R: We’ll hear of people having multiple bypass grafts, they might have three or four grafts because when the radiologist looks in the angiogram he found this one’s blocked, this one’s blocked, another one around the back is blocked, and then the surgeon has to go in and put bypasses around each of those blockages.

How these problems effect the body

- **Shortness of breath rapid breathing**
  - hard to breathe in  Upper airway narrowing
  - out  Lower airway narrowing
- ↓ exercise tolerance
- Chest pain discomfort
And the last thing, the last mechanism is we've talked a little bit about how you can get heart failure because heart muscle is destroyed by ischemic heart disease or coronary artery disease, and so what are the symptoms of heart failure. Well, obviously the heart can no longer pump your circulation as well so your blood pressure, it might be low. There will be low oxygen in the blood because the blood's not flowing as well through the lungs to pick up oxygen. There will be swelling of ankles because blood builds up in the veins because the heart isn't pumping it through as it should do. There will be rapid breathing, shallow breathing. People with acute heart failure or pulmonary edema are breathless because fluid has leaked out of the pulmonary capillaries into the lungs because it is building up behind the heart, and it's not able to pump it through. And because of that the exercise their exercise tolerance will be now down because there is extra fluid is on the lungs. Now, the same thing can happen if the diaphragm and the breathing muscles get tired, you'll get low oxygen in the blood, you'll get the slow osmosis, a high carbon dioxide in the blood because your ventilation is not enough to remove the carbon dioxide from the body and that will make you sweaty.
The only other thing with that, people have been playing with that a bit already this morning. Perhaps we could leave that open during lunch and if people want to play with it some more that would be good. So do you want to talk about those disease mechanisms that affect the heart or the lungs? Do you have any questions about them?

JG: What do you think?

Dhan: Good.

Mun: Good.

Dhan: We’re just thinking about our relatives.

WG: The words (dharuk) are very hard (dāl mirithirri)

M: The language is difficult, heavy.

R: Too much?

JJ: The language is heavy, Too much.0326

Dh: we will get those things, later we will learn those things and names, (Some conversation in YM)... 0345

WG: a very good story

JG: Later we will be able to learn those words when we go back and study but we don’t know those ... and it would be weyin, it’s a long way for people who are out there, to get to understand the these things for ... But we don’t as interpreters, know these things

R: Yes.

WG: But many people would like to learn all those things before they can tell people. If you don’t know you can’t know what you’re talking about when you don’t really know the situation.

R: Usually when you’re interpreting for a patient you’ll only have to talk about one of those disease processes, the one that’s affecting that person, so it’s a simpler story because you might only be talking about inflammation in the air ways to a person who has asthma. You don’t have to talk about all those other things. Those four processes, inflammation, pressure, blockage of the blood vessels and wearing out OR weakness in the muscles explains all diseases, every disease that affects the lungs or the heart, is due to one of those four disease processes affecting...
some part of the system. So if you can understand those basic mechanisms this explains everything that people get sick from. It’s comprehensive. 0539

Dhan: It’s worthwhile if we need to understand those basics. So we have to wait for the ambulance to get there so we know what that person is suffering from

All: Yo. Yo.

M: Rob, when you say that there’s only one part that needs to be discussed at any one time, people that work in the hospital and are going to be used as interpreters need to have a broader understanding. 0604

R: Yes. This is the broad understanding that will enable you to talk with patients with all sorts of, all the diseases that can affect the heart or the lungs but when you’re explaining to an individual person, you just have to... 0622

Dhan: ... and their families...

R: Families as well. But the explanation is simple.

Dhan: That’s going to be with kids, you know… family member. 0638

R: Yes, the explanation is simple. Want a break?

(Michael talking about something unrelated) 0709

WG: So that’s why we should sit in the front of these things, make them straight and talk among ourselves about what we did this morning how we can break those things up into pieces, what he showed us, 0728 so we will be able to tell the stories about it and say this one, that one, that’s what we’ll do, and those people take it all those people at home and at work, so they will be able to understand what we tell them, how they can be helped, by which paths, 0755 we need to find the money, fundings, so we can help, maybe everyone can see these are very helpful resources, we can help yolŋu there are many sick yolŋu, all sorts of sicknesses, 0817 because if we Break it into pieces, small pieces.

R: Yeah, maybe we can do it just for asthma, in small pieces for one disease only and then it’s easy to understand the link between the structure and the function and the disease and the treatment and the tests, just if we do one disease...

WG: Yes, so we could do that one, what is it asthma? Is that njir’, is that what we call njir’? So we’ll carefully at one of those things, asthma. We’ll look at what’s good, and at what the diseases are, 0903 and what are the treatments, we’ll look at it like that. We’ll just do the one thing, not look at all the different body parts, yes, all of us here, we’ll give that story to those people who are coming here (this afternoon) we’ll give them that story, 0922 we want this and this and this, 0928 so we’ll have to get up and talk to them, tell them share what happened,

M: So should we get them to have their cup of tea first or after?

Mun: We’ll have a cuppa first.

M: Okay, don’t forget to talk about your idea about the stages and the...

BAK: What about the photos, portraits for the website?

M: Have you got them?

BAK: No they’ll have to come and get their photos taken.

M: Yeah, maybe we should all go and have a group photo taken... Sorry about this... 1012 Okay lets’ have a group and just show the sorts of stuff, did you say you’ve got something there that might be suitable?

(Some discussion James and Mundhu saying something, )

M: Well we could probably talk about that... What about some of the multi-media things? 1036 Nothing too texty but all the talking can be done by these guys, we just need to see a couple of things, all of the talking can be done by these guys, we just need to see a couple of the... multi...

R: There’s this which is...

Mun: 1057 ????

WG: ???

M: Okay, to see that, people are going to have to be sitting over here are they. Are there any that will project up here? Let’s do a couple just so people can get the general idea of what we’ve been working on.

R: Should we set them up on those computers? 1119
M: well I think that when they have their cup of tea, they can get a cup of tea, then listen to these guys covering the story, then they can look at the computers ...

(Some quiet discussion in YM and English, cup of tea break chatter for about 10 minutes)

(Audio Time Disc 7: 0:22:40)

WG: Grandfather, give us some idea about what we should say 1213

Mun: ... about how we'd explain it to kids, is that right? Like in that story about iron??

???

MC: You know that Yolŋu matha CD with all the Yolŋu matha phonemes and the little tongue going back and forth, that's multimedia to, and the other thing is talking about Yolŋu consultants. 1452

THE VIDEO IS STILL ON WHILE WE'RE SETTING UP THE ROOM, PEOPLA ARRIVE WEARLY THINKING IT’S TO START AT 2PM,

WG 1545 :?????

Mun:

M: No, half past two, we told everybody.

?: But I'm telling a story. It's nothing to Yolŋu, if we get tired we'll go to sleep straight away, that's our time. If we're hungry we eat straight away.

M: What do you feel like now? Telling the story?

?: (YM)...

M: You want to ...?

?: We've got differences in time.

(Discussion in YM ...)

1902 James; (planning what they're going to say)... When somebody's story finished then the next person will be able to say something...

Michael welcoming people and offering them tea, we're not gong to start for another ten minutes...

?: If we want to tell you, we're leaving, we just go. And then after another one goes, and then after that no one's left.

M: Five minutes, stay awake please. Have another cup of tea.

(Some discussion in YM and English, chatter).

(Audio Time Disc 7: 0:25:40)

M: Okay everybody, you've got one minute to get your tea and we're starting.

(Some very quiet discussion in YM and English).

M: 2719 Okay, I'm going to start. Thank you everybody for coming along. I've just been talking to Waymamba over here, she has asked me to start off these introduction. Waymamba and John are both teaching Yolŋu languages and culture here at CDU, they do the teaching but they also organize some consultancies where Yolŋu can come along and talk to particular issues and do collaborative research and be properly recognized and properly paid for their contribution towards a whole range of different research consultancies. We have already done a number and last year Rob Pierce here from the Melbourne University was at garma and he was talking about his work in research into breathing and sleep and heart and lungs and that sort of thing, and was interested in the whole question of multimedia, so we suggested that we could have a little workshop, bring some Yolŋu interpreters into town or find some that are in Darwin, and spend a couple of days looking at multimedia, talking about interpreting, talking about what could be done if we were going to collaborate in making multimedia that was worthwhile for interpreting and a whole lot of issues around that. Rob spent some time talking about the respiration and the heart and some of the biomedical things and showing us some of those multi-media productions. We thought we would invite you guys along to talk to us or to ask questions of the Yolŋu consultants, if you’re interested, because you
guys come from a background in health and interpreting in Aboriginal health. So that’s my talking later. I’ll hand you over to Rob for a couple of minutes just to introduce himself and then we’ll hand over to Waymamba and she’ll introduce the Yolngu and then we hope you guys might have some questions to ask or some opinions to give. Thanks Rob.

R: Thanks Michael. I’m Rob Pierce, I’m from the University of Melbourne and the Austin Hospital where I’m a respiratory and sleep physician 2947 and I’ve had a long standing interest in lung physiology and sleep physiology and I’ve taught medical students physiology and respiration, for a lot of years; and we have also have at the Institute for Breathing and Sleep at the Austin Hospital which is a research institute, a not for profit research institute (unlike some of the) other research institutes around the place. And our charter there is research, education, and public advocacy in respiratory diseases and sleep disorders. And I guess I’ve developed a bit of an interest in Indigenous health over the last couple of years and I’m chairing a working party for the Thoracic Society of Australia and New Zealand and Australian Sleep Association actually researching and reporting on respiratory and sleep health in Indigenous Australians. That working party has been going for about 12 months. The report will be finished in a couple of months. And we’ll make some recommendations about the adequacy of respiratory services across the northern part of Australia and so forth. In this particular project I became aware that there wasn’t a great deal of resources in terms of health education in respiratory diseases anywhere, even in English there are some but I don’t think there’s anything much in Aboriginal or Indigenous languages. What is out there in respiratory health education is more on the treatment end of things, resources funded by pharmaceutical companies in particular, and there’s not a lot on the structure and function of the lungs. And we at Melbourne University in designing a new curriculum a few years ago for the medical students 3219 worked with the biomedical multi-media unit at Melbourne Uni which is a fairly well developed unit, to produce some interactive animations around respiration and gas exchange and the circulation; essentially tracking, following the progress of an oxygen molecule from the atmosphere down to the tissues, and a carbon dioxide molecule back the other way through the process of respiration and gas exchange and circulation. 3252 And it occurred to me that some of those resources might be useful in the general public health education sense and the predominantly visual rather than textual or heavily text-based verbal resources, that they might be easily adaptable to I guess language groups that are dependent predominantly on visual communication, and that they could also be reproduced perhaps fairly simply in other languages within being predominantly visual in that context. So through meeting John at garma and consequently Michael, we had the idea to have a look at what is available, in terms of educational resources on respiration and circulation, and to explore two things. 3405 One, what are the concepts of structure-function relationships in respiration that are important, and how would one go about communicating those in a cross cultural context like Yolngu and other Indigenous languages. And secondly, what are the best sort of types of media that are best suited to this sort of education; for example, are these animations that one can produce be good for conveying structure-function 2446 and how disease interferes with structure and function, as distinct from perhaps treatment settings be it DVDs and other types of resources are very useful. What’s the place of an anatomic and microscopic illustration for example, in determining how to educate people, communicate ideas about the structure of organs and things like that. So I guess the two focuses of this particular workshop have been how do some of our western bio-medical concepts about the structure-function relationships of the heart and the lungs and the circulation fit, or how are they best transcribed in a cross cultural context; and secondly what sorts of media are available and would be optimal for communicating these messages in this context. 3548 Hence the workshop that we have had here. We started with structure and function, and then moved to pathology and how disease processes interfere with normal structure and function, and how that interference produces symptoms, and how treatments which are really aimed to restore normal function, can all be covered in a continuum of the educational process. Because obviously considering treatments is much easier if you’ve got a good grasp of normal structure and functions and how it’s going to work to reverse a person’s symptoms. 3631 They’re the things that we’ve been covering in the workshop today. From an overall perspective I think there isn’t a great deal of educational material about the respiratory health, compared with some of the other chronic diseases, like cardio-vascular, for example, like some of the other common diseases. Quite a few other existing resources but there’s not a great deal out there on respiratory and there’s potentially a need and a great usefulness in producing them. After all, we have to think that chronic respiratory disease is responsible for a third of clinical admissions to hospital and it’s an enormous burden of chronic respiratory disease up here. It’s grossly over-represented, probably double the prevalence in Indigenous populations compared to non-Indigenous populations. And so it needs to be addressed. That’s all I’d like to say. 3745

M: Thanks Rob. We’re going to get a ??? paper. We really want to get from the Yolngu about the processes of the consultancy and about the multi-media and I might hand over to Waymamba to say a couple of words and introduce some of the other consultants.

W: Okay. Now you’ve heard from Melbourne and we’ve been looking at the healthy breathing and heart, and because of the views and understanding of a Balanda, it comes to our mind, the Yolngu consultants, this group here, has been looking at various things that need to be done to come to the level of understanding for Yolngu. What we have come up with, you know most of you that a lot of doctors use a lot of medical terms, words that we’re not familiar with; 3908 and we don’t understand it. Because of the language barrier there is difficulty understanding the words in a balanda words, than Yolngu. So this multi-media is a good thing that can help Yolngu understand, but we were looking at a lot of different, big words that doesn’t exist in Yolngu language. But we can do that. And that’s why we came with words like these ones on the board, like ‘dhorru’ for the whole and how will we break that into smaller pieces, that Yolngu can understand. Because there’s difficulties in understanding words. We think it’s a good idea for
Yolŋu people and any Indigenous people so they can understand the sickness, what’s the cause of the organs, what is affecting, what sort of disease they have. Because if we say breathing, that’s ‘ŋir’ in our word, ‘ŋir’ breath or breathing. We use only one word. So there’s a lot of different ways and the words in Balanda words, but in our language we have only one word that can describe various body parts or what the function is. So I’ll have to introduce all our Yolŋu consultants. Maybe they can tell you anything they want to tell you. Because this is a good idea for children and for adults too so they can learn about all different, like asthma, a lot of Yolŋu have got asthma. A lot of people having all these sicknesses like strokes and diabetics and you know, you name it all. But people are not understanding what the cause is, so we need to find out, we need to, all the Yolŋu, us, we need to teach our Yolŋu so they can understand. 4211 So that’s why we’ve been learning yesterday and today about all the different healthy breathing and heart and how does the heart work; because if you say veins, we say that’s raki’ that’s rope, that carries the blood. You have like in Balanda word that is the vein that carries the blood but we say in Yolŋu, raki, rapi, the rope gulaŋ, it carries the gulaŋ. Like, we don’t know if we breathe in and breathe out. We need to learn about this so people will have the knowledge of certain diseases that they’ve got. So I’ll hand it over to the group or you can ask any questions.

(Conversation in YM)...

WG:    Should I tell them who you are?
Dh:   Yes
WG:    Okay this is Dhaŋal
Dh:   How come you start with me? (everyone laughs)
WG:    I’m Waymamba, some of you know me. I work here. That’s Dhaŋal from Gunyaŋara that is right? , sorry, sorry, from Galaru, from Gove way. And Janice Mundhu, she’s just the interested person, and you Rose, my aunty, you see, I can’t say the name.
M:    She’s an interpreter in the interpreter service.
?:  Wayalwaŋa, waku from Yirrkala. Yeah.
Wayal:  Interested person.
WG:    And James just went out, James Gaykamanu, And some of them are interpreters working in hospitals and some of them in law court and some of you can see them there in hospitals. So they will give you a little bit of story of what we think. But if we’re very interested to be part of the research process because we want to help our Yolŋu family, our Yolŋu friends, we want to help them.

Dhaŋ:   4448 Yo. What (what’s this man’s name, is it Rob?) Rob brought with him, Yolŋu I believe isn’t aware of it. Respirator, all we know is the air that we breathe in and the air that we breathe out but we don’t know, haven’t the slightest idea, how it functions in our system. And it was a surprise to us, you know it’s interesting. It got me interested because I didn’t know. And every other, illness about the heart or diabetic, what was that new one that was introduced?

Rob:    The iron story…?

Dhaŋ:    Yes, that’s all out. And Yolŋu knows that and they have seen what has been documented or whatever, they’ve seen it on videos, but this one it hasn’t been out. So I guess a lot of our people are affected by it, like asthmatics, they have pneumonia problems, tb, you name it. But we don’t know how that affects us. What we’ve just seen, how things get complicated health-wise, we’ve ourselves in our minds, and by giving that information to us, we’ve got all that information and at the same time, in our minds, our families have suffered and we know, if they get ever sick again, the symptoms that occur with especially with breathing, we can be able to help them, and tell them the correct story, to the doctor or whoever comes, like the ambulance that picks them up. And when we’ve discussed this at two levels of education to be, particularly on this breathing thing. To kids, and for the old people (ŋalapal) , 4736 Yolŋu, from teenage to ŋalapal. For the kids, at school, they could have language that they know now, that could be introduced it to the schools that have got the access to the websites. They’ve got computers. So, a bit of that information can be given to the schools for the kids to have a look and learn themselves, as well as the community mob. And as for the homelands, like I said, people could have access to it like DVD, the ŋalapal, the elders of the homelands, know who that person could be who could explain everything to them, and that person could be chosen by the elders out there. 4842 I think it’s interesting. I would love to sit down with my families and actually teach them.

WG:    4854 And what Rob has showed us is a very, very, heavy, heavy, heavy story and that’s what we call dhoru or heavy. Heavy. And we decided, how are we going to break it into smaller pieces that Yolŋu can understand. So we’re interested in the multimedia so people can learn, as Dhaŋgal was saying. ?? Was saying that kids need to learn in schools so they will become aware of their bodies.

Dhaŋ:    With the knowledge that they gain at school, 4954 they could come up to the community or wherever
they’re staying and with health, for the DVD, that should encourage them to explain more to the people, they could be asking questions from the people who understand, what it’s shown or thought…5018

WG:  Any questions? Ask them, or give us advice or...

Terry:  I’m interested in, you were talking about how complex and how big the story actually is and how to break it down into the smaller bits, and I know ARDS has done some work with the iron story, and I’ve actually seen that. Are you considering to still say these language terms to try to talk around each of the sections that it needs to be broken into, or are you looking at introducing the medical terms in with Yolnu language to describe it so that people start learning what these other bigger words actually really mean?

Dhaŋ:  Yeah, that’s what we’ve discussed, yeah. Like, for the actual producing of it we’d have three different language groups actually talking about the whole thing, and then half of us would be some of us asking questions at the same time, being answered and so forth, yeah.

Terry:  So at the moment you’ve seen the run of the video once?

Dhaŋ:  ???. We’ve seen all that and now we needed, you know we sat down and talked among ourselves, like if what was shown here could be broken up into bits, what comes after, and what for first bit of information that needs to be given out to the communities to make them aware of it.

R:  I think I have collected just about everything I could lay my hands on over the last few months. What things they liked are the Sharing the True Stories booklets, a whole lot of things like the tobacco booklet, some of the animations that we’ve made down in Melbourne, and I brought up. I think we got ??? from Alice Springs, his charts about the respiratory symptoms, and a little booklet about the upper air ways, the whole, how your pulmonary system of the bronchiectatics in Central Australia, she has a little bit of respiratory structure and function in there. A lot of stuff from these sorts of wall charts, that are talking about the upper air ways, the whole, how your pulmonary system of the

Dhaŋ:  5313 As for the books, one can read that. And as for the DVD, if one is watching it others around it still hears about it, while he’s busy doing something else. It still gets into their ear, yow. That’s why.

Terry:  5339 I understand what you’re saying because like for us too, there’s a greater level of understanding that comes from actually having conversations about it, talking all the time so that your understanding becomes clearer and clearer each time. And then when you relate it to somebody else that’s once again bringing it into a better picture. And it stays with you. So that process that you’re talking about going and teaching others, to help to keep it there and make it better, and I think it also encourages going asking more information about it. 5413 But that interaction when you go and see the doctor, that exchange between like Sharing the True Story, same thing again. If you have one person and if Waymamba goes in by herself, I don’t let my mum go in by herself, I go in with her, because she speaks Aboriginal English and she’s very limited in her knowledge. 5437 So that process of having somebody else there to talk about it or even ignore the doctor for a time just to talk about what’s been said and what she thinks about it and how she wants to deal with it; and then we go back and talk to the doctor again in the room. And that process sometimes is not always available but that’s another thing, if we talk of multi-media, you know, sometimes with the younger kids, like a lot of these younger ones I look after they like to actually grab hold of things as well so sometimes having the DVD playing and then having a model to actually pull apart and look at too, and thinking about how it’s actually sitting in the chest and how would they work together and then watching the DVD again. 5529

Dhaŋ:  Yeah, in the schools, that would be fine, that would be appropriate, yeah, because the model’s there already.

Terry:  Yeah, so a couple of different things.

Dhaŋ:  And as for the community, they’ve got that model in the school, and kids would be going home and sort of educating whoever, who doesn’t know. 5547

Robby?:  Can I ask. When you’re talking about two levels of information, one for the kids and one for the community mob, are you thinking that two levels is just how you give the information, or.

Dhaŋ:  The same information but in two languages. The kids language as well as the adults language.

James:  For the kids we need to put it into another curriculum, (YM)... going to school so the kids can also .. programs and learn from that. See what they’re doing, they can help the health issues, and ... the kids. Our version, put them in the curriculum classroom, ... from the children to adults. Now we can ... that one, for health, for the council, for the community, ... DVDs and maybe a book. So people understand what ... on their bodies.

?:  So when you’re thinking about putting it into kids’ language is that from a different way you put the information or is it actually different language?

Dhaŋ:  It’s quite different from the information for the adults. 5709
?: So is it different words or just the way to make it sort of.

Dhaŋ: Just the way, how the kids would be interested in it.

James: The concept will be similar for the adults as for the kids, but the way the kids talk is different to the adults way. And kids understand their own language. And the adults understand their own language. So it's not a separation of ???, the concept is similar. But the kids learn from preschool up to secondary, maybe secondary would be doing similar to what the adults do because they're more grown up.

(Very quiet conversation in YM)...

(Audio Time Disc 7: 0:58:08).

END OF DISC 7