USING A MIXED METHODS APPROACH TO ENHANCE AND VALIDATE YOUR RESEARCH

Dr Caroline Bulsara,
Brightwater Group Research Centre Manager &
Adjunct Senior Lecturer, Notre Dame University
What does mixed methods mean to you?
Mixed Methods as a “Movement”

“The emergence of mixed methods as a third methodological movement in the social and behavioral sciences began during the 1980’s.” (p. 697)

-Tashakkori & Teddlie (2003)
Use of mixed methods approach

• Variation in data collection leads to greater validity.
• Answers the question from a number of perspectives.
• Ensures that there are no ‘gaps’ to the information / data collected.
• Ensures that pre existing assumptions from the researcher are less likely.
• When one methodology does not provide all the information required.
Defining mixed methods

• Also called ‘multi-methodology’. Triangulation.

• Evolved from evaluation research.

• “Involved integrating quantitative and qualitative approaches to generating new knowledge and can involve either concurrent or sequential use of these two classes of methods to follow a line of inquiry.” – Stange K et al (2006).

• “Integrating quantitative and qualitative data collection and analysis in a single study or a program of enquiry.” – Creswell et al 2003.
A Definition

- Mixed methods research is a methodology for conducting research that involves collecting, analyzing, and integrating (or mixing) quantitative and qualitative research (and data) in a single study or a longitudinal program of inquiry. The purpose of this form of research is that both qualitative and quantitative research, in combination, provide a better understanding of a research problem or issue than either research approach alone.

Aspects of this definition:
- Collecting both quantitative and qualitative data
- Mixing the data
- Single vs multiple-phase project

Raises issues: how, what, where, why, value (of mixing)
Criteria for mixed methods research rigour

• Reasons for mixing qualitative and quantitative approaches. Benefits?
• Types of data collected and analysed.
• Priority for qual or quan?
• Implementation sequence – sequential or concurrent.
• Phase at which integration of data occurs.
Scope of mixed methods approach

• Generally in health research there are a number of stakeholders / population groups to consider around one particular issue.
• Can be a on a micro or macro scale.
• Examples:
  - A health service with community outreach.
  - A NGO providing community support services.
  - A general practice screening program.
Background mixed methods

• Approach and main focus on either qualitative or quantitative will depend on popn.
• Instrument design model.
• Triangulation design model.
• Data transformation design model.
• Explanatory model.
Mixing (How)

Converge data:

Connect data:

Embed the data:
Parsimonious Designs (Creswell & Plano Clark, 2007)

Concurrent Mixed Methods Designs
Triangulation Design

Embedded Design

QUAN
Data & Results

INTERPRETATION

QUAL
Data & Results

QUAN
Pre-test
Data & Results

Intervention

qual
Process

QUAN
Post-test
Data & Results

Interpretation
Sequential Mixed Methods Designs (Creswell & Plano Clark, 2007)

Explanatory Design

Sequential Embedded Design

Exploratory Design

Before-intervention qual

QUAN Intervention Trial

After-intervention qual

Interpretation

Interpretation

Interpretation
Focus on design

Triangulativemodel

- Frequently used in primary health care research.
- Gathers data at the same time.
- Integrate all data in order to clarify or better understand the problem.
- Quantitative and qualitative are given equal priority.
- Reported on in separate sections of a report.
- Discussion brings salient points together in the report.

Instrument design model

- Priority to quantitative data.
- Two phases begins with qualitative and then moves to quantitative design and testing.
- Integration in the data analysis stage.
- Uses the qualitative information to develop an instrument for data collection.
- Eg Scale development or Focus groups to create a questionnaire.
Focus on design 2

Data transformation model
- Suited to primary care – retrospective or prospective.
- Initial quantitative (survey) followed by some qualitative questions to explore results.
- Can analyse qualitative data (open ended) and numerically code.

Explanatory model
- Quantitative research questions or hypotheses will address the research question or issue.
- Information from the first phase will be explored further in a second qualitative phase.
- Qualitative data collection will be used to explore important quantitative results with a few participants.
- The reason for following up with qualitative research in the second phase is better understand and explain the quantitative results.
EXAMPLES OF MIXED METHODS TYPE RESEARCH QUESTIONS

• Triangulative questions:
  - How well has a school health initiative for high school students been received?
  - What are the issues in accessing services for those affected by traumatic injury?

• What information do we require?
• What evidence do we require to show the outcomes?
Example planning

*What are the issues in accessing services for those affected by traumatic injury?*

- What groups / populations / stakeholders?
- What parameters do we set?
- Who do we contact to / how do we go about collecting our data?
What data do we require?

What groups /representatives?
- Persons with Catastrophic injury (CI).
- Carers (family) of persons with CI.
- Service providers / orgs for those affected by CI.
- Health professionals.

What parameters?
- Types of injury.
- Level of care required.
- Compensation?
- Age groups.
- Paid care?
- Length of hospital stay.
- Types of aids and appliances.
- Impact on family.
EXAMPLES OF MIXED METHODS TYPE RESEARCH QUESTIONS 2

• Instrument design model questions:
  - How can we best define what empowerment means to cancer patients?
  - What are the access issues for disabled persons attending a general practice for a medical problem?

• What information do we require?
• What evidence / information do we require to develop a survey / instrument?
Example planning 2

*What are the access issues for disabled persons attending a general practice for a medical problem?*

- What is already in place?
- Who can we get our information from – maximum amount of information?
- How do we go about collecting this information?
- What sort of information can we use to quantify the problem?
Useful ways to find out about topic

- Group meetings and discussions
- Meetings with key people / community champions
- Previous written material and other documentation
- Observing the place / location - dynamics
Getting the right information - sampling approaches

• Asking ourselves who has the greatest amount of relevant information.

• Consider those groups – best way to contact and approach them.

• Initial stages may not need to be a broader population perspective.

• E.g. Seniors safety in medicines project.
Qual + quan sampling

- May initially use non probability techniques – qualitative. Focus groups, interviews.
- Which group will give the optimal information on the topic?

Large random sample

Small select group
Using a mixed methods approach - Conclusions

• Can be labour intensive.
• Involves multiple stages of data collection.
• Provides greater breadth of perspectives around a certain issue.
• Combining approaches helps overcome deficiencies in one method only.
• Effectively allows populations with limited language skills or trust issues to participate.
• Can help define more ‘nebulous’ concepts.
• Prevents researcher assumptions about a particular population.
• Lends itself well to outcomes driven research (eg needs assessments or evaluations).
The triangulation method

Dr Caroline Bulsara,
Brightwater Group Research Centre Manager & Adjunct Senior Lecturer,
Notre Dame University
Definition

[Triangulation is an] attempt to map out, or explain more fully, the richness and complexity of human behavior by studying it from more than one standpoint.

- Cohen and Manion, 19

• Because each individual telescope’s view overlaps that of its neighbours, the accuracy of each telescope can be validated to a certain extent by the others.
Characteristics of triangulation methods

• Is either focussed on triangulation of methods or triangulation of subjects / data. Is often a combination of both.

• Triangulation of methods – example = focus groups and survey data. Could be for each individual participant.

• Triangulation of subjects – different and diverse perspectives from various persons.
Tips for triangulation

Combine different techniques that balance each other out:

- Quantitative vs qualitative
- Individual vs group
- Face-to-face vs remote
- Self-reported vs facilitated
- Short engagement vs long engagement etc

This is central to the idea of triangulation.
Concurrent Triangulation Design Visual Model

**Procedure**
- Survey
- Structured observation checklist
- Chart audits

**Product**
- Numeric data

**Procedure**
- Semi-structured interviews
- Observations
- Documents
- Artifacts

**Product**
- Text data
- Image data

**QUAN data collection**

**QUAN data analysis**
- Test statistic
- SEM

**RESULTS**
Comparing results

**Composite Model**

**QUAL data collection**

**QUAL data analysis**
- Coding
- Thematic analysis
- Codes
- Themes
- GROUNDED THEORY
Types of data

- Stakeholder interviews – steering panel, stakeholder consultation
- Interviews (face-to-face or phone *as appropriate*)
- Cultural probe (records / diary study)
- Focus groups / education events
- Secondary research (including an examination of market research data)
- Quantitative survey (to help validate findings with a much larger sample size)
- Usability testing (of existing program, pilot or early concepts)
Why is it useful?

• Statistics and survey results do not provide the human motivation behind certain preferences and behaviours.

• Provide depth to the ‘facts and figures’.

• Can provide ideas for future directions in regard to a health program or intervention.

• Can reveal other information not previously anticipated by the researchers.
Example exercise 1

Triangulation

How do carers get to get optimal care from their GP in helping deal with looking after themselves (self-care issues).
Example planning

• What is feasible for you as RESEARCHER and PARTICIPANTS in the study?
• What groups / populations / stakeholders?
• What parameters do we set?
• Who do we contact to collect our data?
• How many tools for data collection?
• How do we go about collecting our data?
Discussion

• Jot down tools that you would use to collect data.

• Then read through the example question responses from the focus groups.

• What key themes (issues) seem to emerge from the transcripts?

• Now examine the GP data for Qs 4a (text), 2g (SPSS), 2h-2j (SPSS & text).

• What does this tell you about the issues raised – perceptions / communication / attitudes?
Instrument design model

Dr Caroline Bulsara,
Brightwater Group Research Centre
Manager & Adjunct Senior Lecturer,
Notre Dame University
Recap

• Priority to quantitative data.
• Two phases begin with qualitative data and then moves to quantitative design and testing.
• Uses the qualitative information to develop an instrument for data collection.
• E.g. Scale development or Focus groups to create a questionnaire.
Initial phase

• Qualitative in approach.
• Using interviews, group interviews, focus groups, ‘expert’ panel discussions, Delphi technique.
• Helps in deciding priority areas. Areas to focus on.
• Refining issues discussed (qualitatively) into core areas for formulating a quantitative phase of the model.
• May require a number of iterations before final tool is decided upon.
Example – Instrument design model

Development of a questionnaire to distribute to parents of high school children around WHAT teenage health issues are of most importance to them.

Intention? To develop a more tailored approach to providing health advice for school population.
First steps

• What is the context? – community, youth, parenting?
• What information do we need?
• Who would we approach? (sub groups and stakeholders)
• Using a qualitative approach - What type(s) of data collection are required?
• What barriers do we need to be conscious of?
• Who could be our key contact person?
Types of questions we need to ask

• Semi structured interview. Why?
  • Helps stay focused on getting the answers we need.
• Same questions for all stakeholders?
• Who would be best suited to focus group setting?
• Who would be best suited to an interview?
Analysing qualitative data for the instrument design

• Focus groups and interviews → thematic analysis.
• Not exploring the transcripts deeply but rather trying to extrapolate common themes.
• Where more in-depth analysis focuses on individual perspectives – we are seeking commonality.
### Q1. What areas of health are important for the youth in this school?

| T01 | well, for me I think that................ |
| T02 | – I have noticed that recently more kids are turning up to school looking tired and stressed out. They often don’t have anyone to talk to about problems at home..... |
| T03 | - |
| T04 | - |

### Q2. What areas of health are not so important for youth at this school?

| T01 | well, I have noticed that there is less importance that our kids put on things like how to eat healthy. When mum and dad are arguing at home, the last thing they might be worried about whether they’ve had their five fruit and two veggies each day! ............... |
| T02 | – That’s a hard one to answer because the kids are so diverse here. But I don’t see a lot of ................................................................. |
| T03 | - |
Female health worker 1......With our GPs a client might come in to us they start off with a headache but they are in there for ¾ of an hour, the doctor says what’s causing it. Butt with a general GP they go in and you get Panadol and walk out. None of the underlying things get dealt with because the general GPs have only got 5 or 10 minutes appointment time they only want to deal with what you present with and they don’t want to know what’s causing it. That’s the feeling we are getting. I’m not saying that’s across the board. I know with some of our doctors sometimes we are pulling our hair out because the patients take so long. It could take up to an hour because once they start opening up they just keep talking. Once you start that you can't say, "Sorry but your time is up. I can't talk to you any more".

Female health worker 2...... You also find with Aboriginal people its not just one issue it could be ten different things it's quite complex. For example, you get a grandmother in, she’s tired and got a headache you don’t just give her a Panadol you find out why she has got a headache. It is because she has got half a dozen kids and she’s looking after all of them because her daughter is probably in Bandyiup There's no income coming in so there's all these sorts of things so it’s really bound to play a big part in their health. So that’s why we say about holistic health.
EMERGING MAIN THEMES

• Decide what themes are recurrent.
• Establish what services are already offered / present / known.
• Then use themes to identify areas of possible future priority.
• If any issues are not raised by the data collection that are important to you as researcher – consider including these anyway. These may have resulted from a literature review or accessing other records.
Developing the questionnaire

• Reconvene with the group to discuss findings.
• Establish broad areas that you need to collect information on. Awareness, knowledge, quality of life, standard of services are examples.
• Divide survey sections into satisfaction level with current services and then what would be most useful in future.
• Begin first draft.
Closed questions

• Standardised questions (Health Department or other available source) – ensure you acknowledge source!
• Concise
• Have a code frame attached to them.
• Make code frames as complete as possible before survey begins – client input from focus groups and consultations.
EXAMPLE OF CLOSED QUESTION

1. How did you find out about Mercy After Hours services?

(please tick (✓) the appropriate boxes)

☐ Advised of the clinic by my doctor
☐ I saw a poster / leaflet at GP surgery
☐ Was told about it by Health Direct
☐ Message on Doctors answering machine
☐ Advertisement in local paper/magazine
☐ Heard about it from friends or family
☐ Previously attended the clinic
☐ Saw signs on the road
☐ Advised by local pharmacy
☐ Referred by Mercy Hospital
☐ Found it in the phone book
☐ Other (please state) ______________________________________
Closed questions tips

• Make sure you include ‘don’t know’ (not sure’ or ‘refused’ options available for respondents.
• Provide as many codes in a frame as possible.
• Include an “other specify” always in coded questions for anything you have NOT thought of.
• Provide tick boxes and include [✓] for clarity
Discuss with group

• Questions design – share with group.
Pilot your questionnaire

- Essential.
- Ensure that it ‘flows’ and along with transition text ensures that all questions are answered in the correct order.
- Flaws are identified.
- How long it takes is established.
- Awkward or repetitious wording is identified.
Formatting

• Keep questions short unless of a sensitive or probing nature.
• Questionnaire may not be the best forum for this type of research however.
• Make sure you indicate visually how you want questions marked eg [✓].
• Indicate separate sections clearly. This gives the questionnaire purpose rather than a ‘rambling’ impression.
• Always provide an opportunity for options – open or specify.
Improving response rates

- Incentives.
- Short and concise.
- Reply paid envelope / options to respond.
- Clear questions and instructions.
- Participation letter precludes the questionnaire.
Golden rules to remember

• Try to ensure code frames are as complete as possible.
• Keep instructions clear – even if it seems too obvious to you!
• Keep questions short and easy to respond to. Eg length of wait time choices.
• Use transition text to maintain interest.
• Pitch it at target audience level.
• Search for validated instruments. No use ‘reinventing wheel’!!
• Make sure all parties are reasonable about what to include – can end up lengthy, repetitive and complex!
Data transformational design

Dr Caroline Bulsara,
Brightwater Group Research Centre
Manager & Adjunct Senior Lecturer,
Notre Dame University
Definition

**Data Conversion/Transformation**: Collected quantitative data types are converted into narratives that can be analyzed qualitatively (i.e., qualitized), and/or qualitative data types are converted into numerical codes that can be statistically analyzed (i.e., quantitized).

Converting qualitative data into numeric codes

• Generally will come from survey data or interviews which are very structured.

• Some may come from content analysis – but this may mean losing depth of information from respondents.

• E.g. – content analysis as shown over....
Example content analysis presented qualitatively

Women’s beliefs about the causes of breast cancer
(eg from Sue Wilkinson in Qualitative Psychology Ed Jonathon Smith).

Qualitative :
5. Stress, strain and worry.
Not discussed.
6. Caused by childbearing
   ‘I mean I don't know whether the age of which you have children makes a difference as well because my [pause] 8 year old relatively late, I was an old mum’.
   ‘They say if you’ve had one, you’re more likely to get it than if you’ve had a big family.’

Quantitative
7. Secondary to trauma or surgery
   • Stress, strain and worry. 0 times.
   • Caused by childbearing. 22 times.
   • Secondary to trauma and surgery. 9 times.

Allows the researcher to see how generalisable some themes are.
Shorter open ended responses

• Larger databases
• Open ended responses from telephone surveys, questionnaires - answers are relatively short
• For example, “What are the three main issues for you in regard to …”
• Responses are not likely to be longer than one sentence. Slightly longer if survey is administered by telephone.
OPEN ENDED RESPONSES

“Open ended responses permit one to understand the world as seen by the respondents. This enables the researcher to capture the points of view of other people without pre-determining those points of view.”

-Patton, M (2002)
REASONS FOR OPEN ENDED RESPONSES

- To ascertain respondent’s brief opinions.
- Make sure that respondent knows that their opinion is valid.
- To ensure that no information has been omitted from the research.
- May clarify other responses to closed (coded) questions.
What three things would you change about this health service to make it more efficient in future?

Are there any other issues that you would like to raise in connection with carers in the community?

Do you have any further issues that you would like to raise?
<table>
<thead>
<tr>
<th></th>
<th>q4</th>
<th>q4cod1</th>
<th>q4cod2</th>
<th>q5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>autism</td>
<td>autism</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Intellectual Disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Breast cancer with widespread Metastacies</td>
<td>cancer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>Autistic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Congenital Myopathy, Intellectual Handicap, Asthma &amp; Cyclical vomiting</td>
<td>other</td>
<td></td>
<td>intellectual disability</td>
</tr>
<tr>
<td>6</td>
<td>Autism &amp; significant developmental delay Epilepsy</td>
<td>autism</td>
<td></td>
<td>epilepsy</td>
</tr>
<tr>
<td>7</td>
<td>Rt sided hemi from Stroke</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>Autism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>kidney</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>Slow in developing</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Fragile X Syndrome</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>CP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>Cerebral Palsy Quadruplegic &amp; Blindness</td>
<td></td>
<td>cerebral palsy</td>
<td>blindness</td>
</tr>
<tr>
<td>14</td>
<td>Cerebral Palsy</td>
<td></td>
<td>cerebral palsy</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>High blood Pressure / Sugar Diabetic</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>I have Asperges form of Autism</td>
<td></td>
<td>autism</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>Down Syndrome</td>
<td></td>
<td></td>
<td>downs syndrome</td>
</tr>
<tr>
<td>18</td>
<td>Autism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Osteogenesis Imperfecta (Brittle Bones)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>Intellectual Disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>Autism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Cerebral Palsy</td>
<td></td>
<td>cerebral palsy</td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Autism</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24</td>
<td>Global Developmental Disability</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td>Intellectually Handicapped</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td>Type</td>
<td>Width</td>
<td>Decimals</td>
<td>Label</td>
</tr>
<tr>
<td>------</td>
<td>--------</td>
<td>-------</td>
<td>----------</td>
<td>-------------</td>
</tr>
<tr>
<td>id</td>
<td>String</td>
<td>15</td>
<td>0</td>
<td>unique id</td>
</tr>
<tr>
<td>pc</td>
<td>String</td>
<td>250</td>
<td>0</td>
<td>post code</td>
</tr>
<tr>
<td>q1</td>
<td>Numeric</td>
<td>15</td>
<td>0</td>
<td>gender</td>
</tr>
<tr>
<td>q2</td>
<td>Integer</td>
<td>15</td>
<td>0</td>
<td>age groupings</td>
</tr>
<tr>
<td>q3</td>
<td>Numeric</td>
<td>250</td>
<td>0</td>
<td>person complet</td>
</tr>
<tr>
<td>q4</td>
<td>String</td>
<td>250</td>
<td>0</td>
<td>disability</td>
</tr>
</tbody>
</table>

**Value Labels**

<table>
<thead>
<tr>
<th>Value</th>
<th>Label</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.00</td>
<td>&quot;autism&quot;</td>
</tr>
<tr>
<td>2.00</td>
<td>&quot;blindness&quot;</td>
</tr>
<tr>
<td>3.00</td>
<td>&quot;cerebral palsy&quot;</td>
</tr>
<tr>
<td>4.00</td>
<td>&quot;Downs Syndrome&quot;</td>
</tr>
<tr>
<td>5.00</td>
<td>&quot;Epilepsy&quot;</td>
</tr>
<tr>
<td>6.00</td>
<td>&quot;fragile x syndrome&quot;</td>
</tr>
<tr>
<td>7.00</td>
<td>&quot;intellectual disability&quot;</td>
</tr>
<tr>
<td></td>
<td>g5a</td>
</tr>
<tr>
<td>---</td>
<td>---------------------------------------------------------------------</td>
</tr>
<tr>
<td>1</td>
<td>University of NSW - week long course x 2 occasions</td>
</tr>
<tr>
<td>2</td>
<td>ACSP Fellowship</td>
</tr>
<tr>
<td>3</td>
<td>One day SMA sessions 1990's + physio in house day</td>
</tr>
<tr>
<td>4</td>
<td>Certified Sports Med (RACGP &amp; SMA I think)</td>
</tr>
<tr>
<td>5</td>
<td>Australian College Sports Physician - Fellow</td>
</tr>
<tr>
<td>6</td>
<td>Sydney university sport medicine course. Regular conferences &amp; update</td>
</tr>
<tr>
<td>7</td>
<td>AFLMOR Emergency Medicine Course</td>
</tr>
<tr>
<td>8</td>
<td>Postgrad Dip Sports Med (UNSW), Postgrad Dip Exercise &amp; Sports Science (VUT)</td>
</tr>
<tr>
<td>9</td>
<td>Fellow Australian College of Sports Physicians</td>
</tr>
<tr>
<td>10</td>
<td>FACSP Certified Sports Med (RACGP) Dip Ana (Monash Uni)</td>
</tr>
<tr>
<td>11</td>
<td>Fellow Australian College Sports Physicians</td>
</tr>
<tr>
<td>12</td>
<td>Cert Sports Injuries UNsw</td>
</tr>
<tr>
<td>13</td>
<td>UNSW Masters</td>
</tr>
<tr>
<td>14</td>
<td>Worked in sports medicine clinic 5 years, Courses of advanced training in sports med via RA.</td>
</tr>
<tr>
<td>15</td>
<td>RACGP ISAMF course 1987, 1982, ACSP Fellowship Exams 1992</td>
</tr>
<tr>
<td>16</td>
<td>Human Nutrition Unit - University of Sydney</td>
</tr>
<tr>
<td>17</td>
<td>Fellow Australasian College of Sport Physicians</td>
</tr>
<tr>
<td>18</td>
<td>Master Sport Medicine (UNSW)</td>
</tr>
<tr>
<td>19</td>
<td>Taping acute injuries RACGP, Motor Racing Injuries, CAMS &amp; AGP</td>
</tr>
<tr>
<td>20</td>
<td>Fellowship ACSP</td>
</tr>
</tbody>
</table>

**Data View**
Collating open ended responses

Requires pre reading of the text
Each sentence or phrase will belong to a colour/number category
Each theme has a colour/number attached to it
Text from each category will be stored together
Possible to count responses in each category and create frequencies
COLOUR CODING for SHORT OPEN ENDED RESPONSES

- Read through the text and briefly note some common themes.
- Larger common themes can be allocated a colour or number. These can be counted if preferred to display in a table.
- Re-read text in more depth whilst simultaneously coding.
- There should be relatively few new themes emerging as text is coded.
- Codes can be counted and totals given for response frequency.
COLOUR CODING EXAMPLE

Case=11
Q(45)=the **general public** /the medical profession like **doctors** /thats all//^

Case=12
q(45)=people from the **medical profession and nursing area** /people interested and who have worked in that field/particulary those interesed in geriatric nursing/ scientists^

Case=15
Q(45)=i think a wide range from the community not just academics/**general public** and people in community health

Case=16
Q(45)=**Doctors**, religious representatives, people from all age groups, media and a general sample from society^

Case=20
Q(45)=**doctors** /medical resaerchers/thats all//^

Case=24
q(45)=diabetes association **doctors**. ama. legal association to control the ethics **general public**
Shorter response analysis

- Can analyse in Excel or SPSS.
- Trying to convert ‘same’ or ‘similar’ responses into frequencies.
- Works well with survey questions and responses.
- It is still considered qualitative research because you are seeking opinions and attitudes.
EXAMPLE 1

Asthma awareness evaluation program

Asks new mothers by telephone interview to state any changes they have made to protect their baby from exposure to smoke.
SHORTER TYPE OF RESPONSE

Questionnaire contents for Job: BA\r2-L. Filler. 65(8)

Q(65)=q11a: what changes made

Case=18
Q(65)=2,1,8:"KEEP AWAY FROM HIM WHEN WE SMOKE/"*

Case=24
Q(65)=8:"CLOSE WINDOWS AND DOOR TO STOP NEIGHBOURS SMOKE FROM GETTING IN THE HOUSE/"*

Case=26
Q(65)=3,8:"HUSBAND CUT DOWN ON HIS SMOKING/"*

Case=73
Q(65)=3,8:"GET HUSBAND TO GO AWAY FROM THE DOOR OF THE HOUSE TO SMOKE OUTSIDE/"*

Case=168
Q(65)=8:"BY NOT GOING TO THE PUB AS MUCH/ITS TOO SMOKEY/"*
## Table 20 Type of changes made to create / maintain smoke free environment (multiple response)

<table>
<thead>
<tr>
<th>Response</th>
<th>n</th>
<th>% respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asking people not to smoke</td>
<td>38</td>
<td>38.8</td>
</tr>
<tr>
<td>Stop smoking in the house</td>
<td>24</td>
<td>24.4</td>
</tr>
<tr>
<td>Avoiding smokers</td>
<td>20</td>
<td>20.4</td>
</tr>
<tr>
<td>Quitting / cutting down</td>
<td>17</td>
<td>17.3</td>
</tr>
<tr>
<td>Stop smoking in the car</td>
<td>5</td>
<td>5.1</td>
</tr>
<tr>
<td>Stop frequenting smoky venues</td>
<td>3</td>
<td>3.1</td>
</tr>
<tr>
<td>Reinforced views</td>
<td>18</td>
<td>18.4</td>
</tr>
<tr>
<td>Other*</td>
<td>3</td>
<td>3.1</td>
</tr>
</tbody>
</table>

[Other* includes – “the partner who smokes left”, “husband is trying very hard to give up” and “we have a wood fireplace and make sure there is no smoke in the house that will affect my child”]
Presenting shorter responses

- Presented in the form of a table as shown below:

<table>
<thead>
<tr>
<th>Table 6: Other effective ways of dealing with health issues</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No of responses</strong></td>
</tr>
<tr>
<td>----------------------------------------------------------</td>
</tr>
<tr>
<td>Outside speakers</td>
</tr>
<tr>
<td>Curriculum support</td>
</tr>
<tr>
<td>Student based (plays, committees)</td>
</tr>
<tr>
<td>Media - videos, newsletters</td>
</tr>
<tr>
<td>Peer support, year 12 counsellors</td>
</tr>
<tr>
<td>Health sessions</td>
</tr>
<tr>
<td>Discipline</td>
</tr>
<tr>
<td>Parent based</td>
</tr>
<tr>
<td>Other*</td>
</tr>
</tbody>
</table>

*Other* includes single responses as follows: a helpline, students to utilise skills outside of school, holistic nurturing approach, separate sex discussions, dress code enforced, more 'suitable' library magazines (ie not girls' 'teen mags')
Presentation - contd

- Retain more concise responses for the report, presentation or paper.
- An eloquent and often powerful way of expressing respondent opinions.
- Raise or remind reader of the issues which are most important.
Finding the right GP and practice

“There are lots of good GPs out there but there is the time factor and the money factor. It is push, push, push when people ring up with urgent appointments which are not really urgent.”

Finding the right GP who understands and listens to the carer is paramount for many carers. Most carers said that they need to feel ‘listened to’ by the GP. One carer said that she goes first to the GP to see what they are like and then includes the person she is caring for as well. Some carers said that they had researched which GP would be right for them and the person they are caring for before making a decision. One carer said,

“I rang around and asked a lot of questions before I decided on the right person. Practices are all quite different and some have a particular area of interest.”

One who supports the carer is essential.

“...first became ill in the country and my GP referred him on to a psychologist in Perth. This was a good referral. We then had a good GP in Perth who supported my efforts to get my son into independent living.”
EXAMPLE AND DISCUSSION

1. Look at qualitative (open) responses to the survey question:
   What changes have you made to maintaining a smoke free environment?

2. Review the open ended responses made to satisfaction with regular GP of the population in one suburb of Perth.
   Then collate responses into categories for presenting in tabular form.
   What, if any responses would you choose to give in the report as a quote?
The explanatory model

Dr Caroline Bulsara,
Brightwater Group Research Centre Manager & Adjunct Senior Lecturer,
Notre Dame University
Definition

The explanatory model seeks to *explain* the initial phase of quantitative findings in more depth by interviewing (or focus group) with a few of the participants from the initial phase. The findings from the second qualitative phase will *explain (inform) in greater depth* the results from the initial quantitative phase of the study.
Characteristics of explanatory methods

• Both QUAL and QUAN are acknowledged as of equal value in the final results.
• Takes the key findings / issues from the quantitative phase of the study and formulates pertinent questions for the qualitative phase.
• Provides greater depth of information as to the reasons / decisions that participants make in regard to specific issues / events/ situations.
Types of data

• Survey data, statistical (govt) data, hospital data of a quantitative nature.
• Interviews (semi structured or structured).
• Focus groups discussing a particular issue arising from the statistical data.
• Qualitative data can provide a different perspective from those not included in the initial quantitative data sets.
Why is it useful?

- Statistics and survey results do not provide the human motivation behind certain preferences and behaviours.
- Provide depth to the ‘facts and figures’.
- Can reveal other information not previously sought out by the researchers.
- Can initial a new phase of quantitative data collection.
A campaign to encourage blue collar workers to lead a healthier lifestyle was launched across a number of worksites. Workers attended lunchtime sessions about healthy lifestyle habits. Each site was evaluated using surveys for the workers as to how useful the information was to them. They were also asked what changes they had / would make (or if not, the reasons why not) to their lifestyle.

The survey findings were useful but didn’t present the motivations for their behaviours. Focus groups / interviews were planned as a next phase in the study.
Example planning

• What groups / populations / stakeholders?
• What parameters do we set?
• Who do we contact to collect our data?
• How many tools for data collection?
• How do we go about collecting our data?
• What is feasible for you as RESEARCHER and PARTICIPANTS in the study?
Discussion

• This is a report example from a campaign to encourage blue collar male workers to take better care of their health. **Discuss potential health issues for this group.**

• Then **read through** the example from the SURVEY REPORT.

• **What key themes** (issues) seem to emerge from the report which could be discussed in a focus group with workers?

• Jot down **three potential areas** for discussion.

• **What other persons** could be interviewed / focus group?

• **Discuss why these are important** in the area of blue collar workers and health issues.