McMaster University

Family Medicine

David Braley Primary Care Research Collaborative

@McMasterFamMed

Using NVivo for qualitative data analysis: Part I

Watch a recording of the session here

Laura Cleghorn, Jessica Gaber and Fiona Parascandalo

March 24th, 2020

Michael G. DeGroote SCHOOL OF MEDICINE

McMaster University

Family Medicine

What to Know About Nvivo – Part I

Jessica Gaber, Fiona Parascandalo, Laura Cleghorn

@McMasterFamMed

Michael G. DeGroote SCHOOL OF MEDICINE

Agenda

1. Overview of qualitative methods
2. Coding and how to do it
3. Six phases of thematic analysis
4. NVivo demo & practice

Learning Objectives

1. Identify the qualitative methods commonly used at DFM

2. Understand how to code, categorize and make themes from qualitative data

3. Recognize the basic structure and key functions of NVivo

Qualitative methods

- Debates about qualitative methods and approaches
- *Qualitative description* commonly used at DFM
- *Content analysis with thematic analysis:* code, categorize data; identify themes

➢ Recommended reading: Neergaard 2009; Sandelowski 2000, 2007, 2010

➢ Recommended resources:

- ➢ Qualitative Research: Overview of Methods, Meredith Vanstone
- ➢ Grounded Theory, Phenomenology and Narrative, Meredith Vanstone
- ➢ https://fammedmcmaster.ca/research/research-resources/in-services/

Thematic Analysis & Content Analysis - Definitions

- “A method for identifying, analyzing, and reporting patterns (themes) across a data set” Braun & Clarke 2006

- “Content analysis is a research method that provides a systematic and objective means to make valid inferences from verbal, visual, or written data in order to describe and quantify specific phenomena” (p. 314, Downe-Wambolt, 1992)

  - Recommended reading: Braun & Clarke, 2006; Downe-Wamboldt, B. (1992)

What are codes anyway?

- “The most basic segment, or element, of the data that can be assessed in a meaningful way” (Boyatzis 1998)

- “A word or short phrase that symbolically assigns a summative, salient, essence-capturing and evocative attribute for a portion of language or visual data” (Saldana 2015)

➢ Recommended Reading: Saldana Coding Manual 2015

MS_005: As far as pedestrian friendly, it honestly, we just have a small nucleus of things that are in the Oxford area. So, if you are living out in the surrounding areas, you would have a tough time as far as access to that. Even in the city, or the City of Oxford, access - sometimes is one of those 'you can't get there from here', kind of thing. To me, yes, as far as the landscape and the variety of hills and flat areas and all those kinds of things, that's fine. You could if you were athletic, or if you were prone to be a person that liked to walk, run, jog whatever, but we don't promote that very much, even in the city. We are beginning to with the bike path and trying to make some of the, even the campus pedestrian only and trying to get people to walk a little bit more, but it hasn't been one of those things that we have pushed to say "hey, why don't you walk to the park?" or "why don't you walk to a shopping area?" Because the residential areas and then the areas that you have to get to whether it be just basic shopping or whatever, they don't join. They are not accessible. They are surrounded by highways and byways and it's just not that way. Rural Mississippi, it's all accessed through vehicles or trying to get there another way. It is not like we have green spaces that are out there even around the Oxford area that people can go to, to appreciate parks or different types of activities.

Q4: Do you believe there are sidewalks available in most areas?

MS_005: Sidewalks, yes. I think the structure is there, if, like I said, if you are not going to what we perceive the busier part of Oxford, which is the loop over there by the old mall and the Wal-Mart area. I would hate to be a pedestrian in that area even though there are sidewalks. Yes, there are sidewalks. The structure is there. It is just pretty much our culture. It has not been that of "let's walk". It has always been, "let's ride".

First 2/10/2018 17:11
Comment [1]: 20 small nucleus

Rater 2 2/10/2018 17:14
Comment [2]: 21 tough time in surrounding areas
23 you cannot get there from here

First 2/10/2018 17:12
Comment [3]: 24 variety of hills and flats

First 2/10/2018 17:12
Comment [4]: 25 athletic or prone to move

Rater 2 2/10/2018 17:13
Comment [5]: 27 we are beginning to

Rater 2 2/10/2018 17:13
Comment [6]: 28 why don't you walk

Rater 2 2/10/2018 17:13
Comment [7]: 29 walk to shop

First 2/10/2018 17:11
Comment [8]: 30 Areas "don't join"
31 "not accessible"

Rater 2 2/10/2018 17:14
Comment [9]: 32 all accessed through vehicles

First 2/10/2018 17:11
Comment [10]: 33 no green spaces

How to categorize these buttons?

Acknowledgement: slides 8-11 are borrowed from Meredith Vanstone

Start by describing what's there

Light blue, flower shaped, four holes, opaque, decorative, matte

Spring green, shiny, four holes, round, concave, faint design pattern that looks like stone.

Round, cream and brown, more dramatic design pattern, four holes, saucer lip, shiny.

Then look for patterns, categories.

Light blue, flower shaped, four holes, opaque, feminine, matte

Spring green, shiny, four holes, round, concave, faint design pattern that looks like stone.

colour

finish

Round, cream and brown, more dramatic design pattern, four holes, saucer lip, shiny.

Return to the data with these patterns in mind

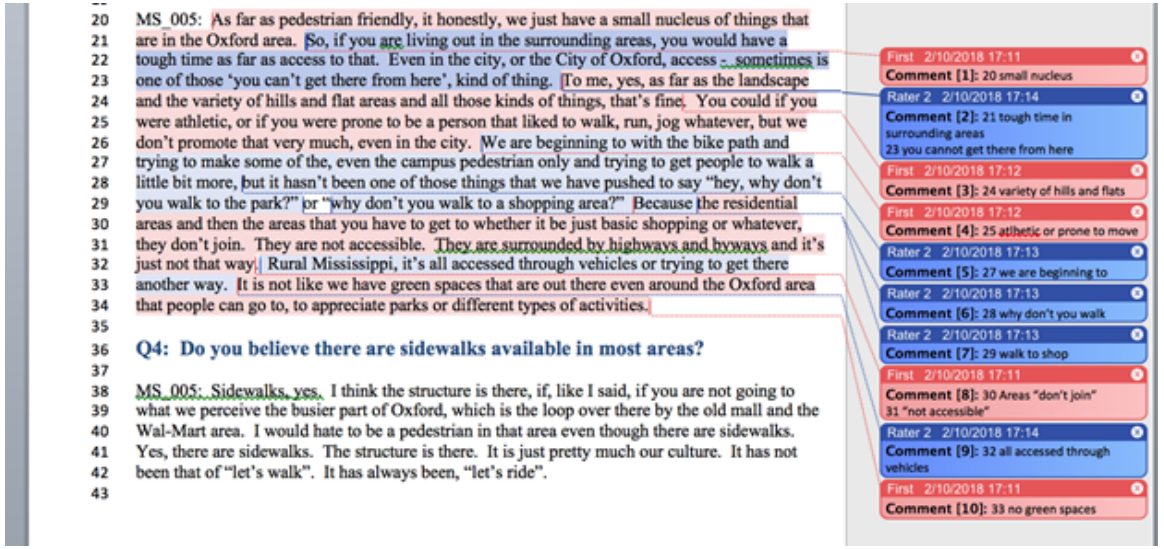
N.B. Buttons analogy is useful to a point, as some buttons can belong in more than one category

Questions to ask as we code

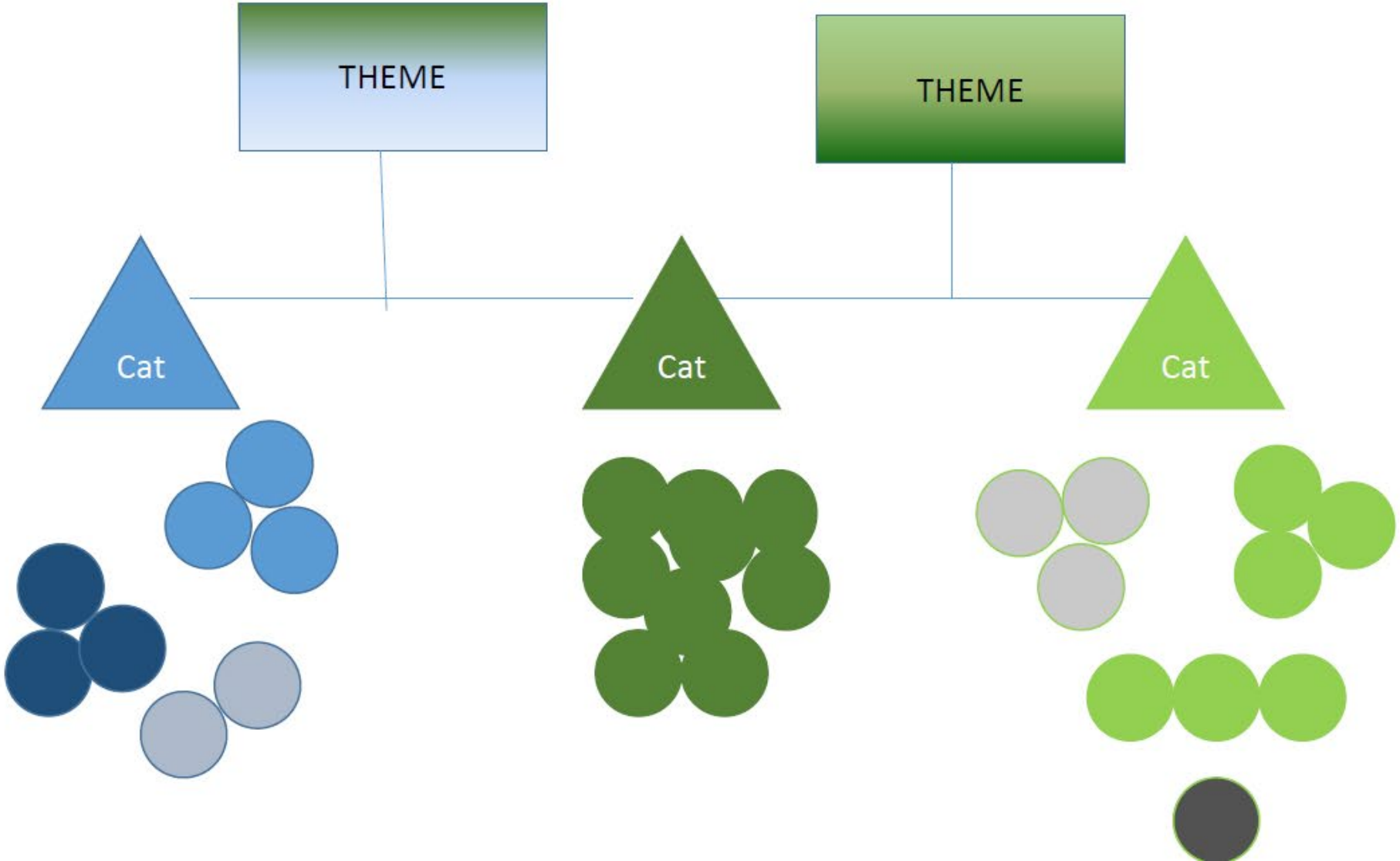
- What is the topic of this passage?
- What is the main idea in this piece of text?
- What is the key concept here?
- What is the gist?
- Is this relevant to our research question?

Coding considerations

- One passage can represent many ideas
- A code can capture a word, or a line, or a whole paragraph
- Codes that don't fit into categories are just as important as those that do fit
- Goal is to describe, categorize, synthesize the data
- Okay to code a chunk of text in more than one place



From codes to themes



Considering coding and analysis styles

- In DFM research, we primarily do (with exceptions!):
    - Rich descriptions of *overall data set, key themes* to answer research question(s)
    - *Descriptive* coding rather than interpretive, though some interpretation is used in identifying themes
    - *Inductive*, data-driven coding rather than deductive, analyst-driven coding
        - Often start with a simple framework, like the questions asked (deductive)
        - Then build from there, based on emerging codes and categories

Six phases of thematic analysis

1. Familiarize yourself with the data
2. Generate initial codes
3. Categorize codes creating themes
4. Review themes
5. Define and name themes
6. Produce the report

These do not go in strict order - a lot of back-and-forth

➢ Recommended Reading: Braun & Clarke 2006

Resources

1. University of Alberta International Institute for Qualitative Methodology

   See the webinars archive and other resources for qualitative and mixed methods

   - https://www.ualberta.ca/international-institute-for-qualitative-methodology/webinars/master-class-webinar/archived-webinars.html

2. DFM's own resources located on the shared drive and on our website:

   - https://fammedmcmaster.ca/research/research-resources/in-services/
   - Qualitative Research: Overview of Methods, Meredith Vanstone
   - Grounded Theory, Phenomenology and Narrative, Meredith Vanstone
   - Data Coding and Analysis, Meredith Vanstone
   - Interviews and Focus Groups, Jessica Jurgutsis
   - Responding to Sensitive Health and Social Issues in Interviewing, Laura Cleghorn and Jessica Gaber

References

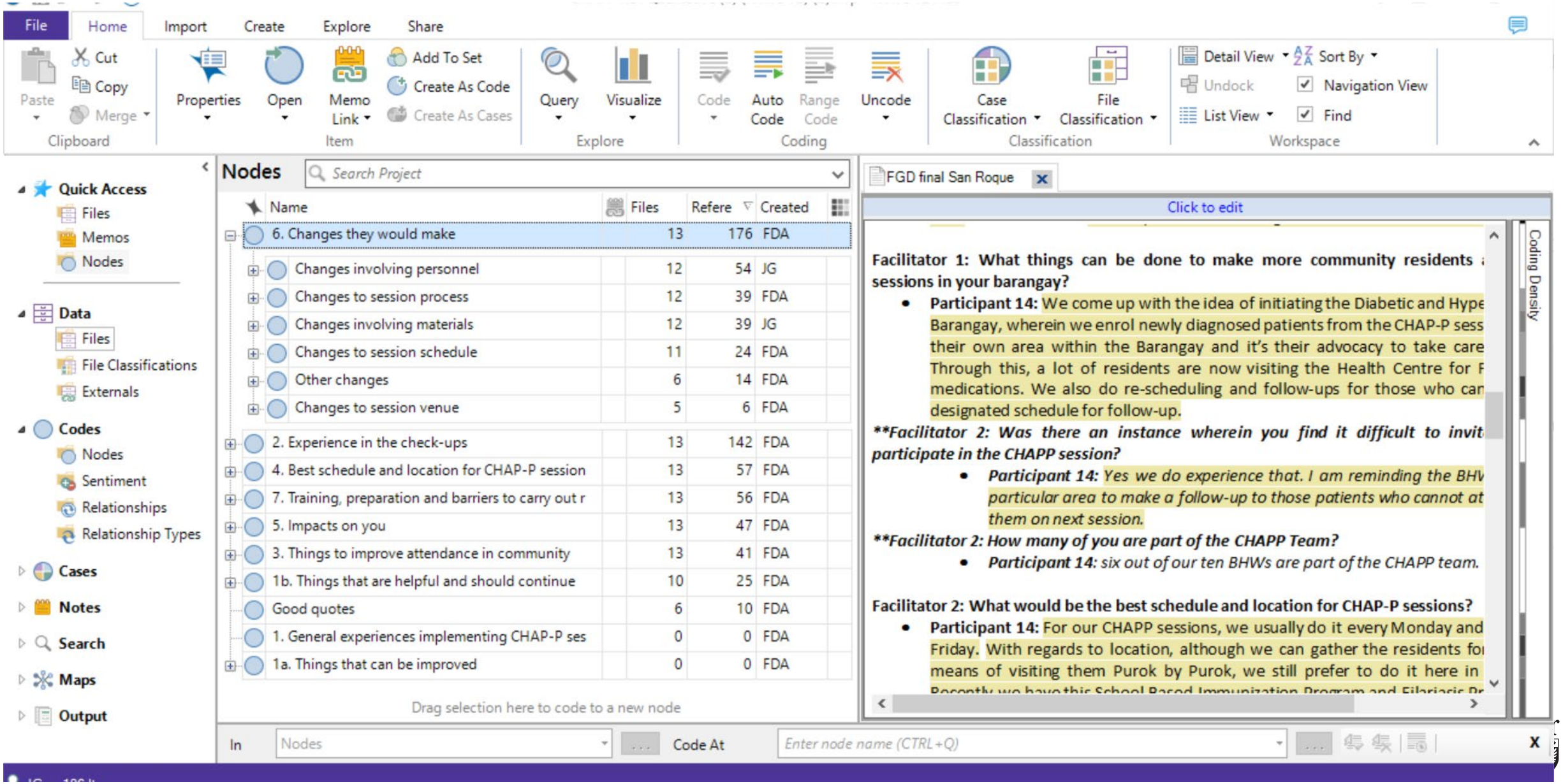
Boyatzis, R.E. (1998) *Transforming qualitative information: Thematic analysis and code development.* Sage.

Braun, V. & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2):77-101.

Downe-Wamboldt, B. (1992). Content analysis: Method, applications, and issues. *Health Care for Women International, 13*(3): 313-321.

Neergaard, M. A., Olesen, F., Andersen, R. S., & Sondergaard, J. (2009). Qualitative description – the poor cousin of health research?. *BMC Medical RMsearch methodology*, *9*(1), 52.

Saldaña, J. (2015). *The coding manual for qualitative researchers*. Sage.

Sandelowski, M. (2010). What's in a name? Qualitative description revisited. *Research in Nursing & Health*, *33*(1), 77-84.

Demo & Practice Using NVivo