

10 DR. CAMPBELL: Thanks, Tom.

11 DR. SIMMER: Participant number 1.

12 DR. CAMPBELL: Thank you very much. I  
13 appreciate the opportunity to come and talk to the  
14 Commission. Obviously this is a very important  
15 subject.

16 As Tom said, my name is Darrell Campbell. I  
17 apologize for having my back to the rest of you, but  
18 I'm the Henry King Ransom Professor of Surgery at the  
19 University of Michigan and the Chief of Clinical  
20 Affairs; and as such, I'm the Chair of the Committee  
21 on Patient Safety for our health system.

22 I come to you today with an issue that I want  
23 to raise to your attention and hopefully this will  
24 work its way into your report in some way, but the  
25 basic issue that I have is that in order to change

1 something, it's very helpful to be able to measure it,  
2 and our way of measuring it at this point is somewhat  
3 lacking.

4 The issue specifically has to do with the  
5 AHRQ patient safety indicators. And for those of you  
6 who are not familiar with what that is, the AHRQ is  
7 the Agency for Healthcare Research & Quality. And two  
8 years ago they came up with something they call  
9 Patient Safety Indicators, or PSI's, of which there  
10 are 20. And the 20 PSI's are to be used by all  
11 hospitals to measure their patient safety.

12 The problem is, as we have found out, they  
13 don't work, and so it's not reasonable for any group  
14 to measure patient safety in a comparative fashion  
15 using the Patient Safety Indicators, and I wanted to  
16 give you some idea of what I mean.

17 First of all, it's the Patient Safety  
18 Indicators are derived from administrative data sets  
19 which were originally designed for billing purposes  
20 and not really for this purpose. They're not very  
21 specific for some of the questions that are being

22 asked of them in the Patient Safety Indicators.  
23 I have some examples of what I mean by that.  
24 They have never really been validated that they mean  
25 what it's -- I think the intent was genuine and

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1 sincere, but they have not been validated.  
2 I'll give you an example of what some of the  
3 patient safety indicators are. Complications of  
4 anesthesia, foreign body left in during procedure,  
5 postoperative respiratory failure, postoperative deep  
6 venous thrombosis or PE, postoperative hip fracture,  
7 and so forth.  
8 And that would seem to be very good subjects  
9 for our interest in the patient safety community, but  
10 the problem is when we try to apply these to our own  
11 population at the University of Michigan, it didn't  
12 work, and here's what the problem was. The devil is  
13 always in the details. And, unfortunately,  
14 healthgrades.com was very quick to utilize this data  
15 for comparative purposes in Michigan and, in fact,  
16 gave four Michigan hospitals their Distinguished  
17 Patient Safety Awards based on this administrative  
18 data using the 20 PSI's.  
19 Now, when we tried to do that, as I have  
20 mentioned, it didn't work, and some of the details  
21 that I wanted to point out to you are as follows.  
22 First of all, in the failure to rescue PSI,  
23 and what that is is the number of deceased patients  
24 divided by the number of patients who had pneumonia,  
25 pulmonary embolus, DVT, acute renal failure, GI bleed

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1 or cardiac arrest.  
2 And when we actually looked at the patients  
3 that would fall into this category, what we found is  
4 only 36 of the 45 cases that came up from the  
5 administrative data actually had a complication; and  
6 of the 36, 67 percent of those patients had been  
7 admitted as a do-not-resuscitate or comfort-care-only

8 patient.

9       So this obviously doesn't fill the intent of  
10 looking at patient safety because they were -- it was  
11 known that they were going to die before they came  
12 into the hospital.

13       Another one was postoperative respiratory  
14 failure. This is secondary diagnosis of respiratory  
15 failure divided by all surgical discharges. We found  
16 that 44 percent of the patients in our sample that  
17 were kicked out by the computer were bone marrow  
18 transplant patients, not really surgical patients.  
19 One of them had graft versus host disease, which is an  
20 immunologic condition associated with bone marrow  
21 transplant disease, obviously not a surgical  
22 complication; one had radiation pneumonitis that was  
23 treated.

24       So it really was very, very misleading as to  
25 whether you had respiratory failure after a

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1 straightforward surgical procedure or not.

2       Another one was the accidental  
3 puncture/laceration category. This is the accidental  
4 cut, puncture, or laceration divided by all medical  
5 and surgical discharges. We reviewed 20 cases. In 17  
6 there were confirmed lacerations but the lacerations  
7 were things that would be expected in the course of a  
8 normal case.

9       For instance, several were tears in the  
10 femoral artery when a vascular prosthesis was inserted  
11 and the prosthesis was bigger than the femoral artery  
12 incision, so it was called a tear but it really is not  
13 an accident or an injury in any way, it just needs to  
14 be -- it's part of the process.

15       Another -- several of them were enterotomies,  
16 that means making a hole in the bowel associated with  
17 GI tumors that were invading the bowel. So the point  
18 here is that there is no way that a performance  
19 improvement measure is going to influence that, and so  
20 it's misleading in that sense.

21           And the final one I'll tell you about is the  
22 death a low mortality DRGs. You would think that  
23 would be a good one; let's measure how many deaths  
24 there are in the disease categories where you really  
25 wouldn't expect to see a death at all and that would

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1 be a good patient safety indicator. But, in fact,  
2 what we found was that many of these cases were highly  
3 complex patients who had -- that had been put into  
4 this particular DRG category for billing purposes, and  
5 it didn't really reflect the complexity of their  
6 disease.

7           In one case a seizure DRG was used to  
8 describe this patient but the patient actually had  
9 hypoplastic left heart syndrome, heart failure, valve  
10 replacement and a pacemaker and died and that was --  
11 but it was in the seizure DRG, so it was kicked out by  
12 the computer as something that we should be very, very  
13 concerned about when in actuality we shouldn't be  
14 concerned about that at all; it would be expected.

15           Okay, one more. The post-operative sepsis,  
16 this involves sepsis, patients -- or sepsis condition  
17 divided by the total elective surgical discharges, and  
18 33 percent of the cases were neonatal patients who had  
19 congenital heart disease, and 30 percent of the adult  
20 cases had diabetes, and this is not adjusted for in  
21 any of these computer manipulations.

22           So to the extent that your hospital has a lot  
23 of congenital heart cases or a lot of diabetic cases,  
24 you're going to see more sepsis cases in this  
25 indicator.

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1           So the list goes on and on. The  
2 postoperative hemorrhage, about half of our patients  
3 had a coagulopathy or were being treated with  
4 anticoagulants, but that wasn't accounted for.

5           So in our summary -- and we are submitting  
6 this paper for publication in JAMA -- our validation

7 of this kind of process, it is completely unusable at  
8 this time and needs further work before we're able --  
9 groups such as this one, perhaps, might be able to use  
10 this information. Thank you very much.

11 DR. SIMMER: Thank you. Clarifying question.

12 MR. WAGENKNECHT: Question. You've  
13 identified some of the problems in your written  
14 testimony that you're going to be providing us. Are  
15 you going to have some recommendations of some better  
16 data that we should be --

17 DR. CAMPBELL: Yes, we are. And I think what  
18 we would propose to do -- this is a good start -- we  
19 should go through these things and simply refine them  
20 to the point and make some of the recommendations that  
21 we have and then submit them as perhaps our  
22 modification of the Patient Safety Indicators so that  
23 they would actually mean something and then we would  
24 be able to compare hospitals throughout the state and  
25 see some of the variation and result in something

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1 that's meaningful rather than something that's  
2 confusing.

3 MR. WAGENKNECHT: Good.

4 DR. SIMMER: Thank you. Thank you very much.

5 The Commission welcomes Mary Toni Flowers as  
6 participant number 2, so we appreciate your testimony.