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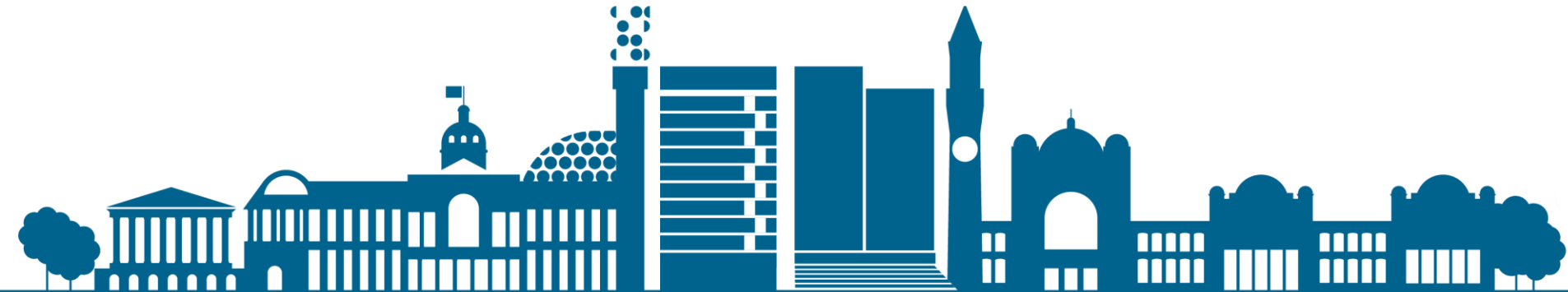
Equi-injury and Rwanda912 seminar

Introduction to qualitative data analysis

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20th March 2024



Welcome

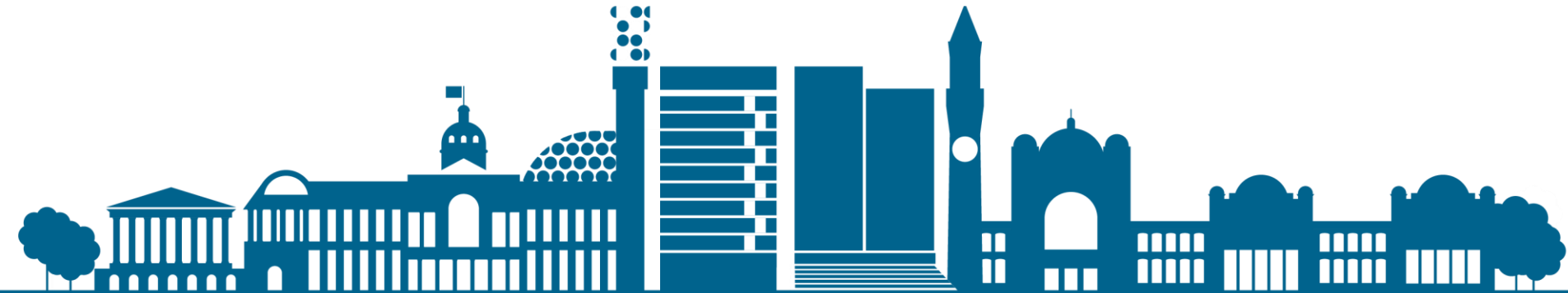
- ▶ (Quick) Introduction to different types of qualitative data analysis
- ▶ Principles of qualitative data analysis
- ▶ Stages in the thematic analysis
- ▶ Practical experience of coding, categorising and conceptualising interview data





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Introduction to different types of qualitative analysis



Different types of qualitative analysis

Thematic	Content
Framework	Discourse
Grounded Theory	Conversation
Interpretative Phenomenological Analysis	Narrative



“Thematic analysis is a method for identifying, analysing and reporting patterns (themes) within data”

(Braun & Clarke, 2006, p. 79)



Types of thematic-based analyses

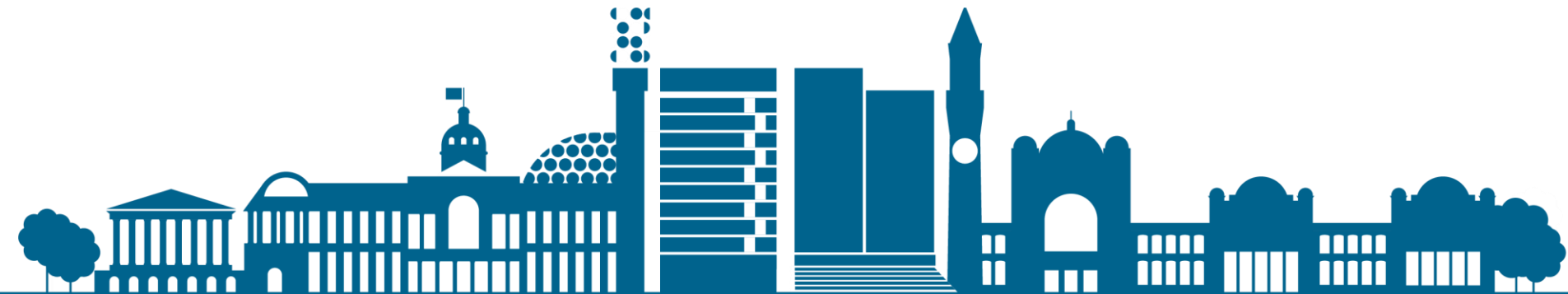
1. Thematic analysis (Braun & Clarke, 2006)
2. Grounded Theory (Glaser & Strauss, 1967)
3. Framework analysis (Ritchie & Spencer, 1994)





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Principles of qualitative data analysis



Qualitative data analysis

The dilemma:

Data, data, and more data!



“You busy?”

Activity



- Imagine you have been given this box of assorted chocolate
- How will you sort this chocolate?
- Now imagine the box of chocolate is an interview transcript
- How will you start analysing it?





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Stages of thematic analysis

(Braun & Clarke, 2006)



- Stage 1: Immersion
The researcher intensively reads or listens to material, assimilating as much of the explicit and implicit meaning as possible
- Stage 2: Categorisation
Systematically working through the data, assigning codes/identifying meanings within the various segments/units of the 'text'
- Stage 3: Reduction
Questioning or interrogating the meanings or categories that have been developed? Are there other ways of looking at the data? Do some codes mean the same thing?
- Stage 4: Thematisation
Sorting through the categories. Deciding which categories are recurring and central and which are less significant or are invalid or mistaken
- Stage 5: Interpretation
Making sense of the data from a wider perspective. Constructing a model or using an established theory to explicate the findings of the study



Immersion: How to 'Read' Data

➤ Literally

- The actual words and language used – the literal content of the data
- The sequence of interaction – in the case of interviews, who speaks when?
- In the case of visual data – style, layout, literal form



Immersion: How to 'Read' Data

- Interpretively
 - Constructing or documenting a version of what you think the data mean or represent
 - Reading through or beyond the data
 - E.g. implicit norms or rules with which an interviewee is operating
 - Discourses that influence people
 - Versions or accounts of how people make sense of social phenomena



What is coding?

Codes identify an interesting feature of the data

- Coding is part of the process of organizing data into meaningful groups, or 'opening up' the data
- Coding is going through each interview and attaching relevant codes to each section
- Coding structure (or framework) is a list of all of your codes



What is coding? (cont.)

- ✓ **Summaries**
- ✓ **Paraphrases**
- ✓ **Associations**
- ✓ **Connections**
- ✓ **Use of language**
- ✓ **Sense of person**
- ✓ **Similarities**
- ✓ **Differences**
- ✓ **Echoes**
- ✓ **Amplifications**
- ✓ **Contradictions**



Coding as a filing cabinet...



- ❑ Sorting your data
- ❑ With other examples of the same thing
- ❑ But YOU have to:
- ❑ Design your own filing system
- ❑ Make decisions about what to file and where



Coding as a filing cabinet...

- ❑ You can put the same thing in several different codes if you are not sure
- ❑ You can keep codes big
- ❑ You choose what size of text chunk to code
- ❑ See it as a staged process
- ❑ New codes may occur to you throughout coding: revisit



What does coding involve?

- **Identifying and creating codes:** the purpose of this stage is to start thinking about possible codes relevant to your research topic.
- **Assigning data to the codes:** the purpose of this stage is to begin to code the data. What is the data telling you?



Deductive, inductive or both?

<https://www.youtube.com/watch?v=MmonSiFR-il>



Key advice (Braun & Clarke, 2006)

- Code for as many potential patterns as possible
- Keep a little surrounding data for context
- Data extracts can be coded as much or as little as relevant



Manual or software?

- ☐ Manual

- ☐ Write notes in margin

- Use highlighters
- Use coloured pens
- Use post-it notes

- ☐ Collate manually

- ☐ Software (e.g. NVivo)

- ☐ Select text

- ☐ Assign code

- ☐ Data items

automatically collated



Example of manual coding (codes-categories-themes)



- A: I just want to get you talking about what the heart attacks meant to you and if it's changed your life. But just to get you started, tell me a bit about how it happened.
- DEREK: I've no idea whatsoever.
- A: You don't remember it?
- DEREK: Yes, Oh, yes. As though it were yesterday, but, I mean I were one of those people who nobody ever thought....it was such a shock to everybody. I were one of them people who never thought it could happen, I'm a six-footer, twelve and a half stone. I were an active...at that time I were in an active job, all day every day. It were a shock.
- A: A shock? Why was it such a shock?
- DEREK: Why, all my family, they've had it, it's like hereditary type thing and that's always been. But with being on this job I always thought, well, I'm alright, you know, being fit, never fat I've always....I used to be in a steel firm and all that...I was a bit heavier then..... all my family died through it. So when it did happen...well, this is it, but when you think about it, I'm the only one what's had one but still here type thing.
- A: Did it make you feel frightened, or worried, or....?
- DEREK: At first, but then, I'd say no I just, you know....plod on, you know, carry on. I just don't know why it happened really.



- DEREK: Yes, Oh, yes. As though it were yesterday, but, I mean I were one of those people who nobody ever thought.....it was such a shock to everybody. I were one of them people who never thought it could happen, I'm a six-footer, twelve and a half stone. I were an active...at that time I were in an active job, all day every day. It were a shock.

shock

- A: A shock? Why was it such a shock?

- DEREK: Why, all my family, they've had it, it's like hereditary type thing and that's always been. But with being on this job I always thought, well, I'm alright, you know, being fit, never fat I've always....I used to be in a steel firm and all that...I was a bit heavier then..... all my family died through it. So when it did happen...well, this is it, but when you think about it, I'm the only one what's had one but still here type thing.

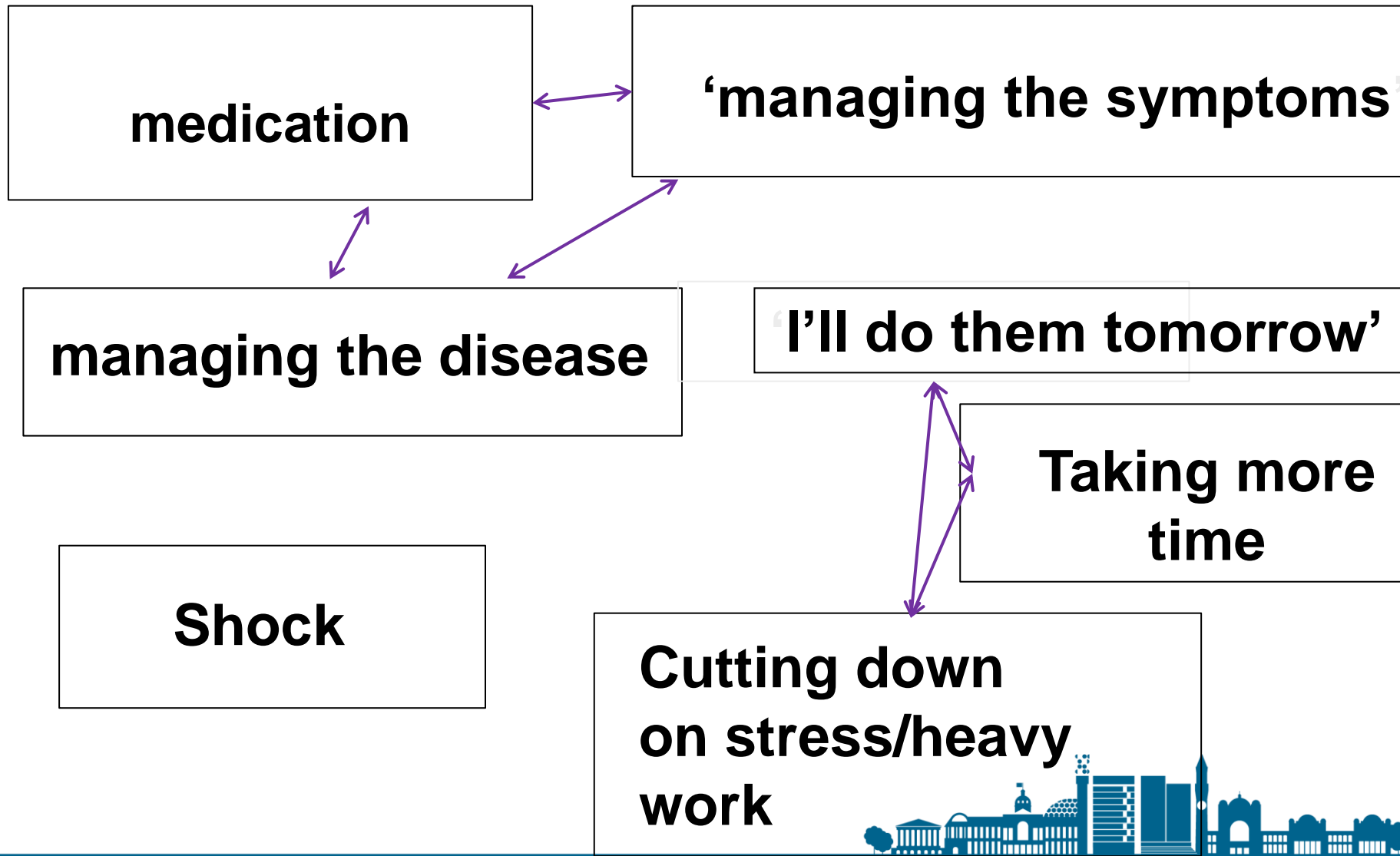
luck

genetic
inheritance

healthy=no
possibility of
heart attack



Search for themes – map codes (codes into categories)



Review themes (codes into themes)– refine ideas

medication

‘managing the symptoms’

managing the disease

**Taking control
of the disease**

Cutting down on
stress/heavy work

Struggling with physical
work

**Changes after
having the
heart attack**

‘I’ll do them tomorrow’

Shock



Define & name themes

Taking control of the disease

I hate it if I have to get a [UK dress-size] twelve because I'm normally a ten. That's just women isn't it?

I was told by the people at the hospital that they would expect me to be back to normal, and I'm starting to learn what normal is to me - tearing down a corridor, leaping about in the lab trying explain things, you know

Changes after having the heart attack

As soon as the pain comes on I stop, you know, or I say, right, that's enough.....At one time I would have carried on and wherever pain were you'd carry on and hope...like, but, now I stop now and I don't mess about.

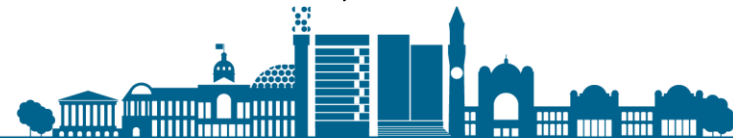
Shock

I mean I were one of those people who nobody ever thought.....it was such a shock to everybody. I were one of them people who never thought it could happen



Thematisation...

- Read through each sections of data.
- Note all the different issues raised by the coded extracts, and relevant respondents IDs...
- You will have a summary of all issues. within the code and respondents IDs
- How might these issues group together into broader themes?
- Aim is to develop an explanation of 'what is going on in the data'
- Need to take account of all issues raised, not just most common



File Home Import Create Explore Share

Clipboard: Paste, Cut, Copy, Merge

Properties, Open, Memo Link, Create As Code, Create As Cases

Explore: Query, Visualize

Coding: Code, Auto Code, Range Code, Uncode

Classification: Case Classification, File Classification

Workspace: Detail View, Sort By, Undock, Navigation View, List View, Find

Quick Access

- Files
- Memos
- Nodes

Data

- Files
- File Classifications
- Externals

Codes

- Nodes
- Sentiment
- Relationships
- Relationship Types

Cases

Notes

Search

Maps

Output

Files Search Project

Name	Codes	References	Modified On	Modified By	Classification
1.Participant01Anonymised	19	38	03/06/2020 15:46	UOB	
1.Participant02Anonymised	16	33	03/06/2020 16:26	UOB	
1.Participant03Anonymised	11	22	04/06/2020 16:07	UOB	
1.Participant04Anonymised	11	44	04/06/2020 17:00	UOB	
FGSite03 Anonymised	18	96	08/06/2020 17:26	UOB	
FGSite05Anonymised	0	0	31/03/2020 14:21	UOB	

Coding using NVivo



DP study - Pilot phase.nvp - NVivo 12 Plus

FileHomeImportCreateExploreShare

DocumentTools

DocumentEdit

MemoLink

See AlsoLink

Links

Zoom

Annotations

Quick Coding

See Also Links

Layout

Relationships

View

Coding Stripes

Highlight

Code

Code In Vivo

Coding

Auto Code

Range Code

New Annotation

Annotations

Word Cloud

Visualize Document

Query This Document

Find

Query

Edit

Edit

Quick Access

Files

Memos

Nodes

Data

Files

File Classifications

Externals

Codes

Nodes

Sentiment

Relationships

Relationship Types

Cases

Notes

Search

Maps

Output

Search Project

Files

Name	Codes	Referenc
1.Participant01Anony	19	38
1.Participant02Anony	16	33
1.Participant03Anony	11	22
1.Participant04Anony	11	44
FGSite03 Anonymised	18	96
FGSite05Anonymise	0	0

1.Participant01Anonymised

from endoscopy all goes into a general pool and then the secretaries allocate it out to individual consultants on the basis of a rota. Reporting wise, the vast majority of the staff are still reporting using [s.l. graph lines – 06:19] and microscopes. Some teams have gone not quite fully digital. The barrier to us going fully digital is requiring accreditation from UCAS which is the lab accreditation body. Going digital is what's called an Extension to Scope. In order for UCAS to accept us doing it, we have to prepare quite a lot of evidence around it. We have to send it off to UCAS and they have to review the evidence and then decide whether we can add that to our scope of practice. We're still assembling the evidence at the moment and so no one is officially reporting entirely digitally but a couple of teams are still getting all the glass slides for everything but looking at the images digitally, reporting them digitally and then just comparing them with the glass slides. The Hempath Team and the Urology Team are doing that at the moment. The Breast Team and the Skin Team are still in the earlier validation phase and so they're looking at a test set and presenting their answers for that. They get reviewed by the Clinical Governance Team and if the Governance Team is happy, they can move on to Phase 2 which is comparing digital and glass for each case.

Coding Density

Drivers for DP

Drawbacks of DP

Experienced difficulties

Training for DP

Barriers to going fully digital

What is involved in going fully digital

DP study - Pilot phase.nvp - NVivo 12 Plus

File

Home

Import

Create

Explore

Share

Paste

Cut

Copy

Merge

Properties

Open

Memo Link

Create As Code

Create As Cases

Query

Visualize

Code

Auto Code

Range Code

Uncode

Case Classification

File Classification

Detail View

Sort By

Undo

Navigation View

List View

Find

Clipboard

Item

Explore

Coding

Classification

Classification

Workspace

Quick Access

Files

Memos

Nodes

Data

Files

File Classifications

Externals

Codes

Nodes

Sentiment

Relationships

Relationship Types

Cases

Notes

Search

Maps

Output

Nodes

Search Project

Name	Files	References	Created On	Created By	Modified On	Modified By	
capacity		1	2	02/06/2020 14:50	UOB	03/06/2020 15:43	UOB
not fully sold on DP		1	3	08/06/2020 16:07	UOB	08/06/2020 16:10	UOB
Benefits of DP		5	29	02/06/2020 14:56	UOB	08/06/2020 17:25	UOB
DP as good as glass		3	9	03/06/2020 16:03	UOB	08/06/2020 17:25	UOB
Drawbacks of DP		5	11	03/06/2020 15:27	UOB	08/06/2020 17:23	UOB
drivers for DP		3	8	03/06/2020 15:22	UOB	08/06/2020 16:55	UOB
Experience		5	6	03/06/2020 15:20	UOB	08/06/2020 17:09	UOB
Future implications of DP		4	10	03/06/2020 15:45	UOB	08/06/2020 17:07	UOB
Glass diagnosis and processes		3	5	02/06/2020 14:52	UOB	08/06/2020 15:36	UOB
familiarity		2	3	03/06/2020 15:56	UOB	08/06/2020 17:04	UOB
waht works well		1	2	02/06/2020 14:52	UOB	02/06/2020 14:53	UOB
what doesn't work well		2	7	02/06/2020 14:54	UOB	08/06/2020 17:26	UOB
how long has DP been used in the servive		1	1	03/06/2020 15:21	UOB	03/06/2020 15:21	UOB
how quickly pathologists delveoped skills		2	2	03/06/2020 16:02	UOB	08/06/2020 16:55	UOB
Impact on interviewee and team		2	4	04/06/2020 15:53	UOB	08/06/2020 15:56	UOB
Introducing DP into practice		4	11	03/06/2020 15:22	UOB	04/06/2020 16:57	UOB
experienced difficulties		1	2	03/06/2020 15:29	UOB	03/06/2020 15:31	UOB
most reporing done using the microscope		4	5	02/06/2020 14:46	UOB	08/06/2020 14:37	UOB
Processess for DP		1	2	03/06/2020 15:54	UOB	03/06/2020 16:09	UOB
Training for DP		3	6	03/06/2020 15:30	UOB	04/06/2020 15:43	UOB
what is DP currently used for		3	6	02/06/2020 14:42	UOB	04/06/2020 16:10	UOB
what is involved in going fully digital		3	12	02/06/2020 14:49	UOB	08/06/2020 17:09	UOB
what is needed for DP to be implemented successfully		5	27	03/06/2020 15:46	UOB	08/06/2020 17:07	UOB
when preference is still for glass		1	4	08/06/2020 17:04	UOB	08/06/2020 17:05	UOB

Ross 4

	Hierarchical Name	Name	Coded Text
confusion about routine care	Nodes\\routine tests and care\\confusion about routine care	pt14_RGE	<p>the consultant I'm under now, Dr. Banerjee, [yeah] she's very, very, very good. She's the one that's really taken an interest; mainly because I'm positive and I'm not prepared to - just to take it laying down [mhmm] erm, and from the results, she has done refer-, - and obviously, information that I lo-, - I found about the Zephyr valves [mhmm] came up. I did some research on that and when I saw her, I said, 'Look, I'd like to go for - have, have a go on these Zephyr valves. She did a referral to Bristol [yeah], to a Dr. Jarad erm, and anyway, cut a long story short erm... it was a little bit slow erm, with exchange of information between erm, Treliske Hospital and Bristol. From that, eventually, I got a letter saying that I had got a nodule on the lung [yeah] erm, which was something like 18 mon-, - I, I - from memory, it's between nine and 18 months later. So when I saw my consultant, I said, 'Why, why is, all of a sudden, this - am, am I being told about a nodule on the lung erm, so long, long after [yeah, yeah] when it was... obviously, I'd had the X-ray, or CT scan, or whatever?' Nobody could explain that but all of a sudden, it was, 'Oh, go for this test. Go for that test. Go for this test.' I then said to erm, Dr. Banerjee that my mum, mum had died from erm, various cancers [yeah] only erm, 18 months ago. I was concerned because I have erm, pains up in my head and one of them was [yeah, sure] erm, my mum had cancer of the brain [yeah]. She had cancer of the lungs, etcetera, etcetera and I wanted tests doing for that erm because of these pains in</p>

Name	Hierarchical Name	Name	Coded Text
embarrassing aspects of disease	Nodes\\embarrassing aspects of disease	pt14_RGE	<p>It's only latterly that I've pushed hard to find out a bit more; plus, I've joined a COPD group online [yeah]. Er, it's American based [yeah] but er, it doesn't matter. Erm... it's - to a certain extent, it's a little bit like a, a chatroom but it's, it's all erm, information - exchange of information [yeah] - g-, good and bad. Erm, I don't like to speak too specifically about erm, personal experiences [yeah] because it's - they're individual experiences as opposed to - but just as an example, I, I, I put - something I, I did put on and that was when I push myself to the extreme, I almost become incontinent [yeah] er, by, by having a wee [yeah, yeah] and I've always been slightly embarrassed by that. Erm, anyway, cut a long story short, I put that on the, the forum and asked if anybody else had come across it and suddenly, it opened a can of worms. It, it was a lot of people that suffer from the same thing but they had been too embarrassed to say anything and erm... it was in-, interesting to, to find out that I wasn't alone. It was reassuring as well but not only that but other people were experiencing the exact The distance [yeah]. Erm, I feel those - the resources are obviously here. Why can't they be strate-, strategically placed throughout the country so that more people ha-...? I am fortunate. I can afford to do - to come here [yeah]. How about the ones that can't? [Yeah]. They're, they're the ones that are missing out.</p>
equity	Nodes\\value of specialist centres\\equity	pt14_RGE	<p>The distance [yeah]. Erm, I feel those - the resources are obviously here. Why can't they be strate-, strategically placed throughout the country so that more people ha-...? I am fortunate. I can afford to do - to come here [yeah]. How about the ones that can't? [Yeah]. They're, they're the ones that are missing out.</p>
equity	Nodes\\value of specialist centres\\equity	pt5_RGE	<p>I think specifically worse with rare diseases I think. I don't think there's you know, erm - well I also think drug companies are just in it for the money. They say these drugs cost X amount of money. I don't think they</p>

file 4

Name	Hierarchical Name	Coded Text
Awarness about NCD plan	Nodes\\Healthcare Professional\\NCD Plan (old or existing)\\Awarness about NCD plan	I: then have you have heard of the NCD Plan from the MoHS? R: no
Awarness about NCD plan	Nodes\\Healthcare Professional\\NCD Plan (old or existing)\\Awarness about NCD plan	Have you heard about the Non Communicable Disease Plan? R. No
Awarness about NCD plan	Nodes\\Healthcare Professional\\NCD Plan (old or existing)\\Awarness about NCD plan	I. But the job that you have done for the past six years, have you ever heard somebody come to the hospital and say this, this and this is from the ministry of health, it is the national plan now to try and engage somebody that have that Non Communicable Diseases, have you ever heard about the plan about that ? R. That is more, for the plan, they might have done it in my absent because for now they have done plenty of things, maybe they have done it when I was not there, for now I have not heard about it yet, for come with anything, plan like that, call us, everybody, health workers, they have



Patient autonomy/control

Loss of control

Dependence on clinicians (this could also go under the empowerment heading as a counterpoint to this argument?)

In some cases digital communication may discourage patients from taking responsibility for their own health:

'I think... personally I do think it is too... I think it makes patients a little too dependent on you and you only, which we don't like that to happen.' (Transplant coordinator 3)

CSW06s03-3: Fine, I think because they do have a crisis plan and they, you know, they're not going to have me forever to text, so they need to learn to manage these situations themselves. And you know, they do have plans in place.

Some patients were concerned if they didn't hear from their clinician within a few days:

CSK01yp09-1: I wouldn't say it has altered my relationship with my consultant directly,

1. Nurse – patient relationship

For nurses: this includes understanding of the relationship from a nurse perspective: the role of the nurse: nurse-patient interaction: challenges to this relationship, including paternalism, the need to prioritise some work/patients because of the staff shortages, delays to treatment, and shortages of drugs, challenges in caring for patients including overcrowding due to a large numbers of patients on long-term treatment regimens and dealing with defaulting patients

'You book him /her [the patient] for to come on this date, he will come maybe three weeks later, you see, and even the blood pressure is elevated then so we have to intervene' Nurse

'It is a problem because... They will give you excuses, some say I was attending a funeral, some will say I went to see my child who is sick ...they give excuses' Nurse

'...shortages of professional [nurse] at work, she cannot manage to see deliveries. And also to attend the others on minor ailments. I give the excuse to the others and then I start with them...chronics... And give them the treatment and then after I come back and continue. But before I go, I first check if

Ignatowicz, Agnieszka, 21/09/2016 08:32:00 commented:
Linked to duty of care

experiences of patients.
Because of lack of resources, nurses may have to provide care without optimal support and safeguards for their patients. They may find it necessary at times



Ignatowicz, Agnieszka

Some notes: values around health and health care imply a specific approach to life, death, health and illness, and may entail a different view of the patient, health care professional, patient/health care professional relationship and health services.



Ignatowicz, Agnieszka

Nurses seem to relate to patients in particular ways, often perpetuating stereotypes and assumptions. The biomedical focus of the health care delivery does not engage adequately with patient expectations. Patients are assumed to understand the structure and bureaucracy of the health care system.
Nurses are aware of the social determinants of health



Ignatowicz, Agnieszka

Nurses are expected to support patient self-management. But self-management strongly focuses on patient autonomy and active patient involvement, implying a less dominant role for healthcare professional (in the Western world)...



Ignatowicz, Agnieszka

Data analysis

Interviews and focus groups were transcribed, anonymised and translated into English by two of the data collectors—one of whom is the coauthor on this paper—for subsequent analysis. The transcripts were uploaded into the NVivo programme for coding and analysis.²² Data were analysed thematically using constant comparison²³ within a modified framework approach.²⁴ Codes were generated both inductively, from the data, and deductively, focussing on articulations of understanding of CVDRF and perceived barriers to accessing care. A sample of interview transcripts was read to identify the initial set of codes by two coauthors of this paper. This generated an initial coding framework that was discussed in an analysis meeting between members of the research team and then used to code all remaining interview and focus group transcripts. Codes were gradually built into broader categories and final themes through comparison across transcripts, with further discussion among all team members. In reporting the findings, direct quotes from participants that have been translated into English and anonymised were used. The quotes were translated in a way that closely represented what the person said and not to introduce errors into translation.



Exercise (30mins)

1. Identify codes.
2. Group codes (How might you merge these codes into broader categories which describe what's going on in the data?)
3. Start to develop initial themes.
4. Identify more codes under each theme.
5. Prepare a description of 2 themes you found and support with quotes

