $30,000 and overstrike line 22, 23 and 24.

**Rep. Damschen:** Second.

**Voice Vote: Motion Carried**

**Rep. Kilichowski:** I move a Do Pass as amended.

**Rep. Schmidt:** Second.

**VOTE: 10 y 0 n 3 absent – Rep. Louser, Conklin and Holman**

**MOTION CARRED ON DO PASS AS AMENDED**

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
February 7, 2011
Job #14083

☐ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:**

**Chairman Weisz:** Called the meeting to order on HB 1266. This bill is on the floor today so I need to decide whether to bring it back or not. That was the medical director where we changed the funding for a total of $50,000 funding for taking care of the worksite visits and training. Eliminated everything else, but the language that authorizes the Health Dept. to establish a medical director is still in the bill. At first I thought I'd made the mistake when I signed off on the amendments, but after I went through he notes and everything else we did not eliminate that. We can leave the language in, but we are not funding the position. We took the money out. I need to know what the committee (stops) my guess is the Senate is going to put money back in.

**Rep. Porter:** I talked with Rep. Schmidt and it certainly wouldn't hurt to leave the language in there. If they want to contract with a private physician to provide some of those services inside of their existing budget; we are telling them it is ok to do. That does meet some of the recommendations of the American College of Surgeons.

**Chairman Weisz**: I don't have a problem with doing that. I would assume the committee at least want me to make sure Appropriations knows that we were not intending to additionally fund that position.

**Rep. Kilichowski:** But it mandates that they shall appoint. Isn't that a little stickler there?

**Chairman Weisz:** You have a point.

**Rep. Kilichowski:** I move to bring it back to the committee for further amended.

**Chairman Weisz:** We don't need a formal motion. If that is what the committee wants to do I will just have it brought back.

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
February 7, 2011
Job #14122

☐ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:**

**Chairman Weisz:** Called meeting to order on HB 1266. Asked to reconsider.

**Rep. Hofstad:** I would move that we reconsider HB 1266.

**Rep. Kilichowski:** Second.

**Chairman Weisz:** Do we want to change the language from shall to may?

**Rep. Kilichowski:** I would move that we amend it from shall to may.

**Rep. Hofstad:** Second.

**Chairman Weisz:** We are going to leave language that was in there that was in the question as far as lines 8 through 12. We are just changing the one word from shall to may. It will allow the department if they have money in their budget that they can go ahead and do one.

**Voice Vote: Motion Carried**

**Rep. Hofstad:** I move a Do Pass as amended.

**Rep. Anderson:** Second.

**VOTE: 12 y 0 n 1 absent – Rep. Porter**

**Bill Carrier: Rep. Schmidt**

# FISCAL NOTE

**Requested by Legislative Council**
04/19/2011

Amendment to: Reengrossed HB 1266

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

| | 2009-2011 Biennium | | 2011-2013 Biennium | | 2013-2015 Biennium | |
|---|---|---|---|---|---|---|
| | General Fund | Other Funds | General Fund | Other Funds | General Fund | Other Funds |
| Revenues | | | | | | |
| Expenditures | | | $100,000 | | $100,000 | |
| Appropriations | | | $100,000 | | $100,000 | |

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

| 2009-2011 Biennium | | | 2011-2013 Biennium | | | 2013-2015 Biennium | | |
|---|---|---|---|---|---|---|---|---|
| Counties | Cities | School Districts | Counties | Cities | School Districts | Counties | Cities | School Districts |
| | | | | | | | | |

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the state health officer to appoint an emergency medical service and trauma medical director to provide oversight and consultation to the state emergency medical services and trauma systems.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 Medical Director states "the state health officer may appoint an emergency medical services and trauma medical director to provide medical oversight and consultation in the development and administration of the state emergency medical services and trauma systems". It further states "The Medical director must be a physician licensed in the state and must be contracted and paid by the state department of health" Total cost for this activitiy is $50,000.

Section 2 Appropriation. This section includes an appropriation of $50,000 to the Department for advanced trauma life support training and trauma designation site visits. This training and site visit is necessary in order for their hospitals to maintain any level of designated Trauma Center Status. The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. The total cost of these activities is detailed in the expense section of this fiscal note.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

In section 1 of this bill the medical director must be a physician licensed in the state and must be contracted and paid by the state department of health. The medical direcor would be paid $100 per hour for 250 hours per year for an

annual cost of $25,000 or $50,000 per biennium.
The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. A health department employee, a physician from the respective region and a nurse trauma coordinator from the region make up the team for the site visit for these hospitals. It is anticipated that the team would complete 15 site visits per year at $1,000 per site visit or $30,000 for the 2011-13 biennium. In order for a hospital to maintain any level of trauma designation, physicians and other providers across the state must be current in Advanced Trauma Life Support training. it is anticipated that approximately 15 individuals would be trained each year at a cost of approximately
$650 per person. Total for the biennium would be approximately $20,000.
Total cost for both the 2011-13 biennium and the 2013-15 biennium would be $100,000.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

This bill includes an appropriation of $100,000 from the general fund to the state department of health. It is not included in the Department's appropriation bill (HB 1004).

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|---|---|---|---|
| **Name:** | Kathy J. Albin | **Agency:** | Health |
| **Phone Number:** | 328.4542 | **Date Prepared:** | 04/19/2011 |

# FISCAL NOTE

**Requested by Legislative Council**
04/01/2011

Amendment to: Reengrossed HB 1266

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

| | 2009-2011 Biennium | | 2011-2013 Biennium | | 2013-2015 Biennium | |
|---|---|---|---|---|---|---|
| | General Fund | Other Funds | General Fund | Other Funds | General Fund | Other Funds |
| Revenues | | | | | | |
| Expenditures | | | $100,000 | | $100,000 | |
| Appropriations | | | $100,000 | | $100,000 | |

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

| 2009-2011 Biennium | | | 2011-2013 Biennium | | | 2013-2015 Biennium | | |
|---|---|---|---|---|---|---|---|---|
| Counties | Cities | School Districts | Counties | Cities | School Districts | Counties | Cities | School Districts |
| | | | | | | | | |

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the state health officer to appoint an emergency medical service and trauma medical director to provide oversight and consultation to the state emergency medical services and trauma systems.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 Medical Director states "the state health officer shall appoint an emergency medical services and trauma medical director to provide medical oversight and consultation in the development and administration of the state emergency medical services and trauma systems". It further states "The Medical director must be a physician licensed in the state and must be contracted and paid by the state department of health" Total cost for this activitiy is $100,000.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

In section 1 of this bill the medical director must be a physician licensed in the state and must be contracted and paid by the state department of health. The medical direcor would be paid $100 per hour for 500 hours per year for an annual cost of $50,000 or $100,000 per biennium.
Total cost for both the 2011-13 biennium and the 2013-15 biennium would be $100,000.

   C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

This bill includes an appropriation of $100,000 from the general fund to the state department of health. It is not included in the Department's appropriation bill (HB 1004).

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|---|---|---|---|
| **Name:** | Kathy J. Albin | **Agency:** | Health |
| **Phone Number:** | 328.4542 | **Date Prepared:** | 04/01/2011 |

# FISCAL NOTE

**Requested by Legislative Council**
03/14/2011

Amendment to: Reengrossed HB 1266

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

| | 2009-2011 Biennium | | 2011-2013 Biennium | | 2013-2015 Biennium | |
|---|---|---|---|---|---|---|
| | General Fund | Other Funds | General Fund | Other Funds | General Fund | Other Funds |
| Revenues | | | | | | |
| Expenditures | | | $416,000 | | $416,000 | |
| Appropriations | | | $416,000 | | $416,000 | |

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

| 2009-2011 Biennium | | | 2011-2013 Biennium | | | 2013-2015 Biennium | | |
|---|---|---|---|---|---|---|---|---|
| Counties | Cities | School Districts | Counties | Cities | School Districts | Counties | Cities | School Districts |
| | | | | | | | | |

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the state health officer to appoint an emergency medical service and trauma medical director to provide oversight and consultation to the state emergency medical services and trauma systems.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 Medical Director states "the state health officer shall appoint an emergency medical services and trauma medical director to provide medical oversight and consultation in the development and administration of the state emergency medical services and trauma systems". It further states "The Medical director must be a physician licensed in the state and must be contracted and paid by the state department of health" Total cost for this activitiy is $416,000.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

In section 1 of this bill the medical director must be a physician licensed in the state and must be contracted and paid by the state department of health. The medical direcor would be paid $100 per hour for 2,080 hours per year for an annual cost of $208,000 or $416,000 per biennium.
Total cost for both the 2011-13 biennium and the 2013-15 biennium would be $416,000.

   C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

This bill includes an appropriation of $416,000 from the general fund to the state department of health. It is not included in the Department's appropriation bill (HB 1004).

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|---|---|---|---|
| **Name:** | Kathy J. Albin | **Agency:** | Health |
| **Phone Number:** | 328.4542 | **Date Prepared:** | 03/14/2011 |

# FISCAL NOTE

**Requested by Legislative Council**
02/09/2011

Amendment to: Reengrossed HB 1266

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

| | 2009-2011 Biennium | | 2011-2013 Biennium | | 2013-2015 Biennium | |
|---|---|---|---|---|---|---|
| | General Fund | Other Funds | General Fund | Other Funds | General Fund | Other Funds |
| Revenues | | | | | | |
| Expenditures | | | $92,000 | | $92,000 | |
| Appropriations | | | $92,000 | | $92,000 | |

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

| 2009-2011 Biennium | | | 2011-2013 Biennium | | | 2013-2015 Biennium | | |
|---|---|---|---|---|---|---|---|---|
| Counties | Cities | School Districts | Counties | Cities | School Districts | Counties | Cities | School Districts |
| | | | | | | | | |

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill allows the state health officer to appoint a emergency medical service and trauma medical director to provide oversight and consultation to the state emergency medical services and trauma systems.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 Medical Director states "the state health officer may appoint an emergency medical services and trauma medical director to provide medical oversight and consultation in the development and administration of the state emergency medical services and trauma systems". It further states "The Medical director must be a physician licensed in the state and must be contracted and paid by the state department of health". There is not an appropriation for this service so the medical director will not be appointed and there will be no costs for the Department of Health.

Section 2 Appropriation. This section includes an appropriation of $50,000 to the Department for advanced trauma life support training and trauma designation site visits. This training and site visit is necessary in order for their hospitals to maintain any level of designated Trauma Center Status. The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. The total cost of these activities is detailed in the expense section of this fiscal note.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

In section 1 of this bill the medical director must be a physician licensed in the state and must be contracted and paid by the state department of health. Since the language has changed from "shall to may" and there is no appropriation

for this activity a medical director will not be appointed and there will be no cost to the Department.

The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. A health department employee, a physician from the respective region and a nurse trauma coordinator from the region make up the team for the site visit for these hospitals. It is anticipated that the team would complete 21 site visits per year at $1,000 per site visit or $41,000 for the 2011-13 biennium.

In order for a hospital to maintain any level of trauma designation, physicians and other providers across the state must be current in Advanced Trauma Life Support training. In order to provide approximately 100 individuals training within a three year period it is anticipated that approximately 34 individuals would be trained each year at a cost of $700 per person. Total for the biennium would be $51,000.

Total cost for both the 2011-13 biennium and the 2013-15 biennium would be $92,000.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

This bill includes an appropriation of $50,000 compared to the estimated expenditures of $92,000. Funding for this project are not included in the Department's appropriation bill (HB 1004).

| | | | |
|---|---|---|---|
| **Name:** | Kathy J. Albin | **Agency:** | Health Department |
| **Phone Number:** | 328.4542 | **Date Prepared:** | 02/10/2011 |

# FISCAL NOTE

**Requested by Legislative Council**
02/09/2011

Amendment to: HB 1266

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

| | 2009-2011 Biennium | | 2011-2013 Biennium | | 2013-2015 Biennium | |
|---|---|---|---|---|---|---|
| | General Fund | Other Funds | General Fund | Other Funds | General Fund | Other Funds |
| Revenues | | | | | | |
| Expenditures | | | $92,000 | | $92,000 | |
| Appropriations | | | $92,000 | | $92,000 | |

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

| 2009-2011 Biennium | | | 2011-2013 Biennium | | | 2013-2015 Biennium | | |
|---|---|---|---|---|---|---|---|---|
| Counties | Cities | School Districts | Counties | Cities | School Districts | Counties | Cities | School Districts |
| | | | | | | | | |

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill allows the state health officer to appoint a emergency medical service and trauma medical director to provide oversight and consultation to the state emergency medical services and trauma systems.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 Medical Director states "the state health officer may appoint an emergency medical services and trauma medical director to provide medical oversight and consultation in the development and administration of the state emergency medical services and trauma systems". It further states "The Medical director must be a physician licensed in the state and must be contracted and paid by the state department of health". There is not an appropriation for this service so the medical director will not be appointed and there will be no costs for the Department of Health.

Section 2 Appropriation. This section includes an appropriation of $50,000 to the Department for advanced trauma life support training and trauma designation site visits. This training and site visit is necessary in order for their hospitals to maintain any level of designated Trauma Center Status. The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. The total cost of these activities is detailed in the expense section of this fiscal note.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

In section 1 of this bill the medical director must be a physician licensed in the state and must be contracted and paid by the state department of health. Since the language has changed from "shall to may" and there is no appropriation for this activity a medical director will not be appointed and there will be no cost to the Department.

The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. A health department employee, a physician from the respective region and a nurse trauma coordinator from the region make up the team for the site visit for these hospitals. It is anticipated that the team would complete 21 site visits per year at $1,000 per site visit or $41,000 for the 2011-13 biennium.

In order for a hospital to maintain any level of trauma designation, physicians and other providers across the state must be current in Advanced Trauma Life Support training. In order to provide approximately 100 individuals training within a three year period it is anticipated that approximately 34 individuals would be trained each year at a cost of $700 per person. Total for the biennium would be $51,000.

Total cost for both the 2011-13 biennium and the 2013-15 biennium would be $92,000.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

This bill includes an appropriation of $50,000 compared to the estimated expenditures of $92,000. Funding for this project are not included in the Department's appropriation bill (HB 1004).

| | | | |
|---|---|---|---|
| **Name:** | Kathy J. Albin | **Agency:** | Health Department |
| **Phone Number:** | 328.4542 | **Date Prepared:** | 02/10/2011 |

# FISCAL NOTE

**Requested by Legislative Council**
02/04/2011

Amendment to: HB 1266

1A. **State fiscal effect:** *Identify the state fiscal effect and the fiscal effect on agency appropriations compared to funding levels and appropriations anticipated under current law.*

| | 2009-2011 Biennium | | 2011-2013 Biennium | | 2013-2015 Biennium | |
|---|---|---|---|---|---|---|
| | General Fund | Other Funds | General Fund | Other Funds | General Fund | Other Funds |
| Revenues | | | | | | |
| Expenditures | | | $445,000 | | $445,000 | |
| Appropriations | | | $445,000 | | $445,000 | |

1B. **County, city, and school district fiscal effect:** *Identify the fiscal effect on the appropriate political subdivision.*

| 2009-2011 Biennium | | | 2011-2013 Biennium | | | 2013-2015 Biennium | | |
|---|---|---|---|---|---|---|---|---|
| Counties | Cities | School Districts | Counties | Cities | School Districts | Counties | Cities | School Districts |
| | | | | | | | | |

2A. **Bill and fiscal impact summary:** *Provide a brief summary of the measure, including description of the provisions having fiscal impact (limited to 300 characters).*

This bill requires the state health officer to appoint a emergency medical service and trauma medical director to provide oversight and consultation to the state emergency medical services and trauma systems.

B. **Fiscal impact sections:** *Identify and provide a brief description of the sections of the measure which have fiscal impact. Include any assumptions and comments relevant to the analysis.*

Section 1 Medical Director states "the state health officer shall appoint an emergency medical services and trauma medical director to provide medical oversight and consultation in the development and administration of the state emergency medical services and trauma systems". It further states "The Medical director must be a physician licensed in the state and must be contracted and paid by the state department of health". Total cost for this activity is $208,000.

Section 2 Appropriation. This section includes an appropriation of $50,000 to the Department for advanced trauma life support training and trauma designation site visits. This training and site visit is necessary in order for their hospitals to maintain any level of designated Trauma Center Status. The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. The total cost of these activities is detailed in the expense section of this fiscal note.

3. **State fiscal effect detail:** *For information shown under state fiscal effect in 1A, please:*
   A. **Revenues:** *Explain the revenue amounts. Provide detail, when appropriate, for each revenue type and fund affected and any amounts included in the executive budget.*

   B. **Expenditures:** *Explain the expenditure amounts. Provide detail, when appropriate, for each agency, line item, and fund affected and the number of FTE positions affected.*

In section 1 of this bill the medical director must be a physician licensed in the state and must be contracted and paid by the state department of health. The part time medical director position would be contracted at $100 per hour based on a half time position. This would total $104,000 per year or $208,000 per biennium.

The state trauma system is made up of all the hospitals in the state that must be designated as a Trauma Center in order to treat trauma patients. They must be designated every three years for all levels of trauma center designation. A health department employee (associate trauma coordinator), a physician from the respective region and a nurse trauma coordinator from the region make up the team for the site visit for these hospitals. It is anticipated that the team would complete 21 site visits per year at $1,000 per site visit or $41,000 for the 2011-13 biennium.

The associate statewide trauma coordinator would be a new FTE employed by the Department of Health. Salary and fringe benefit costs for this 1.0 FTE are $115,000 and $30,000 for travel and general operating costs.

In order for a hospital to maintain any level of trauma designation, physicians and other providers across the state must be current in Advanced Trauma Life Support training. In order to provide approximately 100 individuals training within a three year period it is anticipated that approximately 34 individuals would be trained each year at a cost of $700 per person. Total for the biennium would be $51,000.

C. **Appropriations:** *Explain the appropriation amounts. Provide detail, when appropriate, for each agency and fund affected. Explain the relationship between the amounts shown for expenditures and appropriations. Indicate whether the appropriation is also included in the executive budget or relates to a continuing appropriation.*

Funding or the 1.0 FTE for this project are not included in the Department's appropriation bill (HB 1004). The Department will need an appropriation for these funds and the FTE to carry out this project.

| | | | |
|---|---|---|---|
| **Name:** | Kathy J. Albin | **Agency:** | Health |
| **Phone Number:** | 328.4542 | **Date Prepared:** | 02/07/2011 |

Adopted by the Human Services Committee 2/2/11

February 2, 2011

PROPOSED AMENDMENTS TO HOUSE BILL NO. 1266

Page 1, line 14, replace "permanent oil tax trust" with "general"

Page 1, remove lines 18 and 19

Page 1, line 20, replace "21,000" with "$20,000"

Page 1, line 21, replace "41,580" with "$30,000"

Page 1, remove lines 22 through 24

Renumber accordingly

Date: 2-2-11
Roll Call Vote # 1

**2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES**
**BILL/RESOLUTION NO.** 1266

House HUMAN SERVICES Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☐ Do Pass ☐ Do Not Pass ☐ Amended ☒ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Kilichowski Seconded By Rep. Damschen

| Representatives | Yes | No | Representatives | Yes | No |
|---|---|---|---|---|---|
| CHAIRMAN WEISZ | | | REP. CONKLIN | | |
| VICE-CHAIR PIETSCH | | | REP. HOLMAN | | |
| REP. ANDERSON | | | REP. KILICHOWSKI | | |
| REP. DAMSCHEN | | | | | |
| REP. DEVLIN | | | | | |
| REP. HOFSTAD | | | | | |
| REP. LOUSER | | | | | |
| REP. PAUR | | | | | |
| REP. PORTER | | | | | |
| REP. SCHMIDT | | | | | |
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Total (Yes) _____ No _____

Absent _____

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Voice Vote
Motion Carried

Date: 2-2-11
Roll Call Vote # 2

**2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES**
**BILL/RESOLUTION NO.** 1266

House HUMAN SERVICES Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☒ Do Pass ☐ Do Not Pass ☒ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Kilichowski Seconded By Rep. Schmidt

| Representatives | Yes | No | Representatives | Yes | No |
|---|---|---|---|---|---|
| CHAIRMAN WEISZ | ✓ | | REP. CONKLIN | A | |
| VICE-CHAIR PIETSCH | ✓ | | REP. HOLMAN | A | |
| REP. ANDERSON | ✓ | | REP. KILICHOWSKI | ✓ | |
| REP. DAMSCHEN | ✓ | | | | |
| REP. DEVLIN | ✓ | | | | |
| REP. HOFSTAD | ✓ | | | | |
| REP. LOUSER | A | | | | |
| REP. PAUR | ✓ | | | | |
| REP. PORTER | ✓ | | | | |
| REP. SCHMIDT | ✓ | | | | |
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Total (Yes) 10 No 0

Absent _____

Floor Assignment Rep. Schmidt

If the vote is on an amendment, briefly indicate intent:

11.0449.03002
Title.04000

Adopted by the Human Services Committee

February 8, 2011

2/8/11

PROPOSED AMENDMENTS TO ENGROSSED HOUSE BILL NO. 1266

Page 1, line 8, replace "shall" with "may"

Renumber accordingly

Date: 2-7-11
Roll Call Vote # 1

**2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES**
**BILL/RESOLUTION NO.** 1266

House HUMAN SERVICES Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☐ Do Pass ☐ Do Not Pass ☐ Amended ☒ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep Kilichowski Seconded By Rep. Hofstad

| Representatives | Yes | No | Representatives | Yes | No |
|---|---|---|---|---|---|
| CHAIRMAN WEISZ | | | REP. CONKLIN | | |
| VICE-CHAIR PIETSCH | | | REP. HOLMAN | | |
| REP. ANDERSON | | | REP. KILICHOWSKI | | |
| REP. DAMSCHEN | | | | | |
| REP. DEVLIN | | | | | |
| REP. HOFSTAD | | | | | |
| REP. LOUSER | | | | | |
| REP. PAUR | | | | | |
| REP. PORTER | | | | | |
| REP. SCHMIDT | | | | | |
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Total (Yes) _____ No _____

Absent _____

Floor Assignment _____

If the vote is on an amendment, briefly indicate intent:

Voice Vote
Motion Carried

Date: 2-7-11
Roll Call Vote # 2

**2011 HOUSE STANDING COMMITTEE ROLL CALL VOTES**
**BILL/RESOLUTION NO.** 1266

House HUMAN SERVICES Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☒ Do Pass ☐ Do Not Pass ☒ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Rep. Hofstad Seconded By Rep. Anderson

| Representatives | Yes | No | Representatives | Yes | No |
|---|---|---|---|---|---|
| CHAIRMAN WEISZ | ✓ | | REP. CONKLIN | ✓ | |
| VICE-CHAIR PIETSCH | ✓ | | REP. HOLMAN | ✓ | |
| REP. ANDERSON | ✓ | | REP. KILICHOWSKI | ✓ | |
| REP. DAMSCHEN | ✓ | | | | |
| REP. DEVLIN | ✓ | | | | |
| REP. HOFSTAD | ✓ | | | | |
| REP. LOUSER | ✓ | | | | |
| REP. PAUR | ✓ | | | | |
| REP. PORTER | A | | | | |
| REP. SCHMIDT | ✓ | | | | |
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Total (Yes) 12 No 0

Absent 1

Floor Assignment Rep. Schmidt

If the vote is on an amendment, briefly indicate intent:

## REPORT OF STANDING COMMITTEE

**HB 1266: Human Services Committee (Rep. Weisz, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (10 YEAS, 0 NAYS, 3 ABSENT AND NOT VOTING). HB 1266 was placed on the Sixth order on the calendar.

Page 1, line 14, replace "permanent oil tax trust" with "general"

Page 1, remove lines 18 and 19

Page 1, line 20, replace "21,000" with "$20,000"

Page 1, line 21, replace "41,580" with "$30,000"

Page 1, remove lines 22 through 24

Renumber accordingly

## REPORT OF STANDING COMMITTEE

**HB 1266, as engrossed: Human Services Committee (Rep. Weisz, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (12 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Engrossed HB 1266 was placed on the Sixth order on the calendar.

Page 1, line 8, replace "shall" with "may"

Renumber accordingly

2011 SENATE HUMAN SERVICES

HB 1266

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Human Services Committee**
Red River Room, State Capitol

HB 1266
3-2-2011
Job Number 14868

☐ Conference Committee

Committee Clerk Signature

**Explanation or reason for introduction of bill/resolution:**

Relating to a state department of health emergency medical services and trauma medical director.

**Minutes:** Attached testimony.

**Senator Judy Lee** opened the public hearing on Reengrossed HB 1266.

**Representative Todd Porter** (District 34) introduced HB 1266. He explained that a couple of sessions back the legislature passed a bill dealing with the trauma system. The American College of Surgeons was asked to come in to do a statewide assessment of the ND trauma system. The National Highway Traffic Safety Institute was asked to do a complete look at the EMS system. Last session several bills dealt specifically with recommendations from those studies.
HB 1266 is the last piece of the assessment that the American College of Surgeons and National Highway Traffic Safety Institute said would make our trauma and EMS systems whole. Right now there is not a statewide medical director in place for the local medical directors to consult with for protocols and standards in the delivery of trauma care or EMS. One of the key components from the American College of Surgeons was ND does not have a top down medical direction of our systems in place.

He explained the bill as originally introduced and the changes made in the House.

**Senator Judy Lee** asked if the amendment that changed "shall" to "may" and cut out all the other appropriation was done in policy committee or appropriations.

**Rep. Porter** said it was done in policy and the bill never went to appropriations.

**Senator Judy Lee** asked if he thought there was value to having a trauma director to be able to assist these hospitals in doing what they need to.

**Rep. Porter** replied that, up to this point, there has been a lot of volunteerism inside of the trauma committee that has offered to the state a lot of value for free. There absolutely has to be a top down approach to the standards of care to the benchmarks that are established

for both trauma care and for EMS care across the state. He explained the importance of having the top down approach.
He pointed out that the national organizations mentioned earlier were brought in to tell ND where it lacked to make sure in a rural health care setting that the same standards of care are there, no matter where the accident was or where the ambulance came from. This is the last component. It is foolish to think you can set up a mandated system, bring in the experts to tell you what you need, and then think you can get by without doing it.

**Senator Dick Dever** asked if this is a program the state health department could put together and designate the state health officer as the EMS/Trauma Medical Director.

**Rep. Porter** answered that, even though the state health officer is a physician, this type of position should be a part time surgeon or emergency room physician – someone who has the educational background to deal with trauma and EMS.

**Dr. Kent Hoerauf**, represents the ND AMA on the state trauma committee, testified in support of HB 1266. Attachment #1
Attachment #2 – ND State EMS/Trauma Medical Director Job Description
Attachment #3 – Amy's Job Duties

**Dr. Steven Briggs** testified on his own behalf as a Physician. Attachment #4

**Senator Spencer Berry** asked if he was in favor of the initial bill as introduced.

**Dr. Briggs** replied yes.

**Senator Tim Mathern** asked what he thought the challenge was to have legislators accept his point of view.

**Dr. Briggs** said the reality is that trauma is one of those things that nobody thinks will ever happen to them. Until it hits home with someone, they don't appreciate how fragile life is and how little control they have over it on a day to day basis.

**Senator Spencer Berry** wondered if this system is modeled after some other system in rural areas so there are statistics.

**Dr. Briggs** replied that trauma systems were developed and modeled on urban populations. It's only been recently that they've been trying to figure out how to deal with the rest of the country which is primarily rural. He felt it was important to note that when the American College of Surgeons did their review they commented that ND has its act together better that just about all the states in the country that are rural. He found that to be true in his experience. The key to trauma care is an organized systematic approach with protocols that are driven and literature based and evidence based in how they are applied. ND is one of the most rural states with the least resources as far as trauma centers.

**Senator Spencer Berry** pointed out that if they can take this bill to the Senate body with metrics and examples and situations showing relevance it would be helpful.

**Dr. Briggs** said he could do some research and try to pull together numbers the best he could for the committee.

**Dr. Hoerauf** pointed out that some states do have a medical director. He addressed the question from Senator Spencer Berry about the statistics and also said they would try to get him additional information.

**Bruce Levi**, NDMA, testified that the original bill was supported by the NDMA and the original source of funds was the permanent oil trust fund.

**John Vastag**, (Health Policy Consortium made up of Trinity Health of Minot, Altru in Grand Forks, MedCenter One in Bismarck, and Sanford in Fargo) urged support of HB 1266. This is the missing piece and he recommended support of the original bill and the financing of the medical director.

**Senator Tim Mathern** asked what the preference would be if there was an attempt to move this back to the original bill but couldn't get the full direction. Would there be an order of priority of items that were in the original bill?

**Mr. Vastag** did not have a recommendation but referred to the committee and their recommendations and the fact that the trauma medical director appears to be a key missing component. That seems to be critical to see the medical director in place.

**Senator Judy Lee** referred to the original bill where there is a director and an associated trauma coordinator – is that two new positions.

**Amy Eberle**, State Trauma Coordinator with the Dept. of Health, was neutral on the bill. She explained that originally the medical director would be a contracted position so it wouldn't be considered an FTE within the health department. The associate trauma coordinator would basically assist her with all the duties running the trauma system and would be a full time FTE.

**Senator Judy Lee** asked, if they don't get it all and found they could get support for the director, could they take everything else on the list off and still be able to make it work.

**Ms. Eberle** believed that, in her opinion, they would still be able to maintain where they are at now if they get the director.
Attachment #5 – Information provided by Ms. Eberle, Department of Health.

With no further testimony the hearing was closed.

The committee was brought back to order for discussion and the committee agreed to ask Amy to prepare an amendment to restore the trauma medical director.

**Senator Judy Lee** adjourned the committee discussion.

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Human Services Committee**
Red River Room, State Capitol

HB 1266
3-9-2011
Job Number 15221

☐ Conference Committee

Committee Clerk Signature PAMorrison

**Explanation or reason for introduction of bill/resolution:**

**Minutes:** Attachments

HB 1266 was opened for committee work.

Returning the wording on line 8 to "shall" was discussed. When the money for the director was taken out the wording was changed to "may". The proposed amendment calls for an appropriation of $416,000 for a "contracted emergency medical services and trauma medical director". (Attachment #6)

**Senator Tim Mathern** moved to change the word "may" to "shall" and adopt the amendment offered dated 3-4-2011.

Seconded by **Senator Dick Dever**.

The money in the original bill came from the permanent oil tax trust fund. The money in the lesser appropriation was from the general fund. There was discussion on whether to direct the funds to the general fund, go back to the permanent oil trust fund, or leave it to the Appropriations Committee to figure out. It was decided to leave the funds coming from the general fund.

Roll call vote 4-0-1. **Amendment adopted.**

**Senator Dick Dever** moved a **Do Pass as Amended and rerefer to Appropriation.**

Seconded by **Senator Gerald Uglem.**

Roll call vote 4-0-1. **Motion carried.**

Carrier is **Senator Dick Dever**.

Attachment #7 – Additional information.

Date: 3-9-2011

Roll Call Vote # 1

## 2011 SENATE STANDING COMMITTEE ROLL CALL VOTES

BILL/RESOLUTION NO. 1266

Senate **HUMAN SERVICES** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number 3-9-11 (2)

Action Taken: ☐ Do Pass ☐ Do Not Pass ☐ Amended ☒ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By **Sen.** Mathern Seconded By **Sen.** Dever

| Senators | Yes | No | Senators | Yes | No |
|---|---|---|---|---|---|
| | | | | | |
| Sen. Judy Lee, Chairman | ✓ | | Sen. Tim Mathern | ✓ | |
| | | | | | |
| Sen. Dick Dever | ✓ | | | | |
| | | | | | |
| Sen. Gerald Uglem, V. Chair | ✓ | | | | |
| | | | | | |
| Sen. Spencer Berry | | | | | |
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Total (Yes) 4 No 0

Absent 1

Floor Assignment

If the vote is on an amendment, briefly indicate intent:

11.0449.04001
Title.05000

Adopted by the Human Services Committee

March 9, 2011

3-9-11

PROPOSED AMENDMENTS TO REENGROSSED HOUSE BILL NO. 1266

Page 1, line 8, replace "may" with "shall"

Page 1, line 18, replace "Advanced trauma life support training" with "Contracted emergency medical services and trauma medical center"

Page 1, line 18, replace "$20,000" with "$416,000"

Page 1, remove line 19

Renumber accordingly

Date: 3-9-2011

Roll Call Vote # 2

**2011 SENATE STANDING COMMITTEE ROLL CALL VOTES**

BILL/RESOLUTION NO. 1266

Senate **HUMAN SERVICES** Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number 11.0449.04001 Title 05000

Action Taken: ☒ Do Pass ☐ Do Not Pass ☒ Amended ☐ Adopt Amendment

☒ Rerefer to Appropriations ☐ Reconsider

Motion Made By **Sen.** Dever Seconded By **Sen.** Uglem

| Senators | Yes | No | Senators | Yes | No |
|---|---|---|---|---|---|
| | | | | | |
| **Sen. Judy Lee, Chairman** | ✓ | | **Sen. Tim Mathern** | ✓ | |
| | | | | | |
| **Sen. Dick Dever** | ✓ | | | | |
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| **Sen. Gerald Uglem, V. Chair** | ✓ | | | | |
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| **Sen. Spencer Berry** | | | | | |
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Total (Yes) 4 No 0

Absent 1

Floor Assignment Sen. Dever

If the vote is on an amendment, briefly indicate intent:

## REPORT OF STANDING COMMITTEE

**HB 1266, as reengrossed: Human Services Committee (Sen. J. Lee, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** and **BE REREFERRED** to the **Appropriations Committee** (4 YEAS, 0 NAYS, 1 ABSENT AND NOT VOTING). Reengrossed HB 1266 was placed on the Sixth order on the calendar.

Page 1, line 8, replace "may" with "shall"

Page 1, line 18, replace "Advanced trauma life support training" with "Contracted emergency medical services and trauma medical center"

Page 1, line 18, replace "$20,000" with "$416,000"

Page 1, remove line 19

Renumber accordingly

2011 SENATE APPROPRIATIONS

HB 1266

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Appropriations Committee**
Harvest Room, State Capitol

HB 1266
03-18-2011
Job # 15647

☐ Conference Committee

Committee Clerk Signature Alice Dilzer

**Explanation or reason for introduction of bill/resolution:**

A BILL for an ACT relating to a state department of health emergency medical services and trauma medical director.

**Minutes:** Attachment: #1, #2

**Chairman Holmberg**: Meeting called to order on Friday, March 18, 2011 at 8:30am. Roll call was taken. All committee members were present. In attendance were Sara Chamberlin, Legislative Council and Joe Morrissette, OMB. Subcommittee members are Senators Kilzer, Fischer, and Robinson.

**Chairman Holmberg:** Comments regarding actions of the House will be going back to the 3 and 3 for state employee compensation, they felt strongly about the right thing to do. The Majority Leader and I discussed issue ....the dollar amount is the same. This will be in bill 2015 which we don't have. The 7th is a preliminary report, not a final report which comes on the 14th or 15th. It will be data we received too late. Let's start with HB1266.

**Steven Briggs**: Medical Director for Sanford Health, Trauma Services and Sanford LifeFlight Critical Care. (Attachment #1) Testify in favor of funding HB 1266. Testifying as a concerned medical professional and should not be interpreted as testimony of Sanford Health Organization.

**Senator Grindberg**: Help me to understand more what your references about this system or having this bill passage would help minimize trauma experiences? There is no way of preventing accidents....help me understand this bill having the coordination or assistant director. How does that benefit an individual who had an accident and saving their life? I am not clear on the connection.

**Steven Briggs**: (Example of true case.) A patient rolled his car on the interstate, fell asleep and brought in by a local ambulance to a small critical access hospital....severe neck pain. The physician examined the patient, not sure anything was wrong, said neck looked ok, he took the collar off his neck, the patient got up and began feeling tingling in his arms and legs. Within a few minutes, became quadriplegic.....he had a broken neck. The doctor did not work up the problem appropriately. He is a physician with limited experience in trauma as most of the critical access hospitals have. That patient is now a quadriplegic

and injury that is not reversible in any way. He will require hundreds of thousands of dollars in care over the first year and for the rest of his existing life. Beyond that, millions of dollars will total for the cost of his care until death. His life has been reduced by at least 30 years, his function as a member of society has been reduced to about nothing. When we talk about medical direction, we talk about someone who works to get the critical access hospitals to do the right thing and provide them with education to follow through. The quality monitoring to help them do the right thing.....trauma is not preventable. There a things we can do to minimize the impact of trauma as wearing seatbelts, making it mandatory.....have proven to reduce death rates. We can't prevent it, so how do we respond to it. If we do a poor job of responding, it still happens. More patients will die and we have more long term burden of injury. If we do a better job responding, we will have better outcomes. (Example) Last Christmas, big snowstorm, there was an 18 year old young man in the prime of his life, who went to visit his girlfriend.....ran his car into a telephone pole, suffered a serious brain injury as a consequence. The provider who took care of him at the rural hospital just completed our advance trauma life support class three months previous. He did the right things; he recognized the patient's neurologic status was not appropriate to maintain his airway. He aggressively worked to innovate the patient (which was getting a tube in his lungs to prevent low oxygen saturations) and keep breathing for him. Difficult to arrange, but they managed to get him transferred out of the facility without any further testing or intervention made. Ultimately, the patient did very well and went to rehab and will become a productive member of society. Had that physician not made the intervention, he would have been a comatose patient in a nursing home at the age of 18.

**Senator Wardner**: How do you see $416,000 being used?

**Steven Briggs:** A state medical director has to be physician with knowledge in emergency medical services and trauma. Most commonly around the country, it is an emergency physician....someone who deals with emergencies on a daily bases. We are looking at someone who would have to be paid to do the job of developing protocols, guidelines for how best to care for a traumatically injured in our environment. We are a unique environment across the country ....we are one of the most rural of health care systems. Our times from an injury to definitive care are often very long and we need people who can go out and emphasis to the care givers and educate them and those who are coming through staffing the critical access hospitals. We need the care given...this is evidence based care that will improve the outcomes of the trauma patients. In the additional position at the state level is an assistant position to help get this process done. I have been working on a guideline manual with Amy Eberle for over two years to try to get a basic picture of how the rural health care providers should approach multi system trauma. They have been eager for this and they need the education....they want it. It is hard to get it to them. That is what this is about.

**Senator Bowman**: With all the legal ramifications today, mistakes made, we can have a law suit. Is there a protocol set up for this someplace where they have certain procedures where they have to follow so they are not liable? Being in the hospital.....testing extensively is to protect them from a law suit. In this trauma medical field, they are not trained to do this, so mistakes are made.

**Steven Briggs**: Reality is our critical access hospitals are staffed by family practice/general practitioners. In an annual year, they may deal with only one or two critically injured patients. They do not get the education in their medical field to deal with critically injured patients and are not comfortable doing it.

**Senator Bowman**: Why doesn't the medical facility have a check list that you have to check to a guide for making the diagnosis?

**Steven Briggs**: That is what I was doing with the guidelines.....developing. It was surprising that I couldn't find types of things out there....they don't exist. In residency, they talk about traumas and that is all the training they get on trauma.....which is not enough. They go out to their practice with little or no training. We have had a positive response as people want these resources available so they can do the right thing. They are doing the best they can with what training they have to deal with all medical problems. Impossible to be an expert in all medical fields and the problem with trauma, it is always different. Every accident is different.....not like other medical conditions as heart attacks with similar symptoms.

**Chairman Holmberg**: Remember we are dealing with $400,000 what we need to focus on as we know what the bill does.

**Steven Robinson**: Please elaborate on the $416,000. We will be asking for this again and again....is this a stand alone bill or will it be incorporated a health or human services? This amount could grow with inflation.

**Chairman Holmberg**: What we are asking in this bill is to add an FTE to the Health Dept. and the subcommittee on the Health Dept would still be meeting on the bill will be the sub-committee that will work on this bill and report back to us.

**Senator Krebsbach**: My concern centers around the fact of what we are trying to do with this bill is to bring the emergency room doctor up to speed and as to how to handle trauma. Over the years, there are many concerns about what we need to be doing in this state in the care of the EMS and basic life support. The training of these people in the field....where is the dollar better spent, today?

**Dr Briggs**: The reality is position covers both....the way most other states is a combine position, EMS and Trauma. They are intricately related .....they are the same, duel impact. Our EMS system needs the help, too, it is largely volunteer (95% volunteer). They want the education and have a conference once a year with 400 people attending to learn about trauma.

**Senator Krebsbach**: Is it our responsibility to train that doctor or our responsibility to get the people to that doctor?

**Dr. Briggs**: Our responsibility to insure that the doctors are practicing the way we want them to as they would treat a patient as if it were a loved one that comes into the emergency department.

**Senator Judy Lee, District 13 West Fargo**: Here to give you the strong support of the policy Human Committee on this particular position. Notice, it is contracted and see this as putting the 4th wheel on the car before we send it on the highway. Rep Porter is in a position to offer some additional information about the survey that has been done and how we have gotten to this point. Senator Kresbach questions.....both are critical components .....give credit to the medical facility that has been providing the life support training to physicians and many things the medical care facilities have done on a volunteer bases to get us to this point. We can't expect them to volunteer everything and need a coordinator and somebody to do what Dr. Briggs just mentioned. There are two components that work together. (Example- person hurt and brought to hospital in Bismarck.) If you are hurt in a distant rural place and being treated by a licensed practitioner who doesn't have the training.....this could be someone who ends with a terrible outcome. With this type of injury, the state could end with a huge expense, paying for a facility, support, and the care of this individual. I encourage you to give this favorable consideration.....it is a challenge, but this a critical component of having appropriate care. Many of these cases have doubled in the last year, particularly in the NW corner of ND with all the industrial growth. Those things happen....they are accidents and that is why a coordinator is terribly important.

**Rep. Porter, District 34 Mandan:** Your idea has gone a long way. I am the legislative appointee to the state trauma committee, appointed to serve on the committee and do it with great honor and pride. I am a paramedic and own an ambulance business. This bill has been studied two interims ago....we studied our trauma system. We had a bill that hired the American College of Surgeons and a bill who hired the National Highway Traffic Safety Institute. They studied on trauma and EMS system for 18 months and then reported back to the legislature. From the study, this is the last component of what they recommended. Our state lacks direction over the EMS and trauma, I put the bill in for the trauma committee to finish what we had as legislature asks them to do. Here is the money, hire the experts, have them come in to tell what our system lacks.....what we need to do to have a competent, fully engrossed trauma system. What came back were a couple key components....the medical director was an important part on what they recommended that we do to complete. We made a lot of policy changes last session.....we turn a voluntary trauma system in the state of ND into a mandatory participation trauma system in ND. Every hospital at every level is mandated by us into this system....no opt out...they are in as it is mandatory. Patients by ambulance are not taken that facility....that requires for them to meet the guidelines of the American College of Surgeons for trauma care. You get to a facility that has primary coverage by a nurse practitioner that is a level 5 trauma center in our state.....that nurse practitioner still has to go through the same advanced trauma life support case course that the physician working in the emergency dept in Bismarck, Fargo, Grand Forks, Minot has to go through. That is where it comes together ....this position will do it from the top down type of program where the policies are developed at the state because it is a state mandated program and pushed back out to meet those national bench marks to make sure all facilities across the state are meeting what we have mandated. The bill looks different than what it did in the House as it was introduced it....we had training dollars for the facilities because that is all picked up by the regions. Those regions all have an anchor hospital is the level 2 trauma center in that area. We have 2 in Bismarck, Fargo has 2, Grand Forks has 2, Minot has 1 (Trinity). Those are all ND has for level 2 trauma centers. Our closest level 1 is in Minneapolis. Then go down the tiers and those tiers can

....needs to be a uniform position from the state to make sure the care you receive is the same care, same protocol, same treatment, and to transfer. One of the biggest things that kill trauma patients isn't the trauma, it is a rural facility holding on to a patient too long....one who needs surgical care and not calling for helicopter, not getting the patient to the next level of care where the surgery can be done. The only way you are going to find those situations and re-train those medical people is to review charts ....go into their facility and do a review of the charts, discuss any trauma patients and what they did to help them....as.....why didn't you get them to one of the level 2 centers? Only one thing that fixes a trauma patient is a surgeon.

**Chairman Holmberg**: Is there any coordination with the Health Dept? This is adding an FTE with the Health Dept.....there is no record that the Health Dept put in any request for any positions like this. It wasn't an optional request from the Health Dept.

**Rep. Porter**: You are correct. This request, as the legislative appointed a member of the state trauma committee. The committee met and had this discussion they ask me to introduce the stand alone bill. In regards to finishing this process of what we started... point out that the state trauma committee did not want the medical director position to be a full time physician hired by the state. It is a contracted position ....not an FTE....it is funds to contract.

**Senator Christmann**: Are we going to keep wratching up the requirements of professionalism to the point of those who live outside Minneapolis won't have hospitals anymore? Too expensive to meet all the requirements?

**Rep. Porter**: Those outside of Minneapolis want the bar set at a high level. Those requirements are painful....volunteer EMS system a very dedicated group and have more continuing ed requirements than any other person working in medicine. Without that training, if they run into a catastrophic event, they will not have the background/training/knowledge to help the patient. If you think you get better care in Minneapolis, that means you want training in ND....they have the volume....we have to rely on training to make the difference. Personal experience with gunshot wounds, delivering babies, doesn't happen often enough to remember what the training taught. It is a matter of volume into training that brings the whole thing together. This position is the coordination and protocols that we are at a standard and or above.

**Senator Erbele**: Difficult for me to understand is why part of our training in medical schools...I had experience with the EMS and made many trips to Bismarck.....our training was "stabilize, stabilize, stabilize".

**Rep Porter:** You need that ongoing education ....this position is the protocol to make sure the rural doctors take care of a trauma patient. That person needs the consultation....that physician going out to review what was done for the last 10 trauma cases. Go through them very carefully.....learning by what has been done.

**Dr. Steve Hammer**: Surgeon in Bismarck, Chairman of the North Dakota College of Surgeons on Trauma; member of the State Trauma Committee. A trauma surgeon for 30 years. (Examples of patients from Elgin tornado, Bowman car crash, Canadians in

accident.) Legislature, in the last session, mandated trauma systems in all hospitals. It is imperative this position be created. We have reached the position where this medical coordinator for all these things and help prevent medical mishaps. My position is make sure every medical person in the state is educated in trauma. Teaching this class gives me more pleasure and satisfaction as I can see physicians with no experience. Yes, they do get education in trauma, but very minimal. Our state send our residents to take the ATL course which is excellent.....most don't get this training unless they are in the surgical field. Several things left out of this bill that are very important in providing those education dollars: advance trauma life support training, trauma designation site visits that all go on.... the level 2 centers do that. Trauma registry is a lynch pin in what we are doing, it gives us the information for the first time and able to act on it. We can tell where hospitals are delaying their transfers. We now have QI conferences within each region of the state and can ask "why was that done that way?"....."why did you keep that patient so long?" It takes a leader to guide and direct all that through....to develop a program for EMS and medical direction for the trauma system.

**Chairman Holmberg**: Close hearing on HB 1266.

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Appropriations Committee**
Harvest Room, State Capitol

HB 1266 Subcommittee
March 29, 2011
Job # 16118

☐ Conference Committee

Committee Clerk Signature Rose Laning

**Explanation or reason for introduction of bill/resolution:**
This is a subcommittee hearing on HB 1266 which relates to a state department of health emergency medical services and trauma medical director.

**Minutes:** You may make reference to "attached testimony."

**Subcommittee Chairman Kilzer** called the committee hearing to order on HB 1266. Subcommittee members **Senator Fischer** and **Senator Robinson** were present. **Sheila M. Sandness** - Legislative Council; **Lori Laschkewitsch** - OMB.

**Senator Kilzer:** 1266 is the final piece in the jigsaw puzzle of putting together a good trauma system in ND. We have not passed the coordinator up to this point; thinks the study was done 4 years ago.

**Senator Fischer**: Are we working off .04000? The last one? **Sheila M. Sandness:** The engrossed is .4000 – there are some amendments that the Senate Human Services committee adopted. You'd have to look at those amendments to decide if you want to keep them.

**Senator Kilzer:** If I remember right, the fiscal note is $416,000. (Sheila making copies) That probably hasn't changed for the biennium.

**Senator Robinson:** Not a medical professional but he was impressed with presentation and thought they had done a good job in their presentation in underscoring the need. It was explained in committee and made a lot of sense.

**Senator Kilzer:** I'm professional in that area and have been for over 40 years; in North Dakota we do have a special situation for the way trauma cases are handled. We use the American College of Surgeons gradation of classifying--5 different classes of hospitals. Starting with #1 which we do not have--Tertiary centers where they have neurosurgeons in the house around clock; Class 2 – Fargo & Bismarck (two each), Grand Forks, Minot; Class 3 – with people on call Williston, Dickinson; Class 4 don't have much specialty coverage nor surgical availability for all types of cases—they are mainly designed to stabilize patients and refer them on.

**Senator Robinson:** Our closest class 1would be Minneapolis? **Senator Kilzer:** Depends on what you're talking about; burn cases, head, orthopedic, extreme internal medicine, infectious

diseases, neonatal that get sent on to Chicago, Minneapolis or Denver. Depends what it is. Most burn cases from here go to St. Paul.

**Senator Robinson:** The $416,000 because this is a new initiative, is not in any budget right now? This is a new expenditure. (Yes)

**Senator Kilzer:** This would put in the health department. Suppose it would parallels the state forensics department examiner type in the health department. **Sheila M. Sandness:** This is ongoing? Or to base budget? **Senator Kilzer:** This would be ongoing.

**Sheila M. Sandness**: We would have to add an FTE for the director? **Lori Laschkewitsch:** Contracted.

**Senator Kilzer:** State health officer has about four people under him who are physicians and could be full-time coordinator. As we heard in testimony, in small hospitals it is a difficult situation for them; on the one hand they are supposed to stabilize patients and not send them out ½ dead. On other hand, the larger hospitals, they don't want delays. They want to see the patient early on, within the first hour or two. It's a difficult balance, sure the trauma coordinator would be expected to not totally resolve those differences but to make the party understand. Tell big hospitals to have patience, and also tell the small hospitals they have to move along. Can't delay.

**Senator Robinson:** Was impressed with young man (physician) who defended the need and spoke to a couple of specific cases where the presence of the trauma expertise save quality of life. In other situation, where the individual was physically impaired for the rest of their life because of a lack of this particular service.

**Senator Kilzer:** Those of us in that line of work have stories like that. In his career has been in both ends of it. He has spent 30 years in Bismarck where he received a lot of those patients. Many of those years he was the only orthopedic surgeon in town; now they have 16 or 17. In more recent years, he doesn't see the more difficult cases; sends those on. Just do pretty routine things.

**Senator Robinson:** I don't' know where committee is at. Looking for motion on this?

**Senator Fischer:** When they appropriated the $416,000 they took back all the other lines that were in .02000. So the $416,000 must include site visits, etc. How does that budget work or is this for designing the system – travel, salary? **Lori Laschkewitsch:** Haven't been in those hearings, so don't know. **Senator Fischer:** I'd like to know if there are other funds that are being used for this position and the project.

**Tim Weidrich, ND Department of Health:** Basically, their understanding that the $416,000 only represented the contract amount of the medical director. That was calculated as a full time position at $100 hour. It does not fund the other things that we're ??.

**Senator Fischer:** What happens to the other parts of the bill and the funding for it? Or do you feel as though you can absorb or just drop? **Tim Weidrich**: The remaining activities cannot

be absorbed. It was not included in the Governor's Executive Budget so not something we had proposed.

**Senator Robinson:** What are we talking about costs of remaining activities? **Tim Weidrich**: Several things were proposed in the initial legislation – an additional coordinator, infrastructure for IT so data can be shared, and then site visits as part of the process. Would use existing staff from other hospitals; physicians and nurses to assist with these site visits and so that was to--about $36,000 for reimbursing those expenses back to those people. **Senator Fischer:** Here we have $316,516, but that includes this trauma registry for $134,000; that is what he was asking about. This coordinator would be $113,000. **Tim Weidrich:** If he is looking at it correctly, trauma would be closer to $41,+ and that does reconcile with where he thinks that would be at.

**Senator Robinson:** The question get to be, if we would approve the $416,000, what do we need above and beyond that to implement the program and do a respectable job over the next two years? **Tim Weidrich:** If funding were not approved, we would continue to request the activities of the existing physicians and nurses that are involved in that activity, and they would not be reimbursed for those efforts. The hard costs is trauma registry in which there is a cost to operate that registry. That would put it at $134,000 for the biennium. **Senator Kilzer:** That is what we have now? **Tim Weidrich:** (cannot hear response)

**Tom Nehring, Director, Emergency Medical Services & Trauma, Dept. of Health:** The $134,000 that was in the initial bill, he believes (the bill was brought forth by the Trauma subcommittee in the state of North Dakota) – one of issues at this time is we have 46 trauma centers or hospitals and 6 level two facilities. All of the west are Level 4 & 5 (Dickinson chose to go to a Level 4) All of those hospitals voluntarily participate in the trauma registry, and there is a fee associated with that to the company for them being part of it. With the trauma registry $134,000 would alleviate hospitals and 42 of which are currently not designated, are critical access hospitals. We're getting push back because they can't cover those trauma registry expenses. Trauma registry sits by itself with the $416,000 for the trauma medical director, there are no costs that were included in the original bill. We would have hard costs within the division of which they currently do not have that funding to be able to cover those costs. Such things as the medical director travel, those types of things. What was included in the bill is just the calculation of $208,000 per year; (full time times $100) times two for the biennium so that's $416,000. That just stands by itself and there are no additional monies included in the bill to help defray any of those costs which the division would have to do and they are already being looked at as far as cutting some DOT funds

**Senator Kilzer:** Mr. Weidrich, we will probably be dealing with the EMS; is there going to be a request for a change in the EMS state funding? **Tim Weidrich**: Yes, part o f the Governor's budget did include did include the restoration funding to maintain the division regarding the funds that were lost from the ??? that Tom was just speaking about. **Senator Kilzer:** How much money are we talking? **Tom Nehring:** $523,000; the House removed that but it was in the Governor's budget. **Senator Kilzer:** Was that in the health department budget? **Lori Laschkewitsch:** That's in the health dept budget.

**Senator Robinson:** Your question regarding EMT--if funding is restored for EMT, how does that impact 1266. Do we still need the additional money for travel that you are talking about

with this position? I'm confused tying two together—is there a connection? **Tim Weidrich**: The money that was in place for that--there is not a connection in that those were specific activities for the EMS system as it currently exists. This $416,000 creates a new level of oversight that doesn't currently exist.

**Senator Robinson:** If we fund this program, we need those operational costs above and beyond $416,000 which total $726,516? **Senator Fischer:** – $134 for trauma, site visits, advanced trauma life support and associate coordinator.

**Tom Nehring**: With regards to expenses for this particular position, I don't expect the entire $700,000+ would be put back in. There was $20,000 HMS training, $30,000 for site visits. Restoration of money like that could potentially decrease some of the costs that the division would have to undergo for this position.

**Senator Fischer:** What if we took out $416,000, pass it through and argue the balance in conference? **Senator Robinson:** Don't know if that is the way to go, but that gives us debate for conference.

**Sheila M. Sandness:** Human services already mended the bill, so if you pass it just as it is it would go to conference. It would go as it is right now; if you adopt it with Senate amendments—already on this, it would go to conference.

**Senator Fischer: moved Do Pass as it came into committee from the Human Services committee. Senator Robinson seconded.**

**Sheila M. Sandness:** – you don't need amendments if you want. **Senator Fischer:** House human services concur. It will be the two human services committees that's why I suggested to take out $416,000, then we are in discussion. If we leave it as is, then we may not be in discussion. **Sheila M. Sandness:** If you do not want to further amend this bill, it would get engrossed with the amendments from the Human Services committee.

**Senator Fischer:** If we leave their amendments on it is going to be House Human Services that is not going to concur. **Sheila M. Sandness:** The amendments that are in it right now (5000 version) are Senate Human Services. **Senator Robinson:** Then it would be the two Human Services committees working it out. That is why he suggested to take out $416,000 so then Appropriations is in discussion. If we leave it as is, they won't appoint anyone from this committee. **Senator Fischer:** Policy committee has asked for one person from Appropriations to serve on their committee. Senator Robinson: Senator Fisher makes a point; we either kick $416,000 out or alter the $416,000. Taking it out sends the message we're not in support. Thinks we are! If we alter this to like $399,000 then send the message that we are supportive, but want to sit down and work with the House in conference committee on some of the issues.

**Senator Fischer: move to further amend HB 1266 and decrease the $416,000 to $100,000; Senator Robinson seconded. Unanimous decision.**

**Sheila M. Sandness:** clarifying the only change to .05000 is to decrease to $100,000.

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Appropriations Committee**
Harvest Room, State Capitol

HB 1266 subcommittee
March 30, 2011
Job # 16187

☐ Conference Committee

Committee Clerk Signature Rose Laning

**Explanation or reason for introduction of bill/resolution:**

This is a subcommittee hearing on HB 1266 and is about emergency medical services and a trauma medical director.

**Minutes:** See attached testimony # 1.

**Senator Kilzer** called the subcommittee hearing to order on HB 1266.

**Sheila M. Sandness**, Legislative Council explained the amendment 11.0449.04002 (see attached # 1) this would be amended to change the $416,000 that was contained in the 2nd engrossment with Senate amendments to $100,000. It adopts the language that was included in the amendment that was prepared for the Senate Human Services committee. It incorporates the language in their amendment but then just changes their amendment where they are replacing twenty thousand dollars in the engrossed version with $416,000 where this amendment replaces the $20,000 with $100,000 in the appropriation section.

It also includes a statement of purpose of amendment which you can see down below that the House version of it came over and had $50,000 in the appropriation. It was the Senate Human Services that increased it to $416,000 and this committee is changing that $100,000.

**Senator Kilzer** The funding in this bill now, if we accept these amendments, would be a total of $100,000? **Sheila M. Sandness** replied correct and that appropriation in the bill would go to the State Dept. of Health for contract of emergency medical services and trauma medical center.

**Senator Kilzer** asked who can draw upon the $100,000– the people who are teaching the ATLS and ACLS courses and things like that. Or people who go around to the hospitals or trauma area and do registration type things.

**Sheila M. Sandness** said the actual bill sets up a medical director. It includes that position for the Dept. of Health and that medical director to be contracted.

**Senator Robinson:** We adjust the appropriation with expectation that, providing we get through the Senate committee and the Senate floor, we'll end up in conference committee and the amount was adjusted for support for the trauma director, but we want to insure that

because we changed the appropriation, it ends up in a conference committee driven by the appropriations committee and not the policy committee. I think that's where we are coming from.

**Senator Fischer:** That was the idea of leaving the money in there rather than take the money out and argue with them.

**Senator Robinson** moved amendment 11.0449.04002.
**Senator Fischer** seconded.

**Unaminous voice vote was taken**.

**Senator Robinson** will explain the subcommittee's actions to the full Senate Appropriations Committee.

# 2011 SENATE STANDING COMMITTEE MINUTES

**Senate Appropriations Committee**
Harvest Room, State Capitol

HB 1266
03-31-2011
16206

☐ Conference Committee

Committee Clerk Signature Alice Delzer

**Explanation or reason for introduction of bill/resolution:**

A ROLL CALL VOTE ON EMERGENCY SERVICES AND TRAUMA MEDICAL DIRECTOR FOR A DO PASS AS AMENDED (Several other bills are on this Job: SB 2210, 2018, SCR 4000.)

**Minutes:** You may make reference to "attached testimony."

**Chairman Holmberg** called the committee to order on HB 1266. Lori Laschkewitsch, OMB and Becky J. Keller, Legislative Council were also present. If we concur there will be a study if we do something to it. There was discussion regarding other bills recorded on this Job.

**Senator Kilzer:** 1266 is a request for $416,000 for the biennium for a physician trauma coordinator at the state level. This is part of the American College of Surgeons recommendation from about 4 years ago. Your subcommittee looked at this and we also looked at another bill, the EMS funding and Senator Robinson will tell us about our decision on 1266.

**Senator Robinson**: Our committee is certainly interested in this bill. The bill is a little bit misleading, the appropriation it was called for in the bill, $416,000 is accurate in terms of providing for the staff person, the trauma coordinator. The one thing that we didn't discuss in the committee when we had the hearing that we did discuss in the subcommittee in addition to the $416,000 we are going to need operational costs, support, travel and a number of other costs centers that are going to have to be part of this package. The fiscal note could easily swell by another couple $100,000 or more. Given that situation our committee elected to reduce the funding to $100,000. That's not a signal that we weren't supportive, we thought it would be important to get the bill into the conference committee and therefore the reasoning for the $100,000, we think it's important that we keep this bill in an appropriations conference committee with the House and that was Senator Fischer's suggestion and that's exactly what this will do. At the end of the day the question is going to be if we want to go the full route for, $416,000 plus some operational costs and they were somewhat up in the air in terms of what those operational costs will be. So in the next 10 days if we do approve this we get into conference committee we are going to have to sort through those issues. It's an important position but it's going to come with a price tag.

**Senator Robinson moved the amendment # .04002. Seconded by Senator O'Connell.**

**Chairman Holmberg:** We have a motion to amend the bill by Robinson, seconded by O'Connell. Discussion.

**Senator Robinson:** I would welcome colleagues on the subcommittee if they have anything to add to it. Senator Kilzer, you are the expert in this area but hopefully I captured the discussion and our intent.

**Senator Kilzer:** I couldn't agree more. That's fine.

**Chairman Holmberg:** Would you call the roll on the amendment on HB 1266.

**A roll call vote was taken: Yea: 13. Motion carried.**

**Senator Robinson moved Do Pass as Amended. Seconded by Senator Erbele.**

**Senator Christmann:** Had questions regarding the dollar amount.

**Senator Robinson:** We are looking at reducing the fiscal note at this point and time. Until we have such time we have a chance to meet with the House conferees; get a complete packaged price tag for the coordinator, certainly can't speak for the full committee but in our subcommittee we were very interested in this concept, i think we believe there is a demonstrated need. The question is we are not only looking at just $416,000 for a coordinator, but then there's going to be related operational expenses and we didn't have a handle on those expenses to the extent where we could say what they were so we thought it needed to go to conference. Senator Fischer made a point in the subcommittee that rather allow it to go back to the policy committee, this is a fiscal issue, but we do need to get a handle on the total operational costs so we therefore changed the fiscal note to the $100,000 from 416,000 at this juncture knowing full well that we'll have two issues; 1. We support the bill, add the 416 plus operational costs or we not support it and it comes back with a do not pass.

**Chairman Holmberg:** The problem some are having is that you have in your book the second engrossment with Senate amendments, but this amendment throws that away, and goes back to the re-engrossed House Bill and when you put these amendments on the re-engrossed House Bill it eliminates all that other money and says you would have contracted emergency medical services and trauma and that's $100,000 and then you remove the line about trauma designated site visits, so I was confused as I was going through this because I was looking at the bill but if you look at the first words of the amendment. In lieu of the amendments adopted by the Senate, the re-engrossed House Bill is amended so it's the one much earlier in your book and that's the one we are on.

**Senator Christmann**: So what would the fiscal note be on this now?

**Chairman Holmberg:** $100,000. All of the fiscal impact has been removed because they not hiring.

**Senator Krebsbach:** Would you explain to me which version is this amendment adapted to, is it the 4000 or the 3000?

**Chairman Holmberg:** 4000. That is the re-engrossed

**Senator Christmann:** So contracted emergency medical services and trauma medical center, does that mean giving somebody some money to help keep their stuff up or would this still be for training people around the state?

**Senator Kilzer:** This money would go to the contracted entity who would then coordinate the training activities. Right now the training is centered in the American College of Surgeons and in hospitals and it comes from both areas. This would contract with an agency that would provide that service. Most of it does go to training.

**Chairman Holmberg:** Verses salary. The other one was salary.

**Senator Kilzer:** That's correct. The 416,000 was for salary and benefits.

**Senator Wanzek:** The total fiscal impact is $100,000 even in the engrossed House Bill.

**Chairman Holmberg**: Right and there are no FTE's. Call the roll on a DO PASS AS AMENDED ON 1266.

**A ROLL CALL VOTE WAS TAKEN ON A DO PASS AS AMENDED ON HB 1266; YEA: 12; NAY: 1; ABSENT: 0. MOTION CARRIED. Senator Robinson will carry the bill.**

The hearing was closed on HB 1266.

11.0449.04002
Title.
Fiscal No. 1

Prepared by the Legislative Council staff for
Senate Appropriations
March 29, 2011

PROPOSED AMENDMENTS TO REENGROSSED HOUSE BILL NO. 1266

In lieu of the amendments adopted by the Senate as printed on page 711 of the Senate Journal, Reengrossed House Bill No. 1266 is amended as follows:

Page 1, line 8, replace "may" with "shall"

Page 1, line 18, replace "Advanced trauma life support training" with "Contracted emergency medical services and trauma medical center"

Page 1, line 18, replace "$20,000" with "$100,000"

Page 1, remove line 19

Renumber accordingly

**STATEMENT OF PURPOSE OF AMENDMENT:**

**House Bill No. 1266 - State Department of Health - Senate Action**

| | Executive Budget | House Version | Senate Changes | Senate Version |
|---|---|---|---|---|
| Comprehensive state trauma system | | $50,000 | $50,000 | $100,000 |
| Total all funds | $0 | $50,000 | $50,000 | $100,000 |
| Less estimated income | 0 | 0 | 0 | 0 |
| General fund | $0 | $50,000 | $50,000 | $100,000 |
| FTE | 0.00 | 0.00 | 0.00 | 0.00 |

**Department No. 301 - State Department of Health - Detail of Senate Changes**

| | Increases Funding for State Trauma System[1] | Total Senate Changes |
|---|---|---|
| Comprehensive state trauma system | $50,000 | $50,000 |
| Total all funds | $50,000 | $50,000 |
| Less estimated income | 0 | 0 |
| General fund | $50,000 | $50,000 |
| FTE | 0.00 | 0.00 |

[1] This amendment increases funding for the support of the comprehensive state trauma system and provides the funding is to be used for contracted emergency medical services and trauma medical center.

Date: 3-31-11
Roll Call Vote # 1

## 2011 SENATE STANDING COMMITTEE ROLL CALL VOTES

**BILL/RESOLUTION NO.** 1266

Senate APPROPRIATIONS Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number 11.0449.04002

Action Taken: ☐ Do Pass ☐ Do Not Pass ☐ Amended ☑ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Robinson Seconded By O'Connell

| Senators | Yes | No | Senators | Yes | No |
|---|---|---|---|---|---|
| | | | | | |
| Chairman Holmberg | ✓ | | Senator Warner | ✓ | |
| Senator Bowman | ✓ | | Senator O'Connell | ✓ | |
| Senator Grindberg | ✓ | | Senator Robinson | ✓ | |
| Senator Christmann | ✓ | | | | |
| Senator Wardner | ✓ | | | | |
| Senator Kilzer | ✓ | | | | |
| Senator Fischer | ✓ | | | | |
| Senator Krebsbach | ✓ | | | | |
| Senator Erbele | ✓ | | | | |
| Senator Wanzek | ✓ | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Total (Yes) 13 No 0

Absent 0

Floor Assignment

If the vote is on an amendment, briefly indicate intent:

Date: 3-31-11
Roll Call Vote # 9

## 2011 SENATE STANDING COMMITTEE ROLL CALL VOTES

**BILL/RESOLUTION NO.** 1266

Senate APPROPRIATIONS Committee

☐ Check here for Conference Committee

Legislative Council Amendment Number _____

Action Taken: ☑ Do Pass ☐ Do Not Pass ☑ Amended ☐ Adopt Amendment

☐ Rerefer to Appropriations ☐ Reconsider

Motion Made By Robinson Seconded By Erbele

| Senators | Yes | No | Senators | Yes | No |
|---|---|---|---|---|---|
| | | | | | |
| Chairman Holmberg | ✓ | | Senator Warner | ✓ | |
| Senator Bowman | ✓ | | Senator O'Connell | ✓ | |
| Senator Grindberg | ✓ | | Senator Robinson | ✓ | |
| Senator Christmann | ✓ | ✓ | | | |
| Senator Wardner | ✓ | | | | |
| Senator Kilzer | ✓ | | | | |
| Senator Fischer | ✓ | | | | |
| Senator Krebsbach | ✓ | | | | |
| Senator Erbele | ✓ | | | | |
| Senator Wanzek | ✓ | | | | |
| | | | | | |
| | | | | | |
| | | | | | |

Total (Yes) 12 No 1

Absent 0

Floor Assignment Robinson

If the vote is on an amendment, briefly indicate intent:

## REPORT OF STANDING COMMITTEE

**HB 1266, as reengrossed and amended: Appropriations Committee (Sen. Holmberg, Chairman)** recommends **AMENDMENTS AS FOLLOWS** and when so amended, recommends **DO PASS** (12 YEAS, 1 NAYS, 0 ABSENT AND NOT VOTING). Reengrossed HB 1266, as amended, was placed on the Sixth order on the calendar.

In lieu of the amendments adopted by the Senate as printed on page 711 of the Senate Journal, Reengrossed House Bill No. 1266 is amended as follows:

Page 1, line 8, replace "may" with "shall"

Page 1, line 18, replace "Advanced trauma life support training" with "Contracted emergency medical services and trauma medical center"

Page 1, line 18, replace "$20,000" with "$100,000"

Page 1, remove line 19

Renumber accordingly

**STATEMENT OF PURPOSE OF AMENDMENT:**

**House Bill No. 1266 - State Department of Health - Senate Action**

| | Executive Budget | House Version | Senate Changes | Senate Version |
|---|---|---|---|---|
| Comprehensive state trauma system | | $50,000 | $50,000 | $100,000 |
| Total all funds | $0 | $50,000 | $50,000 | $100,000 |
| Less estimated income | 0 | 0 | 0 | 0 |
| General fund | $0 | $50,000 | $50,000 | $100,000 |
| FTE | 0.00 | 0.00 | 0.00 | 0.00 |

**Department No. 301 - State Department of Health - Detail of Senate Changes**

| | Increases Funding for State Trauma System[1] | Total Senate Changes |
|---|---|---|
| Comprehensive state trauma system | $50,000 | $50,000 |
| Total all funds | $50,000 | $50,000 |
| Less estimated income | 0 | 0 |
| General fund | $50,000 | $50,000 |
| FTE | 0.00 | 0.00 |

[1] This amendment increases funding for the support of the comprehensive state trauma system and provides the funding is to be used for contracted emergency medical services and trauma medical center.

2011 HOUSE HUMAN SERVICES

CONFERENCE COMMITTEE

HB 1266

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
April 13, 2011
Job #16572

☒ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:** You may make reference to "attached testimony."

**Rep. Hofstad:** Called the conference committee meeting to order on HB 1266. Roll call taken and all members present. Asked for an explanation of Senate amendments.

**Sen. Berry:** Talking with the EMS we felt like putting the money it would take to set up something of this nature to keep these hospitals around back into the bill before we sent over to appropriations. We wanted to make sure we had a good coordinated planned and people well trained and the right folks in place so we could have a quality system.

**Rep. Hofstad:** You sent to the Appropriations Committee, contracting the medical services and trauma medical director at a funding level of $416,000?

**Sen. Berry:** Correct.

**Rep. Hofstad:** What other items did you have in there?

**Sen. Berry:** We had moved it back to "shall" from "may". Moved it back so it says, the Health Officer shall appoint an emergency medical services and trauma medical director". Through the process that had gotten taken out.

**Sen. Dever:** The 040001 are the human service amendments. The 040002 amendments are the Senate Appropriation amendments. It looked to me like it was wrong when we considered the bill with the appropriations amendments on the floor because they said they were increasing the amount from $50,000 to $100,000. If that was their intent, then their amendment should have said, in lieu of the amendments adopted because they were amending the House version and not the Senate Human Service version. We had $416,000 in there and they should have amended the bill previous to that in lieu of. That was confusing. I'm not sure they considered the bill with $416,000 or with $50,000 and increased that to $100,000. In the Senate Human Service Committee we made a "shall" and the version they showed up on the screen that they had, said "shall". So it is shall without sufficient funding. When we sent it over with $416,000 is was for them to prioritize the funding.

**Rep. Hofstad:** The bill that came to the Senate was 06000?

**Sen. Dever:** That is the bill that was passed by the Senate.

**Rep. Hofstad:** And that is what is before us now. We have "shall" and a medical director that must be a physician and a funding limit of $100,000? Is that correct?

**Sen. Berry:** Correct.

**Sen. Dever:** The 04000 must be the version that came from the House to the Senate.

**Rep. Hofstad:** That's correct.

**Rep. Kilichowski:** We sent it over with $50,000. Did the appropriation cut it down to $20,000? When we got it on the floor I thought the $50,000 was still in it.

**Sen. Berry:** The $50,000 was in it when it when it came to the Senate. On the 04000 version on line 18 and 19 they list advanced trauma life support training and trauma designation site visits. There is $20,000 and $30,000 totaling $50,000 and that is how it came to us. The trauma site visits have to be done to maintain their trauma status and the ATLS training with the individuals has to be done. They figured 100 individuals which would be roughly one-third of them. The idea was the $50,000 would be used for the training and site visits.

**Rep. Hofstad:** The bill we have before us that came from the Senate we have no ATLS training in there. The only component we have is the emergency services coordinator.

**Rep. Hofstad:** Let's address the funding limit. We are talking about a licensed physician. Was it your intent to utilize that position on a part-time basis?

**Sen. Dever:** Our intent was a full-time position. If the money is going to stay at a $100,000 is it going to be part-time?

**Rep. Devlin:** On the House side we stressed the site visits and the training. It looked like to us that it was you and obviously it was Senate Appropriations that took that out. I don't know if we can run back another $50,000 plus on House Appropriations the way things are going over there lately.

**Sen. Berry:** Our intent in the policy committee was to get the money back in there. We thought it would come back to us from appropriations because sometimes it does, but it went straight to the floor. I agree the site visits and the training is important and crucial. We thought it was necessary to have someone coordinate that. We thought the money could be split half and half between physician position and site visits and training.

**Sen. Uglem:** I believe it was the intention of the Senate Human Services Committee to put the $416,000 in for a medical director not center. I think center is an error in here and the House Human Services meant for it to be director. We felt the medical director was the most important piece of this bill. Then it went to Senate Appropriations where they worked off the wrong version. I think it was applied to the wrong version of the bill.

**Rep. Hofstad:** Then from your perspective, if we were to prioritize ATLS, the medical director and the site visits, what is your feeling on this? Where does this lie with the Senate?

**Sen. Berry:** I think we need the three.

**Rep. Devlin:** Are you thinking we could split the $100,000 instead of the $50,000 the House had? $20,000 for ATLS, $30,000 for the trauma designation and $50,000 for a coordinator on a contract basis; are you thinking that is possible?

**Sen. Berry:** I'm looking at initial numbers that were $62,500 and you could get by with breaking it out to $20,000 for ATLS, $30,000 for trauma designation and $100 an hour for the coordinator. I'm not sure what somebody would have to have to set that up. What it would take to do it adequately I don't know.

**Rep. Hofstad:** Sen. Dever do you remember how much we funded for this? Was this done last session?

**Sen. Dever:** (Didn't have microphone on and is inaudible.)

**Rep. Hofstad:** I need to do some research on this. (Called Jerry Jurena to podium and asked him a question.) Jerry can you tell us when this legislation was adopted and how it was funded and what kind of funding levels we have in it right now if there are any?

**Jerry Jurena**: From the Hospital Association. This is my first year in this position I believe this was created at a previous session. Chip Thomas or Bruce Levi would probably have those answers. Neither one of them are in their current roles at this point. I can't answer your questions at this point, but can do research for you.

**Rep. Hofstad:** Let's do that research. We are adjourned.

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
April 14, 2011
Job #16618

☒ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:**

You may make reference to "attached testimony."

**Rep. Hofstad:** Called the conference committee meeting to order on HB 1266. Roll call taken and all members were present. We are reasonably certain we can get this through as it is with the life support training at $20,000 and the destination site visits at $30,000. We are talking about taking the balance of the $100,000 and putting into a director. I don't know where it would go as it gets to the floor. If we could make that agreement here in this committee. We are working within this $100,000 from the Senate side and the $50,000 from the House side. I think we will have a fight on the floor.

**Sen. Uglem:** We got a summary of the American College of Surgeons consultation visit from April of 2008 and read through that. It is my understanding we implemented most of their recommendations accept for the trauma director. When the Senate policy committee put the $417,000 in it was the understanding they would hire a full-time medical director as well as cover the $50,000 that came across from the House. We could maybe go with a half-time director, but that is still $200,000. There was confusion on the history that was in here.

**Rep. Hofstad:** Asked Amy Eberle to come to the podium and give a history.

**Amy Eberle:** The State Health Trauma Coordinator. The bill started at around $730,000 which included in original bill a full time EMS and trauma medical director. Included a full-time associate trauma coordinator, trauma registry, ATLS training, and site visit designation.

**Rep. Hofstad:** Where is your current funding?

**Amy:** Current funding within the trauma system is my full-time position. $60,000 for from the (inaudible) general funds for a biennium.

**Sen. Uglem:** The fair amount of the trauma work has been done on a volunteer basis. And this funding would be to take over some of the volunteer work?

**Amy:** That is correct. All the designated site visits are now trauma designated except for Belcourt and it is mandatory that they be trauma designated at some level. The site visit

designations are done by the level II trauma program managers and medical directors at their hospital costs. The state does not reimburse them.

**Rep. Hofstad:** How is support training done now and how is it financed?

**Amy:** We provide the cost of the training through the EMS training grant to the level IV and V's. The amount of the ATLS training is between $12,000-15,000.

**Sen. Berry:** From your standpoint it was set up originally set up to have a trauma director and then someone the Dept. of Health to assist them. Is that correct?

**Amy:** Correct.

**Sen. Berry:** Do you see that as the number one need to have a trauma director?

**Amy:** Correct.

**Sen. Berry:** What would you see as the greatest advantage of doing this.

**Amy:** The greatest benefit for the ND citizens and the hospitals and EMS is the quality of care. This position's main job duties would be reviewing and making sure the most evidence based practices are being done within the EMS pre-hospital and within the hospitals as well. Currently we are doing some performance and quality improvement. It is very difficult for the medical II directors to give a critical review that these cases need because these patients are coming to their hospitals. So this person basically reviews cases and provides education to the EMS medical directors on how to effectively run their services.

**Sen. Berry:** The director would help the local EMS directors with recruitment. Is that coming back to you, the difficulty of recruitment?

**Amy:** Yes. Volunteer services are dying out and it is harder to recruit.

**Sen. Berry:** In your opening statement you said the House is at $100,000 and is that at the top end they are willing to consider?

**Rep. Hofstad:** I'm nervous about bringing the $100,000 to the floor, I but think we have a shot at it. I think we will end up with nothing if we go more.

**Sen. Berry:** We have challenges relate to time and space in ND that other places don't. Coordinating like we have done has been great. I'd like the state to make a commitment to it or dismantle it.

**Sen. Dever:** I have faith in you to fight this on the floor. Even to the possibility of $416,000. My interest is whether they would kill the bill or the conference committee report. And then we would have another conversation.

**Rep. Hofstad:** The conversation would take place where?

**Rep. Dever:** HB 1266 would be on the House floor. The discussion on whether or not to accept the conference committee report. If they defeat the conference committee report, then we come back to the conference committee.

**Rep. Devlin:** I think the likelihood of them accepting the conference committee report of $100,000 that doesn't include the training and the site visits is zero. I don't think that will happen and I don't think it will go over a $100,000 and be accepted on House side even if your Senate Appropriations Committee changes their mind and is willing to go back up.

**Sen. Dever:** My other question is the $100,000 for those two purposes. Is the director where we really need to go?

**Rep. Hofstad:** As it left the House we were adamant about the ATLS training and the site visits. The chairman is willing to split the $100,000 and give $50,000 toward the director. We can try this and bring it to the floor if this is an option for the Senate.

**Rep. Devlin:** (Didn't have microphone on and inaudible.)

**Sen. Berry:** On the sake of compromising, we would like to know what you think about a half-time medical director and the $50,000. If you want to talk to your appropriations about this, that is fine with us.

**Rep. Hofstad:** That half-time coordinator would be...

**Sen. Berry:** $208,000 for a half-time medical director. Then the $50,000 the House has in would be for site visits and training.

**Rep. Hofstad:** You would like us to have that discussion?

**Sen. Berry:** With whomever the Appropriations sub-committee is.

**Rep. Hofstad:** I will have that discussion with him. We are adjourned.

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
April 15, 2011
Job #16656

☒ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:** You may make reference to "attached testimony."

**Rep. Hofstad:** Called to order the conference committee meeting on HB 1266. Roll call was taken and all members were present. We were asked to go back to our leadership and to the appropriations people with a figure and we did that. The House position stands pretty much where we had left it. We would be willing to go with $50,000 for a physician, but we are stuck on the life support training at $20,000 and trauma designation site visits at $30,000. (Asked Rep. Todd Porter to podium to tell the important of the training and site visits.)

**Rep. Porter:** From District 34 in Mandan. When this bill came in it had a large amount of money attached to it. When the bill first came in it had a large amount of money attached to it. In one of my responsibilities from legislative management is to be the designated legislator on the state trauma committee. As we work with the mandated trauma system; this was the last component I testified in front of everybody. The importance of this issue at hand is basically we are talking about a $100,000 to fill the need of a $700,000 initial request. How do we get the best bang for our buck for the next two years in our trauma system? I think that the medical director component is very important for the state. I also feel equally important is the advanced life support training grant that is out there and the site visits that gets these teams out to the rural facilities to do the inspections and to help them with the patient care component of trauma. It would be my hopes as we work on a compromise knowing we are not going to fully fund the system; that we would look at $50,000 for the department to be able to contract with a physician over the next two years. And also have the $50,000 for the advanced life support training and designated site visits so we can assure out in the rural communities that the necessary training is available and the site visits to make assure the care for the trauma patient is at the standard that we expect with our mandate.

**Sen. Berry:** What kind of a medical director are we going to get for $50,000?

**Rep. Porter:** Up to this point it has been a free donated service in collaboration with the EMS and trauma people. The trauma committee has not paid the facilities where the doctors work. To get this started and where it should go, the $50,000 for a contracted position could do a lot for the state in an advisory position. A retired physician or one

working in a group and the group agrees they can bid for the position will give us more than we are getting now. The physician's position has to tie back to the training and site visits.

**Sen. Dever:** Asked the question if they were talking about a total of $50,000 or a $100,000.

**Rep. Hofstad:** We are talking about $50,000 for the director and $20,000 for the training and $30,000 for the site visits.

**Sen. Dever:** The money we appropriated last time is that for the same purpose?

**Rep. Porter:** I don't think we appropriated any. I think you are thinking of the EMS grants.

**Sen. Dever**: It appears to me in the 2000 version this bill which I assume was introduced, for life support training you had $21,000 and site visits were $41,580. What was the reason for those numbers?

**Rep. Hofstad:** They were strange numbers and I do not know why.

**Rep. Porter:** Those numbers came from the state trauma committee so that is the way the original bill was brought in and we rounded them to a total of $50,000 for the training and site visits.

**Sen. Berry:** The House will be comfortable with appropriating a total of $100,000?

**Rep. Hofstad:** I can't speak for the entire House, but we will take it to the floor with that number.

**Sen. Berry:** If we can bring the training and site visits money from another entity can we keep the $100,000 for the medical director? I'm waiting on a call that might pick up that added expense.

**Rep. Hofstad:** Do you have a suggested place where that would come from?

**Sen. Berry:** Yes. The Dakota Medical Foundation and they do things like this. I talked with Sen. Fischer regarding appropriation and some other things and there is a possibility they do things like this.

**Rep. Hofstad:** What kind of assurance would we have that the money would be there for those?

**Sen. Berry:** I'm waiting on a phone call and Pat Traynor runs that.

**Sen. Dever:** If we are going to go down that road, what would be appropriate is a section that provides for continuing appropriation and the authority to accept (inaudible) grants and not specify the dollars coming from that organization.

**Rep. Hofstad:** We are going to stand as we are with the $100,000.

**Sen. Dever:** I suggest we are higher than that and we adjourn the meeting and meet again on Monday.

**Rep. Devlin:** I move that the Senate recede from the Senate amendments and further amend the bill. Change the figure to $50,000 and add "advanced trauma life support training for $20,000, designated site visits for $30,000 for a total expenditure of $100,000.

**Rep. Kilichowski:** Second.

**VOTE: 4 y 2 n 0 absent**
**Motion Failed**

Meeting adjourned.

# 2011 HOUSE STANDING COMMITTEE MINUTES

**House Human Services Committee**
Fort Union Room, State Capitol

HB 1266
April 18, 2011
Job #16736

☒ Conference Committee

Committee Clerk Signature Vicky Crabtree

**Minutes:** You may make reference to "attached testimony."

**Rep. Hofstad:** Called to order the conference committee on HB 1266. Roll call taken and all members were present. The last time we met we were talking about contributions and if and how we could accept them. We talked to the budget section and as far as we understand we can accept those contributions and do not need specific language in the bill. At this point if there are any discussions or motions, I would accept those.

**Rep. Devlin:** I would move that the Senate recede from the Senate amendments and we would be going back to 04000 and further amend. And add, "contracted emergency medical services and trauma medical director for $50,000". A total of $100,000 between the three things.

**Rep. Kilichowski:** Second.

**Sen. Dever:** I spoke with the prime sponsor and he felt this was a start and we aren't likely to be successful in moving any more than that at this time. I'm a little frustrated at this whole session because we are being accused of spending a lot of money and doesn't seem like it is you and me that is doing it. Our healthcare system is dependent upon our ability to serve those people in rural areas. I'd like to see it go further, but I think it is a start.

**Rep. Hofstad:** I share with your frustration. We came here and the writing was on the wall before we got here. We had this huge increase and we deal with $100,000-$200,000 bills and seem to take them nowhere.

**Rep. Kilichowski:** Sen. Berry did you talk with the Dakota Foundation if they would give money for the training and site visits?

**Sen. Berry:** They did not call me back at this point. I do plan to talk with them in the future. I'm hopeful they will help out.

**Rep. Kilichowski:** The reason I brought that up is if that $100,000 was in there and we didn't have to designate exactly where it went and were able to get the $50,000 from the foundation; then we could spend the other $50,000 on the director.

**Rep. Hofstad:** If that money is forthcoming I think at the direction of the department that could certainly be a possibility. There is no question that $50,000 for the director is far short.

**Sen. Uglem:** It is my understanding that any gifts or grants they could come up could be appropriated through the budget section and maybe go to the trauma director.

**Rep. Hofstad:** That is exactly the way I understand it.

**VOTE: 6 y 0 n 0 absent**
**Motion Carried**

**Bill Carriers: Rep. Hofstad and Senator Berry**

# 2011 HOUSE CONFERENCE COMMITTEE ROLL CALL VOTES

Committee: Human Services

Bill/Resolution No. 1266 as (re) engrossed

Date: 4-15-11

Roll Call Vote #: 1

**Action Taken**

- ☐ HOUSE accede to Senate amendments
- ☐ HOUSE accede to Senate amendments and further amend
- ☐ SENATE recede from Senate amendments
- ☒ SENATE recede from Senate amendments and amend as follows

House/Senate Amendments on HJ/SJ page(s) --

- ☐ Unable to agree, recommends that the committee be discharged and a new committee be appointed

((Re) Engrossed) 1266 was placed on the Seventh order of business on the calendar

Motion Made by: Rep. Devlin Seconded by: Rep. Kilichowski

| Representatives | 4-15 | 4-14 | 4-15 | Yes | No | | Senators | 4-15 | 4-14 | 4-15 | Yes | No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hofstad | ✓ | ✓ | ✓ | ✓ | | | Berry | ✓ | ✓ | ✓ | | ✓ |
| Devlin | ✓ | ✓ | ✓ | ✓ | | | Uglem | ✓ | ✓ | ✓ | ✓ | |
| Kilichowski | ✓ | ✓ | ✓ | ✓ | | | Dever | ✓ | ✓ | ✓ | | ✓ |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Vote Count Yes: 4 No: 2 Absent: 0

House Carrier _____ Senate Carrier _____

LC Number _____ . _____ of amendment

LC Number _____ . _____ of engrossment

Emergency clause added or deleted

Statement of purpose of amendment

add in $50,000 ..
$30,000 for site visits
$20,000 for training
and $50,000 for director

motion failed

11.0449.04003
Title.07000

Prepared by the Legislative Council staff for
Conference Committee
April 18, 2011

VVC
4/18/11

PROPOSED AMENDMENTS TO REENGROSSED HOUSE BILL NO. 1266

That the Senate recede from its amendments as printed on page 1329 of the House Journal and pages 1063 and 1064 of the Senate Journal and that Reengrossed House Bill No. 1266 be amended as follows:

Page 1, after line 19, insert:

"Contracted emergency medical services and trauma medical director $50,000"

Renumber accordingly

# 2011 HOUSE CONFERENCE COMMITTEE ROLL CALL VOTES

Committee: Human Services

Bill/Resolution No. 1266 as (re) engrossed

Date: 4-18-11

Roll Call Vote #: 1

**Action Taken**

- ☐ HOUSE accede to Senate amendments
- ☐ HOUSE accede to Senate amendments and further amend
- ☐ SENATE recede from Senate amendments
- ☒ SENATE recede from Senate amendments and amend as follows

House/Senate Amendments on HJ/SJ page(s) 1329.

- ☐ Unable to agree, recommends that the committee be discharged and a new committee be appointed

((Re) Engrossed) 1266 was placed on the Seventh order of business on the calendar

Motion Made by: Rep. Devlin Seconded by: Rep. Kilichowski

| Representatives | 4-18 | | | Yes | No | | Senators | 4-18 | | | Yes | No |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Hofstad | ✓ | | | ✓ | | | Berry | ✓ | | | ✓ | |
| Devlin | ✓ | | | ✓ | | | Dever | ✓ | | | ✓ | |
| Kilichowski | ✓ | | | ✓ | | | Uglem | ✓ | | | ✓ | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |

Vote Count Yes: 6 No: 0 Absent: 0

House Carrier Rep. Hofstad Senate Carrier SEN. BERRY

LC Number 11.0449 . 04003 of amendment

LC Number _____ . _____ of engrossment

Emergency clause added or deleted go back to 04000

Statement of purpose of amendment

## REPORT OF CONFERENCE COMMITTEE

**HB 1266, as reengrossed:** Your conference committee (Sens. Berry, Uglem, Dever and Reps. Hofstad, Devlin, Kilichowski) recommends that the **SENATE RECEDE** from the Senate amendments as printed on HJ page 1329, adopt amendments as follows, and place HB 1266 on the Seventh order:

That the Senate recede from its amendments as printed on page 1329 of the House Journal and pages 1063 and 1064 of the Senate Journal and that Reengrossed House Bill No. 1266 be amended as follows:

Page 1, after line 19, insert:

"Contracted emergency medical services and trauma medical director $50,000"

Renumber accordingly

Reengrossed HB 1266 was placed on the Seventh order of business on the calendar.

2011 TESTIMONY

HB 1266

#1

HB 1266 EMS Trauma Medical Director

Good morning chairman_____ and esteemed committee members. My purpose this morning is to support HB 1266. I will give a brief history of how we arrived at this position and explain the need for a State EMS Trauma Director. I will not be reviewing the financial aspects of the bill which will be reviewed in subsequent testimony.

I am Kent Hoerauf, a rural MD of Hettinger and the North Dakota Medical Association representative on the State Trauma Committee. As such I was a part of the Trauma Advisory Committee when the state trauma plan was conceived. In 1992 the trauma system was organized based on regional health centers and existing referral patterns. This proved to be successful and efficient use of existing health resources. The regional trauma centers established regional leadership, education, and performance improvement review. A state trauma registry was established and a funded analyst position was later provided. The state trauma registry accumulates data from EMS encounters and Emergency Department admissions meeting trauma inclusion criteria. ~~Recently the registry has become of interest to provide statistics regarding brain injury, stroke, and acute myocardial infarctions~~.

Systems organization is composed of the director of the Division of Emergency Medical Services and the state trauma committee. The state trauma committee is composed of a maximum of 21 members representing various organizations provided by the ND Century Code under the auspices of the State Health Council. The state trauma committee monitors the standard of care of the trauma system, addresses systems issues, and provides a forum for problem solving and establishing policy guidelines. While the state committee is the governing body, large part of the work is carried out by the state nurse trauma coordinator who alone manages the details and daily operation of the state program.

The trauma system's success exists largely due to the commitment and support of the trauma centers, medical staff, and their respective trauma nurse coordinators. To objectively measure ND trauma system to national benchmarks, interested organizations advocated an audit of the trauma system and funding was provided

by the state legislature. Since the audit April 2008 we have met nearly all the directives posed by the American College of Surgery's Committee on Trauma. All hospitals are required to provide trauma care, the trauma registry was improved to provide meaningful data for regional and state trauma statistics, and trauma regions increased participation to review trauma care for education and performance improvement. The trauma rules were updated and revised to accommodate the changes.

However important directives remain unfinished. According to the American College Surgeons executive summary (page 5) "North Dakota is poised to take the trauma system to the next level and has the potential to become a showcase for an inclusive rural trauma system. However, in order to make this transition, the state needs additional, but modest, investment in personnel and infrastructure. In particular, the state trauma program staff will need to be increased and investments in the state trauma registry may be necessary." Further on page 8 of the executive summary regarding financing listed the following:

- "Acquire dedicated funding for additional positions needed to manage the trauma program; Associate Trauma Manager (1.0 FTE), Administrative support (0.5 FTE)
- Acquire dedicated funding for an EMS Medical Director;
- Acquire funding to improve/maintain state trauma registry"

The NHTSA National Highway Traffic Safety Administration Technical Assistance Team also conducted an audit of the ND EMS department April 2008 and recommended," The North Dakota Legislature should update the trauma system legislation to include dedicated funding for trauma system operations and staffing. Develop a job description for state trauma medical director and appoint one (may be 0.5 FTE or less).

These reviewing entities recognized that a state director is necessary to provide the necessary infrastructure for overall management of a system based on independently medically functioning regions understaffed by a single state trauma nurse coordinator. The director would provide continuity to carry the

Trauma Systems mission in a system based on volunteers to ensure longevity of policy and standards in the course of trauma site reviews and being an active participant of the trauma committees. The director would be in a unique position to network EMS and trauma with other allied departments such as Homeland security, injury prevention, and public health, and etc. The director would better manage the state trauma registry and direct necessary studies for affecting systems policy and research. The director would be in a unique position to represent ND at national trauma conferences and ensure ND continues to meet or exceed national benchmarks of quality in trauma care.

If we accomplish this we will have met the ACS expectation to rise to the higher level and have become a showcase for an inclusive rural trauma system.

#2

**Human Services Committee**
**Representative Robin Weisz - Chairman**
**January 18, 2011 10:30 am**
**Fort Union Room**
**HB 1266**

Good morning. Chairman Robin Weisz and members of the Committee. My name is Shelly Arnold and I am the Trauma Service Manager at Medcenter One in Bismarck, ND. Medcenter One is a Level II Trauma Center and has been involved in the North Dakota Trauma System since 1993.

I am here in support of House Bill 1266. The North Dakota State Trauma System is an extremely valuable part of each of our lives. We are not allowed to plan or determine if a trauma is going to affect us and we do not get to select when, where or how it will happen. Therefore, each and every corner of our State needs to be prepared to care for an injured person. Your injuries may occur as you are traveling through the State and you may not have your local ambulance service or your own hospital. You may be in a different county or even close to a small critical access hospital. Whether it is your 85 year old grandmother who broke her hip, your 45 year old wife who fell from a ladder or your 16 year old son who has been in a horrific car crash; you want to KNOW the ambulance (EMS) service and trauma center (hospital) is prepared and ready to care for every concern there is or could be.

In 2008 the North Dakota Department of Health, Division of EMS and Trauma had a consultation visit from the American College of Surgeons (ACS) to evaluate the North Dakota Trauma System and determine how the system could be enhanced. They were complementary about several areas of the current trauma system but had some strong recommendations for improvement. The trauma system (ND Department of Health with the assistance of the Level II Trauma Centers) has worked diligently to implement the recommendations suggested by the ACS. Amy Eberle, State Trauma Coordinator can provide you with all the recommendations and the status of achieving these recommendations. But the biggest piece that has not been accomplished is the implementation of an EMS/Trauma Medical Director and additional staff for the trauma program.

The EMS/Trauma Medical Director would provide oversight for all aspects related to planning, development, implementation and evaluation of the statewide EMS and trauma system. This oversight will enhance the work that has been done by the North Dakota Department of Health, Division of EMS and Trauma and the Level II Trauma Centers (Medcenter One, St. Alexius, Sandford-Fargo, Altru, Trinity, and Essentia).

Trauma Surgeons and Trauma Managers have been providing the oversight for the trauma system; but as the statewide trauma system is growing and evolving into performance improvement activities and the development of evidence based care, the oversight needs to be at a state level. The Level II Trauma Centers are committed to

ensure the trauma system continues to improve and move forward but the state oversight is necessary to carry out the activities.

Support for an EMS/Trauma Medical Director will allow the State to evaluate the data collected through the EMS and trauma registries, develop evidence based protocols, implement treatment guidelines, and address any issues identified. These activities will help to assure all areas of the state are functioning at the highest level of care possible and have the latest standards of care available. We want to make sure we are ready and prepared to care for you and/or your loved ones.

Please consider this bill as a way to improve the care available for that unknown injury as you travel through or live in the State of North Dakota.

Thank you for the opportunity to testify.

Shelly K Arnold
Trauma Service Manager
Medcenter One
Bismarck, ND
sarnold@mohs.org

#3
Tom Maren

**North Dakota State EMS/Trauma Medical Director Job Description**
**Related HB 1266**

**Definition**
This is advanced professional medical and regulatory work providing specialized medical oversight and consultation in the development and administration of the state emergency medical services and trauma system.

The selected physician is responsible for all medical aspects of the planning, evaluation, and supervision of the comprehensive emergency medical services and trauma system. The selected physician will work in close consultation with the North Dakota Department of Health Division of Emergency Medical services.

**Examples of Work**

Provide oversight for all medical aspects related to planning, development, implementation, and evaluation of the statewide EMS and Trauma system. This includes all medical components for response systems of care supported by public policy that integrate or interface with the EMS and Trauma system, such as the following.

- State plans (i.e. burn, cardiac, pediatric/neonatal, trauma, stroke plans)
- Emergency preparedness
- Other systems of specialized care through which EMS and trauma patient care is delivered

Oversee the establishment of statewide protocols, policies, and procedures for all patient care activities from dispatch through triage, treatment, and transport.

Oversee statewide EMS and Trauma continuous performance improvement program.

Establish credentialing, training, and certification requirements of local and regional EMS medical directors.

Serve as an expert advocate for efficient, effective, and evidence-based care throughout the state.

Oversee the delivery of medical care that is consistent with recognized professional standards.

Develop and oversee performance improvement programs designed to assure professional and public accountability for medical care provided within the statewide EMS and trauma system.

Recommend and approve medical policies and procedures to be included in the state treatment and transport protocols.

Assist the state EMS regulatory agency to assure compliance with applicable rules and regulations.

Represent the state EMS regulatory agency at meetings involving matters related to EMS and trauma medical issues and related public policy development.
Provide education on roles/responsibilities, EMS/Trauma rules/regulations, and emerging issues in EMS and Trauma to local and regional EMS and Trauma medical directors.

Provide consultation, support, and assistance to local and regional EMS medical directors as needed.

Promote and participate in EMS and Trauma system research.

Interact with local, regional, state, and national EMS and Trauma authorities to oversee that standards, needs, and requirements are met and resource utilization serves to optimize efficient, effective, and evidence-based medical care.

Promote public information and education on prevention of illness and injury, recognition of emergency conditions, and timely 911 EMS access.

**Examples of Knowledge, Skills and Abilities**

The following are key professional attributes that the state EMS medical director should have in order to successfully interact with a diverse group of coworkers and EMS and Trauma system stakeholders.

- Knowledge of state EMS Trauma laws
- Knowledge of system level data analysis
- Knowledge of EMS dispatch and communications
- Knowledge of mass casualty and disaster plans
- Considerable communication and interpersonal skills
- Ability to analyze and comprehend data
- Ability to deal tactfully with the media, elected officials, and others on sensitive matters
- Ability to make public presentations

**Experience and Education Requirements**

Must be a physician experienced in the current practices within prehospital care and treatment of the trauma patient. Board certification by the by the American Board of Emergency Medicine or by the American Board of Surgery is desired.

Physician must be willing to remain current in ACLS, ATLS, and PALS.

Physician must be licensed within the state of North Dakota.

- Knowledge of state EMS and trauma laws, statewide EMS and Trauma systems and its infrastructure, EMS/Trauma performance improvement processes, emergency patient care research, and system level data analysis is desired.

#1

HB 1266 EMS/ Trauma Director Senate Human Services Committee

March 2,2011

Good morning chairperson Lee and esteemed committee members. I am Kent Hoerauf. I am an internist geriatrician of Hettinger ND and also represent the ND AMA on the state trauma committee. My purpose is to support HB 1266 to establish and fund EMS Trauma Medical Director position and funding for associate statewide trauma coordinator and trauma registry.

I must admit that I feel uncomfortable with this request. I know that the legislature is faced with many bills requesting additional funding this year given the increased revenues in the recent past and that ND is doing better financially than most states. Some say it is because we are blessed with abundant resources and strong agriculture base. But native North Dakotans know that our current position is due to long tradition of fiscal responsibility and "doing more with less" consistent with ND values of self reliance and hard work.

It is in this tradition that the ND Trauma System was founded in 1992. I was the NDMA representative on Trauma Advisory Committee. Stakeholders at that time knew that to succeed the trauma system had to be self sufficient and congruent with existing medical practices. It was this reason and the geographic distribution of major medical centers that the ND trauma system was based on four regions represented by the larger medical centers and their respective referral bases provided by the rural medical communities.

The regional medical centers became Level 2 trauma Centers under the auspices of the American College of Surgery Committee on Trauma. They are surveyed every 4 years and have to meet extensive national quality benchmarks to be verified by the ACS and receive their level II designation by the state of ND. Part of their charter is to provide trauma education and injury prevention in their communities. Level II trauma physicians serve as ATLS instructors to provide training based on national standards so all physicians and midlevels involved in trauma have equal opportunity to have the skills necessary to take care of trauma whether it is in Hettinger or my referral centers in Bismarck.

The Level IV and later Level V trauma centers were established according to ND rules. They are surveyed every 3 years by the site survey team consisting of Level II Trauma physician, state trauma coordinator, and assistants. The rural trauma hospitals are held to the same national quality standards according to their resources. They must have the necessary equipment, trauma protocol to staff the ER 24 hours a day with trauma certified personnel, and have an active performance improvement system for ongoing evaluation of quality benchmarks and plans for correction. Based on the site survey the rural hospital's ability to provide quality trauma care is verified by the State Trauma Committee and designated a Level IV or V trauma center. Based on ND rules effective January 1, 2011 all hospitals in ND that have an ED shall meet trauma designation standards and provide trauma care in their area so all ND citizens benefit.

All trauma hospitals submit trauma data to the ND trauma registry. Each hospital has a trauma coordinator that submits data and monitors hospital compliance to trauma quality standards. The state registry accumulates data from EMS encounters and Emergency Department admissions meeting trauma inclusion criteria. The registry is a repository of information to track origins and incidences of various injuries and their outcome. It is the performance improvement of the system as a whole to track trends and identify areas that require improvement. A funded data analyst reviews data and provides reports that meet statistical scrutiny.

Systems organization is composed of the director of the Division of Emergency Medical Services and the state trauma committee. The state trauma committee is composed of a maximum of 21 members representing various organizations provided by the ND Century Code under the auspices of the State Health Council. The state trauma committee monitors the standard of care of the trauma system, addresses systems issues, and provides a forum for problem solving and establishing policy guidelines.

While the state committee is the governing body, large part of the work is carried out by the state nurse trauma coordinator who alone manages the details and daily operation of the state program.

The trauma system's success exists largely due to the commitment and support of the trauma centers, medical staff, and their respective trauma coordinators. To objectively measure ND trauma system to national benchmarks interested organizations advocated an audit of the trauma system and funding was provided by the state legislature. Since the audit April 2008 we have met nearly all the directives posed by the American College of Surgery's Committee on Trauma. All hospitals are required to provide trauma care, the trauma registry was improved to provide meaningful data for regional and state trauma statistics, and trauma regions increased participation to review trauma care for education and performance improvement. The trauma rules were updated and revised to accommodate the changes.

However important directives remain unfinished. According to the American College Surgeons executive summary (page 5) "North Dakota is poised to take the trauma system to the next level and has the potential to become a showcase for an inclusive rural trauma system. However, in order to make this transition, the state needs additional, but modest, investment in personnel and infrastructure. In particular, the state trauma program staff will need to be increased and investments in the state trauma registry may be necessary." Further on page 8 of the executive summary regarding financing listed the following:

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- Acquire funding to improve/maintain state trauma registry"

The NHTSA National Highway Traffic Safety Administration Technical Assistance Team also conducted an audit of the ND EMS department April 2008 and recommended," The North Dakota Legislature should update the trauma system legislation to include dedicated funding for trauma system operations and staffing. Develop a job description for state trauma medical director and appoint one (may be 0.5 FTE or less).

The North Dakota trauma system has grown and matured since 1992. It has become a vital part of our state health infrastructure.

Early challenges to develop a comprehensive trauma system consisted of having all medical facilities participate to provide trauma care. With passing of rules for statewide participation the system is currently focused on strengthening quality improvement efforts both in the four regions and statewide. Ongoing challenges to have a statewide functioning trauma registry eventually came to fruition with time as hospitals developed computer software that allowed seamless data transmission and the establishment of data analyst. These challenges have been meet with a great deal of voluntary commitment and efficient use of existing medical resources consistent with ND values doing more with less.

However the growth and maturation of the trauma system has come at a cost. The State Trauma committee and verification teams are operating at maximum capacity and volunteerism suffers to take on additional duties .Replacing retiring committee members is problematic, Full participation of all hospitals in trauma data submission leads to more meaningful data and time requirements for the data analyst and information to digest. The state trauma coordinator's activities are outlined in **Amy's Job Duties** (attached) and makes oversight of all clinical aspects of trauma care extremely difficult.

The trauma system has become more compartmentalized with each piece operating at full capacity and focused on individual duties and the mission of optimal trauma care is compromised.

I will give you a hypothetical scenerio to illustrate the point. This winter Hettinger has 10 snowmobile accidents.8/10 presented to the ED by pickup truck.8/10 occurred while chasing cyotes. 6/10 involved alcohol. 10/10 were not wearing helmets. 3/10 had severe brain injuries. A recent report found that inducing hypothermia to cool the brain to 34 degrees F markedly improves outcomes in individuals with diffuse brain injury.

The ACS audit in 2008 found that we take very good medical care of trauma patients and monitoring outcomes. This reflects the strength of our trauma hospitals and in systems terms is the Medical Model of treating trauma.

But in the example above who is monitoring the registry to expose this problem? Who is going to notify Game and Fish Dept they have a problem in SW ND? Who is going to present the problem to departments of Public Health and Injury Prevention to start public education on the use of helmets to reduce injury. Who would promote orange graphic helmets that have been found to improve use of helmets by snowmobilers? Who will address the high incidence of alcohol use associated with snowmobile accidents? Who will evaluate the impact on the families of the victims of severe brain injury and help them? Who will ask the UND School of medicine to conduct our own study on outcomes of brain injury in ND? Who is responsible to start hypothermia protocol to treat severe brain injury as standard of care in our trauma hospitals? This is an example of the new Public Health Model in treating trauma.

This bill is to provide an EMS-Trauma Medical Director who has a surgical or clinical expertise to be the "captain" to steer this vessel of multiple compartments to work together and integrate EMS Trauma with Emergency Preparedness, Injury Prevention, Public Health, UND School of Medicine and National EMS and Trauma Organizations.

See **North Dakota State EMS/Trauma Medical Director Job Description (attached)**

Today I appeal to this committee for your help to comply with the directives of the 2008 ACS and NHTSA audit and appoint a State EMS/Trauma Medical Director and the funding requested in original House Bill 1266. The current bill before you does not fully address the problem. All know taking care of trauma is expensive. The original request to fund this problem is more realistic to successfully implement a comprehensive trauma system based on a Public Health model to elevate ND trauma system to its fullest potential to become a model of trauma care for the future.

Thank you. I appreciate your questions.

Kent Hoerauf MD

1100 Hwy 12

Hettinger, ND 58639

#2

# North Dakota State EMS/Trauma Medical Director Job Description

## Purpose of Position

- Serves as the state Emergency Medical Services (EMS) and Trauma Medical Director and provides expert guidance and medical direction to prehospital, medical, nursing, and other emergency medical services and trauma professionals. Must be licensed by the North Dakota Board of Medicine.

- Serves as a liaison to North Dakota DoH in dealing with EMS and Trauma system issues brought to the attention of the department.

- Promote and assist with recruitment, retention, and training of physicians to serve as local EMS Medical Directors and Trauma Designation Surveyors.

- Provide professional/technical medical advice to the EMS and Trauma Advisory Committees.

- Annually review state plans and processes for compliance with state and national standards of emergency and trauma medical care.

- The state EMS/Trauma Medical Director provides medical aspect of leadership, oversight, coordination, access to best practices, system quality management, and research to ensure the safest and highest quality care for patients. The state EMS/Trauma Medical Director provides medical direction and oversight necessary for a comprehensive EMS and Trauma system and oversees treatment protocol and policy development.

- Serves as a liaison to Emergency Preparedness and Response, Injury Prevention, Public Health, and National EMS and Trauma Organizations.

- This full-time position will be expected to work standard office hours at the North Dakota Department of Health Division of Emergency Medical Services and Trauma.

- Availability to travel throughout the state to attend EMS and Trauma regional meetings, seminars, trainings, trauma designation visits, and ambulance inspections

**Education, Experience, Licensure, Certification required for successful performance in this position**

- Must be an Emergency Physician or General Surgeon knowledgeable of the current practices within prehospital care and treatment of trauma patients. Board certification by the by the American Board of Emergency Medicine or by the American Board of Surgery is required along with currency in ACLS, ATLS, and PALS.

- Knowledge of state EMS and trauma laws, statewide EMS and Trauma systems and its infrastructure, EMS/Trauma performance improvement processes, emergency patient care research, and system level data analysis.

- Demonstrate ability to analyze and comprehend data, complete technical writing in protocol and policy development, and conduct public presentations.

- Demonstrate proficiency with personal computers and Micro Soft Office products.

#3

## Amy's Job Duties

**Coordinate all the trauma designation site visits**

- Keep track of designation dates and send letters on expirations dates and site visit dates
- Review applications that are sent in for trauma designation
- Set up trauma designation site visit dates
- Participates in all hospital trauma designation visits
- Prepare the applications for the State Trauma Committee
- Send letters and certificates once designation is granted

**Coordinate Quarterly Regional (4) and State Meetings and PI Meetings**

- Send reminders to all state and regional members of meeting dates
- Gather and organize PI patient data to review at the meetings and distribute to members
- After the meetings provide summaries and correspondence to hospitals and follow-up with hospitals on any issues.

**Trauma Registry**

- Provide training along with the data analyst on the trauma registry
- Help the data analyst develop reports and review submissions for accuracy
- Monitor submissions and follow-up with facilities that are late with data submissions
- Update and distribute the trauma registry data dictionary
- Maintain the trauma website

**Liaison for All Hospitals**

- Orientation for new trauma coordinators on how to implement or maintain their local trauma programs.
- Coordinate along with chair quarterly trauma coordinator meetings with one face to face meeting each year.
- Support for development of performance improvement processes at the local facilities
- Support for trauma registry issues
- Liaison for care or system issues that arise
- Assist with semi-annual trauma newsletter
- Help coordinate the Annual State Wide Trauma Conference

**Others**

- Serve on the injury prevention coalition and provide quarterly injury prevention flyers to all hospitals at the regional meetings
- Chair elect of the National State Trauma Managers Council
- Serve on the Emergency Medical Services for Children advisory board
- Instruct Trauma Nursing Care Courses at hospitals when needed.
- Help with ATLS when needed.
- Participate in ACS Trauma System State Consultations (Recently have done Missouri, West Virginia, and The Navajo Nation)
- Part of the Health Department's Operation Center for Disasters

#4

**HB 1226 EMS/Trauma Director**

**Testimony of March 2, 2011 for the Senate Human Services Committee**

Good morning. Thank you to Chairperson Lee and the members of the Senate Human Services Committee for the opportunity to speak. My name is Steven Briggs. I have been an active participant in the care of injured patients in the state of North Dakota since 1990. I started my medical career as a ground and then flight paramedic, and eventually became a general surgeon with additional certification in Surgical Critical Care and Trauma. I am the Medical Director for Sanford Health Trauma Services and Sanford LifeFlight Critical Care Transport Service in Fargo. I have participated in the intimate care of many very sick trauma patients in our state, from highway ditches, to the level 4&5 trauma centers with minimal experience and resources, to the highly functional level 2 hospitals providing definitive care. I would like to share with you my thoughts in favor of funding HB 1226.

To understand the importance of funding HB 1226, one must realize that an organized response is the cornerstone of treatment for multi-system traumatic injury. No "one person" or specialist ever saves an injured person. It is a team effort. To illustrate this concept, please refer to Exhibit #1. Exhibit #1 illustrates what I have found to be the "normal process" in caring for an injured patient in North Dakota. As I review the trauma cases that are accepted by our facility, I am repeatedly struck by the fact that the outcome of these patients is primarily determined by the "care of the whole". In other words, we are only as good as the worst of our care. For example: patients who make successful recoveries or do better than expected share specific treatment characteristics: 1) early entry into the trauma system, 2) appropriate life saving interventions and treatment at level 4&5 trauma centers, 3) early transfer from level 4&5 trauma centers, 4) appropriate critical care support during transfer, and 5) no "glitches" occur (i.e. treatment errors, delays, or clinical judgment errors are made at any point along the way.) On the other hand, when I review patients who did poorly, especially in the setting of traumatic brain injury, I often find multiple **"negative events"** over the continuum of their care that culminate in a very sick patient that will have **limited functional outcome** if he/she survives. Negative events are most commonly: 1) delays in treatment/stabilization, 2) delays in transfer, 3) untreated low blood pressure or airway problems, 4) inappropriate treatments.

The reason negative events matter is that we live in a rural environment. Transport times to definitive care at level 2 trauma centers are measured in hours, not minutes as they are in urban trauma systems. As a consequence, there are numerous opportunities for negative events to happen during the treatment of trauma patients. It is well established in trauma medicine that appropriate care during the first 6 hours of severe injury is the key to saving lives and reducing the long term burden of injury. Herein lays the challenge we are trying to address with HB 1226: How do we provide a continuum of appropriate care over large intervals of time

and large geographic distances in our state. A cornerstone of the solution is medical oversight of the "Big Picture" for North Dakota. This means medical expertise/leadership guiding a capable and appropriately staffed State Trauma Coordinator Office that is actively engaged in educating and organizing the different facets of the state trauma system. Trauma organization is only effective using a "top down" approach with a leader in place to organize the different regions of the state into a cohesive network of trauma care. Currently we struggle to maintain our existing trauma system entirely through the largely independent efforts of the six level 2 trauma centers and Amy Eberle, our State Trauma Coordinator, who is willing to travel thousands of miles around the state trying to improve our trauma system. Completely voluntarily, our level 2 trauma centers have chosen to teach Advanced Trauma Life Support to our rural hospital providers, provide outreach for trauma education, lead site visits for verification of trauma readiness, lead quality improvement efforts for our level 4&5 trauma centers, and provide educational materials to meet the needs of our rural providers who cannot be experts in the exceedingly complex and stressful art of trauma resuscitation. All of this is done under the auspices and organizational expertise of our State Trauma Coordinator, alone.

The level 2 centers have chosen to shoulder the responsibility of the trauma system because traumatic injury is a chronic, draining problem for our state. It is a growing problem. It is a problem that can impact anyone of us, possibly even myself as I drive home tonight. Please read Exhibit #2. I do not take pride or comfort in living in a state with one of the highest motor vehicle death rates in the country. That is why I am here. Much of the emphasis of this legislative session is focusing on "investment" and "infrastructure" supporting the development of our natural resources. I would advocate to you that the trauma system is a critical component of the state's investment in infrastructure – just as important as every road or service program currently approved or underway. For if you build the industrial resources, the roads, the services, I can assure you that traumatic injury will (and is) following. While we are asking for a significant investment in the trauma system, that investment is mere pennies when you factor in the costs, both real dollars involved with medical care, and the cumulative societal cost associated with the loss of highly functioning young people who remain the most commonly injured segment of our population, and the foundation of our workforce to build a better future.

Traumatic injury is inherent with population and industrial growth. We are already seeing the ramifications of this growth in our healthcare system. I have spoken with rural doctors in the Northwestern part of the state who describe being overwhelmed with severely injured patients on a weekly basis now, whereas before the development, these types of injuries occurred rarely in a year.

As you deliberate how to efficiently and appropriately spend the taxpayer's money, I can assure you that the burden of trauma in our state will grow. I can also assure you that whether you fund HB 1226 or not, the state will pay for the consequences of trauma from its monetary funds, and it will pay far more to repair the damage and support the damage that is not repairable than the funds requested in HB 1226.

Again, thank you to the committee for the opportunity to speak.

Steven Briggs, MD, FACS

Medical Director for Trauma

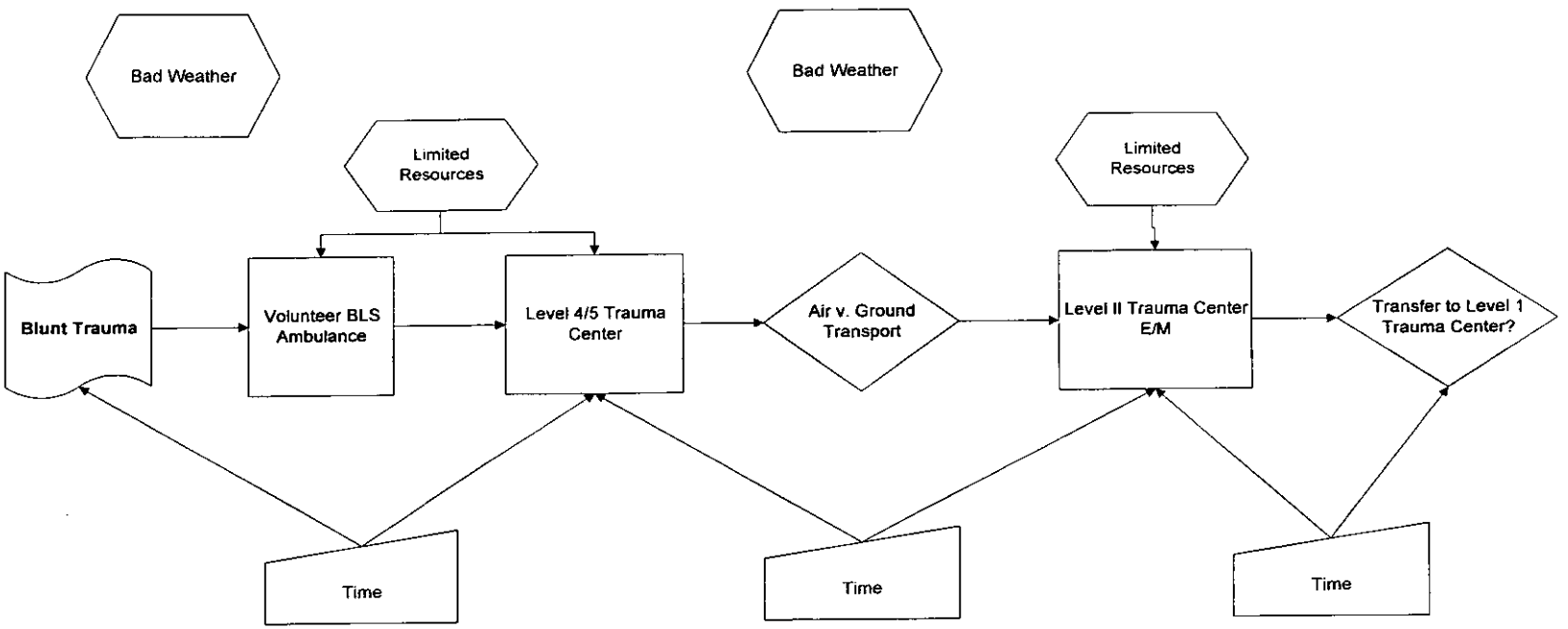
Sanford Medical Center Fargo

801 Broadway North

Fargo, N.D. 58122-0140

**Exhibit #1**

# Rural Trauma Systems




**Outcome is determined by the "whole" of provided care.**

# Exhibit #2

## Study: Roads are safer in urban areas

**By Larry Copeland, USA TODAY**

Your odds of dying in a motor vehicle crash vary dramatically because of one simple thing: where you live.

The safest places to drive in the USA are Washington, D.C., and Massachusetts. Among the most dangerous: Montana, Wyoming, Louisiana and Mississippi. Those conclusions are based on federal data of traffic fatalities per 100,000 population and per 100 million miles driven.

The primary reason for the difference: Urban roads are safer than rural roads.

Even in states with low overall road death rates, rural areas often have rates twice as high as urban ones. That's because urban areas usually have roads with lower speed limits, more safety engineering features such as divided highways and faster access to emergency medical care than rural routes. Many rural deaths occur when vehicles leave the road and crash into trees or other obstructions.

"An urban state in the Northeast is going to have a much lower fatality rate than a rural Western state with a lot of high-speed, two-lane rural roads, where serious crashes are more likely to happen," says Russ Rader, spokesman for the Insurance Institute for Highway Safety.

Many traffic safety groups such as the Governors Highway Safety Association argue that such comparisons don't accurately reflect how safe a state's roads are. A better measure, they say, is whether states have enacted proven safety enhancements such as motorcycle helmet laws and primary seat belt laws, which allow police to stop motorists solely for being unbuckled.

State legislatures around the country are gearing up this month to debate scores of highway safety measures that address everything from texting while driving to booster-seat use.

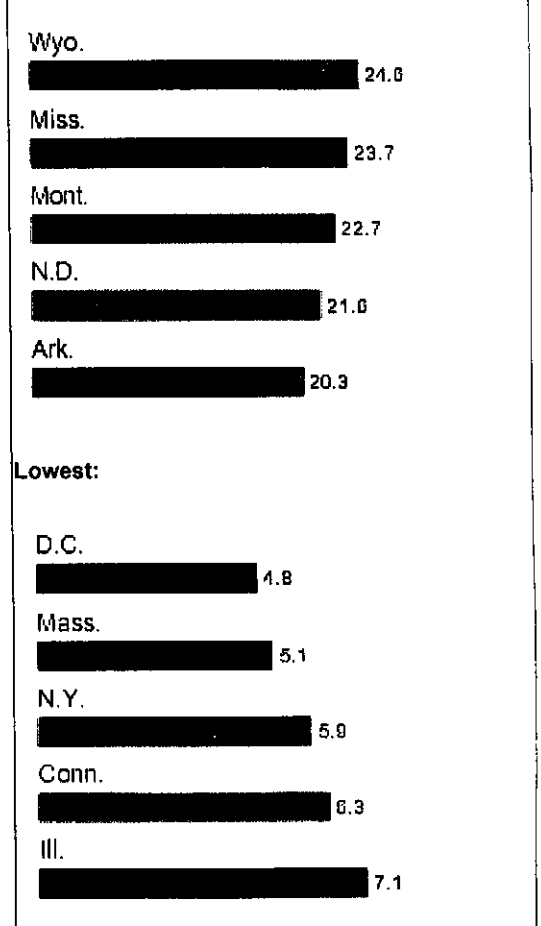
The National Transportation Safety Board urges states to adopt five "most wanted" safety measures, covering extreme drunken driving, seat belt use, child-occupant protection, eliminating distractions for young drivers and motorcycle safety.

Judith Stone, president of Washington, D.C.-based Advocates for Auto and Highway Safety, says the group does not consider fatalities when issuing its annual report card on states. "We look at laws and whether they've been passed," Stone says.

Advocates of stronger laws say it's difficult to persuade a state such as New Hampshire, which has no seat belt or motorcycle helmet laws, to enact such rules when its death rate is below the U.S. average. "States like ... New Hampshire could certainly save more lives by passing stronger laws," says governors safety association spokesman Jonathan Adkins. "Legislators note these states have relatively low fatality rates and tend not to see the benefit in passing stronger laws."

**RISKS ON ROAD**

States with highest and lowest road death rates per 100,000 population in 2009:




Source: National Highway Traffic Safety Administration

Amy Sobeck - Dept of Health SB 1266

#5

## ND Report Summary of the 17 oil producing counties 2006-2009

It appears the total number of trauma patients presenting to the hospitals located in those counties have doubled from 2006 through 2009. There were 756 trauma patients reported in 2006 and 1131 reported in 2009. Records from 2010 were not evaluated. We evaluated only full years.

Reported industrial accidents increased from 66 in 2006 to 127 in 2009.

Injury location for STREET was reported at 339 in 2006 and 579 in 2009 for all records.

For industrial accidents only, STREET location went from 14 in 2006 to 37 in 2009, INDUSTRY was reported at 28 in 2006, 46 in 2007, 43 in 2008 and 33 in 2009.

Injuries by Fall, Fire, Motor Vehicle, Transport, Struck by, Against all increased from significantly in the general population from 2006 to 2009. (All records)

Injuries by Fall, Machinery, Motor Vehicle, and Struck by, Against increased in the inductrial accidents only population doubling from 2006 to 2009.

Cause Codes were evaluated. Assaults, Burns, Falls, Stabbings increased in the general population. Falls, Machinery, and Motor Vehicle accidents increased in the Industrial Accidents only group.

Injuries occurring from all records increased in the following counties: McHenry, McKenzie, McLean, Mountrail, Rolette, Stark, Ward and Williams.

Injuries occurring from Industrial Accidents only increased in the following counties: McHenry, McKenzie, McLean, Mountrail, Rolette, Stark and Ward.

Industry type was looked at but since the field was added in 2008 there was no comparative data in 2006 or 2007.

[redacted] Name
Records included

17 Oil Producing County Report
:3553

**Patients Entered Into the Registry by Year**

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| Tioga Medical Center (5048) | 12 | 17 | 31 | 29 | 89 |
| Trinity Medical Center (5055) | 376 | 487 | 445 | 639 | 1947 |
| Sakakawea Medical Center (5024) | 16 | 23 | 20 | 21 | 80 |
| St Andrews Medical Center (5005) | 65 | 40 | 29 | 19 | 153 |
| Garrison Memorial Hospital (5019) | 15 | 17 | 33 | 45 | 110 |
| Kenmare Community Hospital (5028) | 11 | 0 | 10 | 9 | 30 |
| Mercy Hospital (Williston) (5052) | 90 | 79 | 77 | 125 | 371 |
| Mountrail County (Stanley) (5047) | 33 | 55 | 40 | 16 | 144 |
| St Lukes Hospital (Crosby) (5011) | 4 | 0 | 5 | 1 | 10 |
| Southwest Health Care (Bowman) (5006) | 2 | 15 | 21 | 33 | 71 |
| St Josephs Hospital (Dickinson) (5054) | 103 | 89 | 81 | 156 | 429 |
| McKenzie County Memorial Hospital (Watford City) (5051) | 29 | 26 | 26 | 38 | 119 |
| Total | 756 | 848 | 818 | 1131 | 3553 |

**Industrial Accidents by Year**

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| Industrial Accidents | 66 | 85 | 118 | 127 | 396 |
| Total | 66 | 85 | 118 | 127 | 396 |

[redacted]Location by Year

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| Farm | 53 | 35 | 43 | 50 | 181 |
| Home | 170 | 225 | 193 | 236 | 824 |
| Industry | 32 | 49 | 43 | 33 | 157 |
| Institution | 27 | 19 | 20 | 31 | 97 |
| Mining | 0 | 0 | 7 | 2 | 9 |
| NA | 0 | 0 | 1 | 1 | 2 |
| ND | 2 | 0 | 1 | 0 | 3 |
| Other | 25 | 26 | 52 | 21 | 124 |
| Public | 40 | 29 | 56 | 41 | 166 |
| Recreation | 42 | 49 | 46 | 72 | 209 |
| Street | 339 | 360 | 320 | 579 | 1598 |
| UNK | 0 | 6 | 12 | 15 | 33 |
| Unspecified | 26 | 50 | 24 | 50 | 150 |
| Total | 756 | 848 | 818 | 1131 | 3553 |

[redacted]

**Injury Location Industrial Accidents Only by Year**

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| [redacted] | 19 | 13 | 18 | 25 | 75 |
| [redacted] | 0 | 5 | 9 | 5 | 19 |
| Industry | 28 | 46 | 43 | 33 | 150 |
| Institution | 1 | 0 | 0 | 0 | 1 |
| Mining | 0 | 0 | 7 | 2 | 9 |
| NA | 0 | 0 | 0 | 1 | 1 |
| ND | 1 | 0 | 0 | 0 | 1 |
| Other | 2 | 2 | 12 | 7 | 23 |
| Public | 0 | 1 | 5 | 8 | 14 |
| Recreation | 0 | 1 | 0 | 5 | 6 |
| Street | 14 | 14 | 20 | 37 | 85 |
| UNK | 0 | 0 | 1 | 2 | 3 |
| Unspecified | 1 | 3 | 3 | 2 | 9 |
| Total | 66 | 85 | 118 | 127 | 396 |

**[redacted]use E-Codes by Year**

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| [redacted]Pierce | 16 | 16 | 28 | 17 | 77 |
| Drowning | 0 | 0 | 0 | 0 | 0 |
| Fall | 246 | 240 | 227 | 314 | 1027 |
| Fire/Flame | 5 | 19 | 12 | 17 | 53 |
| Hot object/Substance | 0 | 1 | 3 | 7 | 11 |
| Firearm | 10 | 12 | 11 | 12 | 45 |
| Machinery | 10 | 15 | 17 | 17 | 59 |
| Motor Vehicle Traffic | 1 | 1 | 2 | 2 | 6 |
| MV Occupant | 249 | 276 | 238 | 453 | 1216 |
| MV Motorcyclist | 25 | 35 | 29 | 53 | 142 |
| MV Pedal Cyclist | 0 | 3 | 2 | 10 | 15 |
| MV Pedestrian | 6 | 10 | 11 | 7 | 34 |
| MV Unspecified | 9 | 9 | 7 | 4 | 29 |
| Pedal Cyclist, other | 0 | 0 | 0 | 0 | 0 |
| Pedestrian, other | 5 | 3 | 10 | 6 | 24 |
| Transport, other | 78 | 95 | 72 | 97 | 342 |
| Natural/Environmental | 10 | 17 | 8 | 10 | 45 |
| Bites and Stings | 2 | 4 | 2 | 1 | 9 |
| Overexertion | 2 | 3 | 3 | 0 | 8 |
| Poisoning | 1 | 2 | 0 | 1 | 4 |
| Struck by, against | 45 | 64 | 68 | 68 | 245 |
| Suffocation | 0 | 2 | 2 | 1 | 5 |
| Other Specified | 14 | 12 | 19 | 11 | 56 |
| Other Specified, NEC | 2 | 5 | 9 | 8 | 24 |
| [redacted]pecified | 10 | 7 | 9 | 12 | 38 |
| [redacted]rse Effects Medical Care | 0 | 0 | 1 | 1 | 2 |
| [redacted]erse Effects Drugs | 1 | 1 | 1 | 1 | 4 |
| Missing | 26 | 184 | 87 | 50 | 347 |
| Total | 773 | 1036 | 878 | 1180 | 3867 |

[redacted] E-Code Industrial Accidents Only by Year

| [redacted] | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| [redacted]erce | 2 | 1 | 4 | 3 | 10 |
| Drowning | 0 | 0 | 0 | 0 | 0 |
| Fall | 14 | 20 | 31 | 36 | 101 |
| Fire/Flame | 3 | 9 | 6 | 3 | 21 |
| Hot object/Substance | 0 | 0 | 2 | 1 | 3 |
| Firearm | 0 | 0 | 0 | 0 | 0 |
| Machinery | 5 | 8 | 13 | 12 | 38 |
| Motor Vehicle Traffic | 0 | 1 | 0 | 0 | 1 |
| MV Occupant | 16 | 13 | 18 | 33 | 80 |
| MV Motorcyclist | 0 | 0 | 0 | 1 | 1 |
| MV Pedal Cyclist | 0 | 0 | 0 | 0 | 0 |
| MV Pedestrian | 0 | 0 | 0 | 0 | 0 |
| MV Unspecified | 0 | 0 | 1 | 1 | 2 |
| Pedal Cyclist, other | 0 | 0 | 0 | 0 | 0 |
| Pedestrian, other | 1 | 1 | 3 | 0 | 5 |
| Transport, other | 11 | 13 | 8 | 16 | 48 |
| Natural/Environmental | 4 | 5 | 2 | 4 | 15 |
| Bites and Stings | 0 | 1 | 0 | 0 | 1 |
| Overexertion | 0 | 0 | 0 | 0 | 0 |
| Poisoning | 0 | 0 | 0 | 0 | 0 |
| Struck by, against | 6 | 12 | 16 | 13 | 47 |
| Suffocation | 0 | 0 | 0 | 0 | 0 |
| Other Specified | 5 | 3 | 9 | 5 | 22 |
| Other Specified, NEC | 1 | 0 | 2 | 0 | 3 |
| Un[redacted]ecified | 0 | 1 | 0 | 0 | 1 |
| [redacted]e Effects Medical Care | 0 | 0 | 0 | 0 | 0 |
| A[redacted]se Effects Drugs | 0 | 0 | 0 | 0 | 0 |
| Missing | 2 | 18 | 10 | 6 | 36 |
| Total | 70 | 106 | 125 | 134 | 435 |

[redacted]

[redacted] Code by Year

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| AIR | 0 | 0 | 1 | 1 | 2 |
| ANIMAL | 0 | 1 | 13 | 30 | 44 |
| ASSAULT | 0 | 25 | 42 | 37 | 104 |
| ATV | 42 | 40 | 40 | 42 | 164 |
| BIKE | 5 | 7 | 8 | 11 | 31 |
| BIOHAZ | 0 | 0 | 0 | 1 | 1 |
| BURN | 5 | 14 | 18 | 25 | 62 |
| FALL | 257 | 266 | 258 | 327 | 1108 |
| GSW | 12 | 11 | 14 | 11 | 48 |
| MACH | 11 | 14 | 32 | 23 | 80 |
| MC | 36 | 48 | 41 | 70 | 195 |
| MV | 260 | 289 | 262 | 474 | 1285 |
| NA | 0 | 0 | 1 | 0 | 1 |
| OTHER | 87 | 90 | 41 | 30 | 248 |
| OV | 5 | 5 | 7 | 5 | 22 |
| PED | 12 | 12 | 7 | 9 | 40 |
| SKATE | 1 | 4 | 0 | 0 | 5 |
| SKI | 1 | 0 | 1 | 0 | 2 |
| SNOWMOB | 0 | 3 | 3 | 3 | 9 |
| SPORT | 15 | 13 | 12 | 13 | 53 |
| STAB | 5 | 3 | 16 | 14 | 38 |
| WATER | 2 | 3 | 1 | 5 | 11 |
| Total | 756 | 848 | 818 | 1131 | 3553 |

[redacted] Code Industrial Accidents Only

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| AIR | 0 | 0 | 1 | 0 | 1 |
| ANIMAL | 0 | 0 | 3 | 9 | 12 |
| ASSAULT | 0 | 1 | 1 | 0 | 2 |
| ATV | 3 | 2 | 2 | 7 | 14 |
| BURN | 2 | 5 | 10 | 4 | 21 |
| FALL | 15 | 25 | 38 | 36 | 114 |
| MACH | 9 | 11 | 26 | 18 | 64 |
| MC | 0 | 2 | 0 | 0 | 2 |
| MV | 17 | 12 | 21 | 37 | 87 |
| OTHER | 17 | 24 | 12 | 10 | 63 |
| OV | 2 | 1 | 2 | 2 | 7 |
| PED | 1 | 2 | 0 | 0 | 3 |
| SNOWMOB | 0 | 0 | 0 | 1 | 1 |
| SPORT | 0 | 0 | 0 | 1 | 1 |
| STAB | 0 | 0 | 2 | 2 | 4 |
| Total | 66 | 85 | 118 | 127 | 396 |

[redacted]

[redacted] by County

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| %MISSING | 0 | 0 | 1 | 0 | 1 |
| Barnes | 0 | 1 | 0 | 0 | 1 |
| Benson | 2 | 1 | 2 | 1 | 6 |
| Billings | 17 | 10 | 8 | 8 | 43 |
| Bottineau | 81 | 63 | 51 | 49 | 244 |
| Bowman | 3 | 8 | 13 | 28 | 52 |
| Burke | 20 | 13 | 17 | 16 | 66 |
| Burleigh | 0 | 1 | 0 | 1 | 2 |
| Cavalier | 0 | 0 | 1 | 0 | 1 |
| Divide | 7 | 9 | 12 | 6 | 34 |
| Dunn | 19 | 8 | 25 | 15 | 67 |
| Eddy | 0 | 1 | 0 | 0 | 1 |
| Golden Valley | 2 | 3 | 6 | 17 | 28 |
| Grand Forks | 1 | 0 | 0 | 0 | 1 |
| Grant | 0 | 0 | 1 | 0 | 1 |
| Hettinger | 3 | 4 | 1 | 4 | 12 |
| McHenry | 18 | 32 | 22 | 30 | 102 |
| McKenzie | 45 | 38 | 43 | 60 | 186 |
| McLean | 25 | 28 | 43 | 68 | 164 |
| Mercer | 15 | 24 | 11 | 20 | 70 |
| Morton | 1 | 0 | 3 | 2 | 6 |
| Mountrail | 67 | 124 | 118 | 106 | 415 |
| Nelson | 0 | 1 | 0 | 0 | 1 |
| [redacted]Applicable | 1 | 0 | 0 | 4 | 5 |
| [redacted]one | 0 | 0 | 1 | 10 | 11 |
| [redacted]of State | 16 | 18 | 7 | 20 | 61 |
| Pierce | 8 | 10 | 10 | 5 | 33 |
| Ramsey | 2 | 0 | 2 | 2 | 6 |
| Renville | 10 | 16 | 9 | 13 | 48 |
| Richland | 0 | 1 | 0 | 0 | 1 |
| Rolette | 36 | 51 | 52 | 68 | 207 |
| Sargent | 0 | 1 | 1 | 0 | 2 |
| Sheridan | 0 | 3 | 0 | 1 | 4 |
| Slope | 0 | 4 | 5 | 2 | 11 |
| Stark | 54 | 62 | 47 | 105 | 268 |
| Towner | 1 | 1 | 5 | 9 | 16 |
| Traill | 0 | 1 | 0 | 0 | 1 |
| Unknown | 14 | 18 | 11 | 15 | 58 |
| Walsh | 0 | 0 | 0 | 1 | 1 |
| Ward | 176 | 197 | 165 | 262 | 800 |
| Wells | 1 | 8 | 0 | 3 | 12 |
| Williams | 111 | 88 | 125 | 180 | 504 |
| Total | 756 | 848 | 818 | 1131 | 3553 |

[redacted]

**Injuries by County from Industrial Accidents Only**

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| [redacted] | 0 | 1 | 0 | 0 | 1 |
| Benson | 0 | 0 | 1 | 0 | 1 |
| Billings | 9 | 4 | 1 | 2 | 16 |
| Bottineau | 4 | 6 | 4 | 5 | 19 |
| Bowman | 1 | 1 | 0 | 2 | 4 |
| Burke | 1 | 1 | 6 | 1 | 9 |
| Divide | 4 | 1 | 1 | 0 | 6 |
| Dunn | 0 | 2 | 3 | 6 | 11 |
| Golden Valley | 1 | 1 | 0 | 1 | 3 |
| Hettinger | 0 | 1 | 0 | 1 | 2 |
| McHenry | 2 | 4 | 6 | 6 | 18 |
| McKenzie | 2 | 6 | 11 | 7 | 26 |
| McLean | 1 | 1 | 1 | 12 | 15 |
| Mercer | 2 | 3 | 2 | 6 | 13 |
| Morton | 0 | 0 | 1 | 0 | 1 |
| Mountrail | 6 | 14 | 17 | 15 | 52 |
| Not Applicable | 0 | 0 | 0 | 1 | 1 |
| Not Done | 0 | 0 | 0 | 3 | 3 |
| Out of State | 3 | 2 | 3 | 5 | 13 |
| Pierce | 1 | 2 | 2 | 1 | 6 |
| Ramsey | 1 | 0 | 0 | 0 | 1 |
| Renville | 1 | 1 | 3 | 0 | 5 |
| Rolette | 0 | 3 | 2 | 3 | 8 |
| Sargent | 0 | 0 | 1 | 0 | 1 |
| [redacted] | 0 | 0 | 4 | 1 | 5 |
| [redacted] | 5 | 4 | 11 | 19 | 39 |
| [redacted] | 0 | 0 | 1 | 1 | 2 |
| Unknown | 1 | 1 | 0 | 1 | 3 |
| Ward | 8 | 15 | 16 | 18 | 57 |
| Williams | 13 | 11 | 21 | 10 | 55 |
| Total | 66 | 85 | 118 | 127 | 396 |

[redacted]

**C[redacted]e E Codes Intent**

| | 2006 | 2007 | 2008 | 2009 | Total |
|---|---|---|---|---|---|
| A[redacted]ULT | 30 | 42 | 56 | 49 | 177 |
| OTHER | 1 | 1 | 2 | 4 | 8 |
| SELF_INFLICTED | 6 | 9 | 9 | 12 | 36 |
| UNDETERMINED | 1 | 2 | 3 | 3 | 9 |
| UNINTENTIONAL | 717 | 805 | 727 | 1063 | 3312 |
| Total | 755 | 859 | 797 | 1131 | 3542 |

3-4-11

#6

**PROPOSED AMENDMENT TO ENGROSSED HOUSE BILL NO. 1266**

Page 1, replace line 18 with

"Contracted emergency medical services and trauma medical director $416,000"

Page 1, remove line 19

Renumber accordingly

#7

**Subject:** HB 1266 Trauma Services...

Dear Esteemed Members of the Senate Human Services Committee,

My name is Howard Walth, I am a Trauma Nurse Coordinator at a level II trauma center. I attended the hearing for HB1266 but did not have the blessing of my employer to testify on the bill, so I am sending you this note.

I understand that you will have a difficult time explaining to your colleagues and constituents how you could possibly spend nearly half a million dollars in one biennium for one position. Per Senator Mathern's request I would like to provide an example that demonstrates what I believe to be the most important reason why a Trauma/EMS Medical Director is necessary.

One of the improvements we have accomplished in the North Dakota Trauma System is regional performance improvement meetings. Patient's are presented and care is discussed in these meetings. Most situations are very helpful and constructive criticism is offered and welcomed. There are occasions however where a patient's care was suboptimal and due to politics and patient referral patterns the higher level facilities are not free to objectively present the problems identified without fear of offending the hospital that sent them the patient. The very real fear is that the referring hospital will send patients elsewhere.

One example that I am familiar with is a patient that rolled their 4-wheeler while chasing cattle. The patient was taken to a rural level V center and stayed there for 36 hours before transfer to higher level of care. The seriousness of the patient's situation was not appreciated and it is but for the grace of God that the patient did not meet with disaster. During the performance improvement meeting issues were identified, but really were not dealt with due to the politics and referral patterns. There are also meetings of just the level II Trauma Centers to discuss issues but we are not "policed" and problems may not be resolved.

I see one of the major roles of the Trauma/EMS Medical Director as an authority figure to provide correction when it would otherwise not be heeded using the current system. One who will be able to deal with issues from the State level without the constraints of local politics and referral patterns.

Also related, the State Trauma Coordinator is swamped and really needs some help.

Thank you for your time and attention, I appreciate it.

Howard Walth
1827 North 20th Street
Bismarck, North Dakota 58501
701-202-0952
701-258-1724

# Executive Summary

Dr. Steve Hammel

American College of Surgeons
Trauma System Consultation Visit
North Dakota Department of Health
April 27th-30th, 2008

The current trauma system within North Dakota is a testament to the dedication and resourcefulness of the leadership both within and outside of the North Dakota Department of Health. The larger healthcare facilities in the state have demonstrated an ongoing commitment to the citizens of North Dakota by completing and maintaining the verification process of the American College of Surgeons (ACS) as level II or level III trauma centers. As a result of the "inclusive" trauma system model articulated in the state's first trauma system plan, completed in 1993, there has been active recruitment of rural and frontier facilities as well. The fact that only eight of forty-six hospitals are not currently verified for trauma care at some level speaks highly of the success of this recruitment process. Notable support from the Office of Rural Health through the Rural Hospital Flexibility Grant Program to assist the seven remaining Critical Access Hospitals in achieving verification is available over the next three years.

Adequate numbers of emergency medical service (EMS) agencies are present throughout the state, most of which operate at a basic life support level and 95% of whom are volunteer in nature. Many other attributes of a comprehensive trauma system are in place, in varying degrees, including broadly empowering legislation, the designation of a lead agency, statewide communications, trauma training, injury prevention interventions, local trauma data collection, and disaster preparedness.

Though its daily function is generally good, the trauma system has some remaining challenges. The most important areas remaining to be addressed include an ongoing system-wide approach to performance improvement, the development of a formal critical care transportation network (with combined ground and air medical resources), the ability to generate statewide reports from the trauma registry, and the limited access to fundamental epidemiological data that can be used to better describe and respond to the injury problem in North Dakota.

North Dakota is poised to take the trauma system to the next level and has the potential to become a showcase for an inclusive rural trauma system. However, in order to make this transition, the state needs additional, but modest, investments in personnel and infrastructure. In particular, the state trauma program staff will need to be increased and investments in the state trauma registry may be necessary.



2

Currently, North Dakota has 46 hospitals, six verified as level II trauma centers, 1 as level III, 21 as level IV, and 11 as level V. Two hospitals from Minnesota and South Dakota are also included in the North Dakota trauma system. Eight hospitals in the state are non-designated with regard to trauma care. Budget support is appropriated by the state legislature for salary support for the trauma manager and additional limited operating expenses. The majority of serious injury to North Dakota citizens is blunt trauma, primarily from motor vehicle crashes. The state had nearly 400 trauma-related deaths in 2006.

## Advantages and Assets of the North Dakota Trauma System

- Long history of strong commitment by people and health care facilities
- Inclusive system with excellent participation
- Over ten years practical experience with current system
- Good EMS coverage despite geographic challenges
- Good working relationship between EMS and trauma
- Strong enabling legislation
- Strong confidentiality legislation
- Budgetary support for trauma system administration
- Existence of other significant health resources
- Lower than average rate of unfunded care
- Seven centers maintaining ACS verification standards
- Strong cooperation among hospitals
- Robust internal system for designation of rural hospitals
- Recent Technical Assistance Team visit from NHTSA
- FLEX program collaboration
- State radio communications system
- WAN connection between hospitals
- North Dakota Trauma Foundation
- Potential for the state to benefit economically from recent oil discovery
- Current budget surplus
- Engaged members of state legislature

## Challenges and Vulnerabilities of the North Dakota Trauma System

- Large geographic area, scattered population
    - Difficulty in provider recruitment
    - High reliance on volunteer personnel, especially EMS
- Trauma plan is out of date
- Progress with system development has stalled
- No statewide trauma registry data, little use of existing data collected by trauma centers
- No statewide hospital discharge data
- No statewide quality assurance/process improvement efforts
- Poor coordination between trauma and disaster programs

- Lack of specific pediatric protocols and practices
- Relative shortage of air ambulance services
- Poor coordination with the existing injury prevention program
- Current regional structure is not working well
- Transportation plans are not fully implemented
- Aging population

The following compilation of priority recommendations is drawn from the individual sections of the report that follows. Additional detail and rationale will be found in those individual sections. The recommendations are listed in the general public health framework that has, as its three core functions, assessment, policy development, and assurance.

## Priority Recommendations Summary

## Assessment

**Prevention**

- Obtain the services of an epidemiology consultant to help identify and utilize existing resources and develop a template for an annual statewide injury report.

## Policy Development

**Trauma system policy & oversight**

- Mandate participation of all primary care and general acute care hospitals as a condition of licensure
  - Assure participation at a level consistent with resources
  - Modify level V criteria to facilitate compliance
- Strengthen the State Trauma Committee
  - Assume role as lead advisory body
  - Establish technical advisory groups (TAGs) responsible for specific tasks (e.g. prevention, verification) to move work forward and to broaden inclusion of stakeholders
  - Review membership of the Committee, consider adding members from payer community, industry, media
  - Establish a mechanism for succession, continuation and growth

**State Trauma Plan**

- Update and modify the State Trauma Plan
- Bring up to current standards
- Seek better integration with disaster preparedness agencies, rural health programs, injury prevention, public health
- Establish a process for routine periodic review and update of plan
- Use plan to drive rules process

- Modify the regional committee structure to rely more upon regional level 2 centers for leadership and support

**Financing**

- Acquire dedicated funding for additional positions needed to manage the trauma program
  - Associate Trauma Manager (1.0 FTE)
  - Administrative support (.5 FTE)
- Acquire dedicated funding for an EMS Medical Director
- Acquire funding to improve/maintain state trauma registry

## Assurance

**Prevention**

- Develop a comprehensive approach to injury control
  - Assessment
  - Interventional strategies
  - Evaluation
- Strengthen the relationship between the state trauma system program and the injury prevention program, in preparation for seeking a CDC injury capacity-building grant
- Obtain the services of an epidemiology consultant to help identify and utilize existing resources and develop a template for an annual statewide injury report

**EMS**

- Appoint a state EMS medical director
- Encourage participation, assure consistency and provide adequate support for EMS medical directors in their provision of medical oversight
- Develop automatic dispatch protocols to expedite rotor wing ambulance and/or ALS injury scene response/intercepts
- Evaluate the impact on the utilization of ALS intercepts by BLS services due to potential financial disincentives

**Definitive Care**

- Create memoranda of understanding between the Department of Health and trauma centers outlining their roles and responsibilities
- Develop an inventory of each facility's resources and capabilities to better direct triage and patient flow
- Develop specific inter-facility transfer criteria
  - Match patient needs to resources (acute care and rehabilitation)
- Review pediatric trauma care to assess the possibility of establishing an ACS verified level II pediatric trauma center in the state

**System Evaluation and PI**

- Develop a performance improvement plan

    - Start with simple screens
    - Conduct quarterly or semi-annual reviews
- Appoint a multidisciplinary PI TAG
    - Base membership TD and TPM from ACS verified centers
    - Other members as appropriate
- Base reviews on available trauma registry data
- Start now

**Trauma Management Information Systems**

- Utilize existing registry data to its fullest extent
- Identify solutions to improve current system
    - Ensure that each installed version is fully compatible with the NTDS
    - Explore all avenues for aggregation and reporting on current data
    - Contact the National EMSC Data Analysis Resource Center (NEDARC) for assistance with current software package
- Consider replacement of existing system if above fails, recognizing significant costs in both time and money

**Research**

- Encourage the general medical community to come together and develop an agenda to identify the strategic priorities in injury research
- Encourage the presentation of new findings from researchers within local academic centers at state trauma conferences to foster the development of academic-community partnerships
- Perform state level linkage across datasets, where relevant, to facilitate evaluation of the continuum of care

#1

## Funding HB 1266

**Testimony of March 18, 2011 for the Senate Appropriations Committee**

Good morning. Thank you to Chairperson Holmberg and the members of the Senate Appropriations Committee for the opportunity to speak in favor of funding HB 1266. My name is Steven Briggs. I have been an active participant in the care of injured patients in the state of North Dakota since 1990 when I started my medical career as a ground and then flight paramedic. Eventually I became a general surgeon with additional certification in Surgical Critical Care and Trauma. I am currently the Medical Director for Sanford Health Trauma Services and Sanford LifeFlight Critical Care Transport Service in Fargo. My testimony today is that of a concerned medical professional and should not be interpreted as the testimony of the Sanford Health Organization. I have participated in the intimate care of many very sick trauma patients in our state; all the way from the highway ditches, to the Critical Access Hospitals who are the level 4&5 trauma centers, and on up to the highly functional level 2 trauma centers providing definitive care. I would like to share with you my professional thoughts in favor of funding HB 1266.

To understand the importance of funding HB 1266, one must realize that an organized response is the cornerstone of treatment for multi-system traumatic injury. No "one person" or specialist ever saves an injured person. It is a team effort. To illustrate this concept, please refer to the Rural Trauma System flow chart. I developed this flow chart based on what I have found to be the "normal process" in caring for an injured patient in North Dakota. As I review the trauma cases that are accepted by our facility, I am repeatedly struck by the fact that the outcomes of trauma patients are primarily determined by the "care of the whole". In other words, we are only as good as the worst of our care. For example: patients who make successful recoveries or do better than expected share specific treatment characteristics: 1) they have early entry into the trauma system, 2) they receive appropriate life saving interventions and treatment at level 4&5 trauma centers, 3) they get early transfer from level 4&5 trauma centers, 4) they receive appropriate critical care support during transfer, and 5) no "glitches" occur over the span of care (i.e. treatment errors, delays, or clinical judgment errors are not made at any point along the way.) Far more commonly, however, when I review patients who did poorly, especially in the setting of traumatic brain injury, I often find multiple **"negative events"** over the continuum of their care that culminate in a very sick patient that will have **limited functional outcome** if he/she survives, no matter what we do. Negative events are most commonly: 1) delays in treatment/stabilization, 2) delays in transfer, 3) untreated low blood pressure or airway problems, 4) inappropriate treatments.

The reason negative events matter so much is that we live in a rural environment. Transport times to definitive care at level 2 trauma centers are measured in hours, not minutes as they

are in urban trauma systems. As a consequence, there are numerous opportunities for negative events to happen during the treatment of trauma patients. It is well established in trauma medicine that appropriate care during the first 6 hours of severe injury is the key to saving lives and reducing the long term burden of injury. Herein lays the challenge we are trying to address with HB 1266: How do we provide a continuum of appropriate care over large intervals of time and large geographic distances in our state? A cornerstone of the solution is medical oversight of the "Big Picture" for North Dakota. This means medical expertise/leadership guiding a capable and appropriately staffed State Trauma Coordinator Office that is actively engaged in educating and organizing the different facets of the state trauma system. Trauma organization is only effective using a "top down" approach with a leader in place to organize the different regions of the state into a cohesive network of trauma care. Currently we struggle to maintain our existing trauma system entirely through the largely independent efforts of the six level 2 trauma centers and Amy Eberle, our State Trauma Coordinator, who is willing to travel thousands of miles around the state trying to improve our trauma system. Completely voluntarily, our level 2 trauma centers have chosen to teach Advanced Trauma Life Support to our rural hospital providers, provide outreach for trauma education, lead site visits for verification of trauma readiness, lead quality improvement efforts for our level 4&5 trauma centers, and provide educational materials to meet the needs of our rural providers who cannot be experts in the exceedingly complex and stressful art of trauma resuscitation. All of this is done under the auspices and organizational expertise of our State Trauma Coordinator, alone.

The level 2 centers have chosen to shoulder the responsibility of the trauma system because traumatic injury is a chronic, draining problem for our state. It is a growing problem. It is a problem that can impact any one of us, possibly even myself as I drive home today. Please read Exhibit #2. Our roads are dangerous. I do not take pride or comfort in living in a state with one of the highest motor vehicle death rates in the country. That is why I am here. Much of the emphasis of this legislative session is focusing on "investment" and "infrastructure" supporting the development of our natural resources. I would advocate to you that the trauma system is a critical component of the state's investment in infrastructure – just as important as every road or service program currently approved or underway. For if you build the industrial resources, the roads, the services, I can assure you that traumatic injury will (and is) following. While we are asking for a significant investment in the trauma system, that investment is mere pennies when you factor in the costs, both real dollars involved with medical care, and the cumulative societal cost associated with the loss of highly functioning young people who remain the most commonly injured segment of our population, and the foundation of our workforce to build a better future.

HB 1266 is a critical piece of legislation for our trauma system at a critical time in our state's growth. It is about leadership. Does a system of care that requires a multitude of different people in different roles to function properly need leadership? That is the central question of HB 1266. Again, please refer to the Rural Trauma System flow chart. This chart describes lays out the anatomy of an Inclusive Trauma System. The Inclusive Trauma System model of care was first described in the Model Trauma Care System Plan by the United States Department of Health and Human Services in 1992. In this plan medical direction is considered a core component of the leadership structure (reference Model Trauma Care System Plan. HRSA 2002). For the Inclusive Trauma System to fully mature, the lead agency (our State Trauma Committee) must identify "a Medical Director to ensure medical accountability, act as a trauma system advocate, and provide for medical credibility throughout system development." In fact, the role of Medical Direction is so important as to be its own benchmark indicator in assessing the strength and completeness of an inclusive trauma system (reference Model Trauma System Planning and Evaluation. HRSA 2006). Since September of 2001 our country has critically assessed and emphasized improving our response to disaster. The need for this response is only accented by the events unfolding in Japan this present day. In 2002 the U.S. Department of Health and Human Services identified trauma system medical direction as a characteristic of the most completely developed and capable trauma systems in our country (reference 2002 National Assessment of Trauma Development. HRSA 2002). In citing this strength, they acknowledge that the trauma system is the foundation of response to disaster.

HB 1266 is about leadership. Leadership is understood to be a characteristic strength of an organized mature trauma system. I can tell you organized trauma systems can save lives, not only in North Dakota, across the United States, but also around the world. As an example of how important organization is, I have included a recent article from the Annals of Surgery for your review (reference The Effect of an Organized Trauma System on Mortality in Major Trauma Involving Serious Head Injury. Annals of Surgery 2011). To simply summarize this article, death is a characteristic of disorganization.

Traumatic injury is inherent with population and industrial growth. We are already seeing the ramifications of this growth in our healthcare system, especially in the Northwest of the state. I have spoken with rural doctors who describe to me being overwhelmed with severely injured patients on a weekly basis now, whereas before the development, these types of injuries occurred only rarely in a year.

As you deliberate whether to fund HB 1266, I want to again remind you it is about leadership. Ask yourself the following: Does our country need a President? Does our state need a Governor? Does this committee need a chairperson? A vote to fund HB 1266 confirms what we all know: Complex processes require leadership to function effectively. In the case of trauma, it

is life...or death. It is also important to emphasize to you that the burden of trauma in our state will continue to grow in harmony with our economy and infrastructure well into the 21st century. If you choose not to fund HB 1266, I can assure you the state will pay for the consequences of trauma from its monetary funds, and it will pay far more to support the devastating injuries that were potentially preventable than those funds requested in support of HB 1266.

Again, thank you to the committee for the opportunity to speak.

Steven Briggs, MD, FACS

Medical Director for Trauma

Sanford Medical Center Fargo

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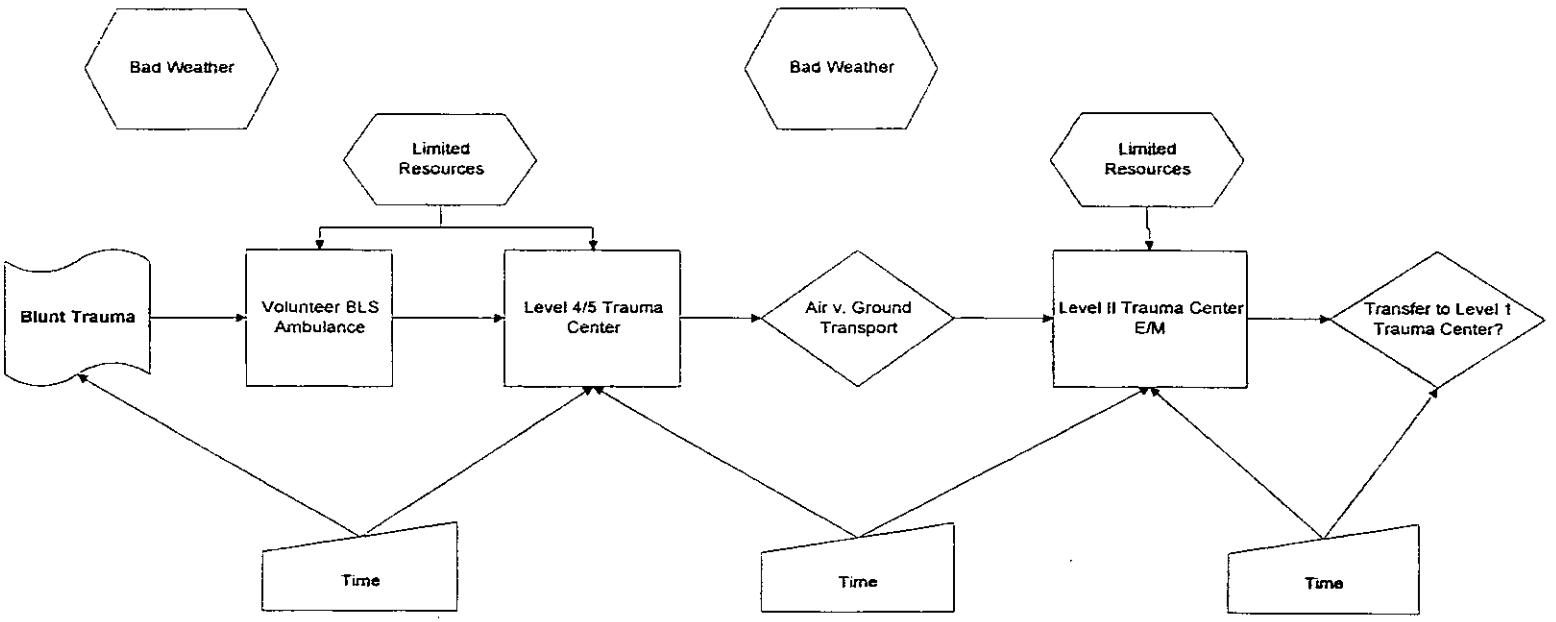
# Rural Trauma Systems




Outcome is determined by the "whole" of provided care.

**Exhibit #2**

# Study: Roads are safer in urban areas

**By Larry Copeland, USA TODAY**

Your odds of dying in a motor vehicle crash vary dramatically because of one simple thing: where you live.

The safest places to drive in the USA are Washington, D.C., and Massachusetts. Among the most dangerous: Montana, Wyoming, Louisiana and Mississippi. Those conclusions are based on federal data of traffic fatalities per 100,000 population and per 100 million miles driven.

The primary reason for the difference: Urban roads are safer than rural roads.

Even in states with low overall road death rates, rural areas often have rates twice as high as urban ones. That's because urban areas usually have roads with lower speed limits, more safety engineering features such as divided highways and faster access to emergency medical care than rural routes. Many rural deaths occur when vehicles leave the road and crash into trees or other obstructions.

"An urban state in the Northeast is going to have a much lower fatality rate than a rural Western state with a lot of high-speed, two-lane rural roads, where serious crashes are more likely to happen," says Russ Rader, spokesman for the Insurance Institute for Highway Safety.

Many traffic safety groups such as the Governors Highway Safety Association argue that such comparisons don't accurately reflect how safe a state's roads are. A better measure, they say, is whether states have enacted proven safety enhancements such as motorcycle helmet laws and primary seat belt laws, which allow police to stop motorists solely for being unbuckled.

State legislatures around the country are gearing up this month to debate scores of highway safety measures that address everything from texting while driving to booster-seat use.

The National Transportation Safety Board urges states to adopt five "most wanted" safety measures, covering extreme drunken driving, seat belt use, child-occupant protection, eliminating distractions for young drivers and motorcycle safety.

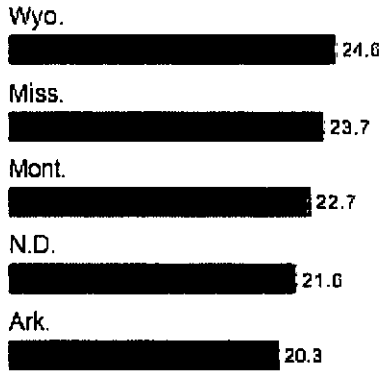
Judith Stone, president of Washington, D.C.-based Advocates for Auto and Highway Safety, says the group does not consider fatalities when issuing its annual report card on states. "We look at laws and whether they've been passed," Stone says.

Advocates of stronger laws say it's difficult to persuade a state such as New Hampshire, which has no seat belt or motorcycle helmet laws, to enact such rules when its death rate is below the U.S. average. "States like ... New Hampshire could certainly save more lives by passing stronger laws," says governors safety association spokesman Jonathan Adkins. "Legislators note these states have relatively low fatality rates and tend not to see the benefit in passing stronger laws."

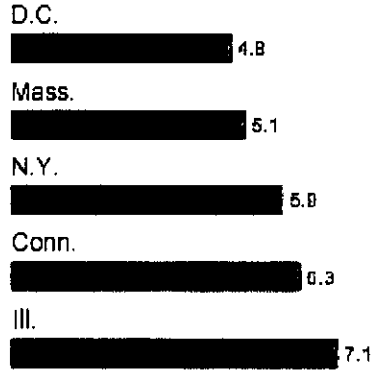
**RISKS ON ROAD**

States with highest and lowest road death rates per 100,000 population in 2009:

**Highest:**




**Lowest:**




Source: National Highway Traffic Safety Administration

# MODEL TRAUMA CARE SYSTEM PLAN

SEPTEMBER 30, 1992

DRAFT

U.S.DEPARTMENT
OF HEALTH & HUMAN SERVICES
Public Health Service
Health Resources and Services Administration
Bureau of Health Resources Development
Division of Trauma and Emergency Medical Systems
Room 11A-22, Parklawn Building
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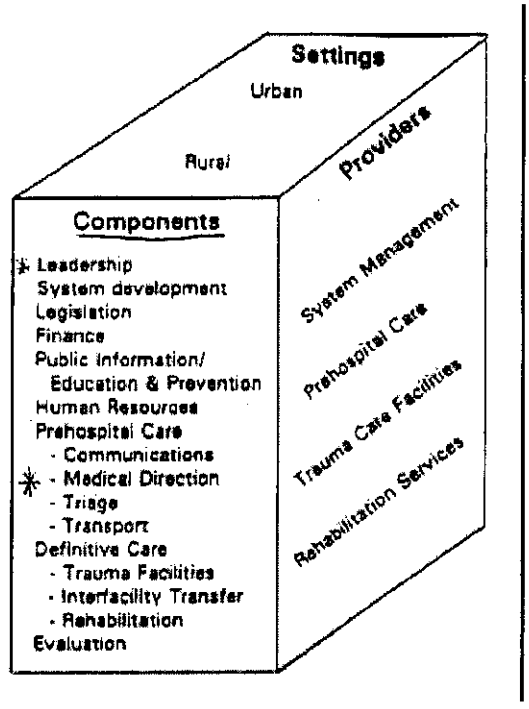
FIGURE 1

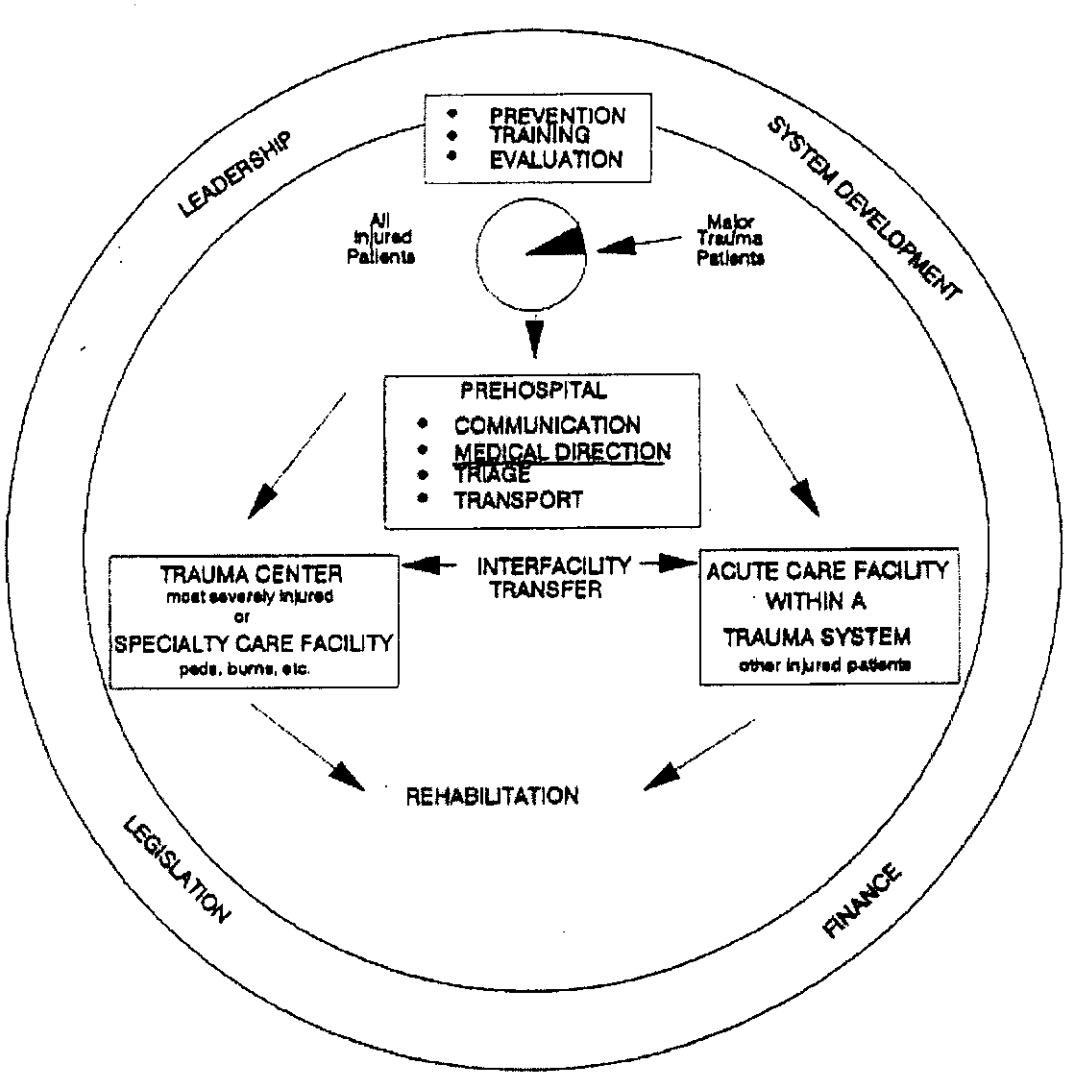



This model was adapted from the American College of Emergency Physicians, "Guidelines for Trauma Care Systems"

Most of the existing regional trauma systems are "exclusive" in nature; they are driven by the major (severely injured) trauma patient who requires immediate treatment at a designated trauma center. An inclusive trauma care system will not only incorporate provisions for designated trauma centers to care for the most severely injured patients, but also recognizes the importance of other acute care facilities within a trauma system in caring for the majority of less severely injured. The range of injury severity risk and extent of actual injury occurs along a spectrum of minor to severe injury, and the resources needed to provide optimal care for these patients must also exist along the same spectrum (Figure 2). The goal of an inclusive trauma care system is to match each trauma care facility's (or provider's) resources to the needs of injured patients so that every patient receives optimal care from the initial recognition of the injury through return to the community.

FIGURE 3

COMPONENTS OF AN INCLUSIVE TRAUMA CARE SYSTEM




* The components in this model are based on the components described in several trauma care resources (11-17). The model was adapted from Trauma Care Systems, a position paper from the Third National Injury Control Conference, "Setting the National Agenda for Injury Control in the 1990's", pg. 388.

## USE OF THE MODEL TRAUMA CARE SYSTEM PLAN

The Model Trauma Care System Plan is divided into sections that reflect the essential components of an inclusive trauma care system. Each section highlights a single component or related set of components, and the objectives to be met in creating a trauma care system plan. Essential elements of each component are displayed in tabular format so that the reader can quickly review this information. The discussion segment offers detailed information related to implementing these objectives and identifies issues to be addressed in developing a trauma care system plan. Key concepts or activities are underlined in the discussion text to underscore their importance and summarize essential material. Appendix A consolidates the tabular components of each section for easy reference in the identification of necessary objectives in a trauma care system plan.

As each State trauma care system plan must reflect the dynamic nature of traumatic injury with deliberate plans for continual revision and adaptation, so must the Model Trauma Care System Plan be considered in itself a fluid document which will be continually revised as new components, or criteria need to be incorporated. The success of any trauma plan and resultant system depends on the ability to ensure that each injured patient will receive timely access to resources and optimal care which will enable the patient to expeditiously return to the community as a productive member.

# ADMINISTRATIVE COMPONENTS

## I. LEADERSHIP

By State, Regional and/or Local Area[1]:

**Lead Agency**

- Define and describe role and responsibility of the authority that will take a leadership role in trauma system development (cite statutory, regulatory or policy provisions of authority)
- Provide organizational chart, with short narrative description of duties within the authority and showing relationship to other EMS agency components
- Identify medical and other health care leaders from public and private sectors to assist with trauma system development
- Develop a plan for linkage between trauma system components and the local organ procurement organization

**Trauma System Committee**

- Define and describe the composition, role, responsibility, and authority for Trauma System Committee
- Display in organizational chart

**Interdisciplinary Medical Review Committee**

- Define and describe role, responsibility, and authority for the Medical Director and Interdisciplinary Medical Review Committee
- Display in organizational chart

DISCUSSION

The development of a trauma system is best accomplished through the designation of a lead agency to organize the development of the system, coordinate both EMS and trauma resources, seek input from key participants at each stage of development and negotiate workable policies. The lead agency must integrate prehospital, hospital and all other system components while being responsive to the

[1]As appropriate to individual States, the trauma care system plan should include provisions for each level of organization within the system.

needs of both the providers and the public. This lead agency is usually placed within a governmental entity, such as the State EMS agency or another existing health agency within the State, and must possess the authority, responsibility and resources required by this broad role. The organization of trauma care activities within a given State government has a number of implications, not the least of which is how the EMS regulatory process relates to that of the overall health care system. Special efforts should be made to ensure consistency in policy as conflicts resulting from lack of coordination and understanding of responsibilities can undermine the implementation of a trauma care system.

The State lead agency, working with medical and professional societies, is ultimately responsible for coordinating system design, as well as establishing the minimum standards for system performance and patient care. Implementation of the trauma care system plan may take place in particular areas under the direction of a regional or local lead agency; in these cases the minimum standards established by the State lead agency must be met or exceeded. The State lead agency is also responsible for integrating the trauma system and the EMS system (23), and ensuring cooperation between contiguous State or regional level agencies to fully meet public health needs in spite of geographic boundaries.

Regulatory authority may be needed to establish some components of the trauma system and the lead agency must possess, or have access to the legal authority to implement the system. The establishment of authority for the lead agency often requires that enabling legislation precede or be developed concurrently with trauma system planning (see Legislative components, p 11). Through legislation, the lead agency may also be granted the authority to regionalize care, and to designate trauma centers. In States where the designation authority and planning responsibility reside in the same agency, the development process is often simplified.

Medical and surgical participation is critical to trauma system planning and key physician groups should participate in trauma system planning to ensure that the final system reflects the availability of specialty physicians and the hospitals best prepared for the care of injured patients. These groups must assess the impact of trauma system implementation on the existing levels of professional resources within the community, and plan for future resource development. Communities with limited physician specialists (such as neurosurgeons or orthopedic surgeons) must develop creative solutions to ensure the continual availability of these resources in that community.

The lead agency should work closely with Level I facilities to ensure integration of system leadership activities. The role of the lead agency is to coordinate input from all affected parties in establishing a framework for trauma system development to ensure that the system is responsive to the needs of all injured persons and to establish realistic timeframes for system planning and implementation. The lead agency can also be charged with adopting trauma standards, implementing triage guidelines, designating trauma facilities, determining the number and location of designated trauma centers, establishing data collection systems, and evaluating system performance. The lead agency should also ensure that linkages are established between the trauma care system and the local

# MODEL TRAUMA SYSTEM PLANNING AND EVALUATION


U.S. Department of Health and Human Services

# MODEL TRAUMA SYSTEM PLANNING AND EVALUATION

Released February 2006

The Health Resources and Services Administration document *Model Trauma System Planning and Evaluation* was edited, designed, and coordinated by the U.S. Department of Health and Human Services Program Support Center, Visual Communications Branch.


U.S. Department of Health and Human Services

U.S. Department of Health and Human Services
HRSA
Health Resources and Services Administration

# EXECUTIVE SUMMARY

Injury is a leading cause of death in the United States and continues to occur every day and in every State of our Nation. The rates are not declining. The threat is magnified with the consideration of unexpected natural and man-made incidents. The following are facts on daily injury in the United States:

- Traumatic injuries are estimated to be responsible for over 161,000 deaths each year and for an estimated death rate of 55.9 for every 100,000 persons.
- Children account for 25 percent of all traumatic injuries. Injury has been the leading cause of death for children and youth for decades.
- Trauma is the leading cause of death for Americans 35 years of age and younger.
- For all U.S. residents, unintentional injury ranks as the 5th most common cause of death.

The problem of injury has a profound effect on individuals, families, hospitals, and society at large because it causes tremendous medical, psychosocial, and financial burdens. The need for a comprehensive injury response strategy is clear. That strategy is consistent with trauma system development.

More than 15 years ago, Congress addressed the important role of trauma systems in responding to injury as a public health threat through passage of the Trauma Care Systems Planning and Development Act of 1990 [P.L. No. 101-590, 104 Stat. 2915], which created a new section, Title XII of the Public Health Service Act, on the subject of trauma care. The importance of continuing to address injury remains an important public health issue that was also emphasized in the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 [P.L. No. 107-188, 116 Stat. 594]. In recognition of the significance that the trauma system plays in response to both multiple casualty as well as mass casualty incidents, this Act called for trauma and burn care to be a component of State preparedness plans [P.L. No. 107-188, § 131(a), 116 Stat. 618, 625; 2002].

A trauma system is a pre-planned, comprehensive, and coordinated statewide and local injury response network that includes all facilities with the capability to care for the injured. It is the system's inclusiveness, or range of pre-planned trauma center and non-trauma center resource allocation, that offers the public a cost-effective plan for injury treatment. In such an effective system, trauma care delivery is organized through the entire spectrum of care delivery, from injury prevention to prehospital, hospital, and rehabilitative care delivery for injured persons. The system begins with a State's authority to designate various levels of trauma and burn centers and, through data collection and analysis processes, demonstrates its own effectiveness time and time again.

In 2002, HRSA released the *National Assessment of State Trauma System Development, Emergency Medical Services Resources, and Disaster Readiness for Mass Casualty Events*. This national assessment revealed that those States with the most developed or comprehensive trauma systems were indeed the States that were most ready to respond to and medically manage day-to-day as well as mass casualty incidents. It is the sum of all the trauma system's components that contributes to a State's all-hazards medical response readiness.

This living document, *Model Trauma System Planning and Evaluation*, is a guide to modern statewide trauma system development. It modernizes the HRSA 1992 *Model Trauma Care System Plan*. The document is designed to provide trauma care professionals, public health officials, and health care policy experts with the direction to use the public health approach, a scientifically proven method, when developing and evaluating trauma systems.

health care providers function in pre-planned concert with one another. Emergency care providers match patients with the aid of triage protocols and medical supervision to the correct medical facility equipped with the right resources to best meet the patient's needs. This approach may mean bypassing the closest medical facility. This process should reflect the general population and the populations requiring special considerations (i.e., children and elder persons).

A trauma system is a partnership between public and private entities to address injury as a community health problem. These entities have common interests (e.g., right patient, right hospital, and right time) and interdependent goals (e.g., injury prevention strategies for the community, and quality care in all settings—prehospital, hospital, and rehabilitation).

*The goals of a trauma care system are:*

- To decrease the incidence and severity of trauma
- To ensure optimal, equitable, and accessible care for all persons sustaining trauma
- To prevent unnecessary deaths and disabilities from trauma
- To contain costs while enhancing efficiency
- To implement quality and performance improvement of trauma care throughout the system
- To ensure certain designated facilities have appropriate resources to meet the needs of the injured

Without a statewide system, the level and quality of care rendered at any given time may vary on a regional basis within a State, or even on a daily or hourly basis within the same region. Trauma-specific statewide multidisciplinary, multi-agency advisory committee meetings are important for planning, implementing, and evaluating the State trauma care system.

*A mature trauma system seeks to minimize quality of care variations by:*

- Managing, at the State level, the coordination and facilitation of statewide trauma system development
- Collaborating and coordinating with related health care and non-health care systems
- Establishing, consistently using, and maintaining common standards of trauma care that address the needs of all populations
- Assessing, planning, coordinating, monitoring, and ensuring consistent and optimal care
- Applying scientifically evaluated injury prevention strategies that target specific populations at risk, the mechanisms that wound them, and their injury environments
- Using data systems to enhance care
- Providing sustained funding for system maintenance
- Setting priorities for injury prevention initiatives
- Providing statewide ongoing technical assistance to all regions within a State
- Establishing effective evaluation processes to continuously improve trauma care performance

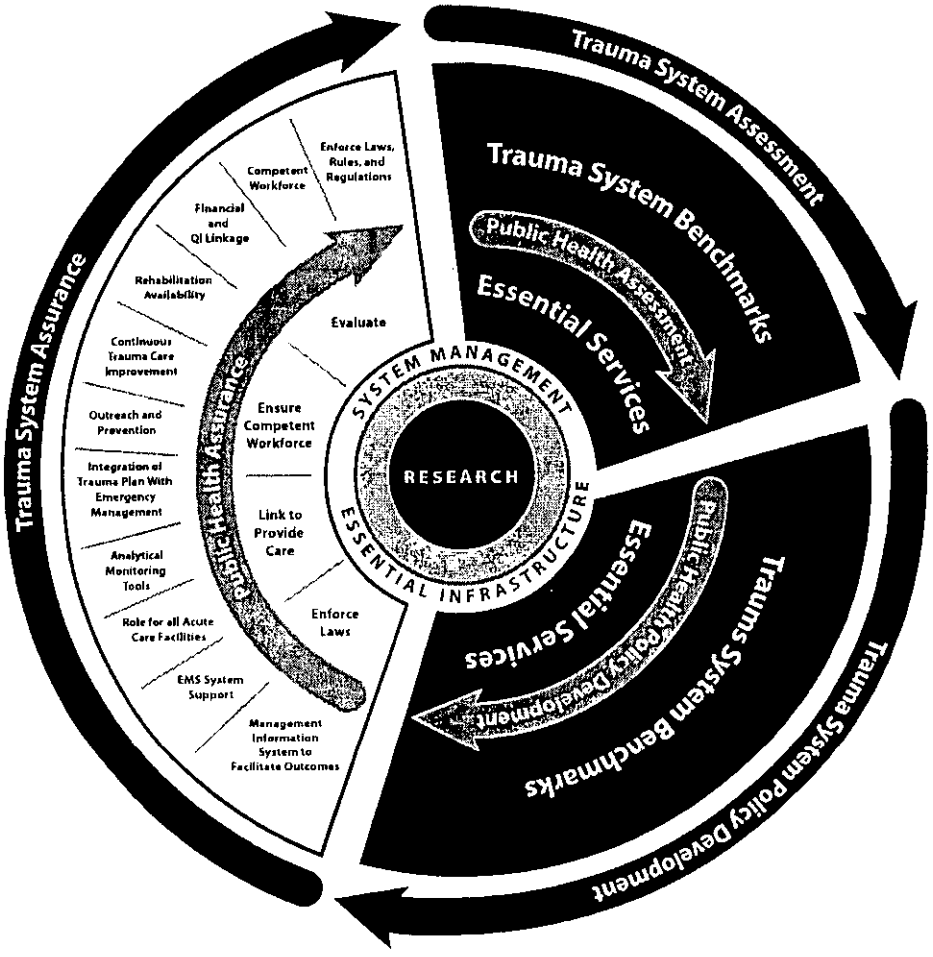
*An effective trauma system comprises both patient care and social components:*

- Patient care includes such operational and clinical components as human resources in the prehospital, hospital, and post-acute care rehabilitation environments.
- Social components include legislation, prevention programs, education, research, economics, and value or the degree of quality in relation to cost.

Various institutional or individual providers in a number of settings administer and deliver the patient care and social components that shape each trauma system.

# 300. ASSURANCE

*Assurance to constituents that services necessary to achieve agreed-on goals are provided by encouraging actions of others (public or private), requiring action through regulation, or providing services directly.*



## *BENCHMARK*

**302. The trauma system is supported by an EMS system that includes communications, medical oversight, prehospital triage, and transportation; the trauma system, EMS system, and public health agency are well integrated.**

Essential Service: *Link To Provide Care*

| Indicator | Scoring |
|---|---|
| 302.1 There is well-defined trauma system medical oversight integrating the specialty needs of the trauma system with the medical oversight for the overall EMS system.<br><br>Note: The EMS system medical director and the trauma medical director may, in fact, be the same person. | 0. Not known<br>1. There is no medical oversight for EMS providers within the trauma system.<br>2. EMS medical oversight for all levels of prehospital providers caring for the trauma patient is provided, but such oversight is provided outside of the purview of the trauma system.<br>3. The EMS and trauma medical directors have integrated prehospital medical oversight for prehospital personnel caring for trauma patients.<br>4. Medical oversight is routinely given to EMS providers caring for trauma patients. The trauma system has integrated medical oversight for prehospital providers and routinely evaluates the effectiveness of both on-line and off-line medical oversight.<br>5. The EMS and trauma system fully integrate the most up-to-date medical oversight and regularly evaluate program effectiveness. System providers are included in the development of medical oversight policies. |

# A 2002 National Assessment of State Trauma System Development, Emergency Medical Services Resources, and Disaster Readiness for Mass Casualty Events

U.S. Department of Health and Human Services
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Health Resources and Services Administration

A (least developed systems) listed Support for the Trauma System and Prevention as top opportunities.

THREATS:

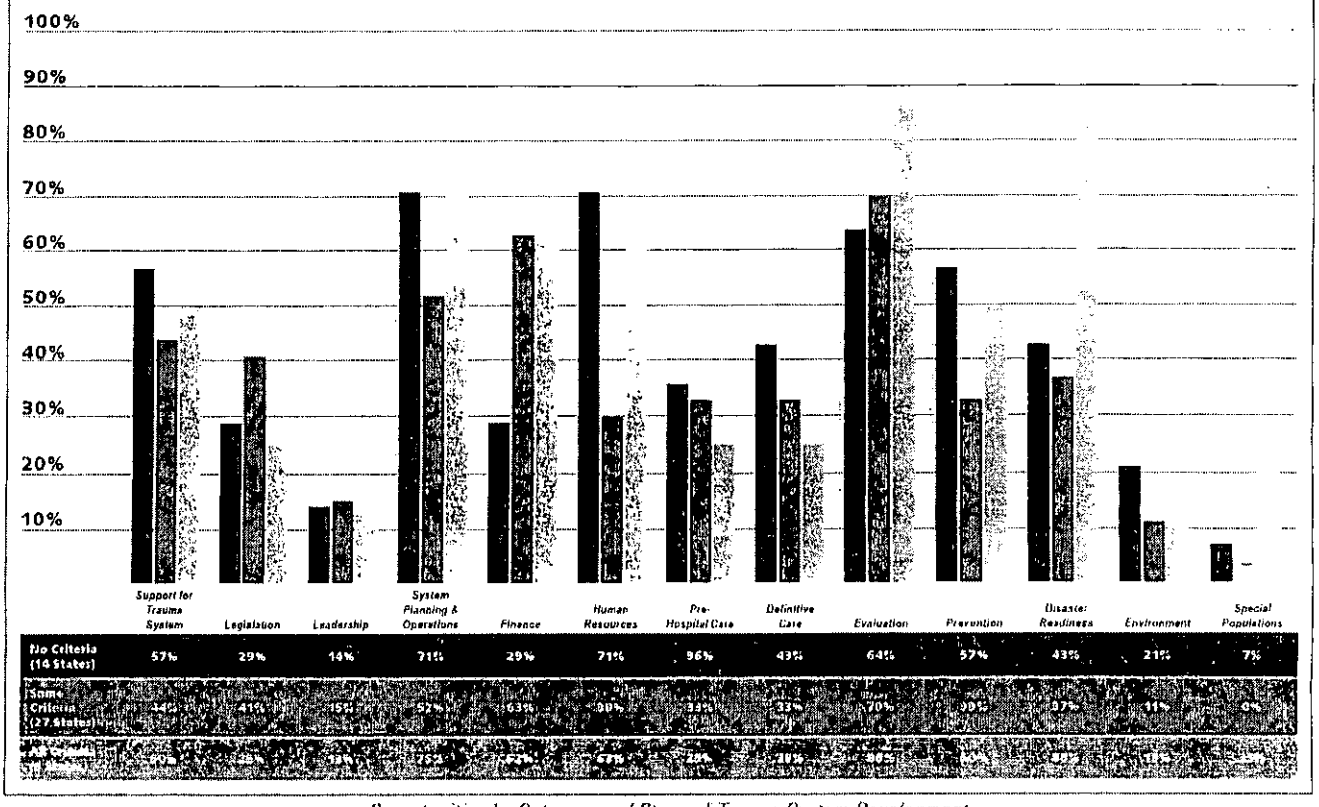
Finance was also the category cited by each group as the top threat to the continued viability of their trauma system (see Figure 8). In fact, 13 of the 14 States in Group A and 100 percent of the States in Groups B and C listed inadequate financing as a threat to their systems. All States, regardless of their stage of development, also identified Human Resources (specifically the difficulty recruiting and retaining physicians and nurses) as a leading threat. Groups A and B included inadequate Support for the Trauma System as a threat, and Groups B and C listed the lack of adequate data and Evaluation as a threat. More than half of the Group A States listed Environment under threats, referring most often to the challenge of providing comprehensive and coordinated trauma care in a rural environment.

## *Brief Discussion*

In general, all States appear to identify their strengths in terms of the following infrastructure: system operations, quality of trauma centers, and pre-hospital transport (see Table 11). However, when grouped by stage of system development, States with more complete trauma systems (as defined by the seven West et al. criteria) differ from the other States by identifying Evaluation and Leadership among their top strengths. Although States with systems at different stages of development may focus on

# Opportunities

**Figure 7. Opportunities Associated With State Trauma Systems and Delivery of Trauma Care**




*Opportunities by Category and Stage of Trauma System Development*

# The Effect of an Organized Trauma System on Mortality in Major Trauma Involving Serious Head Injury

## *A Comparison of the United Kingdom and Victoria, Australia*

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**Objective:** To compare outcomes following major trauma involving serious head injury managed in an inclusive trauma system (Victoria, Australia) and a setting where rationalization of trauma services is absent (England/Wales).

**Background:** The introduction of regionalized trauma systems has the potential to reduce preventable deaths, but their uptake has been slow around the world. Improved understanding of the benefits and limitations of different systems of trauma care requires comparison across systems.

**Methods:** Mortality outcomes following major trauma involving serious head injury managed in the 2 settings were compared using multivariate logistic regression. Data pertaining to the period July 2001 to June 2006 (inclusive) were extracted from the Trauma Audit and Research Network (TARN) in the United Kingdom and the Victorian State Trauma Registry (VSTR) in Australia.

**Results:** A total of 4064 (VSTR) and 6024 (TARN) cases were provided for analysis. The odds of death for TARN cases were significantly higher than those for VSTR cases [odds ratio = 2.15, 95% confidence interval = 1.95–2.37]. After adjusting for age, gender, cause of injury, head injury severity, Glasgow Coma Scale score, and Injury Severity Score, TARN cases remained at elevated odds of death (3.22; 95% confidence interval = 2.84–3.65) compared with VSTR cases.

**Conclusions:** Management of the severely injured patient with an associated head injury in England and Wales, where an organized trauma system is absent, was associated with increased risk-adjusted mortality compared with management of these patients in the inclusive trauma system of Victoria, Australia. This study provides further evidence to support efforts to implement such systems.

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There is growing international support for the development and implementation of regionalized trauma systems, where trauma patients are transported to a small number of specialized trauma services that are staffed and equipped appropriately to manage severely injured patients.[1–7] Although there is evidence from North American studies that trauma systems reduce mortality,[2,8–12] the uptake of regionalized trauma systems across the world has been low, particularly in Europe and Australia. Reasons for the slow uptake of regionalized trauma systems worldwide could reflect an inability to engage political decision makers and reluctance to undertake the complex reorganization of healthcare systems necessary to support their implementation.

The implementation of an inclusive, regionalized trauma system in Victoria, Australia, has demonstrated significant improvement in survival for the severely injured.[1] A recent report evaluating trauma care in the United Kingdom identified deficiencies in the care of trauma patients and identified the development of level 1 trauma centers and integration of prehospital services into the regional trauma system as 2 of the principal recommendations for improving trauma care in the United Kingdom.[13] A previous attempt to assess the effectiveness of a regional trauma system in reducing mortality from major trauma in the United Kingdom found little evidence to support a change[14] but was largely criticized because of methodological issues and evaluation of a trauma system that was never fully established.[15–17]

Improved understanding of the benefits and limitations of different systems of trauma care requires comparison across systems, using comparable methods of data collection.[10] Contemporaneous comparisons of trauma systems have been few and largely limited to North America,[3] of little value due to data limitations,[10] or analyzed vastly different health settings and patient populations.[18,19] The existence of the Trauma Audit and Research Network (TARN) data set in the United Kingdom and the Victorian State Trauma Registry (VSTR) in Australia (SDC content is available at http://links.lww.com/SLA/A106) provide the opportunity to compare the outcomes of severe injury across jurisdictions with different trauma systems but similar patient profiles.[1,20] The aim of this study was to compare outcomes following major trauma involving serious head injury managed in an inclusive, regionalized trauma system (Victoria, Australia) and a setting where rationalization of trauma services is largely absent (England and Wales). The study focused on major trauma involving serious head injury as head injury remains a leading cause of death and severe disability, and study patients were more likely to represent a homogenous clinical group.[21,22]

## METHODS

### Setting

#### *Trauma Audit and Research Network*

Trauma Audit and Research Network was established as the UK Major Trauma Outcome Study in 1989. Since 1996, TARN has

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collected and analyzed data to benchmark care in approximately half of trauma receiving hospitals in England and Wales. It is currently the largest European trauma registry containing case details on more than 250,000 injured patients. Patients are included if they arrive at hospital alive within 24 hours of injury and meet 1 of the 4 following criteria:

1. In-hospital death within 30 days of admission
2. Intensive or high dependency care
3. Interhospital transfer for specialist care
4. Hospital treatment for 3 or more days.

Isolated closed limb (excepting femoral shaft fractures), isolated facial injuries, and simple spinal strains are excluded. The results of hospital benchmarking using the case-mix adjustment model, Ps04, have been publicly available since 2007 (www.tarn.ac.uk/standardsofcare).

### *Victorian State Trauma Registry*

The population-based VSTR has been collecting data about all major trauma patients in the state of Victoria, Australia, since July 2001. The VSTR was established to monitor and evaluate the state's regionalized, inclusive trauma system, and the registry methods have been previously published.[1,23,24] "Inclusive" systems are where there is coordination of prehospital and acute care services in an entire geographical area to ensure that the needs of the patient are matched to the facility providing definitive care in a timely manner.[5,25] Data are collected from the prehospital setting and all acute care episodes for patients defined as major trauma. All hospitals in Victoria with a Victorian State Trauma System designation contribute data to the registry, and the registry data collection has been approved by all participating institutions and their relevant ethics committees. A patient is defined as major trauma if he or she meet any of the following criteria:

1. Death following injury
2. An Injury Severity Score (ISS) of more than 15
3. An intensive care unit (ICU) stay longer than 24 hours requiring mechanical ventilation
4. Urgent surgery

## Patients

Patients with an ISS of more than 15, aged older than 15 years, with a date of injury between July 2001 and June 2006 (inclusive), and with a serious head injury were extracted for analysis from the VSTR and the TARN. A serious head injury was defined as a head injury with an Abbreviated Injury Scale (AIS) score of more than 2, indicating intracranial injury or complex skull fracture. Patients were excluded where the only head injury with an AIS severity score of more than 2 was related to the length of unconsciousness. Cases submitted to TARN but transferred to nonparticipating hospitals were excluded from the study.

## Analysis

Data items collected using comparable methods were extracted from both data sets for analysis. Summary statistics were used to describe the profile of patients across the trauma settings (TARN and VSTR). Percentages, mean and standard deviation (SD), or median and interquartile range (IQR) were used to describe variables as appropriate. Chi-square tests for categorical variables and either independent *t* tests or Mann-Whitney *U* tests, depending on the distribution of the data, were used for comparisons across settings.

Given the importance of the Glasgow Coma Scale (GCS) score as a predictor of head injury outcome,[26–29] missing data for the GCS on arrival to hospital were imputed to minimize case exclusion from the multivariable model and the associated bias. The method for imputation of the GCS has been previously described.[30] The GCS was categorized for inclusion in the models according to clinical convention with a GCS score of less than 9 representing severe head injury, a GCS score of 9 to 12 representing moderate head injury, and a GCS of more than 12 representing mild head injury. The ISS was log transformed to meet the assumption of linearity for inclusion in the multivariable models.

The primary outcome of interest was in-hospital mortality. Multivariable binary logistic regression was performed to quantify the association between setting (trauma system) and mortality, adjusted for variables demonstrating a significant ($P < 0.05$) difference in case-mix between the settings on preliminary analyses, and established predictors of head injury mortality (ie, potential confounders). Indicators of the differences in the trauma systems were not included in the multivariate model; however, a second model with inclusion of key system differences was performed to establish the impact of individual system attributes on mortality outcomes across the settings.

Adjusted odds ratios [(AOR) (95% confidence interval (CI)] were reported to provide an estimate of the strength of association, and the precision, between trauma setting and mortality. As the aim of the modeling was explanatory (ie, whether mortality could be reliably attributed to the trauma setting after adjustment for other potentially causal factors), rather than prognostication, model calibration and discrimination were not included, as these are not meaningful for this context.[31,32] All analyses were performed using Stata (Version 10, StataCorp, College Station, TX) statistical software.

## RESULTS

A total of 4064, and 6024, major trauma (ISS > 15) cases with a serious head injury (AIS head severity score >2) were provided for analysis from the VSTR and TARN registries, respectively. There were differences in the patient profiles across the trauma settings with respect to age, gender, mechanism of injury, and head injury severity (Table 1). A higher percentage of TARN patients were male, and TARN patients tended to be younger than VSTR patients (Table 1). The VSTR recorded a higher percentage of motor vehicle–related major trauma, whereas pedal cyclist, pedestrian, and struck by person cases were more prevalent in TARN (Table 1). Missing physiological data were prevalent with the GCS missing for 20.5% of cases.

A higher percentage of VSTR cases were managed at a neurosurgical center than TARN cases, and critical care unit admission was more prevalent for VSTR cases despite the shorter length of hospital stay for VSTR cases (Table 2). A higher percentage of VSTR patients arrived at the definitive hospital of care via another hospital than those of TARN patients (Table 2). Although differing recording methods preclude definitive comparison, the VSTR reported higher rates of head CT scan completion (81% vs 63%), cranial surgery (32% vs 23%), and intracranial pressure (ICP) monitoring (14% vs 9%) than those of TARN. The percentage of patients undergoing a craniotomy was similar for VSTR (17%) and TARN (18%) patients.

The odds of death for TARN patients were significantly higher than those for VSTR patients (AOR = 2.15, 95% CI = 1.95–2.37). Age, gender, cause of injury, head injury severity, GCS scores, and ISS were considered potential confounders. After adjusting for these confounders, TARN patients were at elevated odds of death compared with VSTR patients (Table 3). Adding whether the patient was managed at a neurosurgical center partially explained the difference;

**TABLE 1.** Comparison of the Patient Profile of Patients with an ISS of More Than 15 With Associated Head Injuries From the England/Wales (TARN) and Victoria, Australia (VSTR

| Variable | VSTR (n = 4064) | TARN (n = 6024) | *P* |
|---|---|---|---|
| Age, mean (SD), yr | 48.1 (23.7) | 45.1 (21.5) | <0.001 |
| Gender, n (%) | | | |
| Male | 2938 (72.3) | 4535 (75.3) | 0.001 |
| Cause of injury*, n (%) | | | <0.001 |
| Fall | 1518 (37.9) | 2359 (39.2) | |
| Motor vehicle driver | 777 (19.4) | 743 (12.3) | |
| Pedestrian | 414 (10.3) | 756 (12.6) | |
| Struck by person | 295 (7.4) | 731 (12.1) | |
| Motorcycle rider/passenger | 274 (6.8) | 436 (7.2) | |
| Motor vehicle passenger | 316 (7.9) | 360 (6.0) | |
| Pedal cyclist | 108 (2.7) | 235 (3.9) | |
| Other cause | 307 (7.7) | 404 (6.7) | |
| On arrival at the emergency department† | | | |
| Pulse rate, mean (SD) | 90.1 (23.5) | 89.2 (25.4) | 0.102 |
| Systolic BP, mean (SD) | 141.2 (32.5) | 137.7 (32.3) | <0.001 |
| Respiratory rate, mean (SD) | 17.8 (5.4) | 19.7 (7.0) | <0.001 |
| $O_2$ saturation, median (IQR) | 100 (97–100) | 99 (96–100) | <0.001 |
| GCS score, n (%) | | | **<0.001** |
| **13–15** | **2099 (53.2)** | **2028 (49.9)** | |
| **9–12** | **309 (7.8)** | **600 (14.8)** | |
| **3–8** | **1535 (39.0)** | **1438 (35.3)** | |
| ISS, n (%) | | | **0.079** |
| 16–25 | 2250 (55.4) | 3352 (55.6) | |
| 26–40 | 1255 (30.9) | 1931 (32.1) | |
| >40 | 559 (13.7) | 741 (12.3) | |
| Highest head injury severity (AIS), n (%) | | | <0.001 |
| 3 | 698 (17.2) | 905 (15.0) | |
| 4 | 2051 (50.5) | 2663 (44.2) | |
| 5–6 | 1315 (32.3) | 2456 (40.8) | |

Bold font indicates GCS data missing for 20.5% of cases.
*Data missing for n = 56 VSTR cases.
†Data missing for 1.9% (pulse) to 22.4% (respiratory rate) of VSTR cases and 16.6% (pulse) to 45.0% (respiratory rate) of TARN cases.

however, TARN patients remained at increased risk of death compared with VSTR patients (AOR = 2.43; 95% CI = 2.13–2.78). The addition of transfer status modified the results marginally (AOR = 2.46; 95% CI = 2.15–2.82).

## DISCUSSION

Few jurisdictions in the world have achieved fully integrated trauma systems, with inclusive, regionalized trauma systems mostly confined to the United States and Canada. Over recent years, momentum has been growing for the development of integrated trauma systems in Europe and other regions of the world.[5,25] However, the necessary political decisions and reorganization of healthcare services necessary to support the implementation of regionalized trauma systems have led to slow progression toward trauma system development. The Victorian State Trauma System was implemented in 2000, with bipartisan political support and strong advocacy and financial support from the state's third party insurer for road trauma, the Transport Accident Commission, ensuring the essential changes could be made. Unlike the Victorian system, the rationalization of trauma systems in the United Kingdom has only just begun.[13,33] The similarities in the profile of major trauma patients, with a predominance of blunt trauma related to road trauma and falls, and comparable trauma registry data collection methods, in the United Kingdom and Australia provided an opportunity to compare the outcomes of these settings with disparate trauma systems. The results of our study suggest that the risk of mortality of major trauma patients with associated serious head injury were significantly lower in Victoria, Australia, where an inclusive, regionalized trauma system has been implemented, than that in England and Wales, where regionalized trauma systems are largely absent.

**TABLE 2.** Comparison of the Trauma System Factors and Outcomes for Cases with an Injury Severity Score More Than 15 and Associated Head Injury From the England/Wales (TARN) and Victoria, Australia (VSTR)

| Variable | n (%) | | P |
|---|---|---|---|
| | VSTR (n = 4064) | TARN (n = 6024) | |
| Transferred? | | | |
| Yes | 1417 (34.9) | 1706 (28.3) | <0.001 |
| Managed at a neurosurgical center? | | | |
| Yes | 3794 (93.4) | 3788 (62.9) | <0.001 |
| Critical care stay? | | | |
| Yes | 2000 (49.2) | 2817 (46.8) | 0.016 |
| Length of stay | | | |
| Median (IQR) days | 8.0 (3.8–16.9) | 9.0 (4.0–22.0) | <0.001 |
| In-hospital outcome | | | |
| Died | 697 (17.2) | 1857 (30.8) | <0.001 |

**TABLE 3.** Association Between Trauma Setting and In-Hospital Mortality for Cases with an ISS of More Than 15 and an Associated Serious Head Injury—Multivariable Analysis (n = 10,033)

| Variable | AOR (95% CI) |
|---|---|
| Trauma setting | |
| VSTR (reference) | — |
| TARN | 3.22 (2.84–3.65) |
| Age | 1.041 (1.038–1.045) |
| Gender | |
| Male (reference) | — |
| Female | 1.14 (1.00–1.30) |
| Cause of injury | |
| Fall (reference) | — |
| Motor vehicle driver | 0.63 (0.51–0.77) |
| Motor vehicle passenger | 0.79 (0.60–1.04) |
| Motorcyclist | 0.88 (0.67–1.16) |
| Pedal cyclist | 0.69 (0.49–0.97) |
| Pedestrian | 0.96 (0.79–1.17) |
| Struck by person | 0.50 (0.38–0.65) |
| Other | 0.75 (0.58–0.97) |
| GCS | |
| 13–15 (reference) | — |
| 9–12 | 2.24 (1.79–2.79) |
| 3–8 | 9.86 (8.42–11.60) |
| Head injury severity (AIS severity score) | |
| 3 (reference) | — |
| 4 | 1.02 (0.83–1.24) |
| 5–6 | 1.99 (1.63–2.44) |
| ISS (natural log) | 5.61 (4.56–6.89) |

A direct comparison of the effect estimate (AOR) from our study with previous studies relating to trauma system effectiveness is difficult because of differences in the effect estimate used and the patient population studied. Previous studies have suggested a 15% to 20% reduction in the risk of mortality through the introduction of trauma systems or management at trauma centres,[2,4,8] substantially lower than the results of the current study (AOR = 3.22). However, MacKenzie and colleagues[8] compared the mortality outcomes of moderately to severely injured (at least 1 injury with an AIS severity score >2) managed in trauma and nontrauma patients,[8] a vastly different patient population to our study. Our study involved severely injured patients, all with a serious head injury, at high risk of death with survival likely to be influenced by advanced prehospital care, early resuscitation, expert supportive care in ICU, and early operation. The remaining 2 studies involved meta-analysis of existing studies and the estimated 15% to 20% represented the overall effect of trauma systems rather than individual study findings.[2,4] Previous studies have demonstrated similar effect sizes to the current study.[34,35] Sampalis and colleagues[34] reported an AOR of 3.25 when comparing the mortality rates pre- and postintroduction of a trauma system in Quebec, whereas Barquist and colleagues[35] reported an AOR of 3.33 when comparing the mortality rate for blunt trauma prior to the trauma system introduction with the mortality rate at system maturation.[35] Although the effect estimate for our study appears high, it is consistent with the published literature, and reflects the selection of a patient group at high risk of mortality, and comparison of a mature, inclusive trauma system with no formalized system for trauma care. A directly comparable study has not been undertaken, preventing a more valid comparison of our findings with the literature.

Our study focused on the severely injured patient with an associated head injury, a group with very high mortality rates relative to the overall trauma population, as head injury is a key predictor of mortality following trauma and this group is indicative of the complex patient most likely to benefit from trauma system organization. Previously, head injury has been termed an "untreatable" predictor of trauma mortality.[36] However, there is evidence that trauma system improvements such as integration and rationalization result in improved survival of head injured patients[1,37–39] further supported by the current study findings.

Although the methodology of our study cannot definitively identify the reasons for improved outcomes in the inclusive trauma system setting, a number of findings provide potential explanations. The percentage of patients managed at hospitals designated as neurosurgical centers was 63% in England and Wales, but 93% in the Australian setting and the low rate of management at neurosurgical centers for UK patients is consistent with previous figures.[13,40] Patel and colleagues[40] found that management of head-injured patients in the United Kingdom at nonneurosurgical centers was associated with a more than 2-fold increase in the odds of mortality. In our study, the difference in neurosurgical center management only partially explained the difference in risk-adjusted mortalities across the settings.

The vast majority of patients managed at a neurosurgical center were managed at the Victorian equivalent of level 1 trauma centers that are equipped and staffed to manage the severely injured patient, irrespective of injuries sustained. The model of care in the United Kingdom differs, with few hospitals able to provide the multitude of specialties on-site necessary to manage a multitrauma patient. Nevertheless, when only isolated severe (AIS head injury severity >3) head-injured patients were analyzed, the findings were similar with an elevated risk of death for TARN patients compared with that of VSTR patient and persistence of the difference even after adjusting for management at a neurosurgical center. Together, the findings suggest that neurosurgical expertise alone is not sufficient. Potentially, the high-volume exposure of all specialties involved in trauma care at designated trauma centers, including emergency, anesthetics, general surgery, and intensive care, for the management of neurotrauma benefits patients. Esposito and colleagues[41] argued that the immediate availability of a neurosurgeon to provide treatment of trauma was not essential, particularly given the low rates of craniotomy performed in trauma patients, the capacity for other specialties to manage factors such as elevated ICP, and advancements in telemedicine.[41] Admission to critical care units and ICP monitoring were more prevalent for VSTR patients than for TARN patients, despite comparable rates of craniotomy, indicating differences in management that could reflect the contrasting odds of mortality across the settings.

Prehospital management of trauma differs between the 2 regions with respect to paramedic training, prehospital times, and organization of ambulance dispatch, and retrieval between the UK trauma system and the Victorian State Trauma System. This is likely to result in alternative approaches to airway and fluid management. For example, it is likely that patients in the United Kingdom received less fluid according to NICE guidelines (http://www.nice.org.uk/nicemedia/pdf/ta074guidance.pdf). Unfortunately, data limitations precluded detailed analysis of this component of care and variations in clinical management were beyond the scope of this study. However, early hypoxia, hypercarbia, and hypotension have been shown to have a strong correlation with neurotrauma outcome.[42]

Most evidence of trauma system effectiveness has been gleaned from "before and after" studies where mortality rates prior to system implementation are compared with postimplementation rates,[2,4] making it difficult to adjust for general trends in healthcare improvement. In contrast, we were able to compare a large cohort of patients from a setting with an intact, mature trauma system with those from a region with an absent trauma system, using data collected prospectively over the same time frame, a clear study strength.

Despite the strengths noted, and the clear study findings, a number of limitations must be noted. Patients were identified retrospectively using AIS and ISS criteria rather than all potential patients treated by both systems, a limitation of all trauma registry studies. Notwithstanding, the AIS and ISS criteria should identify the severely injured patients of interest in a study of trauma system performance.

As commonly occurs with trauma registry data, missing data were notable across both data sets, particularly for physiological data items such as the GCS. Imputation of the GCS, using published methods, was undertaken to address the missing data issue.[30] Although imputation of the GCS is considered superior to the bias associated with excluding cases with missing GCS from analyses, analysis using complete data would have been preferable. Regardless, completion of the modeling with the missing GCS cases excluded provided consistent results with the imputed GCS models.

The definitions used for data items were comparable across the registries, enabling valid data comparison for most variables. The method of data recording employed by TARN precluded definitive comparison of cases for some variables because of the inability to determine whether an unpopulated field represented the absence of the event (eg, craniotomy) or missing data. Nevertheless, the majority of key data items were fully populated across both data sets.

Finally, although all hospitals managing trauma in Victoria participate in, and contribute data to, the VSTR, contribution to TARN is voluntary, potentially resulting in selection bias of the TARN contribution. Although every effort was made to draw comparable patients for comparison, the potential for selection bias to impact on the size of the effect estimate cannot be ignored. The overall number of TARN patients available for comparison with the VSTR appears low given the difference in population between England and Wales, and Victoria, Australia. The lower than expected number of cases is likely to reflect the number of hospitals participating in TARN, the exclusion of cases transferred to a non-TARN participating hospital because of an unknown outcome, and the lower incidence of serious injury and road trauma in the United Kingdom than in Australia. An estimated 50% of trauma receiving hospitals in England and Wales contributed data to TARN during the study period, providing a potentially biased sample of cases for analysis. However, the bias is believed to be toward higher volume, larger trauma centers participating in TARN, which would likely bias against the current study findings. Previous analysis of TARN data has shown that where underreporting of cases occurs at participating hospitals, this is due to the absence of a data coordinator for periods of time and cases are missing at random.[20] The exclusion of cases from the TARN contribution due to transfer to a hospital not participating in TARN was necessary, as the outcome of these cases could not be determined. Exclusion of these cases would have contributed to the higher transfer rates for the VSTR cases and the exclusion of some transfers could have contributed to a selection bias; however, adjustment for transfer status in the model did not modify the effect estimate substantially.

## CONCLUSIONS

Management of the severely injured patient with an associated head injury in England and Wales, where an organized trauma system is absent, was associated with increased risk-adjusted mortality compared with management of these patients in the inclusive trauma system of Victoria, Australia. The results of this study provide further evidence to support the efforts to implement such systems in Europe. The recent commission of a regionalized trauma system in the United Kingdom will provide the ideal opportunity to compare outcomes in the future, once the UK trauma system has matured.

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## REFERENCES

1. Cameron P, Gabbe B, Cooper D, et al. A statewide system of trauma care improves patient survival. *Med J Aust.* 2008;189:546–550.
2. Celso B, Tepas J, Langland-Orban B, et al. A systematic review and meta-analysis comparing outcome of severely injured patients treated in trauma centers following the establishment of trauma systems. *J Trauma.* 2006;60:371–378.
3. Jurkovich G. Strengthening of the case for organised trauma-care systems. *Lancet.* 2000;355:1740–1741.
4. Jurkovich GJ, Mock C. Systematic review of trauma system effectiveness based on registry comparisons. *J Trauma.* 1999;47:S46–S55.
5. Lansink K, Leenen L. Do designated trauma systems improve outcomes? *Curr Opin Crit Care.* 2007;13:686–690.

6. MacKenzie E. Review of evidence regarding trauma system effectiveness resulting from panel studies. *J Trauma.* 1999;47:S34–S41.
7. Tallon J, Fell D, Ackroyd-Stolarz S, et al. Influence of a new province-wide trauma system on motor vehicle trauma care and mortality. *J Trauma.* 2006;60:548–552.
8. MacKenzie E, Rivara F, Jurkovich G, et al. A national evaluation of the effect of trauma-center care on mortality. *N Engl J Med.* 2006;354:366–378.
9. Mullins R, Veum-Stone J, Helfand M, et al. Outcome of hospitalized injured patients after institution of a trauma system in an urban area. *JAMA.* 1994;271:1919–1924.
10. Nathens A, Brunet F, Maier R. Development of trauma systems and effect on outcomes after injury. *Lancet.* 2004;363:1794–1801.
11. Nathens A, Jurkovich G, Cummings P, et al. The effect of organized systems of trauma care on motor vehicle crash mortality. *JAMA.* 2000;283:1990–1994.
12. Papa L, Langland-Orban B, Kallenborn C, et al. Assessing effectiveness of a mature trauma system: association of trauma center presence with lower injury mortality rate. *J Trauma.* 2006;61:261–267.
13. Findlay G, Smith N, Martin I, et al. Trauma: who cares? National Confidential Enquiry into Patient Outcome and Death 2007. http://www.ncepod.org.uk/2007report2/Downloads/SIP_summary.pdf. Accessed June 1, 2009.
14. Nicholl J, Turner J. Effectiveness of a regional trauma system in reducing mortality from major trauma: before and after study. *BMJ.* 1997;315:1349–1354.
15. Parr M, Nolan J. Wrong comparisons were made. *BMJ.* 1998;316:1383.
16. Oakley P, Kirby R, Redmond A, et al. Improvements have occurred since study. *BMJ.* 1998;316:1383.
17. Wright J. Data do not support conclusions. *BMJ.* 1998;316:1383.
18. Squyer E, Cherry R, Lehman E, et al. Comparison of trauma mortality between two hospitals in Turkey to one trauma center in the US. *Eur J Emerg Med.* 2008;15:209–213.
19. Cheng C, Graham C, Gabbe B, et al. Trauma care systems: a comparison of trauma care in Victoria, Australia and Hong Kong, China. *Ann Surg.* 2008;247:335–342.
20. Lecky F, Woodford M, Yates DW. Trends in trauma care in England and Wales 1989–97. UK Trauma Audit and Research Network. *Lancet.* 2000;355:1771–1775.
21. Acosta J, Rodriguez P. Morbidity associated with four-wheel all-terrain vehicles and comparison with that of motorcycles. *J Trauma.* 2003;55:282–284.
22. Ulvik A, Wentzel-Larsen T, Flaatten H. Trauma patients in the intensive care unit: short- and long-term survival and predictors of 30-day mortality. *Acta Anaesthesiol Scand.* 2007;51:171–177.
23. Cameron P, Finch C, Gabbe B, et al. Developing Australia's first statewide trauma registry—what are the lessons? *Aust N Z J Surg.* 2004;74:424–428.
24. Cameron P, Gabbe B, McNeil J, et al. The trauma registry as a state-wide quality improvement tool. *J Trauma.* 2005;59:1469–1476.
25. Leppaniemi A. Trauma systems in Europe. *Curr Opin Crit Care.* 2005;11:576–579.
26. Bouamra O, Wrotchford A, Hollis S, et al. Outcome prediction in trauma. *Injury.* 2006;37:1092–1097.
27. Bouamra O, Wrotchford A, Hollis S, et al. A new approach to outcome prediction in trauma: a comparison with the TRISS model. *J Trauma.* 2006;61:701–710.
28. Gabbe B, Cameron P, Wolfe R, et al. Predictors of mortality, length of stay and discharge destination in blunt trauma. *Aust N Z J Surg.* 2005;75:650–656.
29. MRC Crash Trial Investigators. Predicting outcome after traumatic brain injury: practical prognostic models based on large cohort of international patients. *BMJ.* 2008;336:425–429.
30. Moore L, Lavoie A, LeSage N, et al. Multiple imputation of the Glasgow Coma Score. *J Trauma.* 2005;59:698–704.
31. Moons K, Royston P, Vergouwe Y, et al. Prognosis and prognostic research: what, why, and how? *BMJ.* 2009;338:b375.
32. Sauerbrei W, Royston P, Binder H. Selection of important variables and determination of functional form for continuous predictors in multivariable model building. *Stat Med.* 2007;26:5512–5528.
33. Black A. Reconfiguration of surgical, emergency, and trauma services in the United Kingdom. *BMJ.* 2004;328:178–179.
34. Sampalis J, Lavoie A, Boukas S, et al. Trauma center designation: initial impact on trauma-related mortality. *J Trauma.* 1995;39:232–239.
35. Barquist E, Pizzutiello M, Tian L, et al. Effect of trauma system maturation on mortality rates in patients with blunt injuries in the Finger Lakes region of New York State. *J Trauma.* 2000;49:63–70.
36. MacLeod J, Lynn M, McKenney M, et al. Predictors of mortality in trauma patients. *Am Surg.* 2004;70:805–810.
37. Coats T, Kirk C, Dawson M. Outcome after severe head injury treated by an integrated trauma system. *J Accid Emerg Med.* 1999;16:182–185.
38. Hunt J, Hill D, Besser M, et al. Outcome of patients with neurotrauma: the effect of a regionalized trauma system. *Aust N Z J Surg.* 1995;65:83–86.
39. Tiesman H, Young T, Torner J, et al. Effects of a rural trauma system on traumatic brain injuries. *J Neurotrauma.* 2007;24:1189–1197.
40. Patel H, Bouamra O, Woodford M, et al. Trends in head injury outcome from 1989 to 2003 and the effect of neurosurgical care: an observational study. *Lancet.* 2005;366:1538–1544.
41. Esposito T, Luchette F, Gamelli R. Do we need neurosurgical coverage in the trauma center? *Adv Surg.* 2006;40:213–221.
42. Chestnut R, Marshall L, Klauber M, et al. The role of secondary brain injury in determining outcome from severe head injury. *J Trauma.* 1993;34:216–222.

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March 9, 2011

PROPOSED AMENDMENTS TO REENGROSSED HOUSE BILL NO. 1266

Page 1, line 8, replace "may" with "shall"

Page 1, line 18, replace "Advanced trauma life support training" with "Contracted emergency medical services and trauma medical center"

Page 1, line 18, replace "$20,000" with "$416,000"

Page 1, remove line 19

Renumber accordingly