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ADVISORY
COUNCIL ON
RADIATION PROTECTION

**CERTIFIED
TRANSCRIPT**

Bureau of Radiation Control
Hampton Inn & Suites
Tampa Airport Avion Park Westshore
Tampa, Florida 33607

Thursday, May 5, 2022
10:01 a.m. - 3:10 p.m

Reported by
Rita G. Meyer, RDR, CRR, CRC
Realtime Reporter and Notary Public
State of Florida at Large



1 ADVISORY COUNCIL MEMBERS PRESENT:

2 Randy Schenkman, M.D., Retired (Chairman)
3 Mark S. Seddon, M.P., DABR, DABMP (Vice-Chairman)
4 Rebecca McFadden, RT(R)
5 Nicholas Plaxton, M.D.
6 Adam Weaver, MS, CHP
7 Mark Wroblewski
8 Jennifer Peterson, M.D.
9 George Gilbride, R.R.A, R.T.(R) (CT) (ARRT)
10 William "Bill" Atherton, DC, DACBR, CCSP

7

8 FLORIDA DEPARTMENT OF HEALTH STAFF

9 Cynthia Becker, Bureau of Radiation Control
10 James Futch, Bureau of Radiation Control
11 Clark Eldredge, Bureau of Radiation Control
12 Tim Wallace, Radon and Indoor Air Staff
13 Brenda Andrews, Bureau of Radiation Control
14 Kevin Kunder, Bureau of Radiation Control

12

13 Guest Lecturer: Moffitt Cancer Center

13

14 William R. Gibbons, RRPT, CLSO, RSO

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1 RANDY SCHENKMAN: So is everybody ready to get
2 started? We will call this meeting to order. I
3 want to welcome everybody here. Why don't we, as we
4 usually do, go around and everybody introduce
5 themselves. Would you like to start?

6 REBECCA McFADDEN: Okay. Hi, I'm Rebecca
7 McFadden. I'm from Ocala, Florida. I'm currently
8 the radiologic technologist on the committee and I
9 work for Orlando Health as a cardiology system
10 administrator.

11 KEVIN KUNDER: I'm Kevin Kunder. I'm with the
12 Bureau of Radiation Control and I'm the materials
13 administrator.

14 CLARK ELDRIDGE: I'm Clark Eldridge from the
15 Bureau of Radiation Control. I am the radiation
16 machine administrator.

17 BRENDA ANDREWS: I'm Brenda Andrews from
18 Radiation Control.

19 CINDY BECKER: Hi, Cindy Becker from Radiation
20 Control.

21 MARK SEDDON: Mark Seddon. I am the medical
22 physicist representative from Advent Health in
23 Orlando. I'm the RSO and chief diagnostic
24 physicist.

25 RANDY SCHENKMAN: And I'm Randy Schenkman,

1 radiologist, retired, and chairman here.

2 JAMES FUTCH: I'm James Futch, also from
3 Radiation Control. Administrator of the Technology
4 Standards and CE Section where the council falls in
5 the Rad Tech statutes.

6 TIM WALLACE: I'm Tim Wallace. I'm with the
7 Radon and Indoor Air Program which is not in the
8 Bureau of Radiation Control, but it was a long time
9 ago. We're with the Bureau of Environmental Health
10 and I'm one of your presenters today.

11 JENNIFER PETERSON: I'm Jennifer Peterson. I'm
12 a radiation oncologist in Jacksonville, Florida at
13 the Mayo Clinic and this is my first time on the
14 council, so I'm excited to be here.

15 RANDY SCHENKMAN: Welcome.

16 JAMES FUTCH: We'll try not to scare you off
17 today.

18 GEORGE GILBRIDE: I'm George Gilbride. I'm the
19 radiologist assistant on the committee here and I'm
20 retired as well, so --

21 ADAM WEAVER: I'm Adam Weaver. I work at
22 University of South Florida. I'm a health
23 physicist, certified physicist on the board.

24 NICHOLAS PLAXTON. I'm Nicholas Plaxton. I'm a
25 nuclear medicine physician over at Bay Pines VA.

1 JAMES FUTCH: Okay. Just a reminder, everybody
2 to turn off your cell phones. We are going to have
3 a change in the agenda. Brenda has to leave early,
4 so after Cindy gives her talk, we're going to decide
5 when our next meeting will be. We can move that up.
6 And anybody who needs to sign, I guess anybody and
7 everybody who needs to sign for their travel
8 vouchers, to do that and we'll give it to Brenda
9 then instead of at the end of the meeting. Okay?

10 JAMES FUTCH: Brenda, you leave after lunch,
11 right?

12 BRENDA ANDREWS: Yes.

13 JAMES FUTCH: There will be time to talk about
14 that.

15 RANDY SCHENKMAN: Okay. We need approval of
16 the minutes.

17 BRENDA ANDREWS: And just so we know, Joe Danek
18 sent in comments and those comments were
19 incorporated in the final minutes. Those were the
20 only comments I received.

21 RANDY SCHENKMAN: Okay. Does anybody have any
22 other comments about the minutes from the last
23 meeting?

24 ADAM WEAVER: No.

25 JAMES FUTCH: Okay. So can we make a motion to

1 approve?

2 ADAM WEAVER: Motion to approve as corrected.

3 REBECCA McFADDEN: I'll second it.

4 RANDY SCHENKMAN: Second?

5 RANDY SCHENKMAN: All in favor?

6 ALL: Yes.

7 RANDY SCHENKMAN: Any opposed?

8 (No Response)

9 RANDY SCHENKMAN: Okay. We're good. Next we
10 go to Cindy.

11 CINDY BECKER: A very short welcome, but
12 welcome everybody. Updates in the last six months,
13 very few of those. We do have a new budget manager
14 for the Bureau. Magdalena Lakin is our budget
15 manager. She will be visiting us maybe at the next
16 meeting. I want to bring her down just to see what
17 we do here, but also take her over to the lab. So
18 that will be, that will be fun.

19 So we have two new inspectors. One in Fort
20 Myers, Cindy -- another Cindy. It's the first time
21 in almost 35 years we've had Cindy. I'm not sure
22 about that. Yeah. I might have to go with Cynthia
23 or she will. And then we also have Tony is in
24 Sarasota. So they both just started. So if you run
25 into them, be nice at least at first, right? So

1 they'll be there.

2 We have a new MQSA mammography inspector.
3 She's been here a little while with us as an
4 inspector, Judy Atkinson, but she just got certified
5 MQSA. She's in the central area. So those of you
6 who have mammography might see her around.

7 We had the Daytona race in February. We did
8 that one. We also did a couple nuclear power plant
9 exercises. We had the St. Lucie, which was a grade
10 in one, and we had a Turkey Point, which was the
11 first all virtual one. Haven't had feedback yet on
12 that.

13 JAMES FUTCH: Not only the first all virtual,
14 but the first, I think, employ, all three shifts of
15 dose assessment people, operations people
16 simultaneously working different scenarios with
17 different teams out of Miami/Dade, which was very
18 interesting. Interesting for us. I think we ended
19 up overwhelming the folks at the other end. The
20 technical. In fact, at one point they told me to
21 shut up, so --

22 (Laughter)

23 JAMES FUTCH: Not in so many words, but
24 something like that.

25 CLARK ELDRIDGE: It was, it was an interesting

1 experience. I won't say it was the best one I've
2 ever been in.

3 JAMES FUTCH: We do have to give kudos to Neal
4 Battista to having the guts to actually try and do
5 it.

6 CLARK ELDRIDGE: Yes.

7 JAMES FUTCH: Emergency manager from Miami/Dade
8 County.

9 CLARK ELDRIDGE: There seemed to be good
10 successes with it, but at the same time, it was just
11 kind of odd, normally, you know, sitting around the
12 room doing a table top, having a little bit previous
13 experience with those, worked better than this Team
14 system did, but --

15 JAMES FUTCH: And the kind of emergency
16 response exercise that he -- we attempted to do was
17 the more complicated, I won't call it ingestive
18 pathway, but out fifty miles instead of the ten mile
19 one, so it involved some of the dose assessment
20 issues and a lot of the local law enforcement and
21 other folks who know where the schools are and the
22 other facilities that you may have to move separate
23 from the regular population.

24 And I'm not sure Jennifer understands when you
25 say about the Daytona race. We weren't really

1 intending to watch it.

2 JENNIFER PETERSON: I didn't --

3 GEORGE GILBRIDE: They were driving the 24 car.

4 CINDY BECKER: We don't even get to watch it.

5 Are you kidding? No. It's our monitoring and

6 surveillance that we do for what they call PRND.

7 Preventive radiological nuclear detection events.

8 So all the large-scale events that happen in

9 Florida. The Superbowls, the races, inaugurations,

10 several different events. Boat show, air show.

11 JAMES FUTCH: Anything that would be a target

12 for something trying to use Radon.

13 RANDY SCHENKMAN: Are you going to the car

14 races in Miami this weekend?

15 CINDY BECKER: No.

16 RANDY SCHENKMAN: No?

17 CINDY BECKER: I guess it's not a big enough

18 event on the scale of things.

19 MARK SEDDON: Who determines that criteria?

20 RANDY SCHENKMAN: This is going to be enormous.

21 CINDY BECKER: Enormous.

22 GEORGE GILBRIDE: So you cover the bowl games

23 and stuff here in Florida as well?

24 JAMES FUTCH: We don't do everything.

25 CINDY BECKER: We did Tampa Bowl, Miami Bowl.

1 JAMES FUTCH: The way it works is the Federal
2 government has a rating criteria. And strangely
3 enough, it has an acronym and a bunch of numbers
4 associated with it. I won't go into it because I
5 can't remember what they mean. But there's a rating
6 system and if it's something like a presidential
7 debate or something like that that they hold in
8 Florida, they'll bring the federal assets down who
9 actually trained us a long time ago. And if it's
10 anything less than that, at this point, Florida has
11 a relationship that if anyone's asked to do that,
12 we'll go and assist them.

13 Doing this as many years as we've done it, the
14 local law enforcement folks have been trained, often
15 by us, to understand how to use radiation detection
16 assets. So we're filling in where we need to. And,
17 and usually, we're invited. And if we don't have to
18 go, it's perfectly fine.

19 You'd think that doing the Daytona 500 for how
20 many years? 2007 to now, 14 years, you wouldn't run
21 out of staff who just want to go and volunteer for,
22 you know, a week-long event. We've long since
23 exhausted all the NASCAR fans, all of the --
24 everyone else. And it's actually getting hard for
25 John to get volunteers. We usually take a crew of

1 seven to ten to Daytona.

2 CINDY BECKER: Yeah.

3 RANDY SCHENKMAN: I'm surprised you're not
4 coming to Miami.

5 JAMES FUTCH: Well, probably the right people
6 just have to ask. And we can't force ourselves on
7 the local law enforcement if they don't want help
8 and assistance.

9 RANDY SCHENKMAN: Interesting.

10 JAMES FUTCH: It doesn't work out well. They
11 carry guns; we don't.

12 RANDY SCHENKMAN: I understand that. I'm just
13 surprised.

14 CLARK ELDRIDGE: But we are asked to go up to a
15 suspicious package and say, tell us about that. So,
16 you know.

17 CINDY BECKER: Then they might want you to show
18 up.

19 JAMES FUTCH: And actually, one of our
20 administrators who's not here today, John
21 Williamson, is located in Orlando. Has the
22 radiation, radio chemistry lab, nonemergency
23 response and the PRND program. We brought him here
24 to the council two or three, the last one with some
25 gear he demonstrated.

1 RANDY SCHENKMAN: Last time.

2 MARK SEDDON: Last time.

3 JAMES FUTCH: And then I think at least twice
4 before that going back a number of years.

5 CINDY BECKER: Right.

6 ADAM WEAVER: And don't some police vehicles
7 just travel around the state have detection
8 equipment always on?

9 JAMES FUTCH: A lot of the motor carrier
10 compliance part of FHP, the ones who stop the big
11 rigs and check the weights and things like that, a
12 lot of their vehicles do. Large volume sodium
13 iodine detectors, four by four by sixteen, and
14 usually two or four sets. Occasionally neutron
15 detection, too. All of the -- not all. I shouldn't
16 say that. A number of the bomb squads, EOD people
17 in the Sheriff's offices have smaller detectors that
18 are able to not just detect gamma like normal
19 equipment, but also analyze the spectrum and
20 identify the isotope.

21 In fact, we were testing one of the first FHP
22 systems, probably in, in 2010, I think. And you
23 know, the little nuclear medicine calibration
24 standards, looks like a little vial of latex, 100
25 microcuries.

1 ADAM WEAVER: Vials I think they still call
2 them.

3 JAMES FUTCH: I had one of those. They were
4 doing acceptance testing and wanted us to look at a
5 couple manufacturers and help them figure out which
6 one to buy.

7 My take away from that is, the one they ended
8 up buying, that little vial, they could be going
9 down the road at 90 miles an hour from two lanes of
10 traffic away, not only would it see a blip in the
11 gamma background, but it would I.D. the isotope. So
12 it's a pretty spiffy system.

13 RANDY SCHENKMAN: Wow.

14 GEORGE GILBRIDE: That's impressive.

15 MARK SEDDON: I think those systems, it's hard
16 to read because it's a small readout on those little
17 hand outs.

18 JAMES FUTCH: It's small, for sure.

19 NICHOLAS PLAXTON: That last one you showed us
20 that connects to your cell phones.

21 JAMES FUTCH: Yeah, that was the backpack,
22 right? The backpack system?

23 REBECCA McFADDEN: That was pretty neat.

24 JAMES FUTCH: That one had two, three by three
25 crystals in it and a whole bunch of Helium-3 for

1 neutron detection. Those are pretty nice.

2 CINDY BECKER: So we have another race coming
3 up. Coke 400 in July.

4 CLARK ELDRIDGE: August.

5 JAMES FUTCH: Hot.

6 CINDY BECKER: I don't know if there's, in the
7 next six months, if there's anything after that.
8 There might be the boat show again, which last time,
9 it --

10 JAMES FUTCH: Fort Lauderdale?

11 CINDY BECKER: Yeah, the Fort Lauderdale boat
12 show. They call it a boat show. It's really
13 yachts. Million dollar yachts, but that's an
14 international.

15 JAMES FUTCH: Somebody mentioned Formula 1. Is
16 that coming to Miami?

17 RANDY SCHENKMAN: That's the one that's coming
18 next week.

19 JAMES FUTCH: Yeah, if I'd have known this, I
20 would've volunteered for that one because I like
21 Formula 1.

22 RANDY SCHENKMAN: Oh, yeah. This is going to
23 be amazing.

24 ADAM WEAVER: There's going to be a lot of
25 people.

1 RANDY SCHENKMAN: And there's a lot of people
2 coming, so I'm surprised they didn't --

3 MARK SEDDON: That's true. Didn't trigger
4 the --

5 RANDY SCHENKMAN: -- ask you guys. Nobody
6 asked.

7 JAMES FUTCH: Miami is -- in the Federal
8 government scheme of Homeland Security, Miami became
9 a secure city a year or two ago, which means they
10 have their own funding stream direct from Homeland
11 Security. So when that happens, I've seen this
12 happen in different places around the country where
13 I teach. The local region becomes much more
14 self-reliant and much, much -- doesn't need to go
15 outside their region as often for assistance and
16 help. Miami was kind of a little bit like that to
17 begin with.

18 RANDY SCHENKMAN: Have you guys ever found
19 anything at these events?

20 JAMES FUTCH: Let's see. Countless nuclear
21 medicine patients.

22 CINDY BECKER: Patients. Lots of patients.

23 JAMES FUTCH: We detained a contaminated
24 physician who didn't know he was, who was working at
25 Daytona in one of the charity, like the school hot

1 dog whatever.

2 CLARK ELDRIDGE: Hot dog thing.

3 JAMES FUTCH: And so they tracked him down and
4 I'm sure some education took place.

5 NICHOLAS PLAXTON: What was he contaminated
6 with?

7 JAMES FUTCH: He was like, either Tech or
8 Thallium. It was back during when we had the
9 shortage of the Tech.

10 CLARK ELDRIDGE: I thought it was Iodine.

11 JAMES FUTCH: Was it Iodine?

12 CLARK ELDRIDGE: Yeah. That one one of the
13 things. It was the person serving hot dogs.

14 ADAM WEAVER: That was a good mix.

15 JAMES FUTCH: Well, that didn't take long or
16 two.

17 GEORGE GILBRIDE: Get a hot dog, get a scan.

18 JAMES FUTCH: How would you like to be the
19 physician who gets caught by the Department of
20 Health, not only when you're contaminated when you
21 shouldn't be, but you're serving hot dogs for the
22 children.

23 NICHOLAS PLAXTON: Yeah. For charity.

24 JAMES FUTCH: That would be a little
25 embarrassing for the Radiation Safety Committee,

1 right?

2 RANDY SCHENKMAN: I would say.

3 NICHOLAS PLAXTON: That was a nuclear medicine
4 physician? You don't remember?

5 CLARK ELDRIDGE: The person was under
6 treatment.

7 JAMES FUTCH: He definitely had a reason to --

8 ADAM WEAVER: Oh, he was in treatment.

9 CLARK ELDRIDGE: He was in treatment.

10 MARK SEDDON: It makes sense.

11 NICHOLAS PLAXTON: Got it.

12 CLARK ELDRIDGE: He was a patient who was not
13 supposed to be doing what they were doing against
14 the advice, the standards for --

15 ADAM WEAVER: He didn't read the exit
16 instructions.

17 MARK SEDDON: Patient instructions weren't
18 followed.

19 RANDY SCHENKMAN: Or somebody didn't give them
20 to him.

21 MARK SEDDON: That, too.

22 JAMES FUTCH: We find nuclear medicine
23 patients, different facilities, lots of either
24 naturally occurring material in certain parts of the
25 race track ones.

1 CLARK ELDRIDGE: Yeah. Race tracks have got
2 several spots that are hot.

3 ADAM WEAVER: Warm?

4 CLARK ELDRIDGE: Yeah.

5 CINDY BECKER: The women's bathroom.

6 JAMES FUTCH: There was a gentleman who came to
7 the Superbowl in 2009, I think it was in Tampa.
8 It's my first Superbowl. And he had -- we didn't
9 know. Cindy was working the gate with a backpack.
10 And we had the serpentine lines down the street on
11 Dale Mabry inside the gate, where several of us were
12 arrayed with smaller devices. So she gave the
13 signal and said there was a gamma signal, so we
14 would figure out who it was in the crowd and pull
15 him out of the crowd.

16 By the way, the law enforcement guy was well
17 downstream of the metal detectors. And this
18 gentleman who we find out later had just had his
19 thyroid ablated the day before. He was, he was
20 smoking. When we went to -- we didn't have any
21 trouble with every detector picking him up, as I
22 recall. The opposite problem occurred which was, we
23 couldn't use the grid and it kept swamping the
24 detector and we had a whole bunch of dead time. So
25 I think we had to back up to, like, three meters

1 away from the guy to be able to, to read the spectra
2 and figure out what he said was true. Either that
3 or he's not the brightest terrorist in the world.

4 (Laughter)

5 CINDY BECKER: They've all been really
6 compliant when they're stopped by us instead of law
7 enforcement is probably a bit more threatening
8 anyway, yes.

9 So the only other updates, we've got some
10 medical events that Clark usually talks about that's
11 happened in the last six months, so I don't want to
12 steal his thunder.

13 JAMES FUTCH: 2:15 this afternoon.

14 ADAM WEAVER: After lunch.

15 CINDY BECKER: I don't know if Brenda, you were
16 going to jump in and do anything with the travel.

17 BRENDA ANDREWS: Well, before you are your
18 travel authorizations and the two sign-in sheets
19 where I do your reimbursements.

20 All of those just have to be signed and dated
21 and then returned to me before lunch or during
22 lunch. Some of you have already turned those in.
23 So if I could get those back, then I can do your
24 reimbursement when I get back to Tallahassee.

25 The other part that we normally do in the

1 afternoon is decide on the next meeting. And
2 because Cindy and I both have a meeting around 2:15,
3 and that's going to interfere with me being able to
4 do that in the afternoon, we're going to do it now.
5 So I have -- right behind your agenda, there's
6 calendars for September, October and November for us
7 to discuss the best date for the next meeting.

8 JAMES FUTCH: Traditionally, we do this toward
9 the end of September or the beginning of October.

10 BRENDA ANDREWS: Mm-hmm.

11 JAMES FUTCH: And also by tradition, we usually
12 do it either on Tuesdays or Thursdays. And I think
13 the past couple meetings, the members have preferred
14 Thursdays, but there's nothing hard in stone, I
15 think, about that. And we also don't have many
16 members present.

17 So I think usually we look for the -- any
18 society meetings, professional meetings, vacations,
19 kids are in school. Football's in season, did I
20 mention? No Saturdays.

21 RANDY SCHENKMAN: So does anybody have a
22 preference for the end of September or beginning of
23 October?

24 JAMES FUTCH: The 22nd, Thursday, or the 20th,
25 Tuesday? September.

1 BRENDA ANDREWS: This is in September?

2 ADAM WEAVER: September.

3 JENNIFER PETERSON: I like both of those.

4 REBECCA McFADDEN: I like Thursdays. The 22nd.

5 RANDY SCHENKMAN: Anybody else have anything?

6 So do you think Thursday?

7 ADAM WEAVER: Thursday, the 22nd?

8 JAMES FUTCH: Thursday, the 22nd?

9 BRENDA ANDREWS: Yes, we can do that. And what
10 I will do is send it out so that all the council
11 members, the ones that are not here today, will see
12 that date and see if that works for them and give
13 you all feedback.

14 RANDY SCHENKMAN: Okay. That sounds good.

15 Okay. Tim? Okay. So this is Tim Wallace and
16 he's going to update us on Radon.

17 JIM WALLACE: When was the last time you were
18 presented on Radon?

19 JAMES FUTCH: Ever? You don't count, Adam.

20 ADAM WEAVER: I don't count. Sorry.

21 JIM WALLACE: See if this works. All right.

22 Yeah. So everyone here has heard about Radon, of
23 course, right? But how many of you have tested your
24 home for Radon? Can I see a show of hands?

25 (Show of Hands)

1 JIM WALLACE: All riht. I see about half of
2 you so far. How about you in the back? Test your
3 home for Radon? No? All right. Yeah, in the back.

4 All right. So I'm Tim Wallace. I'm a
5 registered sanitarian, an old school health
6 inspector and a certified environmental health
7 professional. I come from the Bureau of Radiation
8 Control -- actually, no. I'm sorry. The Radon
9 program started in the Bureau of Radiation Control,
10 and it may have been a name before that. I think --
11 oh, I got it right here. It actually was called, at
12 some point in time, Central Operations Services
13 Radiological Health Services, right?

14 JAMES FUTCH: Yeah.

15 JIM WALLACE: Probably long before any of us
16 were here.

17 JAMES FUTCH: I think it was part of John
18 Williamson's environmental section.

19 JIM WALLACE: Around 1992, the Radon program
20 was separated from the Bureau of Radiation Control
21 in the Department of Health and Rehabilitative
22 Services, and they were combined with an indoor air
23 professional and Florida Clean Indoor Air Act team.
24 And we were put in the, in that time, the Bureau of
25 Environmental Toxicology. And there's been a number

1 of reorganizations over time. And we are currently
2 with the Bureau of Environmental Health and Public
3 Health Toxicology section.

4 Michelle Dale is our administrator. Patrick
5 Connor and Alex Boudeau (ph) are technical
6 specialists and also, this presentation was also
7 created with Joseph Kidder who does our
8 certification program and our webmaster and a lot of
9 general Radon stuff. I was hired on, basically, to
10 do indoor air quality for the program.

11 So what is Radon? We all know about this. We
12 can probably skip through that pretty quick. Why do
13 we care about it? Some Florida issues; what
14 regulations do we have? How does it enter buildings
15 and behave? How do we measure it? What are the
16 measurement protocols and how do you fix Radon in
17 buildings and investigate it?

18 So first of all, what is Radon? Naturally
19 occurring, noble gas. You can't see it, smell it or
20 taste it, but since it's radioactive, we're
21 concerned about it. It's from the radiation --
22 radiological decay series coming from uranium and
23 radium. We have an inexhaustible supply of it in
24 the plants below us, the rocks and the soil. But
25 I'm going to skip through this ionizing radiation,

1 alpha radiation coming off the atom. And this is
2 the one that we're concerned about inside our
3 bodies.

4 We measure Radon in picocuries per liter of air
5 as opposed to the international system, which is
6 becquerels. And basically, we have about 2.6 liters
7 of air in our lungs and, you know, about 3.2 million
8 radioactive decays occur per year in our lungs and
9 that's just from Radon alone. It's not from the
10 Radon decay products.

11 So you can think that there's a lot of stuff.
12 And the way I tell people, the general lay public
13 about this is this, you know, it's a lung cancer
14 lottery and the more Radon you're exposed to, the
15 more tickets you have to that lottery. You don't
16 want to win that.

17 So when we look at Radon at the action level
18 that was established by the Environmental Protection
19 Agency, I believe that was in 1988, is that right,
20 Clark? Clark is also a person who's been in the
21 Radon program for quite some time. Since what, '88?

22 CLARK ELDRIDGE: I was there for 28 years.

23 JIM WALLACE: And I believe this is 1988 when
24 this was established by the Environmental Protection
25 Agency as an action level. Not necessarily free of

1 risk, but a level that we had a compromise between
2 risk and benefits and costs. But at four picocuries
3 per liter, looking at the annual dose, we're looking
4 at it at about 63 percent of the annual dose of all
5 causes. And this is -- came from Report 19 -- no,
6 170, from NCRP. The National Council -- I have
7 to -- National Council on Radiation Protection and
8 Measurements. And they have these online. And
9 we've adopted this based on this and also Beir VI
10 report from the National Research Council.

11 So if we were to promote Radon resistant
12 policies construction and say, let's get it down to
13 the average indoor level of 1.3 picocuries per
14 liter. So the average across the nation, that we
15 can reduce that down to about 37 percent of our
16 annual radiation dose. However, if we were actually
17 to get it down to the federal goals, which are no
18 higher than outdoors, then the national outside
19 average is .4 picocuries per liter. So if we were
20 able to get it down to that, we can really shrink it
21 down quite a bit. And the annual dose is quite low.
22 It's almost half of -- actually, it's more than
23 half.

24 Now, this is, you know, this is a lofty goal,
25 but this is what is put in the 1988 Federal Radon, I

1 want to say Mitigation Act, but I'm not sure.

2 CLARK ELDRIDGE: Abatement.

3 JIM WALLACE: Radon Abatement Act by Congress.

4 So this is the -- but you know, this is kind of
5 interesting. While this is an average and Clark
6 did, Clark and Mike Phillips did a lot of research
7 on this in the Ocala area where they were finding
8 weird spikes of high levels of Radon outdoors as
9 high as -- what was the level?

10 CLARK ELDRIDGE: 30.

11 JIM WALLACE: 30 picocuries per liter spikes in
12 the Ocala area outdoors. Mainly at night, right?

13 CLARK ELDRIDGE: Right. Basically around
14 midnight, when the air settled down and the
15 temperature inversion would kick in, the Radon
16 levels near the ground would start increasing from
17 normal exfiltration out of the ground and there
18 would be no dilution to mix. So starting at
19 midnight, going to about five a.m. in the morning,
20 it would rise. Normally it would peak around 10 to
21 11, 12 picocuries per liter. Then one time, this
22 was -- it went as high as 30. And this, we did
23 this -- we went down there once a quarter for five
24 quarters and placed outdoor monitors in one
25 particular neighborhood. It was also a slightly

1 bowl shaped neighborhood. There was sort of a
2 historical sink there that had been filled in.

3 We were doing soil borings with hand augers to
4 do some sampling and it was near the top. The soil
5 was maybe six inches deep before you hit a very
6 thick gray clay that you just couldn't cut through.
7 At the bottom of the area, we went 16 feet down on a
8 hand auger, cut through butter is how easy the dirt
9 was, which is black dirt all the way down to the
10 extent we could with the hand auger we had.

11 JIM WALLACE: And you know, it's kind of
12 interesting that the national goals are no higher
13 than outdoors. But the -- kind of a long way to go
14 if our action level by the EPA is four, which is ten
15 times that.

16 CLARK ELDRIDGE: One other thing. We did some
17 modeling on that Ocala location. And if you looked
18 at average inful -- exfiltration rates, breathing
19 rates of buildings, that it, on average, even though
20 the spikes were, tend to be even as high as 35
21 picocuries per liter, it wouldn't increase the
22 indoor average rate on level more than one picocurie
23 per liter if you were just looking at the natural
24 air exchange and not infiltration of Radon from the
25 soil. Just breathing through the walls and the

1 windows. The normal windows closed; AC running.

2 JIM WALLACE: While I was preparing for this
3 presentation, it dawned on me that this slide is
4 woefully inadequate. And I have one slide for Radon
5 history. And the history is very rich; varied.
6 There's a lot of information that goes back
7 centuries. And -- but this is the one thing that
8 kind of brought this problem to the public's mind as
9 a public health issue. It also convinced the
10 Environmental Protection Agency that this was a
11 nationwide problem, not just a problem in Florida in
12 phosphate lands. And so that's going back to
13 history in our files, we have reports about studies
14 of Radon daughter concentrations and structures in
15 Polk and Hillsborough Counties, which was a report
16 from January 1978. This was 1984.

17 And they also were looking at it in Colorado
18 and I believe it was tailings from uranium mines,
19 homes built on those, so they were looking at that
20 there as well.

21 But this is what brought it into the public's
22 eye, all the newspapers, EPA. I mean, it was a, it
23 was quite a big study. They went on from this to
24 study it elsewhere across Florida.

25 There's another report here from EPA,

1 Demonstration of Remedial Techniques against Radon
2 in Houses in Florida and Phosphate Lands. And this
3 is from July 1983. Before Stanley Watras.

4 So who is Stanley Watras? He was a worker at a
5 power plant. The Limerick Power Plant in
6 Pennsylvania. And they were -- this power plant was
7 under construction at the time. And he was actually
8 going to work, leaving as they were setting up the
9 portal monitors to monitor for contamination. He
10 was setting them off. They would laugh at him.
11 They'd make fun of him. They'd say, hey, you're
12 crazy. They didn't know what was going on. No one
13 could explain it because they didn't have any
14 nuclear materials at the site at the time.

15 But then he would actually set it off going to
16 work as well. Not just leaving, but going to work.
17 So he made a lot of inquiries to his employer and at
18 first, they kind of blew him off. But eventually,
19 he kind of went up the chain and says, I'd like to
20 know, we need some help. I need your help to look
21 into this.

22 So they sent some technicians to his house and
23 they found very, very, very high levels of Radon in
24 the house. 4400 picocuries per liter; 22 working
25 level. And this kind of set off the radiation, kind

1 of the alarm bells and they brought in the
2 Department of the Environmental Protection or the
3 equivalent in Pennsylvania, who also called it the
4 EPA, and they started looking at this widespread.
5 They went next door and the house was less than one
6 picocuries per liter. A lot of variation going on.

7 They eventually did after, you know, working on
8 this, looking at some of the stuff from Florida,
9 Colorado, and they actually fixed this house and got
10 it below four fairly easily. It did cost about
11 \$32,000 at the time to fix it. But he moved back in
12 to this house after a time. But that was kind of a
13 watershed moment.

14 So why do we care about Radon? It's the second
15 leading cause of lung cancer deaths in the United
16 States. About 21,000 estimated annual deaths from
17 the EPA. The number one cause of lung cancer for
18 nonsmokers. If you look at, basically, the total
19 number of lung cancers, it's estimated by in the
20 Bier VI report, to be about 14 percent of the total.

21 Now, this risk can be minimized. And it's felt
22 that all Radon-induced lung cancers deaths are
23 preventible.

24 Now, there's a number here, about \$6.8 billion
25 of lung cancer mortality. I was looking into this

1 number. I'm trying to figure out how did we
2 calculate that? And I will tell you that I found
3 some interesting things here.

4 So updating this, I was looking at the
5 Congressional report, estimated cost for lung cancer
6 care. For 2022, that's about \$23.8 billion. So 14
7 percent of that would be about \$3.3 billion a year.
8 Of course, the problem with lung cancer is it has
9 one of the lowest survival rates of most of the
10 cancers out there.

11 Also, if you look at lost productivity cost,
12 there's another study that, that kind of implied
13 about \$5.46 billion of lost productivity for these
14 deaths. People no longer producing in the economy.

15 So as we know from, you know, the breakdown of
16 uranium, there is a long decay chain. And the fast
17 ones are the blue ones here. Radon has half-life of
18 3.8 days. It's a gas. It's basically escaping from
19 the soil and the rock below us.

20 And then it -- there's a couple of Alpha
21 emitters, Polonium-218, Polonium-214, that have very
22 fast half lives, short half lives, and these are the
23 ones that are producing the Alpha radiation that
24 we're concerned about. And if it's inside your
25 lungs, it's not good.

1 So when we're talking about Alpha radiation,
2 we're talking about a Helium nucleus being injected
3 high speed, lots of energy. But the Radon decay
4 products, things that it turns into, the Poloniums,
5 for example, they don't act like gasses any longer.
6 They act more like aerosols. And they arc. They
7 have charges and they're attracted to surfaces and
8 dust. And this is really how that Stanley Watras
9 was -- how he was showing up at work, you know, hot,
10 as you said, smoking, is because of the Radon decay
11 products that were plating out on his beard, on his
12 clothing from his house.

13 CLARK ELDRIDGE: Also if you remember at that
14 time, most of your clothing was polyester. So a lot
15 more reactive with charge particles.

16 JIM WALLACE: Right. And you know, if it's
17 attracted to dust in the air, then you breathe in
18 that dust, then that dust does collect in your lungs
19 through the mucus and the ciliary action and then
20 it's going through the radioactive chain in your
21 body. In your lungs.

22 We don't have any skin in our lungs. There's
23 nothing to stop that Alpha radiation, although
24 outside wouldn't be an issue.

25 So I'm -- I'm going to skip this part. And we

1 kind of know about the Alpha radiation in our lung
2 cells doing damage, either directly or indirectly,
3 through ionizing radiation through the cytoplasm
4 itself, or actually direct impacts on the DNA. That
5 DNA damage might be repaired. No big deal. That
6 cell may die. Still not a big deal. You can
7 replace cells. But if those cells are damaged in
8 such a way that they can't put themselves back
9 together correctly and we have a mutant growth, then
10 we're having the potential for cancer.

11 And this is a risk over time of millions and
12 millions of disintegrations in our lungs and the
13 Alpha radiation. So that's what we're looking at.
14 We're not just looking at an hour or day or a week.
15 We're looking at years of exposure. And long term
16 is more interesting to us.

17 So when we look at risk in terms of cancer
18 related to Radon versus pesticides in foods or
19 outdoor air pollutants or hazardous waste sites or
20 pesticides, Radon is really up there in the 21,000
21 lung cancer deaths per year category. And we look
22 at causes of death as opposed to drunk driving,
23 drowning or second-hand smoke, which is around
24 3,000, or home fires, is still quite high.

25 And there's been some renewed interest, you

1 know, there's a lot of interest in the 80s and 90s,
2 perhaps even the 70s -- kind of spotty in the 70s.
3 But recently, around 2018, there was -- sometimes I
4 think the media, they kind of find a story and they
5 go out and replicate it elsewhere because, hey, they
6 did this in Minnesota. Let's do this more in
7 Florida. So they did. So they started pestering
8 schools, like why are there no results for testing
9 of Radon in your schools? We're going to get to
10 this later, why that's important.

11 And they did a whole week-long series of
12 pestering the school administrations. Why don't you
13 care about your children and why are there no
14 testing results?

15 And then I believe eventually, there was, you
16 know, lawmakers say, hey, this is a big deal. We're
17 going to do something about it, and then you never
18 hear from them again.

19 At this point, other local stations in the
20 Tampa area were picking it up because it was making
21 a lot of headway and drawing a lot of attention.
22 Then other places in the state were then also seeing
23 it and doing their own little stories. So sometimes
24 this does pick up a lot of attention.

25 There was an apartment complex in Palm Beach

1 County that did have a lot of interest in Radon.
2 They were concerned that they weren't told about the
3 Radon levels. We've had that in other parts of the
4 state as well.

5 More recently, FSU was in the news because the
6 faculty had done their own Radon testing. Had done
7 mold testing and they were concerned because they
8 saw, you know, people had cancer, different types,
9 and they were concerned about it. So they brought
10 it to the attention of management and then also to a
11 local political reporter and he put it online and
12 then it exploded from there. And they eventually,
13 pretty quickly they ended up closing this particular
14 building due to their concerns. And they went ahead
15 and did a lot of Radon testing. But this time, they
16 used one of our certified Radon professionals so
17 that they could rely on the results. And Joseph was
18 directly involved and kind of did a walk through
19 with them on this.

20 So we were consulted and we were asked about,
21 questions about mold and Radon, and we provided our
22 advice.

23 They're not required to test, though, in a
24 university setting. So that -- under state law.
25 Now, K through 12 you are, but not in universities.

1 So it is classified as carcinogen by the World
2 Health Organization -- International Agency for
3 Research on Cancer. By the Department of Health and
4 Human Services. By the Environmental Protection
5 Agency. The recommendation, and even the Surgeon
6 Generals, the U.S. Surgeon General says test all
7 homes for Radon. And again, the action levels is at
8 greater, at or above 4 picocuries per liter. WHO
9 has a slightly different number at 2.7 picocuries
10 per liter. That's the World Health Organization.

11 And then ALARA standards, set in the Florida
12 Administrative Code, are as low as reasonably
13 achievable ALARA. And Health Canada has a higher
14 number of 5, at or above 5.4 picocuries per liter.

15 So in Florida, there was early, I believe this
16 was in the 80s, Clark, or the early 90s, they
17 developed a map of Radon potential. This was kind
18 of designed for, if I remember correctly, to help
19 with deciding about requiring Radon -- you know,
20 building codes and trying to require Radon-resistant
21 construction. So they did identify some Zone 2
22 counties in Florida. Most of them were developed as
23 Zone 3, lower potential. But no Zone 1s.

24 But we were looking at our own data, because we
25 certify professionals to do Radon testing. And

1 they're required to report their data to us and
2 we've kind of found more information about this.

3 But not every, every county has been tested
4 that we have data for. And depending on the region,
5 the levels are either, you know, between 1 and 70
6 percent of buildings tested have elevated Radon.
7 And we have found unusual situations where Radon
8 levels are high in highrise buildings, 23 floors up
9 in a condominium. When you think, well, hey,
10 where's this coming from? It's obviously not the
11 ground, right? And Clark was involved with
12 investigation on that as well. And I think the
13 determination was building materials, right?

14 CLARK ELDRIDGE: Highrise buildings, with
15 energy efficiency standards and hurricane wind load
16 standards for penetration requirements on buildings,
17 you're basically living in a concrete cave that high
18 above ground with air exchange rates less than 20th
19 of an air exchange per hour, where actually another
20 standard suggests it should be more like a third for
21 contaminant control and indoor air quality, your air
22 exchange rates.

23 And so it's just that it's a tipping point.
24 You just get the building built so tight that the
25 amount that's coming out of your concrete or other

1 earthy materials in the building is enough to raise
2 the Radon level above action level. I think the
3 highest we've had was a 26 -- that was -- yeah. 26,
4 at one time when I was looking at the data, the
5 highest Radon level we had in a highrise condominium
6 was about 26 picocuries per liter.

7 JIM WALLACE: So this is a map and you also see
8 it here on our windsail or flier, about where is our
9 Radon data from the certified Radon professionals.
10 You see in Leon County, we had a little cluster
11 there. Ocala, Gainesville area. All along the east
12 coast. And then, of course, in the central west
13 coast region. And, of course, Polk County is right
14 there. A lot of phosphate lands in here. Naturally
15 occurring radium in the soil.

16 CLARK ELDRIDGE: It pretty much follows the
17 population of Florida. Where the higher population
18 is, you'll have higher testing.

19 JIM WALLACE: So you'll notice the yellow there
20 is more testing is needed. There's just not a lot
21 of information in these areas and so we can't really
22 categorize whether they have high or low risk. But
23 we've also color coded in terms of 10 percent, 20
24 percent, 20 percent to 25 percent, 25 to 33 percent,
25 greater than 33 percent. So greater than 33 percent

1 are these one, two, three, four, five, counties, I
2 believe.

3 Here's a look at some of the data. We were
4 looking at the data from 2007. And in 2007, we had
5 a total of -- in these ten counties, we had a total
6 of 70,000 test results and about 21 percent, 21.1
7 percent of those levels were at or above the action
8 level of 4 picocuries per liter. Again, it's not a
9 safe level. It's kind of a cost benefit analysis
10 result. And of course, if you want to get it down
11 to ALARA, then probably one hundred percent of these
12 are over outdoor levels or close to it, would be my
13 estimation.

14 Now, if you look at an updated, freshen these
15 numbers in 2021, we're looking at 265,000 results.
16 And the numbers are kind of steady. It went up
17 about .7 percent that are over. But our leaders are
18 going to be in this case, Marion County at 42.9
19 percent; Alachua and Broward as two and three.

20 But, you know, another interesting thing is
21 there's not -- there's some counties that don't have
22 a lot of testing at all. Like Hardee went from 3 to
23 20 and their numbers dropped by nearly half in terms
24 of over. But that's such a small number, sample.
25 Sample size.

1 And Columbia is also another one that also had
2 just a, you know, twice, but that's really a small
3 number. Collier really jumped up. They went from
4 8,000 to 53,000 test. Did you have a comment,
5 Clark?

6 CLARK ELDRIDGE: Yeah. One thing about Collier
7 and Broward is that I don't -- Broward, I'm assuming
8 it might be the same for Collier -- is the Radon
9 result, elevated Radon result is primarily in
10 multifamily construction, apartment buildings, you
11 know, and condos. Since Broward County, about 50
12 percent of the residences or more are in
13 multifamily, and the -- at one point, the elevated
14 Radon rates of those was around 40 percent. So 40
15 times 50 gives you 20 percent of the housing there
16 elevated in Broward.

17 So -- but it's been a while since I looked at
18 that data, so I can't remember exactly where the 31
19 and 29 is coming from, but again, it was, almost all
20 of it was in multifamily construction.

21 JIM WALLACE: Does anyone have any questions
22 about this data here? And again, this is from our
23 certified Radon professionals.

24 JAMES FUTCH: Tim, I had a question or comment.

25 JIM WALLACE: Go ahead.

1 JAMES FUTCH: You or Clark. You were talking
2 before about the building codes and the newer
3 construction acting to retain more of the air and
4 less airflow.

5 So in a place like Miami/Dade, where you have
6 the hurricane standards and the rest of that, could
7 that be a factor in perhaps, and to compare them to,
8 like, some place up in the middle of Florida, for
9 example? Same kind of type of building but one's
10 built to the Miami, you know, kind of standards and
11 one's not. Could that contribute to the difference
12 in the -- all other things being equal?

13 CLARK ELDRIDGE: For the multifamily?

14 JAMES FUTCH: Yeah.

15 CLARK ELDRIDGE: Very well.

16 JIM WALLACE: So as far as the state Radon
17 program was started in 1988 officially. Even though
18 there was a lot of action in the 1970s, up until
19 1988 by the Department of Health and Rehabilitative
20 Services, HRS, the predecessor of the Department of
21 Health, then it was codifying the law and there were
22 some aspects of it.

23 Consumer protection, we certified individuals
24 and businesses. Provide either measurement or
25 mitigation, which is also fixing homes or buildings.

1 Public information and education, like I'm
2 doing today. Going out and reaching out to
3 professionals and the public and saying, hey, test
4 your home for Radon, please.

5 Radon data compilation. So we provide -- we
6 collect the data from these professionals. And
7 also, there's a mandatory testing of licensed
8 facilities in Florida. K through 12 schools. And
9 24-hour care facilities that are licensed, operated
10 or regulated by the Florida -- by the State of
11 Florida.

12 So you know, nursing homes, daycare centers,
13 childcare centers, assisted living facilities,
14 detention facilities, they're all required to
15 provide Radon testing to us. We have more details
16 here.

17 And we also have a requirement in the statute
18 that we develop Radon standards and protocols. And
19 those have been developed in our administrative
20 code, Florida Administrative Code. And there's a
21 requirement for real estate disclosure, not testing.
22 You just have to have this statement in a document
23 in a real estate transaction. Either through sales
24 or rental contracts.

25 And of course, there are other parts of the

1 statutes that deal with indoor air quality, kind of
2 what I focus on mostly.

3 So this is the statute, Chapter 404 -- Section
4 404.056. That's where you find it. And the
5 Administrative Code is 64E-5, Parts X and XII. And
6 then from that is the authorized mandatory testing
7 protocol document, which spells out how mandatory
8 facilities, how they test for it and also how the
9 certify professionals have to test.

10 RANDY SCHENKMAN: Do they test at hospitals?
11 Is that required?

12 CLARK ELDRIDGE: Hospitals are required.

13 RANDY SCHENKMAN: They are? Good.

14 CLARK ELDRIDGE: Generally, there's only one
15 hospital that I remember any -- well, two that had
16 any questions. One in Miami. We think it was
17 because it was next to the nuclear med -- the
18 testing results, and so there was some -- why can't
19 I say the name of it. I can't say the -- it was
20 inhalation location for inhalation therapy and we
21 don't -- we think the testing equipment couldn't
22 differentiate.

23 The other one was in Ocala. And in this case,
24 the Radon levels were three, which you think about
25 the ventilation rate in a hospital and the

1 requirements for ventilation. The fact there was
2 actually anything above getting close to the action
3 level in a hospital building must have meant that
4 hospital had some significant Radon source around
5 the foundation and whatnot that the fact it was
6 actually even -- it wasn't above the action level,
7 but it was actually noticeable.

8 GEORGE GILBRIDE: There's only three hospitals
9 within Marion County. You figure two of them sit
10 right across the street from each other. It's kind
11 of scary when you think how that area would be
12 affected with that.

13 CLARK ELDRIDGE: It was just kind of odd that
14 all the rest of the hospitals were, you know, under
15 two or outdoor ambient air type levels.

16 RANDY SCHENKMAN: What did they have to do with
17 that one?

18 CLARK ELDRIDGE: Nothing. It was under the
19 action level. So it was no --

20 JIM WALLACE: And that's a great question.
21 What do they have to do about it? Nothing. They
22 have to report the levels to us at the health
23 department, but they are not required to mitigate,
24 no matter what the levels are, right, Clark?

25 CLARK ELDRIDGE: Right. A particular county

1 had some elevated levels in their buildings --
2 actually, this was a pattern of a couple different
3 counties. And they would test -- since they didn't
4 necessarily have to report all their testing, they
5 only had to report the tests at a certain period.
6 They would fix them and retest and submit the post
7 mitigation results as their official results to the
8 Department. We found this out when they actually
9 submitted all their raw data tables with their
10 report, so here's the set of reports on the form and
11 here was the additional testing they submitted, the
12 whole history of all the test results from the lab,
13 that included all the previous tests that they did,
14 that were 25 and what not picocuries per liter in
15 the schools, but they didn't bother to officially
16 notify us.

17 That happened in a few counties around the
18 state. And another county they actually would
19 report it, and then come back and say, oh, we didn't
20 do the mitigation. And they'd test the building
21 again and when it came back low, they'd report to
22 us, we didn't test right the first time. They had
23 to do this five times before all of their schools
24 ended up being below four in the results.

25 Were they really fixing things? I don't know.

1 But that's -- they probably were. They're probably
2 trying to do some air ventilation rate adjustments
3 and stuff, but they did this five times, up to five
4 times at some of the schools before all them were
5 below four.

6 MARK SEDDON: For large buildings like
7 hospitals or schools, is there standards for us how
8 they choose, how -- like how many rooms or areas
9 they test? Because when I was in a hospital, air
10 exchange rates vary for different departments at
11 different times in the rooms. It makes a huge
12 difference.

13 JIM WALLACE: And we're going to get into that.

14 MARK SEDDON: Okay. Cool. Perfect.

15 JIM WALLACE: It's part of our mandatory Radon
16 testing protocols, how you choose what rooms to do
17 and it's kind of a percentage of building -- of
18 rooms.

19 MARK SEDDON: Very good.

20 JIM WALLACE: And you know, FSU is not required
21 to do testing, but we advised them of what our
22 mandatory Radon protocols were and then they hired
23 someone to do it. And that person had to follow
24 those protocols. So just because that's -- they
25 were required by us to do it. Not the FSU, but the

1 professional they hired.

2 Oh, I was going to talk about this real quick.
3 So this is the -- this is the language that's
4 required by law in those documents. It doesn't say
5 anything about telling people what it is or telling
6 people they need to fix it. It's just, hey, it's
7 here. It may cause health defects. They may exceed
8 federal/state guidelines; if you have questions,
9 call your county health departments. Usually they
10 call us in Tallahassee.

11 All right. So we are allowed to establish
12 rules for the certification and the mandatory
13 measurements and these are the folks that we -- the
14 categories that we certify. And Joseph is the man
15 who handles most of this action here.

16 CLARK ELDRIDGE: One difference, if you notice,
17 about the Radon authority versus most other
18 authorities for professionals. Because Radon was
19 not really an established industry or whatever at
20 that time when this statute was done, the state
21 actually said the Department of Health has the
22 authority to tell people how to do their job.
23 Specifically, how they're supposed to perform their
24 services and do things. Unlike the rest of it,
25 everything else, it's like, the radiation protection

1 standards for x-ray, a lot of that is
2 performance-based standards and things like that
3 where we tell -- where the industry is the one who
4 has to determine what is the procedure and we turn
5 around and go, did you actually get the job done
6 using your procedure?

7 But in this case, the state actually said the
8 Department of Health has the authority to establish
9 the procedures. It was just because there weren't
10 any formal procedures, there was a very limited
11 industry out there looking how to do that and stuff
12 like that. So that's a little different twist on
13 the regulatory authority.

14 JIM WALLACE: And then the -- here's the list
15 of all the places that are required to do mandatory
16 testing and the protocols incorporated by rule.

17 And when the law first came into play in 1988,
18 it was required of all of these facilities
19 statewide. However, this changed in 19 --

20 CLARK ELDRIDGE: 2000.

21 JIM WALLACE: In 2000, it changed in 2000
22 whereas they changed what facilities and what
23 counties needed to test, and we'll look at that
24 later. But they were kind of -- the way we were
25 looking at buildings is either buildings built as a

1 single-family home or duplex and still used as a
2 home versus other building types.

3 And this was -- there was a Radon protection,
4 not study, done by the Department of Community
5 Affairs, that doesn't exist any longer. And this
6 was looking at -- I believe that you said earlier,
7 it was looking at proposals for areas of the state
8 that may need Radon resistant new construction in
9 building codes. And our understanding is that the
10 Legislature used this map to decide on where
11 mandatory testing was going to be done, which was
12 not the intent of that map.

13 CLARK ELDRIDGE: The map was the -- I cannot
14 remember the exact percentage of homes or the
15 threshold of homes, but it was that a certain
16 percentage of homes, if they built in this county
17 to -- per standard building practices, that the
18 average indoor level when the home was new, would be
19 between, be below four, between 4 and 8.3 picocuries
20 per liter and above 8.3 picocuries per liter.

21 The reason for that threshold is again, in the
22 research studies that were done, it was -- there was
23 passive Radon resistant construction; there was
24 active Radon construction. Passive just means
25 sealing the foundation to keep -- prevent Radon

1 entry. Active means you actually have to have fans
2 that reduce the pressure of the ground underneath
3 the building to kill the pressure differential
4 between the building above and the ground below
5 buildings tend to be negative pressure the way
6 they're operated, so they tend to suck on the ground
7 a little bit. That that pressure, active pressure
8 break had to be put in to keep the Radon levels low.

9 And so it was, what type of construction was
10 needed to reduce it from that 4 to 8.3, whatever the
11 percentage was, down to the acceptable percentage of
12 homes. And if it was above 8.3 -- and again, I
13 can't remember the threshold to reduce it to the
14 lower threshold, you needed active mitigation
15 systems to get that -- to drop it, if it was like 25
16 percent to one percent -- it's been too long. I
17 can't remember.

18 And so that was it. Now, this again, was only
19 for new homes, so it's a house built within a year
20 of manufacture or about within a year or whatever,
21 and it does not affect -- does not reflect anything
22 about aging of homes, shifting of foundations, aging
23 of the caulking and stuff on the outside and how all
24 that goes into pressure differentials, airflows and
25 the amount of a building to suck Radon from the

1 ground. And it also doesn't reflect anything about
2 building materials in buildings because the DCA
3 initially put that off from evaluating that and how
4 to deal with that in buildings. They eventually
5 just dropped it, the Department of Community
6 Affairs, which was the agency that existed at the
7 time that was charged with developing Florida
8 building codes.

9 JIM WALLACE: Now, as far as the facilities
10 that have to do testing, it's not confusing if you
11 say all, you need to do testing, right? That's very
12 simple. But when we had to go to this, this
13 confuses the heck out of them. I've got to test and
14 what county, what does it mean? What does the dark
15 green mean? This type of facility do I need to
16 test?

17 So for example, in Miami/Dade County, only
18 facilities -- only the largest facilities are
19 required to do the testing. Okay? If you're in
20 Hillsborough, in all facilities, whether you're
21 small or large. Orange, none. No, none whatsoever.

22 So this is always a source of confusion for
23 everyone. We've tried to simplify it, but it's
24 still difficult to kind of parse this out and help
25 them understand whether they need to do testing or

1 not. And we've developed a couple of FAQs on our
2 website to get people to understand whether they
3 need to test or not; what protocols to follow.

4 Again, Clark kind of alluded to this earlier.
5 Radon entry, how does it get into the -- how does it
6 get into the building? It comes from the soil or
7 even ground water. We've found that ground water is
8 not a big source in Florida. If you go north into
9 Georgia, though, and some of the northern states
10 along the east coast, it actually is quite a -- is
11 quite significant. But you need what? 10,000
12 picocuries in the water to equal one picocurie in
13 the air in the home, once it's aerosolized out of
14 the water; is that right?

15 CLARK ELDRIDGE: Yeah.

16 JIM WALLACE: So you can get it in sump pumps
17 if you have a basement. Also in the foundation,
18 windows, cracks and crevices in the soil. This is
19 highly variable from one location to another. And
20 then it's a big factor.

21 But basically, homes suck on the ground and
22 they do so either through natural forces, like hot
23 air rising, cooler air replacing it, so there's this
24 kind of a natural low suction. Or it might be
25 enhanced by an exhaust, like a clothes dryer. A

1 water heater. Something that exhausts air out of
2 the house, then it's sucking on something and
3 sometimes from the ground.

4 So Radon entering entry behavior does reflect
5 source strength of the soil and bedrock underneath
6 that building. What's the water quality? And
7 what's the soil porosity? I think in Florida, soil
8 porosity is quite tight. Isn't that correct, Clark,
9 if I remember.

10 CLARK ELDRIDGE: For most of the soils --

11 JIM WALLACE: Most of the soils.

12 CLARK ELDRIDGE: -- they're considered tight.

13 JIM WALLACE: So that means it's kind of hard
14 to suck on -- underneath the foundation, which we
15 have a model back there of a sub slab
16 depressurization system, what it looks like. That's
17 for more new home construction. There's guides on
18 how to do that. But this does affect when you're
19 trying to fix a home. Air pressure differentials
20 between the house and the ground. Materials that
21 contain Radon which, you know, could be concrete.
22 Could be granite. Could be various sources in the
23 building.

24 And the ventilation rate. How much air is
25 being exchanged with the outdoors? Most houses

1 don't have dedicated outdoor air ventilation,
2 although they are incorporating that in newer
3 buildings due to the energy code adoptions.

4 Weather also does have an effect on how much
5 Radon comes into a house. Rain can actually cap the
6 soil and force Radon in and can also depress Radon
7 into a house and make it a more pathway of least
8 resistance. So you'd have rainstorms which increase
9 the amount of Radon inside homes.

10 And of course, we talked about air pressure
11 differentials from high pressure to low pressure.
12 Temperature differentials. Wind pressure and
13 barometric pressure do kind of affect things over
14 time. And you end up having, basically, a variation
15 that occurs on a hourly basis, on a daily basis,
16 season by season and through weather patterns that
17 change. So there's a lot of variability that
18 occurs.

19 So when we're doing testing, or when testing is
20 done, there's either a short-term test kit or a
21 long-term test kit. The short term is basically
22 there to screen for potential health risks. It's
23 not the end all answer, but if you want the true
24 actual health risk, then you go with the long-term
25 testing. But this does take 90 days to a year to

1 get the results to run the test.

2 The minimum timeframes for our short-term test
3 is 48 hours. So there's different protocols
4 depending on your purpose. If you want to screen,
5 you want to do diagnostics, you want to do pre or
6 post mitigation, you want to evaluate health risks.

7 Now, of those test options that are available,
8 there's self-testing. We have some test kits that
9 you can do it yourself that you can buy over the
10 internet or at hardware stores. I'm going to share
11 this if you want to pass it around.

12 And so, what's interesting about this is we're
13 offering free Radon test kits. We get a grant from
14 the Environmental Protection Agency and we have a
15 coupon in the back or on our website, you go to it
16 and say, hey, I want a free test kit. And when I
17 actually talked to people up front I say, no
18 additional cost to you because you've already paid
19 for it through taxpayer dollars. They like that.
20 They appreciate that, that honesty. But we say
21 free, but it's not really free. Nothing's free.

22 We have certified businesses that do charge
23 money for their services. And usually that's a time
24 factor. They want levels done or they want a whole
25 bunch of samples done and they need the results

1 pretty quick. Generally, that does cost more. We
2 do ask people to shop around.

3 We have a list of certified professionals on
4 our website and businesses, of course. And then
5 there's the passive Radon test kits that I'm passing
6 around here. These are activated charcoal kits.
7 And we -- also, there are active Radon tests kits.
8 I've got an active, continuous Radon monitor in the
9 back there that I plugged in this morning that
10 started running. It doesn't have a result yet. It
11 needs a certain period of time before it gives us a
12 result in this particular building.

13 The first four hours on an active test may be
14 disregarded. But with the active continuous Radon
15 test, they have the ability to detect tampering or
16 fraud. You know, people trying to move the machine
17 outdoors or waving a fan over it or opening a window
18 next to it and stuff like that. They built in
19 technologies to help the professionals.

20 So these are the passive test kits that we
21 offer for free; that you can buy and do it yourself.
22 No power needed. Activated charcoal. Alpha track
23 detectors. You need a lab to analyze the results,
24 usually.

25 And then the continuous Radon monitors and

1 working level monitors. No one really uses working
2 level monitors because it's hard and it takes a lot
3 of time. And wouldn't you agree with that, Clark,
4 on the working level? Working level's looking at
5 the Radon decay products.

6 CLARK ELDRIDGE: Right. Where it measures the
7 energy, total energy of the air deposited or
8 generated by Radon deposits.

9 JIM WALLACE: Usually you can get -- if time is
10 an issue, this is why you use the continuous Radon
11 monitors. Active Radon monitors.

12 We do have protocols. Why are you testing?
13 Are you doing it just to know? Is it a real estate
14 transaction, which may be a time factor or are you
15 doing it for mandatory testing purposes?

16 So if you just want to do it, non-mandatory,
17 then we suggest people follow the EPA Citizens Guide
18 to Radon which we have a copy in the back there
19 which you can look at. And it basically suggests a
20 single test device in a common use room and retest
21 to confirm levels.

22 Now, for all other kind of buildings, there's
23 no official protocols. However, AARST, the American
24 Association of Radon Scientists and Technologists,
25 have developed some protocols for testing and

1 measurements in other buildings and those are free
2 on their website to view and read. You don't have
3 to pay to actually read them.

4 Schools are a little different, you know, as
5 opposed to homes. They have fresh air intakes.
6 They bring in outside air. They're frequently only
7 occupied part of the 24-hour period, which kind of
8 is challenging if they shut down the air
9 conditioning system. Radon levels, we do know that
10 they vary from one room to the next as they would in
11 a hospital, for example. And the only way to make
12 sure there are risks, or if you want to screen for
13 potential risks, is to test all the rooms.

14 Now, for our testing protocols, we do require
15 closed building conditions, and this sometimes
16 confuses people. We're not saying never open a
17 door. You know, it's sealed with tape. No.
18 Interior and exit, just like you normally would.
19 Just don't open the windows. Just don't prop the
20 doors open, you know. That's what we mean by closed
21 door conditions. And we want this done 12 hours
22 prior to the starting of the measurements because
23 you need some time for this dynamic equilibrium to
24 occur. And that's why we call it, you need the 12
25 hours.

1 Lowest inhabited space. Away from windows,
2 doors, vents, fans and high humidity areas. Like,
3 you don't want to do it in a bathroom. You don't
4 want to do it in a janitor's closet. There's -- no
5 one's occupying those spaces for any period of time.
6 You want it undisturbed. You don't want people
7 messing with the test kits during the timeframe.

8 It's always a minimum of 48 hours testing. We
9 do recommend 24-hour increments at 48, 72 and 92
10 hours. Partial days is not statistically
11 significant, so you can kind of turn it off any time
12 you want to or stop the test. But we do want, or
13 suggest that they take that 24-hour increments to
14 make it easier for the results in the calculations.

15 We want to get the Radon test kits four inches
16 away from other objects; at least 12 inches away
17 from any wall; 20 inches from the floor; 3 feet from
18 exterior doors, windows, potential openings and if
19 you're suspending a test kit from the ceiling, you
20 want it in the breathing zone.

21 And this is the protocol, it's what we call
22 150-334. And it's used to satisfy the legal
23 requirements of the statutes and, you know, provide
24 this testing to us. There are certain exclusions.
25 Like, for example, the schools. Some portable

1 buildings at schools are not required to do testing
2 if they meet certain criteria. And that's spelled
3 out in the protocols. Because they may be off the
4 ground and have all kinds of ventilation between the
5 ground and the building, itself. So, you know, it
6 may not be a factor, but some close in that
7 crawlspace, that means they will have to go in and
8 test.

9 We do have administrative penalties or fines,
10 which are kind of in, generically, in 404. I'm not
11 sure that we've actually used those very often, have
12 we, Clark?

13 CLARK ELDRIDGE: No.

14 JIM WALLACE: Okay. Okay. So the challenge
15 for a Radon mitigation system is to lower the Radon
16 level in a building, but it's usually not the
17 hardest thing to do. That's the easy part. The
18 hard part is doing it without compromising the
19 esthetics of the building, without compromising
20 building integrity or doing it at a reasonable cost.
21 And that's the challenge.

22 But Radon mitigation systems have been used
23 effectively. I mean, that report right there is
24 from 1978, I believe, or '83 -- yes. So we've been
25 doing this for a long time. They fixed Stanley

1 Watras' house at 40, you know, 4,000 picocuries per
2 liter down to below four rather effectively. Even
3 though that cost \$32,000, you can probably get a
4 mitigation system built in your house, anywhere from
5 1500 to \$5000, depending on the complexity of the
6 home and whether you're, you know, 23 floors up, or
7 whether -- what type of system you need to fix the
8 problem.

9 Go ahead.

10 WILLIAM ATHERTON: What do these systems
11 consist of? You say mitigation systems. I'm not
12 picturing anything. Like fans or what?

13 JIM WALLACE: Yeah. And I think we had some
14 slides on that earlier.

15 WILLIAM ATHERTON: Okay.

16 JIM WALLACE: Yes, we do. Here we go. So the
17 most common mitigation system is called an active
18 soil depressurization or sub slab depressurization
19 system. In our model there, we show what one looks
20 like. That was built by a professor at FAMU for us.
21 It kind of shows how you construct it. And we have
22 some nice brochures there. The EPA has a nice
23 building system. We do have a mitigation standard
24 in the Florida building code as an appendix. It's
25 been there from the mid '90s, I believe.

1 Also, in some buildings, you may need to
2 improve ventilation. Bring in outside air. Like
3 the -- that's -- I think that was kind of the
4 solution for the highrise condos.

5 Sealing cracks and crevices, trying to reduce
6 the amount of Radon entering through -- or maybe you
7 have this whole, this whole plumbing conduit where
8 it's like a Radon superhighway. If you can seal
9 that, you might be able to reduce the amount down to
10 a reasonable level.

11 Sometimes for big buildings, commercial
12 buildings like schools, for example, you may -- if
13 you adjust the air handler settings, you might be
14 able to lower it below the level of action.

15 They must meet building codes. Check with
16 local municipalities. There is no statewide
17 requirement for Radon resistant construction.
18 Although some counties have adopted, the Legislature
19 kind of basically said that local governments could
20 adopt standards, but there was a very specific
21 procedure that they had to follow.

22 CLARK ELDRIDGE: Basically, the majority -- the
23 municipalities were -- representing the majority of
24 the population and the county government, have to
25 enter into an inter-agency agreement to adopt the

1 codes and it goes in effect countywide. How many
2 people here understand how well cities and counties
3 work together? Um, and --

4 JIM WALLACE: It's a challenge.

5 CLARK ELDRIDGE: Yeah. So basically, the only
6 counties that have adopted these are ones where the
7 county government is the only government in the
8 county. Jacksonville. You know, Duval County. Two
9 north of here is Hendrick. I think Hernando has
10 adopted codes or were looking to.

11 JIM WALLACE: And this is kind of --
12 photographs of a mitigation system going into a
13 building where they start by drilling a hole into
14 the foundation. They go into that hole. They use a
15 scoop and they dig out all the rock -- the soil
16 underneath. They put in a bucket. They fill it
17 back in with, let's say, rock or gravel of a certain
18 size. They then fit in a PVC pipe. They seal that
19 pipe to the foundation.

20 They then take this pipe and pipe it to the
21 outdoors. They will need, in an active soil
22 depressurization, to add a fan to it, in line in
23 that pipe system. And also right here is a pressure
24 gauge, indicating that that line is under a negative
25 pressure.

1 So you can look at the, at the red water,
2 basically, in it. If you see it being lopsided,
3 that means you've got negative pressure. If you see
4 it even, there's no negative pressure and your
5 system is not working.

6 And there's another example of that, that gauge
7 saying, hey, you need to take -- there's also a
8 requirement for a labeling. I think there was Radon
9 resistant new construction where they, they made a
10 pipe for the vents for the Radon resistant new
11 construction and they didn't label it and someone, a
12 plumber came afterwards and started -- hooked it up
13 to a toilet or something. Something like that.

14 CLARK ELDRIDGE: Well, they've also used it --
15 they also cut out the system and used it to exhaust
16 their dryer.

17 JIM WALLACE: So it needs to be labeled it's a
18 Radon mitigation system. And they need a fan to
19 install outside of the occupied space, out of the
20 air conditioned space. So usually it can be in the
21 attic, right? It's not air conditioned. Not a part
22 of the breathable space. Or they can plumb it to
23 the outside of the building. They have a fan going
24 out, but it needs to be a visible or audio warning
25 system. And they need to terminate this vent fan

1 above the roof line. So if they're going outside on
2 the side of the house, like this, then they need to
3 go up past. So they don't want Radon re-entrainment
4 in nearby windows or doors.

5 And this system also works for, you know,
6 crawlspaces. It's kind of the same system you put
7 under -- you're putting a negative pressure system
8 underneath the sealed membrane here. You see all
9 the ground and all the contacts with the ground and
10 you suck on that below that membrane. And you
11 basically do the same thing. You pump it to the
12 outside.

13 Ventilation is another technique. This often
14 is used in the more difficult to resolve things,
15 like highrise condos or multifamily condos. A lot
16 of condos that are two stories have problems with
17 getting permission to put in a sub slab
18 depressurization system because of concerns from the
19 homeowner's association. And we've run into that
20 quite a bit. A lot of concerned and angry people
21 apparently, fighting each other over the ability to
22 put in a mitigation system. So they may end up
23 having to do this instead and -- and with mixed
24 results. Let's just put it that way. Mixed
25 results.

1 If this is done right, it can work, but it may
2 be a more expensive system than a sub slab,
3 generally speaking.

4 One of the reasons for that is you bring in a
5 lot of outside air and you don't control that
6 outside air in terms of humidity content; moisture.
7 You may end up causing a damp room and increasing
8 mold problems, so it's something that you have to be
9 fairly careful with. And for the highrise condos,
10 we recommend an engineered system that, you know,
11 they've actually accounted for that humidity and
12 control it.

13 Any comments on that, Clark? But also, with
14 any case, we do want to try to reduce the entry
15 points of Radon by sealing, caulking and reducing
16 the routes through plumbing conduits, electrical
17 outlets; things of that nature.

18 CLARK ELDRIDGE: And it's not very effective.
19 There aren't very many available places to do that
20 in Florida construction because we've got finish,
21 you know, slab on grade and you can't get to the
22 entries.

23 JIM WALLACE: And here's what we've been
24 talking about earlier. There's a lot of politics in
25 the condos regarding mitigation systems and that's

1 why they're using the ventilation techniques the
2 most. Soils are tight, so the suction deals don't
3 go -- extend very far. And water doesn't seem, as I
4 mentioned earlier, water doesn't seem to be a big
5 issue in Florida in terms of the amount of
6 picocuries in water. But if you go north to
7 Georgia, you'll find some problems.

8 Post mitigation assessment, we do recommend
9 testing to make sure that the system that you
10 installed works. I believe this is a requirement.
11 So if a mitigation system is installed and it fails,
12 it does not get you below what you're targeting to
13 look for or maybe targeting to, you'll probably need
14 to perform a building investigation to find out what
15 you did wrong or what you need to address with that
16 building. Is there something you missed that you
17 need to seal? Is there -- do you need another
18 suction point, for example. And you know, fix that
19 particular problem, retest and make sure you're
20 doing it.

21 We do recommend that people retest their homes
22 after five years and doublecheck to make sure their
23 systems are still working. Even if the system is
24 working and they know it's working, still go ahead
25 and retest because things do change over time.

1 Buildings settle; things don't always remain the
2 same.

3 So final review, Radon is a Class A carcinogen.
4 It's known to cause cancer in humans. The only way
5 we know to know its presence is to test for it. We
6 know we can reduce the levels effectively. And
7 Radon testing is required in some facilities in
8 Florida whether they are be old or new.

9 And this is our statewide telephone number.
10 We've had this since the 80s. Toll free. Regular
11 number. Joseph and I were the -- put together this
12 presentation and we've been giving this out quite a
13 bit. If you have any questions, here's our website.

14 And speaking of our website, we have a --
15 probably the most extensive Radon website in the
16 United States as far as state Radon programs go.
17 How do I know this? Because I went and surveyed
18 them all and saw other states have one page. And
19 we've got, like, 47 or something like that. We've
20 got Radon in real estate videos that we've put on
21 YouTube. Those are really neat because you look at
22 the style of the 90s, and you kind of tell that it's
23 dated, but it's all right.

24 We've got training and I guess my time is up.
25 Any questions?

1 JAMES FUTCH: Those were actually questions and
2 yes, your time is up. That's not the question.
3 Tim, if there are members or societies that members
4 know of that would like to hear this, do you travel?
5 Do you do talks at, like, I don't know, Florida
6 Radiological Society or what -- not the Health
7 Physics Society. We've already been there.

8 ADAM WEAVER: Well, it was a joint meeting with
9 the industrial hygienists.

10 JAMES FUTCH: That's true. Yeah.

11 ADAM WEAVER: He got a good bang for his buck.

12 JIM WALLACE: With our EPA grant, the state
13 indoor Radon grant, part of it is outreach. And
14 that is also in our statute, 404.056, that we
15 provide education outreach. So anyone who wants to
16 hear from us, we're pretty much available as long as
17 we've got a budget for it, right, Clark?

18 CLARK ELDRIDGE: Yep.

19 JIM WALLACE: Historically speaking.

20 CLARK ELDRIDGE: Historically speaking.

21 JAMES FUTCH: This is the kind of issue which
22 we can speak from the scientific perspective about
23 what is known, but it butts up against other
24 concerns that have to do with pocketbooks and places
25 we don't typically go.

1 However, I think the more people who are able
2 to understand and appreciate this, especially folks
3 who advise citizens on lots of different things in
4 their lives, and into -- and who citizens look to
5 for guidance about things like cancer, would be a
6 good population to make sure they have all the
7 facts.

8 JIM WALLACE: And we do have a lot of outreach
9 materials. I'll share -- I'll send this around.
10 This is a Radon poster contest. The 2022 winners
11 are in that. The winner for January went to the
12 state, the nationals, and actually won. And we've
13 had quite a few poster contest winners here in
14 Florida went to the nationals and won. These are
15 8th graders, generally speaking. And it's a kind of
16 a winner -- a lot of kids put in great entries. So
17 you can see some examples from the last year.

18 We've got brochures on generic Radon, which is
19 the -- you can see reflected in these big flyers
20 here. We've also got, hey, you want to become
21 certified and do Radon measurement for a business or
22 mitigation? Hey, do you want a free test kit? Go
23 on our website. Here's a coupon. Hey, you got
24 homes, you're a home buyer and home seller, what do
25 you do about Radon? Hey, you've got high Radon, how

1 do you reduce it, you know. Nice little pamphlet on
2 that. Hey, you're building a house or, hey, you're
3 a contractor, do you want to build without Radon?
4 We have a diagram of what a Radon mitigation system
5 looks like back there at that model if you'd like to
6 take a look at it.

7 Hey, you're a health professional. Would you
8 educate your patients about Radon, because it causes
9 lung cancer. Hey, you can sell a house, real estate
10 professionals. We go reach out to them; say, by the
11 way, you know, notification is required if you've
12 got questions about Radon.

13 And that's something I should mention here, is
14 while the law doesn't require that you provide
15 testing results to a buyer, there's case law out
16 there that has been established that any latent
17 defect that affects material value of a property,
18 must be disclosed to the potential buyer whether
19 it's as is or not.

20 So there's been two case law decisions in
21 Florida that have established that requirement.
22 It's not something the health department requires.
23 It's something that people go to court and sue each
24 other over. But if someone has a question about
25 that, we'll let them know that there is case law

1 that they could review and talk to their attorneys
2 if they need to establish if someone knew about it
3 and didn't tell them; and therefore, they need to
4 fix their home and it's going to cost them \$2000 and
5 they're going to go to court for that cost.

6 So -- but anyway. Oh, and that's about it. I
7 think it's -- but we've got, also, some old reports
8 back there if you'd like to look at Radon through
9 the years. From the 70s up until most recently.

10 I'm going to do a timeline on Radon at some
11 point. Maybe a presentation or a website or
12 something.

13 JAMES FUTCH: I think you should write a play.
14 Go on Broadway.

15 JIM WALLACE: Broadway?

16 MARK SEDDON: A two-man show, you and Clark.

17 ADAM WEAVER: You and Clark.

18 GEORGE GILBRIDE: A musical.

19 (Laughter)

20 JIM WALLACE: Do you want to do it, Clark, when
21 we retire maybe?

22 WILLIAM ATHERTON: It has to have a tap number.

23 CLARK ELDRIDGE: I've tapped around here long
24 enough. I should have plenty of experience.

25 JIM WALLACE: Any question, comments, feedback?

1 Is there something here you don't like or thought
2 that's wrong or anything like that?

3 GEORGE GILBRIDE: I do have one question.

4 JIM WALLACE: Okay.

5 GEORGE GILBRIDE: And so, maybe I didn't
6 understand this. But a building comes out, okay?
7 You have high levels. So --

8 JIM WALLACE: New?

9 GEORGE GILBRIDE: Well, let's say old building.

10 JIM WALLACE: Okay.

11 GEORGE GILBRIDE: Once they inform, you know,
12 you guys that it's -- they've got a problem with it,
13 are they obliged to do anything with it or can they
14 leave? That's the question.

15 JIM WALLACE: No. They're not required to --
16 the mandatory testing requirements for buildings,
17 none of those entities are required to fix the Radon
18 problem. They are required to report it to us. We
19 have a form, and we put that on our website. It's
20 searchable. It's a public record. And that's only
21 for the mandatory Radon testing sites. And also,
22 the data is also available for the certified
23 professionals who provide the data to us.

24 GEORGE GILBRIDE: So even if the levels are
25 like, like that guy's house, they're still not

1 required to have anything.

2 JIM WALLACE: Right. The highest level
3 recorded in Florida are 307, according to our nice
4 little flier over there. That was in Tallahassee.

5 CLARK ELDRIDGE: It was in Tallahassee.

6 JIM WALLACE: However, Gainesville is trying to
7 outdo us.

8 JIM WALLACE: Alachua County, I know Alachua
9 County had high levels of Radon.

10 CLARK ELDRIDGE: Before that 307, most of --
11 they were -- Alachua and Marion were battling it out
12 around 280 and 290, one up over the other for the
13 highest Radon level.

14 JIM WALLACE: And recently, someone hired our
15 certified professional to test a, I think it was a
16 boom shelter. An old bomb shelter. And it was in
17 the 500s, which is -- kind of blows this out. We're
18 not going to count it because no one is occupying
19 that bomb shelter.

20 GEORGE GILBRIDE: Not yet.

21 JIM WALLACE: Not yet.

22 JAMES FUTCH: Yeah.

23 JIM WALLACE: So, but very high levels in a
24 bomb shelter. Unoccupied bomb shelter. Who knows
25 what the Radon decay products and the working levels

1 are in that room.

2 CLARK ELDRIDGE: That would be horrible.

3 MARK SEDDON: Has there ever been established
4 any liability claims in case law regarding Radon
5 for, like, for employers who are aware of elevated
6 levels, and they have working conditions that have
7 not been mitigated?

8 JIM WALLACE: I'm going to have to say I don't
9 know.

10 ADAM WEAVER: That's a gray area.

11 CLARK ELDRIDGE: I haven't heard.

12 MARK SEDDON: Okay.

13 JIM WALLACE: I don't know. I know FSU was
14 very concerned about it. About their concerns.

15 MARK SEDDON: Right.

16 JIM WALLACE: About the experience expressed by
17 their faculty and staff and they decided to go ahead
18 and do a lot of testing for Radon and they decided
19 to test every building on the campus for Radon. And
20 we were like, you know, we were happy that they're
21 doing it, but they're not required to.

22 MARK SEDDON: Has it been brought to court
23 before? Is there a precedent or has there just
24 never been a direct correlation set?

25 JIM WALLACE: I don't -- I haven't heard

1 anything about that or read anything about that.

2 CLARK ELDRIDGE: I don't know that certain law
3 firms would necessarily take up this, since you're
4 talking about the, you know, how long does cancer
5 take to show up. There's one of those that, you
6 know --

7 JAMES FUTCH: How do you distinguish the cancer
8 from Radon that you've got inside the house?

9 ADAM WEAVER: Versus smokers. There's been
10 miner cases. I mean, people that work in mines.

11 CLARK ELDRIDGE: Yes. We've see that kind of
12 thing.

13 ADAM WEAVER: High concentrations.

14 CLARK ELDRIDGE: In the mine cases, actually,
15 we're got all the data for that because they've been
16 required to monitor for Radon in mines. So they
17 have all the data showing when this person worked in
18 the mine, what the levels were that day; that type
19 of stuff. That's been --

20 MARK SEDDON: Right.

21 CLARK ELDRIDGE: -- a mine safety --

22 ADAM WEAVER: It's difficult to interpret
23 because a lot of that is working levels and the
24 difference between Radon and Fluorine.

25 CLARK ELDRIDGE: They actually do that for the

1 McMarion Caverns and rotate out the -- state, state,
2 why can't I say the word? It has -- the leader of
3 the caves. I can't think of it.

4 REBECCA McFADDEN: Splunking?

5 NICHOLAS PLAXTON: Splunkers?

6 CLARK ELDRIDGE: No. Park rangers. They
7 actually have to rotate out during the year because
8 they meet the regulatory limits.

9 JIM WALLACE: So some of your medical --

10 ADAM WEAVER: Are they monitored by TrackX?

11 CLARK ELDRIDGE: They're doing grab samples and
12 they're doing continuous monitoring, working on
13 monitoring in the caves. At least that's what they
14 were doing last I knew about it and it's been a
15 while since I've talked to them.

16 ADAM WEAVER: They may have changed.

17 JIM WALLACE: And some of you are medical
18 professionals, correct? There is an ATSDR, the
19 Agency for Toxic Substances Disease Registry has
20 case studies in environmental medicine. Some of
21 them are available for CEUs or CEs. Unavailable
22 anymore, I guess, because they are older and need to
23 be updated. There's one on Radon. And this has an
24 interesting -- I think it's in the -- so they have
25 a -- I can't ever remember this for some reason, but

1 there's an appendix. There's a -- there's a lot of
2 good information in the appendix here.

3 CLARK ELDRIDGE: There's actually one -- is it
4 Cocoa or is it Brevard? Might be Cocoa. Actually
5 has a -- doesn't know they've done this that I'm
6 aware of, but you're actually required to reduce
7 elevated Radon levels if you have a home in Cocoa
8 because their local potability code for the housing
9 has adopted all of 64E-5. And so that includes the
10 Radon. As I say, I don't know that anybody knows
11 they did that in their building codes for that.

12 ADAM WEAVER: So what's a typical cost of
13 getting just a passive test in a house today?

14 CLARK ELDRIDGE: You said for a test?

15 ADAM WEAVER: Yeah. Like a typical, just a
16 charcoal.

17 CLARK ELDRIDGE: Is it still 25 bucks? I
18 haven't looked in a while.

19 JIM WALLACE: It's free here.

20 ADAM WEAVER: I know it's free. You get one
21 free sample. But if you wanted to do a bigger
22 house. Say you had a basement.

23 CLARK ELDRIDGE: Right. At one point, you
24 could get them for 12 bucks in bulk, including
25 analysis. Again, I have no --

1 ADAM WEAVER: Do they sell them on Amazon now?

2 CLARK ELDRIDGE: It's been too long. I'd go
3 directly to the lab.

4 JIM WALLACE: And this is going back to your
5 point, Mark, about occupational versus residential.
6 You know, the residential in schools is 4 picocuries
7 per liter.

8 MARK SEDDON: Right.

9 JIM WALLACE: But the OSHA permissible exposure
10 limit, the legal limit for workplaces is way higher
11 than that. And we're not even close to that at FSU.
12 But you know, and FSU doesn't -- they're not
13 required to follow OSHA standards, either. But
14 this, this is something that folks will look at in
15 terms of their liability. But you know, we're kind
16 of going towards this one --

17 MARK SEDDON: Right.

18 JIM WALLACE: -- for schools and 24-hour care
19 facilities, homes. But for workplaces it's a little
20 bit different. I think, Clark, you and someone
21 else, was it Flip, worked on Marianna Caverns?

22 CLARK ELDRIDGE: Right. Marianna Caverns.

23 JIM WALLACE: We helped them out with trying to
24 limit exposure to their park rangers, I think.

25 CLARK ELDRIDGE: Park rangers.

1 JIM WALLACE: And gave them some help with
2 the -- you know, looking at working levels and
3 trying to make sure that people were aware of their
4 exposure.

5 Did you give them the -- did you suggest
6 dosimeters?

7 CLARK ELDRIDGE: As I said they, last I knew,
8 they were doing periodic -- they were doing air
9 sampling two to three times a day in the caverns.

10 JIM WALLACE: Really? Interesting.

11 RANDY SCHENKMAN: Okay. I think we're going to
12 need to move on. That was a fabulous --

13 MARK SEDDON: Very good.

14 RANDY SCHENKMAN: -- presentation. Thank you.

15 JIM WALLACE: You're welcome. Thanks for
16 having me.

17 CLARK ELDRIDGE: Okay.

18 JAMES FUTCH: And next we have Kevin's
19 radioactive materials update.

20 KEVIN KUNDER: Okay. For the new in the room
21 here, Florida has broken off from the NRC and become
22 an agreement state since '64. So we take care of
23 all the radioactive materials licenses in the State
24 of Florida, with the exception of the federal
25 facilities and the power plants.

1 So we have, at this time, we have about 1800
2 licenses throughout the state. And we're the second
3 largest program overall. California beats us. But
4 we have about 50 percent more medical licenses in
5 the State of Florida than California does.

6 Getting into from last time, probably last
7 couple times, we've been talking about rule making
8 updates. So we were -- we had to get our stuff
9 submitted to the Florida Administrative Register.
10 We did that last year on April 1st, and which meant
11 that we had to have it adopted by April or March
12 31st this year and didn't make it. So we had to,
13 once again, have it published in Florida
14 Administrative Register, which it was, I think
15 the -- it was the second week in -- April 13th of
16 this year. It's in legal right now. So legal is
17 going through it. It's going bouncing back and
18 forth.

19 But from there, it goes to the Office of Fiscal
20 Accountability and Regulatory Reform. Joint
21 Administrative Procedures Committee. And then from
22 there, if everything goes well, then it will
23 probably be adopted. So trying to get this thing
24 fast tracked as best we can, because we have our NRC
25 and we have a mid cycle coming up the 22nd of June

1 this year. And then we'll have our big every four
2 year one will be next summer.

3 MARK SEDDON: So are we currently noncompliant
4 with that NRC requirement?

5 KEVIN KUNDER: Correct.

6 CINDY BECKER: Technically.

7 JAMES FUTCH: Kevin, what's the IMPEP or
8 acronym for that?

9 KEVIN KUNDER: You would ask me that.
10 Integrated materials --

11 JAMES FUTCH: We get inspected by the NRC.

12 CINDY BECKER: Integrated Materials Evaluation
13 Program.

14 KEVIN KUNDER: You forget we've got a P in
15 there. Yes. That one.

16 JAMES FUTCH: The Government can't remember the
17 government's -- --

18 KEVIN KUNDER: Integrated Materials Performance
19 Evaluation Program.

20 JAMES FUTCH: So we get inspected by the NRC.

21 KEVIN KUNDER: Yes.

22 CINDY BECKER: We get IMPEPed.

23 JAMES FUTCH: By other states actually, too.

24 KEVIN KUNDER: Yes. NRC personnel as well has
25 interstate personnel who have gone through the

1 training and they'll come in as well. So they
2 share.

3 MARK SEDDON: Do we anticipate any problems
4 this time around?

5 KEVIN KUNDER: I'm sorry?

6 MARK SEDDON: Do we anticipate any problems
7 this time around?

8 KEVIN KUNDER: I hope not. I think we're much
9 better off than we were in '19.

10 CINDY BECKER: We are. And thanks a lot for
11 Kevin and John's group for that and the inspectors,
12 too. but Kevin was lucky enough to start what, two
13 months before the big IMPEP?

14 KEVIN KUNDER: Yeah. I think they were already
15 here before I got here with the -- going around with
16 the inspectors to watch what they were doing. And,
17 yeah.

18 MARK SEDDON: Okay.

19 KEVIN KUNDER: What else? Medical events for
20 our -- we just had two since last year, or since the
21 last meeting, since December 2nd.

22 The first one was a mobile HDR that goes around
23 in the south Florida area. And they go around to
24 different facilities and they treat patients from
25 nursing homes. They'll bring a wheelchair in, grab

1 them out, bring them out to the little coach, little
2 van and they'll do treatment out there with an HDR
3 unit.

4 And in this particular one, they went in to do
5 a patient. They saw the patient for recurrent
6 squamous cell skin cancer of the hand. And they saw
7 the patient. And the treating authorized user saw
8 the patient in October and scheduled the first
9 fraction of 20 fractions, two a week for, I think it
10 was, um, like, just before, before Christmas,
11 whatever they came in. They did -- the doctor
12 looked at the patient. It was supposed to be for
13 the right hand, but the authorized user looked at
14 his left hand and said, yeah, we've got to get that
15 taken care of. Sends the patient in the coach and
16 the radiation therapist, same thing. Looked at that
17 hand and said, yeah, we've got to get this thing
18 taken care of.

19 And their procedures at the time were for them
20 to put the lead, the therapist puts the lead on,
21 puts the applicator on top of that and then puts
22 another lead backing on top of that. Tapes up their
23 hand and gets them all ready to go and then straps
24 them down and nobody does any other thing in the
25 room at that point.

1 And then they go outside the room and their
2 time out was, was not what I would consider a time
3 out. And they said, yeah, we're doing the right
4 hand and that's all fine. And even the therapist
5 heard him say the right hand, even though he taped
6 up the left hand.

7 So they did the first fraction on the wrong
8 hand. The patient came back two weeks later and
9 they said, yeah. The doctor then looked at the
10 right hand and said, oh, yeah. We're going to get
11 that taken care of this time. And the patient says,
12 no, no. It was this hand over here. So they went
13 out and they did take pictures before and they
14 looked at the pictures. Sure enough, they had done
15 the opposite side, or the wrong side. So that's
16 when they caught it.

17 Unfortunately, they didn't notify us until a
18 week after that. So it took us some going back and
19 forth. We found several violations -- four
20 different violations that we found. And it was just
21 trying to get them -- with their procedures a little
22 bit tighter than what they had.

23 So that was the first one. They were
24 ultimately fined \$1900 for the violations that we
25 found.

1 And the second one was a more recent one. It
2 was Lutathera therapy. And it was, I guess the
3 patient came into the room. It was a leak. It was
4 a leak on that one there. But the patient came in
5 the room. It's the therapy that, for what, the GI
6 pancreas, whatever, areas. They come in for a
7 four-hour infusion, I guess. And at least for the
8 amino acid and stuff, they come in for a 30-minute
9 infusion of the Lutathera. And the patient came in
10 the room already hooked up with the IV. And the
11 technologist put the little cap on there and screwed
12 it on there and they started the infusion. And
13 almost immediately, the patient, I feel wet down
14 here, whatever. So they stopped it. And the
15 patient ends up getting about 36 millicuries out of
16 the 200 millicurie dose. So he had a partial dose
17 in there. But they were able to clean it up
18 following their procedures.

19 They've done these things, you know, they said,
20 probably over a thousand times already and never had
21 any issues with it. But they had these absorbent
22 materials there, collected it all, washed it all
23 down and stuff they were able to account for the
24 full dose and what they had and what was in the
25 patient.

1 So that was the -- that was it for my medical
2 events.

3 And staffing changes, the only thing that I
4 have this time is I'm losing or I just lost an
5 administrative assistant, Diana. If anybody has
6 called, they'll get Diane on the phone. And Diane
7 has now moved over to inspections. So she's on the
8 inspections side in the Tallahassee office. So
9 Jorge took her from me instead of James this time.

10 JAMES FUTCH: It was Jorge. Kevin is a great
11 recruiter. Has a large staff. Clark, myself,
12 Jorge, the inspections administrator, appreciate it
13 very much. It's very helpful. Shortens the
14 timeframe. We don't have to do as much work.
15 Sorry. That's what Kevin thinks.

16 KEVIN KUNDER: That's all I have. Anybody have
17 any questions?

18 RANDY SCHENKMAN: Okay. Well, we're running a
19 little bit late here, so Clark, is your presentation
20 long? Should we do it after lunch?

21 CLARK ELDRIDGE: Yeah, we'll probably do it
22 after lunch.

23 RANDY SCHENKMAN: Okay.

24 JAMES FUTCH: We can even combine with your
25 medical events and we'll still be on schedule at

1 1:30. Clark has got another piece this afternoon.

2 CLARK ELDRIDGE: Yeah, combine with mine.

3 RANDY SCHENKMAN: Oh, okay. All right. Well,
4 then --

5 MARK SEDDON: I have a quick question for
6 Kevin.

7 KEVIN KUNDER: Yes, sir.

8 MARK SEDDON: One second. So Lutathera has
9 currently suspended doses from New Jersey? Have you
10 heard that?

11 KEVIN KUNDER: Oh, really? No.

12 ADAM WEAVER: There's a production issue over
13 it -- the reactor and accelerator, who's ever making
14 it. That's all I heard. It's nationwide.

15 MARK SEDDON: Yeah, nationwide. They just
16 added this the, like this past two weeks maybe.

17 ADAM WEAVER: They haven't been able to deliver
18 doses for all this week.

19 MARK SEDDON: Yeah.

20 ADAM WEAVER: It's taking longer. It's
21 expensive stuff.

22 JAMES FUTCH: So we have -- with the Chair's
23 permission.

24 RANDY SCHENKMAN: Of course.

25 JAMES FUTCH: Can we talk about lunch? We have

1 the Hilton Garden Inn where we've gone many times.
2 Brenda's just checked and we're able to go over
3 there as a group. Although we may be sitting
4 separately, you know. Who knows how it plays out
5 over there. And of course, there's the World of
6 Beer if anybody wants to go that way. And we
7 usually come back at 1:30.

8 RANDY SCHENKMAN: 1:30.

9 ADAM WEAVER: Be back at 1:30?

10 RANDY SCHENKMAN: Yep. That's good for
11 everybody?

12 BRENDA ANDREWS: Can I get a head count of
13 who's going to go to the Hilton Garden Inn? It's
14 about all of us. That's good.

15 JAMES FUTCH: Who's definitely going to stay
16 here? Anybody?

17 NICHOLAS PLAXTON: Stay where?

18 JAMES FUTCH: In the room.

19 ADAM WEAVER: Are you catering?

20 JAMES FUTCH: No. You workaholics. There's
21 always somebody who wants to stay here and work on
22 whatever it is.

23 (Proceedings recessed at 11:57 a.m.)

24 (Proceedings resumed at 1:27 p.m.)

25 RANDY SCHENKMAN: Okay. Since everybody is

1 here, we're going to call the meeting back to order.
2 And we have our guest lecturer here, Will Gibbons.
3 So whenever you're ready.

4 WILL GIBBONS: Thank you. Hello everyone. I
5 am Will Gibbons. I'm the new RSO at Moffit down
6 in -- well, right like here in Tampa. I will be
7 giving a, like, high-level overview of the types of
8 uses of radiation at Moffit. I'll begin with a
9 quick blurb, a little about me, followed by a quick
10 history of Moffit before I dive into what or how we
11 apply radiation. And then I'll finish up with some
12 of the proposals or ideas for the future of Moffit.

13 So a little bit about me. I have a background
14 in nuclear engineering. I'm an RRPT. I've passed
15 AAHP part one. I'll be taking part two within a
16 month now. I am a certified laser safety officer
17 and I have been truly privileged to have had quite
18 the diverse career range so far. And I've done a
19 Marssin work out at Berkeley Labs. I worked with a,
20 kind of like consulting firm for the refueling of
21 naval reactors. I worked for one of your own, Adam,
22 and before I moved back down here to Tampa, I spent
23 a few years up in Chicago.

24 So Moffit Cancer Center opened our doors not
25 too long ago in 1986. And ever since, we have

1 grown; expanded. It's truly a remarkable place
2 filled with some of the most brilliant people I have
3 met. As, like, you can see, the timelines are very
4 short in between some pretty big milestones.

5 We are a -- we have been recognized by various
6 accreditations. We have been ranked as, like, high
7 as, like, number six by the U.S. News and World
8 Report for the best hospitals for cancer treatment.
9 We are ACR accredited and there's just many
10 accomplishments Moffit is proud to have achieved.

11 So I'll briefly touch on how Moffit does have
12 non-human research. That will not be what I focus
13 on. I'll be talking mainly about the clinical side.
14 But there are brilliant scientists; two large
15 research buildings, many isotope users, x-rays and
16 quite the resources.

17 I know this half is, like, covered by the USF
18 radiation safety team.

19 So now for the side I am over, the clinical
20 side. Moffit has many facilities I know mainly here
21 in Tampa. There is a center at an Advent Health
22 site in Wesley Chapel. Moffit also has established
23 various partnerships such as the Morton plant, also
24 others such as sites in Pembroke Pines and
25 Celebration.

1 We currently have four radioactive materials
2 licenses listed here. We had our blood irradiator
3 replaced with an x-ray device, so that cut down on a
4 license.

5 Also, we have a decent expanse of radiation
6 generating machines. At the main campus, which is
7 an inpatient and outpatient site, we have seven
8 LINACS. We have a whole slew of diagnostics and one
9 electronic brachy system. The two other larger
10 outpatient clinics also have a good number of x-ray
11 or, like, radiation machines. And then as I touched
12 on, our Wesley Chapel site has a LINAC up there.

13 So Magnolia, as I said, it is our main campus.
14 It is up at the University of South Florida campus.
15 It is licensed for 206 inpatient beds. We do a lot
16 of different procedures with radiation, both
17 diagnostic as well as therapeutic. This is a list
18 of some of the modalities available.

19 So in IR, they do a whole bunch of really neat
20 stuff. There are three NGO rooms; a very talented
21 team of physicians and wonderful technologists and
22 the culture is just fantastic. As an RSO, it's
23 really nice when there's a culture that respects the
24 tools that they employ.

25 Radiation therapy is, I think, one of the cool

1 departments. They do a lot of very interesting
2 work. They have, like I said, seven LINACS at
3 Magnolia. One is an MR-guided LINAC and that gives
4 some really great resolution. There's a different
5 techniques, capabilities and --

6 At McKinley, this site, it is a mile down the
7 road from the Magnolia campus, so very convenient
8 for the RSO who has to travel between sites. There
9 it is a purely outpatient clinic. They have DEXA,
10 3D mammography and both nuclear medicine and PET.

11 Moffit International Plaza, which is right down
12 the, like, road here, if you came in off of Boy Scout
13 Road from Dale Mabry, you went right past it.

14 This is another outpatient site. There are two
15 LINACS. One was recently installed, replacing
16 another. They have, again, a, like, wonderful slew
17 of modalities and they have PET for the materials
18 side.

19 Now, the HDR, this is housed at our Magnolia
20 site. We do source exchanges every two months so
21 that we can keep the dwell times, like, low to treat
22 as many patients as we can to give the care to
23 everyone who needs it. Typically treating about 12
24 to 15 patients a week.

25 Something really cool they do, they develop in

1 house flaps for skin and, like, different
2 applicators to best suit each patient. So
3 personalized medicine as a whole is a growing idea
4 and it's really nice seeing that applied here.

5 So that is a, like, basic overview of what we
6 have. All that takes a large team. We have, again,
7 some of the most brilliant minds I know and they
8 are, like, we have a number of practitioners which
9 are both MD, DOs as well as, like, the mid-level
10 nurse practitioners and such. There are wonderful
11 nurses who care for these patients and really great
12 technologists. I really appreciate again how every
13 team member really has the passion to provide the
14 best care and it's nice as a safety professional to
15 see people who take safety seriously.

16 So radioactive materials, there's many uses
17 and, like, a new radio pharmaceuticals coming out
18 and we can see the applications growing. The
19 Lutecium-177 usage, whether that is NETs or
20 prostates going up, the Y-90 microsphere cases are
21 just growing. And like, this is just a snapshot of
22 the growth.

23 Now, sometimes things go up and sometimes
24 things go down. There is also different isotopes
25 not being used as much such as Samarium, which the

1 maker has discontinued that. So other things such
2 as like TC-99M, we see it coming back up. So I
3 believe the dip we saw was more to do with the
4 pandemic we are in as opposed to reducing the usage
5 of it.

6 NICHOLAS PLAXTON: I have a question on that.
7 The I-131 I saw kind of dipped down and came back
8 up. Do you think that's the same reasoning or what
9 was the -- I figured thyroid cancer is the main
10 thing being treated. I was kind of surprised to see
11 it go down and come back up.

12 WILL GIBBONS: Yeah, I don't have the specifics
13 of why, but I mean, I would -- there's many
14 different reasons which could and that could include
15 the pandemic. But like, again, I don't have --

16 NICHOLAS PLAXTON: Yeah.

17 WILL GIBBONS: -- the specifics.

18 MARK SEDDON: At Moffit, they did stop doing
19 that during the pandemic.

20 NICHOLAS PLAXTON: They did? I mean, that is
21 what it is.

22 MARK SEDDON: I can't imagine it could be just
23 like a reduction.

24 NICHOLAS PLAXTON: We didn't stop at the VA.
25 We just kept going.

1 MARK SEDDON: It's the VA. You guys do things
2 differently.

3 (Laughter).

4 WILL GIBBONS: For Xenon, I think almost
5 everyone stopped Xenon-133 during the pandemic.

6 NICHOLAS PLAXTON: Yeah. True.

7 WILL GIBBONS: So again --

8 NICHOLAS PLAXTON: They can do that. We did
9 stop that. And we actually stopped doing the
10 exercises on the stress test. I think most people
11 did that, too.

12 ADAM WEAVER: And just used chemical induced?

13 NICHOLAS PLAXTON: We do to this day unless
14 they have a negative Covid. So I don't know if the
15 other people have that experience. We didn't want,
16 you know, people on the treadmill blowing stuff
17 around. So, yeah, since the pandemic started, we've
18 been doing pharmacologic stresses only, unless it's,
19 like I said, they request it and the patient has a
20 negative Covid, like, within 48 hours.

21 MARK SEDDON: That would be an interesting
22 study to look back. We have cardiologist offices.
23 I never really thought about if they changed their
24 practices, so that's curious.

25 NICHOLAS PLAXTON: Yeah.

1 WILL GIBBONS: Yeah. So in, like, in addition
2 to those, like, modalities and, like, isotopes I
3 have touched on, we are applying some pretty cool
4 cutting edge work, too. GARD, I believe some of
5 them you might have heard of. That is a
6 mathematical approach where they look at different
7 predictors to really, again, apply a personalized
8 approach to their radiation oncology treatment. Dr.
9 Torres-Roca has been very instrumental in this work.

10 Also, over in IR, they are doing prosthetic --
11 prostatic artery embolization. And they are finding
12 that really does help alleviate lower urinary tract
13 symptoms during their radiation therapy treatments.
14 And I don't think I need to talk about the
15 different -- the very large occurrence of prostate
16 cancer. So I mean, this is really big work by
17 Dr. Parikh. And it's just really impressive, I
18 think.

19 And again, radiopharmaceutical usage is, like I
20 said, growing. There are many trials coming in.
21 Different proposals, whether using Iodine-131,
22 Actinium-225, that's a big one for us. I know also
23 different Lutecium studies. And on the
24 brachytherapy side, there are proposals such as
25 Radium-224 seeds. So I have a license that I'm in

1 now so hopefully we get that back. So we can tell
2 them that it's a go.

3 And I know if, like, anyone has like been up
4 by the Moffit USF area, you might have seen the new
5 hospital being built. The current plan is to start
6 not at full capacity, but it can grow up to around
7 400 inpatient beds. There will be some pretty cool
8 technology, such as a CT, which can be moved between
9 two IR rooms; a nuclear medicine department with an
10 infusion center.

11 Also, we have four lead-lined rooms with the
12 shielding designed for up to a curie of Iodine. So
13 that will be good for possible work such as Azedra
14 or Iomap B (ph). Different systems that are
15 currently being looked at. This one will be -- this
16 is being built, again, a mile down the road from the
17 Magnolia main campus.

18 And a little bit about the radiation safety. I
19 am a dedicated RSO, so I do not have another hat as
20 like any other role, so it really lets me focus and
21 to make sure we have one of the best radiation
22 programs.

23 I make it a point to visit the different
24 departments routinely. I am a really huge proponent
25 of building up over a rapport. I think the

1 relationships, like, make a really big difference.
2 I know throughout the sites, we have records kept
3 both on paper and electronically for access for
4 whoever needs it. Again, being at Moffit, the team
5 members are fantastic. The safety cultures I feel
6 impressive and it's also nice when there's support
7 from the top.

8 There's also future endeavors, including a
9 possible second Truebeam vault up at the Wesley
10 Chapel site. I'm exploring additional MR-LINACS.
11 Looking into PET LINAC where the beam's guided by
12 the location of the PET tracer. So I think that is
13 really cool. And also, looking at a proton therapy
14 center, carbon ion technology as well as expanding
15 our footprint to best serve our patients. And that
16 includes a Pasco County campus. Over 700 acres have
17 been purchased to build a true campus to fully
18 support patients. Both, like, research, clinical
19 presence as well as, like, planned resources for
20 patients. And with this growth, a personal endeavor
21 is to apply for a broad scope license.

22 Any questions?

23 NICHOLAS PLAXTON: I'd just like to add the --
24 so the MR-LINAC, I don't know, are you familiar with
25 that? Because I know when you guys had it, it was a

1 couple years ago, and that was like one of, like,
2 five in the country at the time. And it's
3 impressive because it's a -- the MR runs
4 continuously during the entire time the treatment's
5 running, so -- and the beam only goes on when the
6 target's in the, in the zone versus like
7 traditionally. Normally, you just get a CT in the
8 very beginning and you just assume the patient is
9 not moving, which is not the case.

10 WILL GIBBONS: Right.

11 NICHOLAS PLAXTON: So it takes twice as long to
12 do, but the amount of direct, you know, hitting the
13 target without hitting stuff around it is huge.

14 MARK SEDDON: Yeah. For us, SBRT is super
15 critical. That's the gold standard if you want to
16 do abdominal SBRT without a lot of traditional
17 markers. That would be the way to go with an
18 MR-LINAC. Actually, I'm really interested in your
19 PET LINAC plans. That would be pretty cool.

20 WILL GIBBONS: I know we are also right, like,
21 now, looking to expand our surface-guided therapies.
22 I know to install that technology on more of our
23 LINACS. There are two more brands, I think, from
24 now and I know we're just looking at which one's
25 best for us, so --

1 MARK SEDDON: Interesting. So is the -- having
2 the fusion center in your nuclear medicine
3 department, is that going to be your standard with
4 your new campus, too?

5 WILL GIBBONS: I cannot talk to the specifics
6 for Pasco because I don't know. However, the plan,
7 the drawings for the new McKinley site are to have
8 three infusion chairs where they have dedicated
9 bathroom, all of them that, right in nuclear med and
10 from a safety side, I think that is a wonderful way
11 to go, so it's all kept locally.

12 MARK SEDDON: Yeah. I think it's interesting
13 because I know we talked previously about the future
14 of nuclear medicine and, of course, on the
15 diagnostic side you're seeing more infusions and
16 having a need for that change in the way we're
17 approaching nuclear medicine to be more therapy
18 treatment and incorporated and having infusion
19 available locally is probably the safest situation
20 to be in.

21 WILL GIBBONS: Right.

22 NICHOLAS PLAXTON: You're doing that for the
23 Lutetium therapies mainly, right?

24 WILL GIBBONS: Correct.

25 NICHOLAS PLAXTON: Currently, right?

1 WILL GIBBONS: Correct.

2 MARK SEDDON: You have to have infusions for
3 like the new Pluvicto and some of the other stuff
4 coming down the pike, all those include fusions as
5 well. That's going to be kind of the new wave.

6 NICHOLAS PLAXTON: Yeah.

7 WILL GIBBONS: Yeah. I mean like, again,
8 having -- being able to, like, minimize the
9 traveling of either the dose, itself, or the
10 patient, I think is really nice. Yeah.

11 MARK SEDDON: Are you involved directly with
12 any of the procedures? I mean, like, do you
13 participate with, like, the TheraSpheres or gamma
14 tiles? Are you more of the compliance side?

15 WILL GIBBONS: I'm more the compliance side.
16 So, so like, safety oversight. Pencil pusher type
17 of a deal.

18 (Laughter)

19 MARK SEDDON: They keep everyone in check.
20 You're the one that tells people what to do.

21 WILL GIBBONS: Again, I make the rounds. I
22 don't sit at my desk that much because, like, I
23 mean, that gets old, too. But I mean, I visit
24 nuclear med; IR, basically, daily. I check in. I,
25 like, watch some stuff. And I have active

1 conversations with them. The physicians, the
2 technologists really to, like, get everyone's
3 perspective on how things are going. Where can we
4 do better and just to -- because I believe it's
5 important to have all people involved from the
6 technologists pushing the dose; the physicians so
7 that we're all on as close to the same page as like
8 possible. And, like, I feel my going around by
9 chitchatting, I mean I don't -- I think all of that
10 really helps. Even though I am more a compliance
11 side, I think that that does have an effect on the
12 physical work, too.

13 Thank you all.

14 ALL: Thank you.

15 MARK SEDDON: Appreciate it.

16 (Applause)

17 JAMES FUTCH: I wanted to thank Will for being
18 willing to, very late in the process, listen to some
19 guy, called him on the phone -- Adam called him --
20 and be willing to come and do this for us here
21 today. So thank you very much.

22 WILL GIBBONS: Thank you.

23 JAMES FUTCH: Did you have any question that --
24 you may want to hang around and listen to Clark's
25 talk about medical events. You missed a little bit

1 of Kevin just before lunch talking about the nuclear
2 medicine events.

3 WILL GIBBONS: I would like that talk.

4 JAMES FUTCH: Thank you again, Will.

5 RANDY SCHENKMAN: Yes. Thank you.

6 Okay. Clark?

7 CLARK ELDRIDGE: All right. I guess I'll start
8 with the part we didn't go over earlier. A little
9 overview. I don't that I really told you all this
10 before about the program. Year over year type
11 statistics.

12 So in 2021, we had 21,000 -- wrong. Back up.
13 Wrong thing I'm on here. All right. In 2021, we
14 had 18,410 facilities that actually paid. 18,866
15 that we are looking to get money out of. Some which
16 have maybe gone and never told us. We're not sure
17 what the percentage there is.

18 In -- I mislabeled something here. Okay. Back
19 up.

20 JAMES FUTCH: If you don't tell us, we wouldn't
21 know.

22 CLARK ELDRIDGE: Now I'm reading my notes
23 right. 2021, 18,410. Year to date paid. This
24 year, a total of 2021, this year year to date,
25 18,866 registrants. So last year total was 19,383.

1 This year, year-to-date registrants is 19,838. So
2 we're getting more people registering and using the
3 machines. Both those that haven't paid and those
4 who have paid.

5 Fees per the program, 2021 for the year was
6 from folks who were actively, what am I going to say
7 here? Registered only for that year, 2.8,
8 \$2,885,000. And for -- that we billed and 276 --
9 2,765,000 have been paid. Year to date this year,
10 we billed \$2,853,000 and we received \$2,703,000.

11 Compared to if you were to go back to last year
12 on -- on May 5th, we would've only billed, at this
13 point, \$2,807,000 and received \$2,718,000. So we've
14 actually, as of May, we've billed for more fees.
15 People applying for registrations, people for adding
16 tubes in the annual renewal. We're ahead of
17 billings for this year; behind it for collections.

18 With personnel update, the program, we lost one
19 of our reg. specialists. We have two that help
20 process all the paperwork that people sent in, so
21 we've been half the staff. Right before renewals
22 last year. First of September. Left us and took a
23 job.

24 I'm sure this might sound familiar to many of
25 you all. It took five tries to get somebody on

1 board. We haven't still got them in the door
2 working yet, but the paperwork is supposed to be
3 moving along. The first round of hiring, people
4 couldn't pass our basic skills test with some few
5 logic questions and proofreading and computer
6 skills.

7 The second round we had someone who had
8 excellent scoring but they were previously dismissed
9 from the agency and we couldn't get around that.
10 The third round was where it got real interesting.
11 Of the people who passed the applications and
12 normally, we would have 50 to 100 applications.
13 We're getting ten, right?

14 So five passed the application scoring. Two
15 declined interviews and two were no shows. Didn't
16 call. Just didn't show up for the interview.

17 Fourth round of interviews, same thing. We
18 scheduled three people. None bothered to show up
19 for the interviews.

20 ADAM WEAVER: None? Wow.

21 CLARK ELDRIDGE: So this was the fifth round we
22 just finished last month and even that, we had four
23 people that applied; that passed the criteria. One
24 declined, one was a no show and two interviewed.

25 GEORGE GILBRIDE: You're up two from the month

1 before.

2 CLARK ELDRIDGE: Exactly. We found a good
3 candidate this time. So hopefully the person will
4 be on board all of our steps in the hiring
5 procedures within our agency goes well.

6 We currently have one outstanding variance
7 request that we're working on. This is a law firm
8 from Tampa who's requested to -- Tampa and New York.
9 Who's requested to use an XRF to shoot peoples'
10 shins to look at the lead in bone concentration.
11 And they're proposing an individual who determines
12 who should receive this experiment and whatnot, is a
13 Ph.D, not nonmedical, out of Massachusetts is what
14 they requested up in the Boston area, I think. I'm
15 not sure about that right now.

16 This was actually the same group, law firm used
17 this in a lawsuit in Flint, over the water, lead in
18 drinking water in Flint and they're proposing it for
19 a lead exposure lawsuit here in Tampa.

20 Current rule development that's undergoing. I
21 reported earlier that a couple years ago, we
22 actually had an update to our statutes specifying
23 how human beings may be exposed to the useful beam
24 of a radiation machine. So the first category is
25 for the purpose of medical or health care. If a

1 licensed health care practitioner operating within
2 the scope of his or her practice has determined the
3 exposure provides a medical or health benefit
4 greater than the health risk proposed by the
5 exposure and the health care practitioner uses the
6 results of the exposure in the medical or health
7 care of the exposed individual.

8 The other one is, it previously there is no
9 explicit authority in statute for security
10 screening. For jail inmates and things, using the
11 transmission x-ray scanners to look for contraband
12 in the digestive tract where they've hidden stuff
13 internally. So there's still isn't an explicit
14 category for registration for these folks, but there
15 is now allowance that says for the purpose of
16 providing security at the four facilities or other
17 venues, if the exposure is determined to provide a
18 life safety benefit to the individual exposed which
19 is greater than the health risk imposed by the
20 exposure, and such determination must be made by an
21 individual trained in evaluating and calculating
22 comparative mortality morbidity risk according to
23 the standards set by the Department to be valid, the
24 calculation method of making a determination must be
25 submitted and accepted by the Department. Limits to

1 annual total exposure for security purposes must be
2 adopted by the Department rule, based on nationally
3 recognized limits or relevant consensus standards.

4 So, of course, this is the ANSI standard for
5 security scanners. I think it's 250. I can't say
6 the unit. It's not micro. Is it micro? Micro a
7 year.

8 CINDY BECKER: Per year?

9 CLARK ELDRIDGE: I can't even remember, I can't
10 remember what the limit for, for annual exposure for
11 those folks.

12 CINDY BECKER: 25 millirem. 250.

13 CINDY BECKER: Millirem.

14 CLARK ELDRIDGE: The maximum individual
15 exposure I think is 250 microrem, something like
16 that. Something on that order.

17 ADAM WEAVER: For one shot.

18 CLARK ELDRIDGE: One shot.

19 CINDY BECKER: There you go.

20 CLARK ELDRIDGE: The systems are designed to be
21 operated down to, again, I can't remember all the
22 frigging limits in my head. But, of course, when
23 you look at the images from the lower exposure, you
24 really can't see defined, you know. Examples,
25 they've got apparently people swallowed stuff they

1 shot with it and low res you really can't see the
2 packet in there and you have to go up to 250 to see
3 the defined.

4 ADAM WEAVER: You can't detect drugs in a
5 plastic bag.

6 CLARK ELDRIDGE: Right. You have to have a
7 higher dose to get the bags.

8 ADAM WEAVER: Are you going to copy your
9 definition from that ANSI standard?

10 CLARK ELDRIDGE: Well, part of it.

11 ADAM WEAVER: Of who needs --

12 CLARK ELDRIDGE: Now?

13 ADAM WEAVER: The basis for when you need to
14 take one of these.

15 CLARK ELDRIDGE: Yeah. The trick, part of the
16 thing here is of course, the current rule says it's
17 only for individuals who are legal detainees can be
18 exposed.

19 ADAM WEAVER: No visitors, yeah.

20 CLARK ELDRIDGE: Yeah. And so, the current is
21 to actually flesh out the rules for Part B. It's,
22 you know, this is a requested by Department of
23 Corrections. Department of Corrections two years
24 ago had submitted a request to expose -- to use
25 these machines on anyone entering their compound.

1 Their confines. And the response from the
2 Department stated things like, your concern here is
3 with people, you're using a transmission x-ray that
4 produces an organ dose and your concern here is for
5 individuals carrying something into their colon or
6 in their gut. You haven't -- your request for
7 everybody doesn't describe how all the other
8 population is supposed to remove things from their
9 colon or their gut while they're in there and handed
10 off. So if a lawyer is coming in to see a client,
11 you know, an inmate, a family member, a service
12 provider, a vendor comes on to your thing, you
13 haven't described how this is -- why they should be
14 getting an organ risk dose, because that's a risk
15 for them to carry stuff behind your security line
16 that way.

17 Also, the fact that there are actually kind of
18 multiple security lines and standards within a
19 prison. It's not just one monolithic, and how you
20 would consider applying it to that, when if you're
21 worried about for a bunch of these other folks, why
22 aren't you using back scatter or millimeter
23 microwave for searching people. That you don't have
24 to give an organ dose if there's not a reasonable
25 way you expect them to be able to extract something

1 and pass it to someone else. That was -- and then,
2 so they're very interested in us moving forward with
3 this.

4 Another thing I'd like to talk about is -- and
5 get your group's opinions on this and anyone else
6 who would like to comment. Dental mobile providers.
7 Okay? So in the history of dentists or x-ray and
8 dental, our rules are really written for your -- I
9 can't say traditional because you'd have to put a
10 time period on what the tradition to consider -- of
11 you go sit in your chair at the dentist, they clean
12 your teeth, the wall-mounted bitewing machine or the
13 hallway handheld, that's where your x-rays are. And
14 so, we haven't required RPPs for dentists at this
15 time because it's a very controlled environment. It
16 is a low energy machine. 70KB. Something along
17 that line.

18 When they started using handhelds, again, this
19 was first conceived primarily in a dental office
20 and/or if you want to consider this also in a mobile
21 dental facility. Putting a dentist into a van, into
22 a bus, something like that. So you still have your
23 controlled dental environment that meets all the
24 standards for the Board of Dentistry for sanitation
25 and all that type of stuff.

1 Handhelds, at that point, somebody is holding
2 an x-ray tube and while the machines are safe to
3 use, you won't know if they're doing something
4 stupid with it or if there's some sort of odd defect
5 in that machine that's causing an exposure if
6 something isn't wearing a dosimeter. So we required
7 a dosimetry for handhelds, even though, again, for
8 dental handhelds and those are currently the only
9 handhelds permitted under our rules to be used in
10 the state.

11 ADAM WEAVER: Really? Is that decision based
12 on inspections or interviews with the techs to -- I
13 mean, the dental hygienists, I guess, doing it,
14 because, you know, just some of the old systems were
15 not, you know, a long time ago, the ones that you
16 think are fixed units, people still, you know, told
17 the patients to hold them or they held them because
18 the -- you know, the counterweight of arm wasn't
19 working right.

20 CLARK ELDRIDGE: That's actually an inspection
21 criteria and that's specifically prohibited in the
22 rules.

23 ADAM WEAVER: Right, but --

24 CLARK ELDRIDGE: Yeah, we receive complaints
25 occasionally from hygienists saying, I'm having to

1 hold the tube. Can you come out and tell the
2 dentist here you can't make me do this anymore.

3 ADAM WEAVER: Yeah.

4 CLARK ELDRIDGE: And that's --

5 ADAM WEAVER: Have you seen results, any
6 positive results, or any dosimetry results from the
7 handheld units?

8 CLARK ELDRIDGE: At this point, nobody has
9 reported anything to us, but they don't have to.
10 They just have to monitor it.

11 ADAM WEAVER: They just have to wear a badge.

12 CLARK ELDRIDGE: They have to wear a badge and
13 monitor their results, just like and we don't
14 expect --

15 ADAM WEAVER: Do they have criteria for them?

16 CLARK ELDRIDGE: It's the same as everybody
17 else. All medical professionals.

18 ADAM WEAVER: Five rem per year?

19 CLARK ELDRIDGE: Yeah. We never expect to see
20 anything reported as an overexposure, but -- you
21 know, although you mention it, we probably do want
22 to set up some reporting criteria for them. And
23 again, this is part of the -- would be part of the
24 discussion here, would be about an RPP, do we need
25 a --

1 ADAM WEAVER: Yeah. If they exceed 100
2 millirem a year, like --

3 CLARK ELDRIDGE: They need to find out what
4 they're doing wrong because they should be pretty
5 much to zero if they're using it properly.

6 ADAM WEAVER: Yeah, right.

7 CLARK ELDRIDGE: And the other thing is maybe
8 you should require ring badges.

9 GEORGE GILBRIDE: Their hands. That's probably
10 going to be the highest exposure than anything.

11 ADAM WEAVER: Most likely, it's going to be the
12 scatter from the patient back to the individual guys
13 shooting it. You're not going to get much on your
14 rings because it's actually like a gun.

15 GEORGE GILBRIDE: The one I have is a two
16 hands.

17 CLARK ELDRIDGE: No, they have two hands.

18 ADAM WEAVER: They also have that but it's
19 still a gun.

20 GEORGE GILBRIDE: Kind of like this.

21 ADAM WEAVER: You can do finger rings, but
22 that's more of a problem because you're going to
23 have to wear it under their gloves.

24 CLARK ELDRIDGE: Yeah.

25 ADAM WEAVER: Which direction are you going to

1 make them do the ring, because the rings are very
2 directional orientation wise for the active element.
3 The whole body exposure is more important because
4 what's the limit for your hands versus --

5 MARK SEDDON: An extremity ring is ten times
6 higher, so I wouldn't worry about the rings.

7 CLARK ELDRIDGE: All right. That settles that.
8 I appreciate your input.

9 So right now we have a couple companies in
10 Florida that have a hygienist that goes door to
11 door -- or I shouldn't say door to door. They will
12 go to -- into facilities to provide dental care.
13 Which the statutes for dental hygienists is very
14 clear. It says, upon a patient of record of a
15 dentist who's issued a prescription for the services
16 of a dental hygienist, which prescription shall be
17 valid for two years unless a shorter length of time
18 is designated by the dentist. Licensed public, they
19 can go to license public and private health care
20 facilities, other public institutions in the state,
21 federal government. Public and private educational
22 institutions, school clinics, right? The home of a
23 non-ambulatory patient and other places in
24 accordance with the rules of the board.

25 I've been trying to find the other -- any

1 rules. I couldn't find any rules that specified any
2 additional locations than those specified by the
3 board. But we have these folks going out. We found
4 one who advertised that they will go to your
5 workplace and set up a clinic, which is explicitly
6 not here. I certainly understand going in to ALFs
7 because that's somebody's home or in the nursing
8 homes. That makes perfect sense.

9 ADAM WEAVER: Yeah.

10 CLARK ELDRIDGE: The fact they're not
11 necessarily maintaining anything, they're not
12 necessarily -- they're out -- they're sort of in the
13 wild now.

14 (Cindy Becker and Brenda Andrews Leave the
15 Meeting)

16 CLARK ELDRIDGE: Of this practice, whether or
17 not we should consider requiring RPPs at this point
18 for these dental hygienists and have some procedures
19 and standards for them concerning radiation safety.
20 Because they're out carrying these handhelds into,
21 you know, it's not a controlled environment anymore.

22 ADAM WEAVER: Yeah. The RPP could be as simple
23 as follow the manufacturer's guidelines or for use
24 or copy those in the RPP, or the state could come up
25 with a generic one.

1 MARK SEDDON: Makes sense. Yeah. Come up with
2 one, a model RPP. We have one for mammography. You
3 have one for other -- that are low dose types of
4 studies that potentially don't have a huge risk.

5 ADAM WEAVER: Portable X-ray machines.

6 CLARK ELDRIDGE: Of course, the additional
7 thing is our current code requires that portable or
8 mobile equipment only use for examinations that are
9 impractical, which --

10 MARK SEDDON: Yeah.

11 CLARK ELDRIDGE: -- you know, is somewhat
12 interpreted as for non-ambulatory. You can't get
13 the person to the machine. There's also the
14 hospital general dispensation because you need that
15 x-ray now. You going to bring the machine to the
16 person, you can't get them, you know, it's a life
17 safety thing.

18 ADAM WEAVER: You can't move them out of the ER
19 or something.

20 CLARK ELDRIDGE: You know it's not in the --
21 and as far as my understanding, it's not within the
22 dentist's scope of practice to make this
23 determination whether it's practical to get the
24 person to the machine. I mean, they can't determine
25 if somebody's got a broken leg. That's practicing

1 medicine.

2 MARK SEDDON: Right.

3 CLARK ELDRIDGE: So there's an issue whether or
4 not we need to make sure that these people all have
5 a list for, for every place they're going.

6 MARK SEDDON: So licensed practitioners does
7 not include dentists?

8 CLARK ELDRIDGE: That's using the machine.

9 MARK SEDDON: Right.

10 CLARK ELDRIDGE: But is it within their scope
11 of practice.

12 MARK SEDDON: Okay. I gotcha.

13 CLARK ELDRIDGE: They can tell you if you've
14 got a bad tooth and can pull it, but they can't tell
15 you --

16 ADAM WEAVER: They can't tell you you've got a
17 broken leg.

18 MARK SEDDON: Yeah.

19 CLARK ELDRIDGE: Right. That's not within
20 their scope. So that they've actually required, you
21 know, got orders or something like this in their
22 list of folks where these hygienists are going that
23 verified, yes, these people can't make it out to do
24 it. I think that's pretty simple at a nursing home.

25 Now again, another situation would obviate

1 these is establishment of a temporary dental
2 facility type thing. Where there are in some of
3 these group homes and these ALFs, they have clinic
4 space, right? So if they limit their service to the
5 clinic space --

6 MARK SEDDON: Yeah, makes sense.

7 CLARK ELDRIDGE: -- then that would be part of
8 our requirement for an RPP or discussion, you know,
9 in the guidance document.

10 ADAM WEAVER: Probably in the guidance document
11 you want to include or insist they only use digital
12 imaging.

13 CLARK ELDRIDGE: True.

14 ADAM WEAVER: Because if not, there's no way to
15 develop it --

16 CLARK ELDRIDGE: Right.

17 ADAM WEAVER: -- quick enough to get a --

18 CLARK ELDRIDGE: Although, I don't know that
19 anything has bought anything that wasn't digital in
20 Florida in how long. It's been a couple years.

21 ADAM WEAVER: It's still --

22 CLARK ELDRIDGE: There's still some people
23 using film out there.

24 ADAM WEAVER: It's a doctor's office with a
25 developer or --

1 CLARK ELDRIDGE: Yeah.

2 ADAM WEAVER: I don't know. People still use
3 tanks.

4 CLARK ELDRIDGE: So any other discussion if
5 this is -- we should be going forward with
6 developing this or --

7 MARK SEDDON: That makes sense.

8 ADAM WEAVER: Is there that much usage? Even
9 if it's complicated --

10 MARK SEDDON: What's the volume of portable
11 devices, do we know?

12 CLARK ELDRIDGE: We currently have, I think,
13 three registrants that are doing this. I don't know
14 how many that might not be that we don't know yet
15 because how we found these three is they said their
16 physical location was a, you know, you show up at
17 the physical location, it turns out it was a rental,
18 a co-working space where they rented a desk or it
19 was a mail drop. And they weren't bothering to tell
20 us and we had one of the companies, national company
21 doing this, well, we don't want to tell you where
22 our hygienists are their homes. It's like, we go
23 into people -- there are, there are mobile CRM
24 providers in the state that store their machines in
25 their garage and we go out to their house and test

1 the equipment in their garage when they're not
2 deployed. That's not a problem. You have to tell
3 us where you keep your -- the statute says you've
4 got to tell us where you keep your machines --

5 ADAM WEAVER: Yeah.

6 CLARK ELDRIDGE: -- you know? So -- the one
7 that came up two weeks ago, which is one reason I
8 decided to add this, was they went, turned around
9 and put their home on the registration after we
10 explained to them you have to give us a physical
11 location.

12 ADAM WEAVER: Most likely we're going to find
13 more of it because these machines --

14 CLARK ELDRIDGE: We do know there are mobile
15 dentists out there.

16 ADAM WEAVER: Yeah.

17 MARK SEDDON: Yeah.

18 CLARK ELDRIDGE: And the trick is are they, you
19 know -- and again, in the sense they're going to
20 someone's private home, which it says they're
21 non-ambulatory, I don't see that that's necessarily
22 an RPP issue. The big one is the ALF or some other
23 location where they may make an attempt to go room
24 to room and if there's any, versus --

25 ADAM WEAVER: Mm-hmm.

1 REBECCA McFADDEN: A nursing home?

2 MARK SEDDON: I think it doesn't make --
3 there's no sense not doing it in our state. We
4 might as well have one developed and be prepared for
5 it.

6 ADAM WEAVER: Has any other states or CCRP,
7 what is it?

8 CLARK ELDRIDGE: Nothing I've seen but again,
9 this is --

10 ADAM WEAVER: This is new.

11 CLARK ELDRIDGE: It's not new, but it's coming
12 to a point where -- there wasn't a competing
13 interest that pushed it back down before I got
14 around to discussing it.

15 ADAM WEAVER: Okay.

16 CLARK ELDRIDGE: I'm sure something else will
17 jump up tomorrow.

18 ADAM WEAVER: It's Friday.

19 REBECCA McFADDEN: Now we have portable
20 dentistry.

21 ADAM WEAVER: That would be next Friday when
22 it's Friday the 13th.

23 CLARK ELDRIDGE: Okay. So let me find --
24 where's my list of medical events now. Okay. I
25 maybe I'll start with the simpler ones.

1 MARK SEDDON: Can I ask one question since
2 finished up with the machine? I know you presented
3 some draft information notices last time. Are those
4 moving forward or --

5 CLARK ELDRIDGE: Yeah. They've been forwarded.
6 And I keep thinking I've mailed them to be posted
7 and every time I look, it's like, I didn't get them
8 over to Brad to post yet, so they need to be posted.

9 MARK SEDDON: Okay.

10 ADAM WEAVER: They're not on the website yet.

11 CLARK ELDRIDGE: Not on the website yet.

12 MARK SEDDON: Okay. Thanks.

13 CLARK ELDRIDGE: So wrong site, electron beam
14 therapy for a skin lesion. Patient comes in to -- I
15 didn't record which treatment this was. But for
16 fraction. Pulled up their pant leg and the
17 therapist, okay, that looks like the right lesion
18 and treated it and it turns out it was -- the actual
19 lesion to be treated was 17 centimeters proximal up
20 the leg, rather than the one that was treated.

21 JAMES FUTCH: So it was a target rich
22 environment.

23 CLARK ELDRIDGE: This case wasn't as target
24 rich. The last one we discussed it was target rich.
25 This last one only had two on the leg. It wasn't

1 the one time where the person had like 15 or some
2 ridiculous number of questionable spots on their
3 legs.

4 And so when they came in the next day, they
5 pulled up the pants leg higher and said, oh, that is
6 the right one. So that was basically failure to
7 follow proper time out. They didn't actually review
8 the material that said, yes, it's over here, not
9 there that closely. And then, you know, because
10 there was data that, paperwork sent to us showed
11 they actually had measurements and photo with the
12 ruler showing where it was supposed to be.

13 ADAM WEAVER: Right.

14 MARK SEDDON: Was it a physician who said it or
15 was it a therapist?

16 CLARK ELDRIDGE: Therapist. Strictly therapist
17 this time.

18 Two wrong patients. Both in this case were
19 both prostates. So Patient A was next up to bat.
20 He went to the bathroom and when the therapist came
21 out to call Patient A, Patient B said, okay, I'll
22 come in and do it.

23 ADAM WEAVER: I'm close enough to that name.

24 CLARK ELDRIDGE: So Patient A was asked for
25 their date of birth and responded with their actual

1 date of birth. And the therapist didn't really pay
2 attention to the date of birth and just checked,
3 clicked off. You know, confirmed date of birth.
4 Name, face verification system. The therapist then
5 realized they had treated the wrong patient. After
6 completion, when they went and escorted Patient B to
7 the waiting room and there was Patient A and
8 recognized that, you know.

9 ADAM WEAVER: It was my turn.

10 CLARK ELDRIDGE: Yeah.

11 ADAM WEAVER: Oh. Do you guys cite these
12 people, like Kevin did, financially or are you
13 allowed?

14 CLARK ELDRIDGE: Well, this will go through the
15 -- again, if it was the facility's lack of SOPs,
16 it's one thing. If it's a -- when it's the
17 therapist making mistakes, that's when it goes to
18 MQA to review and determine what the appropriate
19 action for the therapist is.

20 ADAM WEAVER: Then they get involved.

21 JAMES FUTCH: Actually, it comes back to me to
22 determine probable cause or not. And you would be
23 surprised if you were to learn, maybe not, that we
24 tend not to recommend actions on things we don't
25 think have probable cause.

1 CLARK ELDRIDGE: And some of these are the
2 problem during the pandemic with masks and I hate to
3 say it, apparently, when we get over certain age, we
4 all start looking more alike with a mask on maybe.
5 I'm not sure.

6 REBECCA McFADDEN: They can't hear you, they
7 think you're saying, they're reading lips.

8 MARK SEDDON: Yeah, that's true.

9 GEORGE GILBRIDE: So depending on some of those
10 masks, if they were cloth, sometimes my wife and I
11 would have, you know, and I mean, granted neither
12 one of us are spring chickens anymore, we both would
13 be like what, what? Because it's muffled.
14 Sometimes you just don't hear.

15 RANDY SCHENKMAN: Yeah, that's true, too.

16 MARK SEDDON: Sure.

17 CLARK ELDRIDGE: Next one, patient as I said it
18 was prostate. Therapist set up for Patient A. Went
19 to the waiting room. They found that Patient A
20 hadn't shown up yet. They decided to take back
21 Patient B. They went into the, um, vault and set up
22 the -- changed out the clinical set up properly for
23 Patient B. Performed a verbal time out in the room
24 because they knew it was the person. The problem is
25 there was normally a room monitor in there that

1 displayed what was on the, what was still set up for
2 treatment. And the monitor was out. So the
3 equipment was out so they couldn't look up at the
4 monitor and verify the display that showed the
5 person to make sure their name and date of birth.
6 But they knew they had the right person and whatnot.
7 So they go back in, run the treatment, and then
8 after treatment, they realize they still had Patient
9 A's treatment plan loaded on the console.

10 Last Friday, no details yet. Called in. All
11 we know is a laterality, laterality error. I can't
12 say the word right now. As I said, no details. But
13 left hip versus right hip. Right hip versus left
14 hip. We're not sure of the -- now, another wrong
15 site, since neo, neoplasm cervix, the treatment
16 involved pelvis area with boost treatments to
17 bilateral parametrium and selected pelvic lymph
18 nodes. So the patient was set up for the
19 parametric -- parametrium, left parametrium boost.
20 But when the CBCT was required, the treatment
21 system, control system for the machine requested
22 shifts outside the tolerances. And interestingly
23 enough, the CBCT image, as it was pulled up, was
24 loaded, was named with the Ellen boost rather than
25 the left parametrium boost. The machine actually

1 applied that label to it when it loaded it, even
2 though they set up for the left parametrium.

3 The therapists weren't too concerned with the
4 shifts because the patient had a very large habitus
5 which frequently will cause some significant shifts
6 over the, over the course of treatment. But they
7 were still concerned about the -- why the system
8 renamed the CBC -- categorized the CBCT image
9 incorrectly.

10 So after treatment, they contacted the physics
11 folks. And they investigated and found that the 3CT
12 field for this treatment, for the left LT BMP
13 prescription was actually moved in the system to
14 under the Ellen boost. They tested this out; found
15 out in Mosaic, you could move these fields
16 underneath the prescription without any restriction.
17 The system allowed you to just drag, you know,
18 whatever they got moved and there was no warning.
19 There was no nothing. So somewhere between the day
20 before and this day, somebody was in there. They
21 don't know. Click and drag. Because they, they
22 went in after and looked at the previous boost
23 fields and they were also renamed. They also had
24 the name Ellen boost.

25 So that's one of the other ones they went ahead

1 and treated because all the other images captured
2 for this boost treatment. So what happened is when
3 the person moved it, not only -- it also renamed,
4 the system automatically renamed, recategorized all
5 of the associated CBCTs for that field, for that
6 treatment field, with the new prescription section
7 name. So it moved it one prescription to the other
8 and automatically renamed it and this is a Mosaic --

9 MARK SEDDON: Mosaic.

10 CLARK ELDRIDGE: -- quirk. And so they have
11 requested assistance from Mosaic to fix this glitch.
12 System update.

13 MARK SEDDON: Was it a recent system update
14 they just did? That's why?

15 CLARK ELDRIDGE: Excuse me?

16 MARK SEDDON: Have they recently did a software
17 update?

18 CLARK ELDRIDGE: No information on that. So,
19 again, this was only one boost treatment that this
20 occurred. So it was all within the same treatment
21 field. So, you know, the result doses were within
22 the overall treatment doses and critical, you know,
23 all the dose targets and critical structures were
24 still in the tolerances so -- for the total
25 treatment.

1 MARK SEDDON: Is the reason why they waited
2 until after the treatment is they are exceeding
3 shift before reaching out to physics?

4 CLARK ELDRIDGE: Well, they were -- they didn't
5 feel it was too out of line since the person had a
6 very large habitus.

7 MARK SEDDON: Okay.

8 CLARK ELDRIDGE: They seemed --

9 ADAM WEAVER: Still within the range.

10 MARK SEDDON: I thought they were exceeding
11 their tolerance range.

12 CLARK ELDRIDGE: Well, the tolerance limit was
13 5 centimeters. It was 6.5. And it was their
14 experience, they've had to deal with this with
15 rather large people before between treatments.

16 MARK SEDDON: Okay.

17 CLARK ELDRIDGE: And so that was -- and we
18 still have one medical event outstanding from last
19 August. We're waiting on clarification from the
20 facility on procedures. We requested -- this was
21 where the difficulty in imaging led to a wrong
22 treatment site. And part of the procedure -- the
23 updated procedures include to require the doctor to
24 assist except when they're not present. And so
25 we're asking to clarify what not present means in

1 their procedures. What their SOP is to make that
2 determination because it was kind of a very broad,
3 simple statement in their response. So we requested
4 clarification on that.

5 And I think that covers all of my -- yeah,
6 that's it. My notes. Any questions?

7 (No Response)

8 JAMES FUTCH: Okay.

9 RANDY SCHENKMAN: We'll move on.

10 JAMES FUTCH: I'm next. All right.

11 RANDY SCHENKMAN: James?

12 JAMES FUTCH: So I have a, a little bit of
13 background to give you and then I want your guidance
14 and your recommendation, if you will.

15 As you may know, if you've been on the council
16 before, when it comes to the Rad Tech group, we
17 require continuing education for the profession, 12
18 hours every two years to renew a license. So,
19 Becky, for example, the question has come up, and
20 there's one more piece of background. When we
21 approve continuing education for use for the State
22 of Florida, we do so according to a set of national
23 consensus standards.

24 We do that for a couple reasons. One is that
25 there's a distinct monetary advantage to the

1 technologists. Florida is one of four or five
2 states that approve CE, themselves. And then the
3 rest of the CE for the Rad Tech profession and
4 national level, also follows these consensus
5 standards. And involves recognized continuing
6 education, evaluating mechanisms. We call them
7 RECMEs (ph). That's a fancy name for something
8 that's not a state yet approved CE. For example,
9 the American Society of Radiologic Technologists,
10 the Society of Nuclear Medicine, Nuclear Imaging
11 medicine, American College of Radiology. American
12 Institution of Ultrasound and Medicines, Society of
13 Diagnostic Medical Sonographers. You get the idea,
14 right? Think whatever your modality is and that's
15 your society or organizing group. Including the
16 Canadian Society of Medical Rad Techs. Thirteen in
17 all.

18 And because we use the same standards, all of
19 these organizations, public, governmental agencies,
20 private groups, we -- when we approve CEs, say, for
21 example, 12 hours for Becky in Florida, she can take
22 that same CE and use it to renew her license, for
23 example, with ARRT, the American Registry of
24 Radiologic Technologists. Or if she happened to be
25 a nuclear medicine tech, you know, so forth, with

1 the MTCB.

2 So if you look at it from a monetary
3 perspective, let's say the average cost of 12 hours
4 of CEs is 50 bucks, right? And in Florida, there
5 are somewhere in the neighborhood of 25,000, 26,000,
6 give or take, technologists. And when we looked
7 most recently, in the past couple months or so, at
8 the Florida technologists and the ARRT technologists
9 whose licenses are based in Florida, it's within a
10 couple percent of one another. I mean 95 percent.
11 It depends on how you count the numbers. Give or
12 take. But basically, very close to a hundred
13 percent are licensed by both organizations.

14 So if you run the numbers on that, 25,000 times
15 50, you come up with about a \$1,250,000 impact
16 whether or not you're CE, the same CE that you
17 approved, that you get from one organization can be
18 used with the other.

19 So to us, it makes sense to comply when we
20 approve a course, with these national consensus
21 standards. I call them consensus standards because
22 we actually meet once a year with this umbrella
23 group at ARRT's location in Minnesota and go over,
24 hey, the formula for the number of test questions
25 that you need to have for, you know, an online

1 activity for this much material, should be this many
2 questions for this much material; you know, this
3 kind of stuff. And I think we do a pretty good job
4 of it so that when someone who's been approved in
5 another state maybe wants, like, a course that's
6 been approved by one of the other organizations and
7 they want to, want to have us look at it, we come up
8 with the same numbers.

9 And so it, it is a national consensus. It's
10 not one organization dictating to all the rest. The
11 umbrella for all of this is ARRT. ARRT also has
12 meaning to us in a couple different ways separate
13 from CE. Number one, it's the organization whose
14 test we use for our state-level exams to become a
15 technologist. So if you want to become a
16 radiographer, you would take the same test
17 administered by ARRT, graded by ARRT and given back
18 to the state as the scorer. They do that, they
19 perform that function for 33 other states.

20 In fact, to the best of our knowledge, they're
21 the only game in town for state-level exams. Nobody
22 recreates or comes up with their own test for this
23 profession. If you're in a state that actually
24 licenses your Rad Techs, you're going to use ARRT.
25 And there's some other reasons beyond that.

1 But I explain this and I know it sounds
2 blindingly obvious. I know to most people it does I
3 explain it to. That's because I think we think with
4 logic and with common sense and reason. And all
5 parts of the system in a government don't
6 necessarily operate that way. So once in a blue
7 moon, you have to, you have to explain things.

8 And what I would, I would like, I guess, is to
9 find out whether the council recommends that we
10 continue to abide by the national CE consensus
11 standards as we have done since about 1984. Any
12 discussion?

13 RANDY SCHENKMAN: Would there be any particular
14 reason not to?

15 JAMES FUTCH: None that I can think of.

16 ADAM WEAVER: Is there a cheaper way to do it I
17 guess?

18 JAMES FUTCH: None that I can think of. I
19 think we actually -- honestly, when somebody asked
20 me this, I'm like, what? What possible reason would
21 you --

22 REBECCA McFADDEN: Why would you not? Like, it
23 doesn't even make sense.

24 JAMES FUTCH: How am I going -- so I have a
25 system that in minute detail explains how to

1 evaluate credentials, how to, you know, is the
2 person skilled in this area. How many tests -- the
3 example I gave before, how many test questions
4 should you use, this amount of hours of CE or, you
5 know, it's a formula that involves a couple
6 different parameters. And I begin to think, good
7 lord. If I wanted to come one another mechanism,
8 first of all, why? Number one, what would I do
9 other than what, you know, 13 other organizations
10 that also license in many states and the national
11 registry do.

12 And honestly, I think the only -- it's not
13 really a -- the question is, as it comes to me is
14 not necessarily one from people who care or think or
15 know of another way to do it or another consensus
16 standard. It's simply the way lawyers think. Prove
17 it to me, you know. How is, how is this the, the
18 correct one. Well, it's -- I just gave you the
19 evidence. It seems convincing to me. It seems
20 convincing to the Department of Health. It has been
21 since 1984.

22 And I apologize for asking such blindingly
23 stupid questions, but it would be, it would be good
24 to know if the council recommends that we continue
25 to use the ARRT national CE consensus standards with

1 the whole thing.

2 REBECCA McFADDEN: Right.

3 ADAM WEAVER: Is this something you want to
4 vote on?

5 JAMES FUTCH: I would love to if it's possible.

6 RANDY SCHENKMAN: Okay.

7 JAMES FUTCH: So the question would be.

8 MARK SEDDON: A motion to --

9 REBECCA McFADDEN: To continue using the same
10 standards for the state as it is for ARRT. Motion
11 to approve.

12 GEORGE GILBRIDE: You figure, I mean, you're a
13 Rad Tech. And even through the ASRT, if you join
14 them, you get their magazine, you got all those CEUs
15 you can get from there, which is all standard. If
16 you do that, you set up with that, it goes right
17 over to the state anyway.

18 JAMES FUTCH: Exactly. And that's a good point
19 because many, many years ago because of this
20 consensus framework, we accept everything that, that
21 ASRT like, for example, the directed --

22 GEORGE GILBRIDE: Director meetings.

23 JAMES FUTCH: Stuff like that. So we set up an
24 interchange between our system and theirs. And they
25 were happy to do this. So every month we get into

1 our system for technologist use in Florida from
2 ASRT, I think it's 8,000 credit hours. About.
3 About a thousand technologists renew each month in
4 Florida, give or take. And I think that the numbers
5 that we just ran was 8,000 total credits, 1100
6 unique courses or 2000 unique courses. It's a heck
7 of a lot of CEUs that comes in that you never know
8 about and you never know about. It's just something
9 the organizations do because this consensus standard
10 framework. We accept each others CE.

11 GEORGE GILBRIDE: The RAs need 24.

12 JAMES FUTCH: Yeah. Well, ASRT requires 24.

13 REBECCA McFADDEN: Twenty-four in two years and
14 then 12 yearly. If you do 12 every year for the
15 state, you got your 24 for the two years. That's
16 pretty much how we've all done it.

17 JAMES FUTCH: So the -- to put the question,
18 if, with the Chair's permission, to put the question
19 back out there is, is it the council's
20 recommendation that DOH use the national CE
21 consensus standards to approve CE? The ones that
22 I've described.

23 RANDY SCHENKMAN: Okay. Anybody want to second
24 the question?

25 JAMES FUTCH: Or provide the first motion? I

1 can't make the motion.

2 MARK SEDDON: You can't make a motion.

3 JAMES FUTCH: Somebody has to make the motion.

4 REBECCA McFADDEN: I can make a motion --

5 RANDY SCHENKMAN: Okay.

6 REBECCA McFADDEN: -- to approve.

7 GEORGE GILBRIDE: I'll second it.

8 REBECCA McFADDEN: -- continue using.

9 JAMES FUTCH: All right. All in favor

10 ADAM WEAVER: To continue.

11 RANDY SCHENKMAN: To continue. All in favor to
12 continue as is.

13 ALL: Aye.

14 RANDY SCHENKMAN: Any opposed?

15 (No Response)

16 RANDY SCHENKMAN: No.

17 JAMES FUTCH: Thank you very much. I
18 appreciate that.

19 RANDY SCHENKMAN: Okay.

20 JAMES FUTCH: One more thing. I was texting in
21 communication with some of the other members about
22 the date for the next meeting.

23 I need to introduce, in addition to September
24 22nd, I'd ask Brenda to do this but she's not here.
25 Some have difficulty with September 22nd. I know

1 we'll figure this out. But I wanted to put
2 September 15th out there when we're all sitting here
3 and see if there was any problem. That was the
4 other date that was suggested. That's another
5 Thursday. Obviously, the week before.

6 RANDY SCHENKMAN: I don't think I'll be able to
7 make it that week. I can do the 29th.

8 JAMES FUTCH: All right. My problem with that
9 is I'm out that week.

10 RANDY SCHENKMAN: Okay.

11 CLARK ELDRIDGE: One of the goals is we have it
12 before Cindy retires.

13 JAMES FUTCH: We didn't mention that. Miss
14 Becker is retiring the end of October.

15 RANDY SCHENKMAN: So what about October 6?

16 JAMES FUTCH: That's the ASRT -- not the ASRT
17 or Florida RT, Becky, that's happening.

18 REBECCA McFADDEN: FSRT?

19 JAMES FUTCH: Yeah. Kathy --

20 REBECCA McFADDEN: It's the Florida society, so
21 it's FSRT.

22 JAMES FUTCH: Kathy said one of the societies
23 they're hosting here and it's that week of the 6th.
24 The week that contains the October 6.

25 REBECCA McFADDEN: I don't know.

1 GEORGE GILBRIDE: AARP is having a conference
2 from September 30 to October 2nd.

3 JAMES FUTCH: We're going to put it back out in
4 the e-mail poll and we'll see. Hey, maybe we have
5 to go to a Tuesday. I don't know.

6 ADAM WEAVER: Tuesday might be better.

7 REBECCA McFADDEN: Yeah. I know I --

8 ADAM WEAVER: I got a committee meeting on the
9 15th.

10 JAMES FUTCH: On the 15th?

11 MARK SEDDON: Tuesday might be easier.

12 JAMES FUTCH: So that would be, what is it,
13 three days earlier? That would be the 12th?

14 REBECCA McFADDEN: Monday? The 13th is a
15 Tuesday.

16 ADAM WEAVER: The 13th or 20th, yeah.

17 RANDY SCHENKMAN: I know I'm not going to be
18 here the week of the 13th. Let me check on the
19 20th.

20 JAMES FUTCH: So maybe the 20th?

21 RANDY SCHENKMAN: I'll check on that.

22 JAMES FUTCH: All right.

23 MARK SEDDON: Could I ask one question?

24 JAMES FUTCH: Sure.

25 MARK SEDDON: I guess between you and Clark.

1 It's the same question that we kind of talked about
2 before. Modified barium swallows with speech
3 pathologists. Is the official, that there been any
4 discussion on that more recently than I know we've
5 talked about this in the previous years, having
6 speech pathologists be allowed to the, be the
7 practitioner of record so that their radiologists do
8 not have to be physically present during modified
9 barium swallows or is that still a --

10 JAMES FUTCH: Clark and I haven't talked about
11 this in several months and I hesitate to try and
12 recall all of the history, but as I recall from,
13 from us, the issue was the speech pathologist
14 doesn't fall under the definition of licensed
15 practitioner in the statute for the Rad Techs. So
16 they can't provide the general supervision that's
17 required.

18 MARK SEDDON: Okay. Because I think that's
19 where the push is from other states, people from
20 other states, and from the national relations is
21 that the speech pathologists are overseeing the
22 swallow portion. The radiologists are doing the
23 interpretation after the fact. But is that the, the
24 Florida unique requirement of fluoroscopy performed
25 by a licensed practitioner. I think that seems to

1 be the one key.

2 JAMES FUTCH: Well, I --

3 GEORGE GILBRIDE: At UF they were using one of
4 the RAs, as far as doing the --

5 MARK SEDDON: You can use RAs.

6 REBECCA McFADDEN: I was in Georgia with my
7 nephew and the speech pathologist was doing --

8 MARK SEDDON: That's how it is in a lot of
9 other states.

10 REBECCA McFADDEN: -- doing the swallow study
11 with fluoro --

12 JAMES FUTCH: If you look at it from the proper
13 fix perspective, I think the whole medical
14 profession treats the language speech pathologist as
15 if they are the practitioner for this, for this
16 thing. And the statute, from my part of it, just
17 doesn't allow the general supervision to take place
18 from that.

19 MARK SEDDON: Right.

20 JAMES FUTCH: General supervision could be
21 provided by another physician, but I think the rule,
22 the way that I always read the rule was, they're
23 trying not to use the general radiographer as if
24 they were the physician.

25 MARK SEDDON: Right.

1 JAMES FUTCH: So that they're not providing
2 interpretation or determining where the imaging
3 should take place. That's the purpose of that, of
4 that 64E-5 fluoroscopy regulation. Do you see
5 something different there?

6 CLARK ELDRIDGE: No, it sounds --

7 JAMES FUTCH: It sounds so close, it should be
8 something that should allow --

9 MARK SEDDON: It says the procedure
10 interpretation is being performed by the speech
11 pathologist. They do the billing and they do the
12 procedure. Do we add the radiologist just because
13 of the fluoro component in reality?

14 JAMES FUTCH: We have to go back and look at
15 that rule. What do you think if we modified that
16 rule and put in a -- I hesitate to put in things
17 specific to a particular imaging procedure because
18 it gives sometimes ideas to people.

19 CLARK ELDRIDGE: Right.

20 JAMES FUTCH: We can do that. Let's do this.
21 And they drive a truck through it.

22 MARK SEDDON: Yeah. I know that's --

23 JAMES FUTCH: What are they doing in other
24 states?

25 MARK SEDDON: In other states, as in Georgia,

1 they don't require --

2 CLARK ELDRIDGE: What is the Rad Tech licensure
3 like?

4 REBECCA McFADDEN: I don't know. He was a
5 patient.

6 JAMES FUTCH: They don't do state level
7 licensure. They may somehow recognize ARRT licensed
8 techs.

9 MARK SEDDON: If you read the scope of practice
10 for speech pathologists and their certification
11 boards and things like that, it says that they are
12 qualified to do supervised fluoroscopy for modified
13 barium swallows, however, pay attention to your
14 local state regulations because there's states like
15 Florida where there's restrictions. So I think
16 that's kind of like where the --

17 JAMES FUTCH: One fix which would, which would
18 be a legislative fix, would be simply add the
19 speech-language pathologist to the --

20 MARK SEDDON: To the licensed practitioner.
21 Which is very limited.

22 JAMES FUTCH: And don't take off the physician
23 practitioner somehow and say, oh, it's the same
24 as --

25 MARK SEDDON: I think they tried. I think

1 there was, at one point, an effort at that.

2 JAMES FUTCH: There's danger in doing that,
3 too. You open that statute up for something like
4 that and you can get a whole bunch of people into in
5 that exemption that --

6 MARK SEDDON: That want to become exempt, yeah.

7 JAMES FUTCH: Don't arrive at through logic.

8 ADAM WEAVER: Allow them to comment, so other
9 people want to say, oh.

10 GEORGE GILBRIDE: You open a Pandora's box.

11 REBECCA McFADDEN: Right. I think they should
12 have some kind of a credential or at least training
13 with radiation protection. Seeing all those
14 swallowing studies as a technologist and the amount
15 of radiation that goes on. We even had where our
16 staff behind the control panel would turn it on and
17 off for them because of the amount of time they were
18 spending in the room with that.

19 MARK SEDDON: Right. I mean, speech
20 pathologists are licensed. I mean, it's a licensed
21 profession.

22 REBECCA McFADDEN: Not in radiation.

23 MARK SEDDON: Not in radiation, but as a
24 profession.

25 GEORGE GILBRIDE: Sometimes they have a

1 tendency to stand on that parapet, too.

2 REBECCA McFADDEN: Oh, yeah.

3 MARK SEDDON: I think -- I think the
4 radiologists, it is a popular concept from a
5 radiologist's perspective because they're like,
6 we're just sitting here not doing anything because
7 they're not really part of the procedure. They're
8 sort of there just because they have to be there.

9 REBECCA McFADDEN: We don't have radiologists
10 in -- I mean, some of the hospitals where I've been
11 recently, they have the speech pathologists and an
12 x-ray tech. They don't have the radiologist. The
13 radiologist will interpret the images once they're
14 sent, but they aren't in the room during that. They
15 stopped doing that a while back.

16 MARK SEDDON: That's the regulation.

17 JAMES FUTCH: So let me toss this out, Clark.
18 Obviously, I'll put a caveat in here. It's the end
19 of the council meeting. We didn't really think this
20 out ahead of time. What comes out of my mouth may
21 not be what we end up doing or even close to it.

22 (Laughing)

23 MARK SEDDON: This is opinion, not official
24 statement.

25 JAMES FUTCH: The general supervision could be

1 a, honestly, a licensed practitioner who's somewhere
2 else in the -- radiologist somewhere else, you know,
3 over this area of imaging. So that, that
4 accomplishes the 468 requirement of supervision of
5 the general radiographer. The general radiographer
6 can't provide the interpretation or the
7 determination of where to image. That's the part
8 that the statute 468 envisions having to come from a
9 licensed practitioner. Maybe that's not true.

10 ADAM WEAVER: So that would involve
11 interpretation.

12 JAMES FUTCH: Not by -- as long as it's not the
13 general radiographer and they have general
14 supervision from a licensed practitioner.

15 ADAM WEAVER: Who would --

16 MARK SEDDON: But the general radiographer is
17 allowed to use fluoroscopy for positioning purposes
18 only. Which is the bottom of that --

19 JAMES FUTCH: Yeah.

20 MARK SEDDON: -- little regulation.

21 CLARK ELDRIDGE: Right. And my understanding
22 is the other thing is, you know, questioning was
23 this bolus appropriate. Does it show the details we
24 needed, et cetera. The radiographer, that's outside
25 their scope, and they're -- isn't it sort of

1 outside?

2 JAMES FUTCH: That's what we're trying to
3 prevent was if that speech language pathologist
4 can't make this determination, they can't rely upon
5 the general radiographer to do it because that's
6 pulling them back into the practice of medicine.

7 CLARK ELDRIDGE: Right. Right. So that's the,
8 the difficulty that we have.

9 JAMES FUTCH: Clark, we should put the
10 regulation up there so the new folks --

11 CLARK ELDRIDGE: I'm looking for the code right
12 now.

13 JAMES FUTCH: It's okay.

14 MARK SEDDON: Sorry for bringing it up.

15 JAMES FUTCH: No, no. We all know it.

16 GEORGE GILBRIDE: You figure the speech path
17 should know if they're looking at sinuses or
18 whatever. They should know the anatomy.

19 MARK SEDDON: Yeah. They should know it.
20 They're just not considered licensed practitioners
21 by statute, but our regulations states it has to be
22 a licensed practitioner to perform fluoroscopy. And
23 that's where it's gets very gray here.

24 JAMES FUTCH: It doesn't explicitly say you
25 have to be a licensed practitioner to perform it

1 because we know the general radiographers are
2 performing it.

3 MARK SEDDON: In certain situations.

4 JAMES FUTCH: It's the general radiographers
5 performing it pursuant to an order from the
6 direction of a licensed practitioner.

7 CLARK ELDRIDGE: Yeah. A person shall not
8 perform fluoroscopic imaging or otherwise expose a
9 human to x-rays from a fluoroscopic system unless
10 that person is a licensed practitioner as that term
11 is defined in Section 468. Certified radiological
12 assistant practicing in accordance with the
13 requirements of 468. Certified general radiographer
14 practicing in accordance with requirements of 468.
15 A general -- and then general radiographer has been
16 trained and authorized in writing by a licensed
17 practitioner charged to perform the specified
18 imaging and the specified imaging does not rely on
19 the general radiographer to provide any diagnostic
20 interpretation or to determine suspicious areas for
21 additional imaging or to otherwise modify the scope
22 of authorization for the imaging, and the specified
23 imaging is designed to prevent or reduce exposure to
24 patients by facilitating proper location and
25 positioning for the authorized radiographic imaging.

1 JAMES FUTCH: So could the physician who
2 complies with this, delegate to the speech language
3 pathologist if any deviations need to be made that
4 they can make the determination? Is that allowed?

5 CLARK ELDRIDGE: If that's -- I mean, it would
6 come under the whole physician extender standards
7 and how --

8 JAMES FUTCH: We're getting into areas that
9 sound like Board of Medicine issues.

10 CLARK ELDRIDGE: Board of Medicine, yeah. So
11 how they would interpret who's a legitimate
12 physician extender and what's the protocol? So,
13 yes, if they would be considered by them, with the
14 appropriate written protocol, then they could.

15 GEORGE GILBRIDE: Would that individual, that
16 physician, be able to see the images, so they can
17 say, you know, yay or nay or which way to go.

18 JAMES FUTCH: If they could -- if this was,
19 like, online some place so they're in there and they
20 don't really -- I don't know exactly which part the
21 doctor needs to say and which part the speech
22 language pathologist needs to say. But if they had
23 that communication, they wouldn't have --

24 GEORGE GILBRIDE: It wouldn't be a problem at
25 this point, yeah.

1 MARK SEDDON: If they're, like, just down the
2 hall, if there is a question, they can pop in and
3 say, we need a physician thing, it changes things.

4 REBECCA McFADDEN: It would be under the
5 supervision.

6 MARK SEDDON: Yeah. So it's that direct
7 supervision but not personal supervision.

8 CLARK ELDRIDGE: Yeah. That would meet the,
9 yeah, the extended.

10 REBECCA McFADDEN: Called the gray areas.

11 MARK SEDDON: Yeah.

12 JAMES FUTCH: That's what happens when you try
13 and write statutes and rules to fit the real world.
14 The real world changes.

15 GEORGE GILBRIDE: It's gray, it's very gray in
16 the real world.

17 CLARK ELDRIDGE: MQA had to add some more to
18 this. I'm not sure exactly what word to use. But a
19 case where the doctor was performing a surgery in
20 suite one and his physician extender was doing
21 laparoscopic -- not laparoscopic. Fat removal in
22 suite two next door. And so they're both doing
23 cosmetic procedures at the same time. And that was
24 being accepted as the appropriate level of
25 supervision for a unlicensed individual who was a

1 physician extender to perform the procedure.

2 RANDY SCHENKMAN: It was or was not?

3 CLARK ELDRIDGE: Excuse me?

4 JAMES FUTCH: Who was doing the other procedure
5 in the other room?

6 RANDY SCHENKMAN: Was or was not?

7 CLARK ELDRIDGE: It was. Well, this was, how
8 shall I -- I don't know. This was what was told to
9 me by Ferguson.

10 JAMES FUTCH: That was a while ago.

11 CLARK ELDRIDGE: MQA investigation. I
12 understood from him to say it was allowed. Or it
13 was not prosecuted or whatever somehow.

14 JAMES FUTCH: Okay. So, statute, reg. What's,
15 what's, what's optimal, what should be, what happens
16 in the real world, what gets investigated, what the
17 lawyers want to prosecute and what they can succeed
18 in prosecuting is many different things.

19 CLARK ELDRIDGE: So this may have been the
20 standard that the lawyers didn't think they could
21 prosecute it. They did not proceed any further
22 against that physician for doing that.

23 MARK SEDDON: Right.

24 JAMES FUTCH: Yeah. Okay. I think I've said
25 all I could say.

1 ADAM WEAVER: I think it might have to wait
2 until next time.

3 JAMES FUTCH: I think so.

4 MARK SEDDON: All right. Thank you for the
5 dialogue.

6 RANDY SCHENKMAN: Okay. So do we have any old
7 business to discuss?

8 (No Response)

9 RANDY SCHENKMAN: No? We've already talked
10 about the next meeting. So our meeting is now
11 adjourned unless anybody has anything else.

12 CLARK ELDRIDGE: Don't one of you have to move
13 first to adjourn it?

14 RANDY SCHENKMAN: Okay. Who wants to make the
15 motion?

16 ADAM WEAVER: Second. He made the motion.

17 MARK SEDDON: I made the motion. He seconded
18 it.

19 RANDY SCHENKMAN: Okay. Vote?

20 ADAM WEAVER: We all approve.

21 RANDY SCHENKMAN: Everybody approve?

22 ADAM WEAVER: We don't want to stay longer.

23 REBECCA McFADDEN: Aye.

24 RANDY SCHENKMAN: Any opposed?

25 (No Response)

1 RANDY SCHENKMAN: Okay. We are now adjourned.

2 (Proceedings concluded at 3:10 p.m.)

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1 CERTIFICATE OF REPORTER

2 STATE OF FLORIDA:

3 COUNTY OF ORANGE:

4

5 I, RITA G. MEYER, RDR, CRR, CRC, do hereby certify
6 that I was authorized to and did stenographically report
7 the foregoing proceedings and that the foregoing
8 transcript is a true and correct record of my
9 stenographic notes.

10 I FURTHER CERTIFY that I am not a relative,
11 employee, attorney or counsel of any of the parties, nor
12 am I a relative or employee of any of the parties,
13 attorneys or counsel connected with the action, nor am I
14 financially interested in the outcome of the action.

15

DATED this 31st day of May, 2022.

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RITA G. MEYER, RDR, CRR, CRC

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