Wellcome Trust Lecture 2 Questions
http://dcnapp1.dcn.ed.ac.uk/neurotube/player/player.asp?vidID=aop82135

Lecturer: Prof D Lomas

Q: You said that one of the issues was not having the clinical information,. Is there anything you could be given, or is it simply that because these are healthy controls nothing other than age and weight exists?

A: There are 2 issues I raised; one is the first visit information. Suppose you had the left kidney out for renal cancer, suppose you've had ½ your stomach removed, suppose you've had serious surgery and your internal organ anatomy is completely deranged, it would be quite useful to know that. Suppose ½ your colon out, suppose that you actually have in the background Crohn's disease or inflammatory bowel disease, you've declared it to the investigator, it doesn't affect the trial but is actually there on the imaging study. I think there is quite a lot of information you could give that would help and also avoid giving back an indeterminate unhelpful report from someone like me saying "Oh but there's, but you know all about it anyway". And then the 2nd point is that if there is a problem on scan 1, it would be useful to know what happened when they come back for scan 2, rather than just say "scan 2, trial 301".

Q: My question is about the ethics for the study . You described on the request filling defects in the bile duct, because in ethics applications, our local ethics committee now requires it to state what you are doing with incidental findings, who is responsible and how the patients give consent, how would that work in your example? My suggestion would be to contact the principle investigator, recommend an appropriate course of action and copy that to the GP.

A: Well, I think that's what we are here to discuss, I think that is the whole question; how is that mechanism best handled. What I'm trying to do is demonstrate examples or where that's significant. I don't think we need a National mandate to do what you have described, but it sounds very rational.

Q: Some of the problems you outlined could be maybe sorted by having a memo to the research team and other mechanisms to improve the communication around imaging research.

A: I think what matters is that for 20 years I've been doing research into body MR and when I'm doing research with people I know and the Radiology groups, that has worked very effectively and actually that has not been a problem. I have a research panel of volunteers now, full ethical approval, signed consent forms, go in and try new sequences, I lead these studies, I know them, I consent them, there is continuity and consistency. Why I think this is a common issue is that people are going out and buying systems and they are not experienced in the medical aspect of handling the data and the volume has just become so large in these cases that it is no longer possible to handle. Within a small group it is possible to do that, and to be blunt, people have said to me "Oh we'll put your name on the paper if you do the research governance reporting". But that has the intellectual appeal of not very much actually. I know some of my colleagues do that, but actually I'd be more interested in doing things in research I'm interested in. For me it's more NHS work to be blunt, this is service work.

Q: I am just concerned about the increasing availability of scanners in a non-medical environment, where no radiographer is present, so there is no radiologist or radiographer scanning. If you think of the scenario like sports physiology, MR spectroscopy, phosphorous. The duty of care issue that you mentioned , how does it work in that case?

A: I'm not the best person to talk about that aspect because I don't manage those kind of units, but I think obviously it raises concern, I think in many of these units, and there are people here from some of the independent science units that are not sitting in radiology and I am a member of the British Chapter of ISMRM so I am very thoughtful about wishing to engage their views on this,. But my view is many of the situations involve trained radiographers, who may not be working for radiologists and we have several units like that in Cambridge, and they have made arrangements about research governance reporting in some form. And I imagine there are some units, and certainly when I was in the US there were some units which are entirely out with radiology and entirely without outside clinical centres, they are stand alone centres. Nottingham is probably a comparable example in the UK, so we can have some UK situations of that kind and one of the discussions is what is the expectation of someone going to that kind of centre on a University site, and is that expectation different from somebody going to a hospital site where it is a medical facility?

Q: When you report your governance scans as you were describing, do you give a narrative report or do you give a differential diagnosis? As a clinician one often gets reports, even in clinical settings from some radiologists that are descriptive rather than perhaps listing a principle differential diagnosis. The sort of people this is going back to, if you were to put in your report an angioblastoma or gall stone, that might precipitate more action than "filling defect in the bile duct" being reported. Do you have a view about that?

A: You raised several issues in one quick question. First of all, we are trained to give descriptive reports in terms of describing the findings on a film, then we interpret them and then give a recommendation. So the format of a report should have a standard layout. In that kind of setting I would have reported a filling defect, my report actually said "This is most likely to represent a gall stone, or a mass and may represent a bile duct tumour. Further investigation is recommended". That's very clear I think, so we normally try where we can. That of course could still be an artefact in some respects because it is a suboptimal study, and we are more reluctant to give a definite diagnosis on a suboptimal study and on a suboptimal study usually you can't give a definite diagnosis. The MR study I've shown had 7 additional sequences and gave the guy intravenous contrast to characterise what was still a very difficult haemangioma. The first image could have been a necrotic tumour, the differential would be huge for that person, the list would take forever.