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Robert Cox Oral History

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"The impact of high-resolution structural data on stemming the COVID-19 pandemic," Curr Opin Virol, 2021 Aug; 49: 127-138. doi: 10.1016/j.coviro.2021.05.005. Epub 2021 Jun 3.

Robert Cox

Behind the Mask

June 3, 2021

Lyons: I am Michele Lyons with the Office of NIH History and Stetten Museum and today I am speaking with—do you want to be called Bobby or Robert Cox?

Cox: Robert Cox is fine.

Lyons: Robert Cox, and today is June 3rd, 2021. We will start with your educational and professional background.

Cox: Yes, so, I have been a registered nurse since 1998, a little over 20 years and I started in the Army Nurse Corps, serving for 4 years. I then went back to graduate school and got a degree in Health Administration, so, I have a blended background that is both clinical and administrative.

Lyons: Wow, that is pretty interesting. You came through the military then. So, what is it that you do at the Clinical Center?

Cox: I am a Public Health Service Officer [PHS] and I work in the Nursing Department at the Clinical Center. I am an internal consultant for the Chief Nurse. The Nursing Department is the largest department at the Clinical Center. I think it has 700 FTEs [Full Time Employees].

Lyons: Wow!

Cox: Our Chief Nurse is also a tenured investigator and she directs a research department. In large part, I help support Research in various ways. I also support the operations side of the Nursing Department and help provide consultative services in a variety of ways.

Lyons: So, you kind of work on the protocols as well as how the protocols are implemented?

Cox: On the Research side, I am an Associate Investigator on several protocols. The support that I give to the Nursing Department would be, if a nurse is needs support to do a presentation and they need a little bit of help trying to get their ideas or data in order, how to organize their data, how to present it. Also, if leadership needs reports or data, I help facilitate completing the report and analyzing and displaying the data.

Lyons: Okay, so, when COVID, when did that first show up on your radar and how did your group begin to prepare for it?

Cox: That, I think was at the end of February in 2020, and a group of PHS officers in the Nursing Department were kind of deployed internally, and the initial focus was to prepare, to provide clinical care in the Special Clinical Studies Unit, which is on the fifth floor and that is a very high-level biocontainment clinical unit. That is where we have given care to Ebola patients, and at the time I think we were anticipating that we were going to see a lot of COVID patients in the SCSU. To do that, we needed a lot of training on how to don and doff the PPE, and how to start an IV with two sets of gloves on, because at the time, we did not know exactly what to expect with respect to providing clinical care. It was not real long before it became apparent we were not going to see a high number of COVID patients in the SCSU, and the nursing staff was able to handle the projected volumes. However, it was identified there was a need to set up a perimeter, basically around the Clinical Center, to screen people for signs and symptoms of COVID, and to hand out masks, and that is where that mission started, I think at the end of February and went until the mid-part of October.

Lyons: Okay, so, you were in charge of setting up the screening program, when you come into the Clinical Center you are asked certain questions.

Cox: I was involved in that but not in charge of setting it up. I was in charge of the day-to-day operations, but certainly, there were policies and processes that needed to be implemented. In a large part that was coming from the sixth floor [the director of the Clinical Center's office], because we had a very strict "no visitor" policy, which was one of the more difficult parts of that mission, because if a patient was really sick, initially they could not have a visitor, and if they were terminal, we had to go through a process for them to get visitors. The Clinical Center's infectious doctor, from hospital epidemiology, was a tremendous resource and provided a lot of consultative services to us from an infectious disease standpoint; what PPE we should be doing, what processes we should do if we come into contact with somebody suspected of COVID. And we also had a lot of involvement with the Fire Marshal and Safety and Quality, because we had to set up five stations throughout the Clinical Center, and they had to be within regulation to do that, so we were not blocking entrances and things like that.

Lyons: So, were you in charge of getting the people there to do the screening and training them what to ask, and how to give the masks out, and all of that?

Cox: Yes, in part, eventually I took that part on. The staffing for that initially came from the group of PHS officers who were going to be trained in the SCSU, to provide clinical care, so, it was a pretty seamless transition to set up that mission. Then, as some of the PHS officers got redeployed to sites outside of the Clinical Center, we needed more staffing, so we were able to get a lot of nurses from outpatient and inpatient units that were closed, because they were doing natural history studies and not really doing investigational drugs, so, we brought them into the fold of our operation.

Lyons: Wow, and how many? I know that sometimes, during the day, there was like a little line outside the Clinical Center of people coming in. How did you handle the logistics of how many screeners to have, and where to have them?

Cox: We tracked our numbers on a daily basis. I think we did so every four hours and what we did is counted the number of stickers that we were giving out. This gave us a pretty good idea of what our staffing needs were for the morning, afternoon, and evening, at each location. We had to work closely with Hospital Supply because they were the ones who are providing us all of the masks that we were distributing.

Lyons: I was wondering, did you have a problem with the supply of the masks?

Cox: Generally, there wasn't. I felt like Supply did a great job, and they were able to forecast what the needs were. There are a couple times when supplies ran low and this was clearly communicated to us. I feel supply made every effort to make our mission as successful as possible. They had a technician check in with the stations several times a day.

Lyons: Oh, that's good, and then, there were five locations because I only knew of two of them. What were they?

Cox: So, you had the P1 Lobby, the P1 Ramp, North Lobby, and the South Lobby. There, were four locations.

Lyons: Four locations.

Cox: In the beginning, yes.

Lyons: I was wondering because a lot of the side entrances to the Clinical Center were closed, you could no longer enter or exit those ways so, I guess the Fire Marshal have a big say in where you set up.

Cox: Absolutely, not only where we set up but how we set up. These were things I wouldn't have otherwise thought about prior to the mission, but safety was always front and center. Generally, there was a lot more to the process than just asking seven screening questions, taking a temperature, and giving out a mask. Implementing the "no visitors" policy was extremely difficult, and then, there were some people who came in with suspect type symptoms that you had to think on our feet.

Lyons: Yes, okay, so you were also involved in the NIH vaccination clinic which vaccinated NIH staff, and can you tell us how that was set up and who led the efforts for that?

Cox: Yes, so, Occupational Medicine led the efforts for that, and they did all the initial setup. The staffing for the clinic, initially, came from another group of deployed PHS officers, and they set up the safety piece where they had designated safety officers, clinicians who were going to do the vaccine—administer the vaccines. They set up the observation booth but, I think, when it became apparent that the NIH was going to get a large amount of vaccine, we needed additional staff and so a call was made to the medical executive committee in the Clinical Center, to all the institute chiefs, that more staff was needed, and we are really looking for volunteers. This is the part that I picked up. So, eventuallythe staffing model was, I would roughly say, 50% volunteers, 50% PHS, and the umbrella leadership and supervision was from Occupational Medicine.

Lyons: Well, how did they decide to use the B1 cafeteria?

Cox: I am not completely sure, but I think that they needed a large space to and there were not a lot of available areas to do that, because we needed to set up 12 booths, needed a large observation area. The cafeteria was not being used and I think that was ideal for that reason, but also because it was directly accessible from the outside, so we could have a line outside, where we knew it was a respiratory virus, and the likelihood of spreading it while you are waiting was lower. We could cycle them in, observe, and then get them right out.

Lyons: So, when a person volunteered to work at the vaccination clinic did they also have to do their day job as well?

Cox: I think the majority of them did. I think there was some individual variation for that but there senior leaders and clinicians who were coming in on the weekends for the Saturday clinic, because that was the only time available for them professionally, so, yes, many were doing their regular jobs in addition to volunteering in the clinic.

Lyons: And the PHS officers, were the ones who were already stationed at NIH or were they stationed at other places and then came in?

Cox: So, both. Initially, it was a group from NHLBI who came down and did it, and then they recruited other officers across the NIH, but then a lot of those officers, just as with the screening mission, were being sent out and then they needed to be replenished, and we brought officers outside of NIH. At one point, we really needed pharmacists, when we began administering both Moderna and Pfizer. So we recruited from the FDA., Having them was really important from a safety standpoint, to be able to reconstitute those vaccines because we wanted to be 100% sure that we were as safe as possible, so, that is why the pharmacist came in and we only were able to get them from the FDA at that point.

Lyons: Okay, so how many shifts were worked at the vaccine clinic and how many vaccines have you given out as of today because you have not closed yet.

Cox: I think a rough number is 30,000 vaccines were given total. I do not know the number of shifts that were worked total, but I do know for the volunteers, 705 half day shifts, and that was split among 100 volunteers over 5 months. It was really cool to see the NIH community come together like that.

Lyons: So, is that 30,000 like first and second [shots]?

Cox: Yes, so, I think it would roughly hit about 15,000 people for those 30,000. That is pretty good, that is a big chunk of people.

Lyons: Yes! And you also volunteered up at the asymptomatic testing in the Clinical Center, where people would go if they were feeling okay, but they just wanted to track and make sure there was no COVID coming in that way. Can you tell us a little bit about how that was worked in two different locations?

Cox: I did, I worked, 90 hours in the asymptomatic testing. That was also made up of a lot of volunteers, but also contract nurses, and nurses who were part of the nursing department. The volumes there were really high, and I will say that was probably the most physically demanding part of my work during the covid response, especially that period from Thanksgiving until New Year's, when there was a lot of travel and/or concerns about contracting the virus during the holidays. I think on one of those days, one nurse would administer about 250 tests during a single shift, and that included sitting them down, performing the swab, and then cleaning down the room, because we are wiping everything down at that time, and so your hands were cracked and dry. It was a tough job!

Lyons: So, when you do the [test], which one did you prefer to do? You had the two different kinds. Can you tell us a little about the different kinds of tests the nasal swab and the saliva test?

Cox: So, for the saliva there was not a whole lot to it from a clinical standpoint, because it was self-administered by the employee. You would only give a brief instruction and then you would actually send the employee into a room, and then they would do their thing and they would come out, you would make sure everything [is fine]. For the the nasal swab, you are definitely more involved, but it was definitely at the end of the day after those 200 plus, you were really exhausted from that, so, they both had their challenges.

Lyons: So, I noticed, because I go there every time, I noticed that after the vaccine started being given, the mood significantly lightened in the asymptomatic testing area. Did you notice that too and can you tell us how that affected morale around the Clinical Center?

Cox: Yes, so, I was not able to go back to asymptomatic testing once I got involved with the vaccine clinic but, yes, I think, generally, the morale was really high when the vaccine arrived. Actually, working in the vaccine clinic was a really positive clinical experience. Usually when delivering health care, the patient presents to a clinic and is not feeling all that well. However, the vaccine clinic was felt like a win-win every time you saw somebody you knew you were helping them, and they knew that they were not only protecting themselves but protecting others, so, it was an all-around positive experience. Many clinicians absolutely loved being in the vaccine clinic because they were almost always guaranteed a positive outcome every time they came in touch or contact with somebody, which is something they might not always see in their clinical research setting. I thought that was an interesting perspective to hear.

Lyons: Yes, that is pretty neat. So, do you see all these things winding down soon or do you see we are kind of in a pause to see how these last few weeks of no masks outside of NIH have gone?

Cox: Yes, I think the next couple of weeks are going to be really important, but if that goes well, I do think the operations piece of COVID will begin to wind down at some point soon. I do not know how much longer the masking and the screening will take place in the Clinical Center, but there has been some relaxing. It has been relaxed, the “no visitors” policies kind of loosened up a little bit,.

Lyons: And what impact has this experience had on you professionally and personally?

Cox: It’s been powerful, both personally and professionally. It was at times exhausting and stressful, but also very rewarding. I think the screening mission was actually, the most difficult because that was a 24/7 operation, we rotated days, nights, days, nights, every two weeks, and a lot of the PHS officers are also working parents, so, the stress got to be high when we did not know how much longer the operation was going to last. I think that coming together, the NIH community was really rewarding in the vaccine clinic. We had a hundred volunteers step up so I thought that was really awesome and I will never forget that.

Lyons: That is pretty cool, and so my last question is as a person both working and living through the pandemic do you have anything else you'd like to say?

Cox: Not really. I mean, the one learning, I think, is maybe not take things for granted the way we used to and maybe having a stronger appreciation of the individual freedoms that we have and celebrate more things on a daily basis.

Lyons: Wow, well, I would like to thank you for all your hard work, because all the times I went in the Clinical Center, I felt perfectly safe; I was not anxious; it was not like going to the grocery store which was kind of scary. You felt like you were going somewhere where people knew what they were doing, and you were doing it right. So, thank you very much.

Cox: That is good to hear and thank you for everything you and your team are doing too, because this is a really important project.

Lyons: Thank you.