Strong Medicine Interview with Richard Wolfe, 26 February 2014

RICH: This is Miriam Rich and today is February 26, 2014. I'm here with Dr. Richard Wolfe at Beth Israel Deaconess Medical Center and we are going to record an interview as part of the Strong Medicine Oral History Project. Could you begin by telling me a bit about yourself, your training background, and your positions here?

WOLFE: OK, so my name is Richard Wolfe. I'm chief of the department of Emergency Medicine at Beth Israel Deaconess and oversee the emergency care provided at this hospital as well as at Beth Israel Deaconess Needham, Milton, St. Luke's, in New Bedford, and St. Vincent's, in Worcester.

I trained, actually, in France. I grew up in France. I did my postgraduate training in Denver, at the University of Colorado. I was recruited, in 1994, to Brigham & Women's and Mass General Hospital to start the first training program there in emergency medicine, and then was recruited here to be the chief of the department in 1999, and I've served in that role since then. So, that sort of is a quick, you know, version of my background and my training.

RICH: Great. What led you to pursue this line of work?

WOLFE: Well first, I had exposure to it at a very young age. My uncle, who is one of my heroes and mentors, is a physician by the name of Peter Rosen who, when I was 14, was a surgeon, who was actually the only board-certified surgeon at that time, and I spent a summer with him, where, among other things, when he would be called into the emergency department, he would let me drive the pickup truck and then he would actually let me watch him, or even participate in some of the care, something that would be impossible today, but back then, was unbelievably wonderful. My grandfather was also a physician, who used to bring me down to his clinic and sit me on the stool when I was five and six years old, and I thought he was god incarnate and just thought that that was something that would be wonderful to do. So I've always wanted to be a physician, and I think that exposure in Wyoming first gave me the taste of emergency medicine. This mentor in question, Peter, ended up having to switch from surgery to emergency medicine back when the specialty was first starting. At 35, he had a heart attack and they told him surgery was too rough for him, so he went to work in an emergency department and actually was one of the founders of the specialty of emergency medicine at the University of Chicago, and he kept -- as I was training in Europe, kept

telling me that I needed to come and spend some time and do some work with him. So that led me into the field and I fell in love with it. It was the fast pace, the ability to help people that, really -- some of the most frightening moments of their life, the ability to provide compassion to people who -- some of whom haven't seen in years, the challenge of the diagnosis, the interface between what's on the outside society and the hospital. All I found were very exciting, very fulfilling. And because we were building this specialty, I really got started in the 80s, and by the time I became engaged, it was still early on, so setting up new programs, training, redefining how emergency care happened, and being part of that was also just, at least from my perspective, of great value. So that's a little bit of how. I'm approaching 60, and I don't regret a single day and look forward to many more years of being able to do this.

RICH: What does a typical work day here look like for you?

WOLFE: There is no such thing as, unfortunately, a typical work day. I do probably 16 hours, clinically, a week. I probably spend about another 40 in administrative. I've got another 10 in teaching, maybe another 10 or 15 in research. So it's a very long week. The administrative, it varies from meetings to creating projects, to mentoring,

to -- you know, it's very varied. That's, I think, why it's so exciting.

So one day, I might be going from meeting to meeting. The next day, I may be seeing patients in the emergency department, and then finishing up with an educational session with residents or medical students. The day after that, I might be [05:00] brainstorming on a research project or working on an abstract or paper, or I might be flying off to attend a meeting, presenting, or doing consulting work, in other words, going to another emergency department and seeing how they do it and making recommendations on how they might improve it. So there really isn't -- it's a very varied type of job.

RICH: Thank you. Let's talk about the day of the 2013 Boston marathon. To start with, how did the day begin for you?

WOLFE: I'd had a normal day, an early day at work doing a number of meetings. I had actually -- I have to get to the timeframe, but I had actually gone home early that day and I was working in my office when my wife told me that there had been a bombing that had just been reported on the media. I took a look, you know, went down and saw the report, immediately went online where I can actually see

what's happening in my emergency department, and spoke with the attending on duty, and based -- and made the judgment that we didn't know how many victims or what was happening, but that I needed to go in. So I then drove in and I arrived about the same time the first patients were arriving in the department.

RICH: So, prior to this, what was your disaster response training?

WOLFE: So we have some training as part of residency. We have ongoing training lectures that occur throughout. Emergency physicians also train someone in prehospital care. We go out and work with paramedics, with the helicopters, and you read and discuss this a lot. We also had had global health activities. I had responded to Haiti as part of the team that we sent here about a week after the earthquake hit, which is all part of dealing with mass casualties that sort of overwhelm the medical system.

I was on duty when the Continental flight went down in Denver back in I think it was '86, and was sort of on duty in the emergency department as the senior resident, where we got a wave of major trauma cases from the airplane, and then debrief very much on how to deal and how to manage that. So it's been part of ongoing, both the training and

the existence of emergency physician. And then, we do disaster drills all the time, tabletop exercises, and so it's really just part of both the training but also the job to be somewhat ready for an event like this.

RICH: So given your experience with disaster scenarios prior to this, how did the day of the Boston marathon compare to those previous ones?

WOLFE: So, it went extraordinarily well. it was -- everything, in some ways, worked and worked well, which usually doesn't happen. There's usually periods of confusion, lack of communication, really a lot of last-second improvisation to do things, and generally, at least with this type of injury, far more casualties.

Here, everything really worked remarkably well. The drills and the preparations really kicked in and functioned as they were supposed to. People -- I may be going on and we can break it down into smaller questions, but people, in the face of something like this, really had, for a temporary period, a remarkable behavioral change. It was just like -- it brought out absolutely the best in everyone, the ability to collaborate, you know, it sort of eliminated the ego, that sort of sense of I'm the important one, and made everybody work together, focusing on the

victims and the patients and trying to deliver the best care possible. That occurred from the actual site of the bombing all the way through the process of getting the patient stabilized and brought in, to how the hospitals worked, in terms of how we interacted between specialties, between nurses, administrators, and between the different hospitals, in terms of sharing the workload. It turned, at least for the period of the response, the entire city into a single healthcare unit that functioned like a well-oiled machine. It was remarkable. I've not seen that happen in any disaster before this or in the city until that point.

RICH: Can you talk more about collaboration with other hospitals in Boston, what they looked like?

WOLFE: [10:00] Well, most of it was coordinated through Boston EMS and through the standard systems that kick in when a disaster occurs, but the hospitals were reporting at capacity, sort of checking with each other from time to time to make sure things were working. At one point, I think Boston medical Center asked for help in terms of supplies and equipment from our hospital, from the other hospitals when they ran out, which were provided. So there was basically things that were never normally would never normally happen, the level of communication. It was really as if we were all different parts of the same sort of giant

emergency hospital system.

RICH: So given how smoothly things seemed to have run, were there any ways in which it deviated from your disaster management training scenarios or ideal training situation?

WOLFE: Well, things that -- lessons, I would say, that we learned -- I don't know that it deviated from the systems, but when you're doing what we call real-life experience versus, you know, table-top, you know, we discovered that probably kicking off security much more quickly and more effectively and having security really kind of well hooked into the drills would have probably gotten us, and some of the other places, a little tighter and safer more easily.

There was only -- I mean, if there were two devices, they were both at the scene of the marathon. The classic fear of a disaster is that the healthcare sites get targeted next, which is normally supposed to be one of the things in the playbook of how you really create havoc. And so, there is a possibility that if somebody had had the intent to place a bomb in an emergency department or a hospital, they might have succeeded in that first early period, and we became aware of that. We addressed it very quickly, but we realized it could have been done even more effectively by better preparation, better drilling. That was one example

of a lesson learned that had no consequence, but that really, sort of just judging what could have been done more effectively.

We created what we call teams, healthcare teams, to take charge of the patient for all their subsequent care in the hospital, which was also innovated, at the time, rather than something that we had prepared for, and it worked remarkably well. So now, it's baked into our updated disaster plan. So it wasn't that the plan didn't work, it's just that seeing it unroll, you realize that there were things that the plan just didn't cover that were worth building into it going forward.

RICH: What do you think accounts for how the Boston hospitals were able to function so effectively that day?

WOLFE: OK, so there are a host of things. Let me go ahead and list them.

Number one. Location and type of bomb were gifts, in terms of being able to do this effectively. The bomb was situated right in the center of six level one trauma centers, so that the distance was quick. It was done at a time during the marathon where a lot of the streets had been cleared of traffic, so the ability of ambulances to

get to the patients and take them to the hospital was incredibly good, as compared to a lot of disasters that have occurred in cities where the traffic would snarl up ambulance response, police response, and you couldn't get the patients out to the hospital without a lot of logistical maneuvering.

The paramedics in Boston, Boston EMS, had had a mentor who actually passed away a couple of years ago, name Erwin Hirsch, who was head of trauma, and he had a very strong belief in the use of tourniquets, about rapidly applying, and really trained the Boston EMS to think about tourniquets, about moving quickly, and placing them rapidly. That knowledge probably saved many lives. Those tourniquets were placed literally within a minute of the bomb going off, stopping bleeding that usually kills patients that have traumatic amputations from explosions. And the remarkable thing about the marathon bombing is the three deaths that occurred were immediate deaths on scene. Anybody who survived that initial explosion lived. That's not usually how it works. Usually, people with traumatic amputations almost invariably die, and one has to look at that experience with the tourniquets to explain that.

At the level of the hospitals, [15:00] a combination of drills, of experience in global health, a lot of the emergency physicians and surgeons have been responding to various areas on the globe to help, and so those lessons were easily suddenly brought back. A lot of the techniques we used to triage hundreds of patients in very short times in Haiti were kicked in immediately in terms of how we formed teams, how we dealt with it, but with a lot more resources than we ever had in Haiti, but a lot of those techniques of quick assessment, patient identification, and then rapid decision-making, well, we had practiced it not that long ago.

There are issues like team training, which is we use simulators to make sure that the physicians and nurses and everyone all work as a seamless team. So we practiced those, and those also played into how people were able to communicate well, how you were able to kind of get the patients through rather rapidly. So all this disaster preparedness, experiences elsewhere, and then finally host of lectures from experts in disaster, like Israelis who had been in tons of -- a number of bombings, helped.

And then, for example, at our shop, there was some just

good luck. The senior resident who was on that day had actually grown up in Israel and had been part of the medical side of the Israeli Defense Force and had a huge experience in dealing with bomb injuries.

One of the attendings who was on that I spoke with when I came in was also the person responsible for disaster response for the hospital so was even more trained in this and was able to help set this up very effectively.

But I think lots of past training and experience that didn't really exist often when disasters have happened earlier in the States, the location, the type of bomb, -- on, and the type of bomb was the shrapnel they use for BBs, which don't have high mass. So the usual lethal effect of shrapnel is diminished because they used, I guess from a patient standpoint, I'd say the right thing rather than the wrong thing, heavier objects that would have been much more disastrous. So I think there were just a host of host -- a whole long list of things that all combined to allow us to achieve really spectacular results.

RICH: How different were the type and volume of injuries you saw that day than on an average day here?

WOLFE: Well, the answer is, in a short timeframe, there was a

bolus of very sick patients, I think about 16 severely injured patients arrived at once. We can have that many patients arrive in an hour, it's just that they're not all major trauma cases. But, it was limited, you know. We had set up -- we had a huge number of people respond just as soon as they heard, like myself, from the television, or from other ways, so we were able to create multiple teams. So frankly, we were able to get everybody seen immediately, stabilized. We cleared operating rooms so we were able to get people upstairs in record times. And then, we did clear out the more routine, lower acuity business and explained to people, you know, you're going to have to wait. We're going to have to be geared up for this high wave of acuity. So the answer is, for a very short timeframe, there was a lot of very sick patients, but we had multiplied our manpower by about 10. We cleared out the space from anything that wasn't immediately life-threatening, something that you do, you know, as sort of the way you do rationing of care in a disaster, and within two to three hours, we had everybody processed, cleaned, and on to the next stage of care in the operating room or in the intensive care unit. So, there was never a point where our health system was overwhelmed. That's why we define this as a mass casualty event rather than a

disaster, the setting in which your healthcare resources were overwhelmed. The healthcare resources here were never overwhelmed.

RICH: And in terms of the types of injuries you saw that day, did those differ a lot from what's typically seen here?

WOLFE: Oh yeah. I mean, traumatic amputations are quite rare in sort of, you know, routine practice. You will see them, you know, in a rare injury like an accident with a train or a really devastating motor vehicle accident, but even then, it's not very common. Whereas here, there were multiple traumatic amputations. So that was probably the most marked difference.

The shrapnel [20:00] in a normal bombing usually will give, also, a lot of penetrating truncal trauma, in other words, like a bullet going into chest, belly, head, and neck. The BBs, fortunately, created the impression that might be the case, but actually had not gone particularly deep, so except for one patient with an eye injury, the really -- the shrapnel effect was very limited, although you never normally see that type of shrapnel blast. You need almost a shotgun to be able to do that.

RICH: So to what extent were you aware of the intensive

media coverage and also social media activity as you were providing care, and how did that awareness affect you?

WOLFE: So, the media coverage was relatively apparent as we were wrapping up the last of the patients. Now, we had placed security in place quickly and so the care area was really -- it blocked off most of the media access, and our public relations people were organizing the media so we could do press releases once we had the patients stabilized, but the whole idea is when you're taking care of the patients, you want to focus on care of the patients and deal with the media afterwards. But within a couple of hours, we realized how much media attention was and we were doing those press releases.

The social media, I think some people were aware of, because that's how they got the information and actually responded, and there was clearly, as one would predict, a lot of activity, although frankly, from my standpoint, that was relatively invisible. And the only time I realized it and realized the problem was when some patient confidential details were released on social media or some comments were made by providers that could appear less than professional and generated a huge level of concern from both our media and compliance people and that needed then to be addressed,

the providers spoken to, remediated. Again, releasing any patient information is a federal crime, and expressing unprofessional opinions may be understandable, but let me clarify.

The unprofessional stuff came out after we took care of the terrorist, not with the patients themselves, and I think that sort of when social media issues or problems really started becoming of concern.

RICH: So had you had any experience before now when this level of media coverage, or something approximating the level of media coverage?

WOLFE: Yeah, with media coverage. Certainly with some of the other disasters I've been, you know, had that component, but not with social media coverage. That was a new phenomenon.

RICH: So you mentioned that the bombing suspects were treated here and that was reported in the public media. Are you able to talk about, in general terms, any of the challenges that were associated with that?

WOLFE: So the care issues, and I can't go into, unfortunately, details on either cases, but they were really penetrating trauma gunshot wounds, so things that we are very used to dealing with, and we deal with a lot.

Unlike the bombing, these are injuries that we deal with on a daily basis, so that component was relatively straightforward.

The problems were created by the lockdown that occurred before the second bomber was brought in, the second patient in this case, was brought in. And what that meant is providers couldn't come to work or couldn't leave work. So we actually had to have rotating shifts by the people that were here to be able to staff the emergency department for the people that did come in until they took that lockdown down. That was the part that was unusual or exceptional according to business.

And then, there was the media coverage by that time that made even the media coverage during the bombing seem relatively trivial. At first, there was some confusion about where the second, I don't know, alleged terrorist is probably the right term, well, at first, they thought the patient was going to Mount Auburn, then to Mass General, so the press was moving sort of from one area to another, but the number was quite large.

And then, the other problem we had with the press, both

before and after, some of the press actually went up and started going to patient rooms and so on, which is completely [25:00]unethical. So, the press ended up -- sorry, and that became a bigger problem than the care of the patient.

RICH: Was there a reaction from the public or from families of recovering victims about your treatment?

WOLFE: There was some concern by family members when they found out that one of the perpetrators was actually being hospitalized here, but the -- and then, there were some of the providers, I guess, after the fact, after caring, started realizing, gee, I've taken care of somebody who's done some terrible things. At the end of the day, the truth is some people never even had that reaction, and then those that did still had the perspective of understanding our job is not to be the judge or not to restrict our care, that our job is to be healthcare professionals, is to be doctors and nurses, and when a patient comes in, you give 100% to that patient regardless of other issues. And so, no, I think on the whole, most people were relatively proud about how they had behaved, both not only during the marathon, but also in the care of the alleged perpetrators.

RICH: So you addressed this a bit earlier, but has Beth Israel made any changes to its disaster preparedness

training or policies after the incident?

WOLFE: Yeah, there have and they're ongoing and are going to be tested probably with a series of drills, as well, but it's really working more closely with security so that we have better screening for secondary devices, so that we coordinate better volunteer providers when they come in to staging areas and so on, so we use that workforce more effectively and don't overcrowd the emergency department, so we do a better job, potentially, in early patient identification so we can reunite families with patients as people arrive. There are a lot of little things that came out of it that are both being put into thing, but also being tested to see if they're more effective.

RICH: So in the, let's say, week or two after the incident, or perhaps after the treatment of the suspects as well, how did that unfold for you? Did things go back to normal relatively quickly?

WOLFE: Well, literally, in terms of the work in the ED, they went back to normal within a couple of hours of the bombing. The one sort of thing that was different is we did a general debrief with the entire staff the next day, and we actually brought in one of our counselors who deals with posttraumatic stress disorder and made sure there was a way, both anonymously or not, to be able to follow up for

people that had felt traumatized.

I think providers who were actually at the scene of the bombing definitely used, or more likely used those services than the people in the emergency department, and the emergency department was set up well and was under control that I don't think people got as emotionally disturbed by it because they were focused on the job rather than on the event, if you see the difference. So there was little -- so mostly, the response in the emergency department was very overall positive about the job done, but there was a need, both to debrief, talk about what had happened as well as get help to the people that did need counseling.

RICH: So now that it's been almost a year, is your perspective on that day different in any way that it was, say a week after or a day after, like has the passage of time sort of changed how you view it?

WOLFE: Not really. Some of the same things that I saw in this disaster were like others that I'd seen before. You know, at the end of the day, it's the same logistical problems. It was just here that we were better prepared. The number and the volume, compared to our resources, was much better proportioned than in other places I've seen, and you know, we learned some lessons, but it was almost

like more of a fine-tuning issue than a discovery. Again, I've seen a number of them, you know, and it's a little different than the first time when you go through one of these. I'm sure some of the people you're interviewing maybe it was their first, and there is a feeling of sort of chaos and loss of control that is surprising to me when it's the first time. Once you've been on that, you expect that level of confusion to be occurring and it's all about keeping your head and getting the systems in place as quickly as possible to deal with it.

RICH: So, you're both a healthcare [30:00] professional and also a member of the greater Boston community. Do you view the incident differently or relate to it differently in those two capacities?

WOLFE: It's hard for me to separate out the two, I would think. I mean, honestly, I'm first and foremost a healthcare professional. I live in Boston, love Boston, you know, and I feel this is my city. My kids were brought up here, even if I haven't. So yeah, I'm actually proud at how the city responded and it just continues to validate my delight at being here and my feeling privileged to be part of this community. But in terms of the reaction to Boston, it's really -- I can't help but look through it as the eyes of a healthcare professional and an emergency physician.

RICH: Do you have other thoughts or stories that you'd like to tell us?

WOLFE: No, those really summarize it.

RICH: Great. Thank you for your time.

WOLFE: OK, thank you.

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