Chapter 5: Semi-Structured Interviews Development & Findings

5.1 Introduction

The previous chapter reported the findings from a questionnaire survey based on the model by Heeks et al (1999) about using an EAIRRS. The purpose of this chapter is to explain the development of semi-structured interviews and to present those findings, to allow for the exploration of the causal attributions of the attitudes and perceptions expressed in the questionnaire.

5.2 Developing the Semi-Structured Interviews

An interview is '*a purposeful discussion between two or more people'* (Kahn and Cannell, 1975 quoted in Saunders *et al.,* 2007). It is usually one of two types: structured or semi-structured. A structured interview is one where identical questions are asked of each respondent. A semi-structured interview is one where the interviewer asks participants similar questions about defined topic areas but has the flexibility to explore those topic areas in more or less depth depending on the participant's response and / or explore new topic areas mentioned by the interviewee.

5.2.1 Interview Schedule

The topic areas for the semi-structured interviews were based on the dimension on the model by Heeks et al. (1999). This framework consists of seven dimensions:

(1) Information;
(2) Technology;
(3) Processes;
(4) Objectives and values;
(5) Staffing and skills;
(6) Management and structures; and
(7) Other resources.

These topic areas are the same as those on the questionnaire but the findings of the questionnaire (see Chapter 5) informed the development of interview questions within those topic areas. The main findings from the questionnaire are that consultants, managers, and nurses all had positive attitudes about responsibility for reporting adverse incidents. All respondents indicated that the design of and information collected by DATIX was adequate but medical consultants had more negative attitudes and perceptions than managers and nurses. All respondents expressed negative attitudes about the amount and type of feedback they received from reporting, and consultants expressed more negative attitudes about how DATIX is managed than managers and nurses. To introduce a topic area, an open-ended question was asked about that topic area. Then the following questions were used to further explore causal attributions for the differences in questionnaire findings between the occupational groups.

Information

1 Can causal analysis be made from existing data?
2 Can the information be easily extracted from the system
3 Are the data flexible to meet the needs of the organisation?
4 Who owns the information, the patient?
5 Is the information used effectively?
6 Who accesses the information from the system
7 Has the information improved patient safety?

Technology / Processes

8 Has the system the ability to capture all human factors, for example stress, workload, skills, processes, systems and fear of reporting?
9 Is the system used effectively by the front line staff?
10 Is there a decision process built into the system?
11 Why is quality costing not used in the process?
12 Is there a benefit from paper to electronic, if so can you provide an example.
13 How easy are the drop-down boxes?
14 Does the system meet your requirements?

Objectives and Values

1 Has the overall system brought all incident information together?
2 Is the organisation proactive in the use of the EAIRRS?
3 Is the data used, if so can you give an example?
4 Can you give an example of a quality outcome which has occurred
5 How could you improve the success rate of the EAIRRS?
6 Can the success of EAIRRS be improved?
7 Has the EAIRRS improved patient safety?
8 Have there been any benefits following the introduction of the EAIRRS?
9 Have there been any challenges to implementing the EAIRRS?
10 Have there been any challenges to maintaining the EAIRRS?

Staffing and Skills

1 Has this created an increase in workload?
2 Do all staff use the system, if not why not?
3 Should training be provided?
4 Do all staff have the skills and competencies to use the system?
5 Are the medical staff engaged?
6 If not why not?
7 How would you improve engagement?
8 How would encourage staff to use the EAIRRS?

Management and Structures

1. What are the monitoring and control systems for using EAIRRS?
2. What in practice determine type of incident to be reported?
3. How are the results utilized?
4. Does management provide support to the process in relation to feedback?
5. Does management encourage individuals / services to use the EAIRRS?
6. How effective is the action plan monitoring attached to each adverse incident?

Other Resources

1. Any other issues you would like to cover, which we have not already discussed?

5.2.2 Pilot Testing the Interview Schedule

The interview schedule was pilot tested with three employees from the organisation. These participants stated that the interview questions were comprehensive and easy to understand.

5.3 Method

5.3.1 Participants

The participants for this interview study were seventeen healthcare workers across the four hospitals in the organisation. This sample contained two consultants, two directors, two associate directors, four managers, two ward managers, four nurses and one porter. Across the sample, there were eight male participants and nine female participants. This sample represented a cross-section of both clinical and non-clinical staff in the organisation from the board room to the patient's bedside.

5.3.2 Procedure

Semi-structured interviews were conducted on a one-to-one basis in private at participants' workplace. The author asked participants if the interview could be audio recorded and if notes could be taken during the interview. Participants were told that no one else would have access to the audio tapes and that they would be destroyed at the end of the study. They were also told that the notes would be anonymous (i.e. participants' names and dates of the interviews were not recorded) and that the data would be treated confidentially. Participants were provided with an information sheet (Appendix 2) and a consent form (Appendix 3) as per the University of Strathclyde's ethics policy. Participants also were informed at the start of each interview that they were free to refuse to answer any question or end the interview at any time and that they did not need to offer a reason for doing so.

The length of the interviews ranged from 30 - 75 minutes but the average interview was 45 minutes. Participants were first asked to talk about their job and general responsibilities and state how long they had worked in healthcare and at the hospital. The seven topic areas (see 6.2.1) were then discussed in turn. To introduce a topic area, an open-ended question was asked about that topic area. Participants were sent the open-ended questions before each interview to foster an atmosphere of openness and trust.

5.4 Results and Analysis

A thematic analysis of the interview notes was conducted. The analysis yielded seven main themes:

1) Leadership and Engagement;
2) Training, Staffing, and Skills;
3) Information and Technology;
4) Work Pressure and Time;
5) Feedback;
6) Under-reporting and;
7) Data analysis.

The number of times each participant raised a theme is shown in Table 5.1. As can be seen, the most frequent themes were Leadership and Engagement, and Training, Staffing and Skills. These were followed closely by Information and Technology. Each of these themes shall be discussed in turn in the following sections.

Participant	Leadership and Engagement	Training, Staffing and skills	Information & Technology	Work pressure & Time	Feedback	Under-reporting	Data analysis
1	5	6	14	2	2	2	4
2	5	4	18	4	3	3	3
3	7	7	12	8	4	3	2
4	8	7	6	4	3	3	3
5	8	9	13	6	3	3	5
6	10	8	13	4	4	2	6
7	7	9	9	6	4	3	4
8	9	10	4	4	5	4	3
9	8	10	4	9	5	4	4
10	10	10	6	8	5	5	2
11	11	9	6	9	6	3	4
12	9	9	2	4	4	3	2
13	10	11	7	9	5	4	3
14	11	8	5	7	6	4	2
15	10	18	5	9	5	4	5
16	12	10	8	11	6	5	4
17	8	9	10	8	5	6	4
Total	**148**	**148**	**142**	**112**	**75**	**61**	**60**

Table 5.1: Number of times a participant mentioned a theme

5.4.1 Leadership and Engagement

This section presents the interview findings about Leadership and Engagement by occupational group (medical, nursing, managerial, and other). The trends identified in the questionnaire were that consultants had more negative attitudes compared to nurses and managers. The data in this section explores and explains those attitudes and perceptions in more detail.

One midwife who was interviewed argued that in her experience the medical staff, '*don't' think they think it's their job to report, two I think they think the midwives are going to do it anyway because the midwives do, you know nurses and midwives do it for them and three I don't think they think it needs to be reported' There was another argument put forward that nurses and midwives were trying to be helpful as,' the doctors change so rapidly now.*

One participant at a nursing level argued that it comes down to leadership and clarification of roles and responsibilities, 'I *think the service director has to have some input in there and I think they have to lead on that one. I have no authority over medical staff and I think that has to come from the service director and I think they have to be encouraged.'*

There was generalised criticism from managers and clinical directors that the Executive Medical Director and Directors had not taken up the opportunity of undertaking adverse incident training. This was a missed opportunity in their opinion. This had shown lack of leadership at board level and disregarded the importance of implementing and sustaining the EAIRRS.

Consultants argued that there should be organisational pressure applied by the Executive Medical Director in that, '*there should be some pressure put on clinicians' to make them feel that this is not only useful but part of their responsibility.'*

Managers felt frustrated with the medical profession in that they did not wish to be engaged in the process of reporting and recording and were at times reluctant to respond to managers questions. Despite the organisation's attempts to operate one

single system for reporting and recording incidents one manager argued that (something) '*could be done to look at integrating those systems'*. Some of the clinical and medical areas do have alternative systems of recording incidents but there is dubiety about how well they work.

Nurses at all levels expressed their frustration that despite all their efforts, '*line management do not always come back to us what the outcome of the investigation has been.*' Non-clinical managers expressed that they had, '*systems and processes which were not integrated in the organisation's system*.'

A nursing participant described how the senior medical staff were slowly becoming on board and using the system, '*but junior doctors were not engaged in the processes.'* In theatre there was a different experience expressed by a staff nurse, *'junior doctors, they're asking the nurses to get the stuff on the system.'*

Anaesthetics were given as a good example of embracing incident reporting, however the medical staff in this area were not effective in undertaking the investigation, '*they have problems closing down an incident the way the nurses and managers do.'*

Counter to this argument nursing participants' had undergone training and that*, 'Nursing and midwifery staff use it efficiently and effectively within the hospital.'*

There appears to be general frustration and disappointment from the nurses and managers that the organisation directors had not shown their personal commitment to the system. The consultants appeared to be unengaged and relied on nursing staff to complete and enter the details on to the system. Junior doctors were allowed to leave reporting to nursing staff that recognised the importance of reporting, but became totally frustrated with lack of support and engagement.

5.4.2 Training, Staffing and Skills

This section presents the interview findings about training, staffing and skills by occupational group (medical, nursing, managerial, and other). The trends identified in the questionnaire were that medical staff had slightly positive attitudes about training. Other occupational groups did not raise this as an issue.

All participants supported the role of education and training on both reporting the adverse incident and the investigation process using the data base to generate reports and identify themes.

Managers stated that directors across the NHS Board, '*are reluctant to take up training.*' One manager viewed training as '*if we're asking staff to do something then we have to make sure they're supported with the information and knowledge to be able to do it.*'

Nurses recognised the importance of training on the system but emphasised the lack of resources in order to release staff from direct patient care. This created pressure on nurses already trained on the wards to enter the details of the incident on to the system, taking them directly from patient care.

Senior nurse managers and general managers expressed their frustration that senior clinicians and junior doctors were reluctant to undertake training and relied on nursing staff to complete the report.

In order to put these comments about training in context, Table 5.2 shows the number of staff by professional group who attended training to learn how to put an adverse incident on to the system. While this table does not reflect the cumulative proportion of staff who attended training, it does show that nurses and administrators (including managers) were the two largest occupational groups that attended training.

	05-06	06-07	07-08	08-09	Total
Nursing	70	129	31	44	**274**
Administration and Clerical	35	96	44	52	**227**
Pharmacy	12	18	0	3	**33**
Facilities	1	6	6	0	**13**
Laboratories	1	1	5	1	**8**
Allied Health Professionals	34	8	22	6	**70**
Radiology	0	7	28	0	**35**
Doctors	1	3	4	1	**9**
Volunteer	0	0	1	0	**1**
Total	**154**	**268**	**141**	**107**	**670**

Table 5.2: Training by Profession and non-clinical for entering an adverse incident on to the system Source**:** Risk Management Training database

Table 5.3 shows the number of staff by professional group who attended training to learn how to conduct an investigation into an adverse incident that was reported on the system. Again, while this table does not reflect the cumulative proportion of staff who attended training, it does show that nursing staff was the largest occupational group that attended training.

	05-06	06-07	07-08	08-09	Total
Nursing	30	34	37	44	145
Administration and Clerical	5	8	8	12	33
Pharmacy	1	0	0	2	3
Facilities	7	2	4	3	16
Laboratories	0	3	1	1	5
Allied Health Professionals	0	6	6	6	18
Radiology	0	5	2	0	7
Doctors	1	3	1	3	8
Volunteer	0	0	0	0	0
Total	**44**	**61**	**59**	**71**	**235**

Table 5.3: *Training by professional and non-clinical staff for undertaking an investigation into a reported adverse incident on to the system* Source: Risk Management Training database

One of the participants in the training department argued that not all the courses are filled and targeted to the right people '…*we actually filled the courses that we put on and that we get the right people on the courses because I think at the moment we still tend to run with partially filled courses or not filled courses and I don't think we always get the people that we need to be on those courses. You know the first time we started using Datix for an incident there was a lot of training delivered but since then you know a lot of new people have joined the organisation and unless their managers are picking on that fact and putting them forward and making sure they come for the training it not happening.*'

The importance of senior clinicians and managers to nominate and monitor attendance appears to be a critical success factor in order staff to attend risk specialised training. One of the participants in the Risk Management Department argued that *'it's just that whole awareness and the need for using the system and the fact that it's not just about recording accidents, it's about recording near misses, it's about recording other incidents that in some way are putting the organisation in a bad light, maybe from a media perspective or generally hindering the organisation's*

ability to improve the quality of patient care in an effective way.'

In order for the organisation to investigate an adverse incident and become a learning organisation as described by WHO (2005), staff should be trained in the database so that the level of harm to patients and staff can be assessed and presented in reports. One of the participants argued at director level that the organisation did not have sufficient skills to interpret the data available in the organisation and that the linkage between claims and complaints and adverse incidents was limited. Table 5.4 shows the number of staff by professional group who attended training to learn how to analyse and present the data recorded on the system.

	05-06	**06-07**	**07-08**	**08-09**	**Total**
Nursing	1	18	7	7	33
Administration and Clerical	4	10	24	7	45
Pharmacy	1	2	0	1	4
Facilities	3	2	1	2	8
Laboratories	2	4	2	0	8
Allied Health Professionals	0	3	1	0	4
Radiology	0	5	3	0	8
Doctors	1	4	0	1	6
Volunteer	0	0	0	0	0
Total	**12**	**48**	**38**	**18**	**116**

Table 5.4: Training by professional and non-clinical staff for undertaking data base tuition. Source**:** Risk Management Training database.

While Table 5.4 does not reflect the cumulative proportion of staff who attended training, it does show that administrators (including managers) followed by nurses were the largest occupational groups that attended training about data analysis. Taken together, the data from Tables 5.2, 5.3, and 5.4 along with the interview comments suggest that medical staff do not appear to be interested in attending

system training despite their self-reported positive attitudes about responsibility for reporting.

The Facilities Department which also manages the domestic, gardening and portering services, has taken up limited number of training places. The participants who represented domestic and portering services informed the author that the process of reporting an adverse incident was not to enter it on to the system, but to inform the manager directly. The manager would then decide if the incident would be investigated or entered on the data base. Participants for non-clinical services at the semi-structured interviews informed the author that there was under-reporting of adverse incidents due to this arrangement for reporting.

5.4.3 Information and Technology

This section presents the interview findings about information and technology by occupational group (medical, nursing, managerial, and other). The trends identified in the questionnaire were that medical staff expressed neutral views on the design of the information collected and presented. From all occupational grouping they had positive attitudes about the information collected. From the questionnaire it was not clear who owned the information within the electronic commercial system.

Consultants argued that when they had used the system they had found it '*cumbersome'* and, '*the collection of low level incidents that happen frequently is a complete waste of time in entering the information'*. They argued that a simplified approach was required to answer whether the patient has been harmed, if there is a system error and whether there is a problem with the patient's condition.

Nursing staff argued that using the technology was dependant on how often you reported onto the system. All nursing staff including senior nursing managers argued that the technology was time consuming.

Managers remained frustrated in that Consultants receive the information from the system with interest but also with scepticism. Managers argued that, '*the medical staff did not see the information as relevant to them as it does not directly affect*

them'. The response by the medical staff to the managers is that, '*the information is only part of the picture because there are bigger medical issues which are excluded from the information?'*

Despite the information collected using the commercial technology there remain frustration and annoyance from nurses and managers that the organisation was allowing the medical staff to remain disengaged. The information from the system was presented regularly at directorate and committee meetings were not valued by the medical profession as it only represented a snap shot in time and did not give the full picture of what had happened.

5.4.3.1 Security

Security was raised by one participant as a positive aspect in which all staff could access any computer in the hospital and report an incident. Counter to this view nursing staff commented that this caused them issues as junior doctors constantly forget or lost the access code to the database and relied on nursing staff to log them on.

5.4.3.2 Paper or Electronic

The organisation replaced the internal paper system in 2005 as a strategic objective in order to improve reporting of adverse data. Each participant was asked their view on which system they preferred

The move from paper to electronic secured the information as '*people have not got pieces of paper lying about that could be left on desks and be seen, this would be inappropriate.'* The electronic system had improved the retrieval of information as on participant commented '*retrieval of information on the electronic system is much easier.'* It was recognised by one participant that the organisation held a large amount of information on patient safety in different formats before the introduction of the electronic system,

'I think prior to (electronic adverse system) that information was held quite differently and so although the information was maybe there before, it maybe wasn't in a sort of centralised source that made it obvious where there were trends occurring or indeed if there were issues. It was sometimes difficult to identify that with the previous information'.

There was general agreement from the nurses and managers that the new technology had raised the awareness of patient safety across the four hospitals. Managers argued that electronic system had made the, '*information much easier to receive and action upon.'* Consultants when asked had a mixed view, and wished to keep their, *'control over their own data bases and accesses.*' There remained confusion during the semi-structured interviews who owned the information collected from the incident and what should be released to the patient and media.

5.4.4 Work pressures and Time

This section presents the interview findings about work pressures and time by occupational group (medical, nursing, managerial, and other).These were not identifiable issues raised from the questionnaire, but became an issue raised during the semi-structured interviews.

Nursing staff complained that the process of recording an adverse incident took a long time. When asked, '*how long does it take'*, each nursing participant stated that on average it ranged from twenty minutes to an hour. The concern was that this valuable time to record an adverse incident or investigate '*stretched valuable nursing staff away from patient care.'* Medical staff argued that they did not have the time to record an incident and left it to nursing staff to complete, '*as they are with the patient all the time.*' Managers pointed out that with the increase in reporting had raised the importance of patient safety issues, however had increased their work load, '*immensely.*' One senior manager argued that it had taken time away from *'important general management issues.'*

Nursing staff at all levels raised their '*frustration'* in the increase in workload in reporting patient safety incidents on the EAIRRS. This also involved a limited

number of nurses being taken away from patients' bedsides to use the computer to report an incident, involving time, especially if the nurse reporting an incident was not familiar with the technology or if there had been a time lapse since the previous incident. This frustration was compounded by the lack of support from junior doctors who did not see it their responsibility to report, and left the inputting to nursing staff dealing with the patient.

Managers at all levels complained that their work load had increase, taking a great deal of time to investigate incidents. A message from the participants was that directors '*are not aware of the workload and complexity of the processes for reporting, investigating and escalating an incident.'*

Directors and clinicians' did not express any views on workload and appeared unaware of the operational difficulties the staff were having in relation to workload and pressures in order to comply with the organisations' expectations.

5.4.5 Feedback

This section presents the interview findings about feedback by occupational group (medical, nursing, managerial, and other). The trends identified in the questionnaire were that there were negative views about feedback from all occupational groups.

Feedback was an issue across the nurses and managers interviewed. Nursing staff complained that managers did not always feedback in relation to the outcome of their investigation following their individual reports entered into the electronic system.

Managers felt that the NHS Board directors did not provide feedback when they had raised their concerns in relation to growing patient safety issues. Medical staff were seen to be, '*getting away with murder*,' as they were seen to be not feeding back or reporting within their own clinical or managerial structures. This appeared to be creating 'frustration and isolation' for the medical staff as argued by a senior manager.

Non-clinical staff had to report verbally to their managers if they had been involved or

witnessed an adverse incident. The manager would then determine if the incident should be recorded on the system by the designated manager. Non-clinical health workers were reluctant at times to report and argued that there was limited feedback into what actions had been taken by management to minimise the same incident happening again.

5.4.6 Under-reporting

As Figure 3.3 shows, there had been a consistent level of reporting since the introduction of Datix. *'I think three years on there's been a massive improvement from the frontline staff',*' stated one manager. Despite this comment there was another view was expressed that medical staff do not use the adverse incident system. One nurse stated, '*I could count on one hand the number of doctors that would actually be included to report*.' Another participant at an administration role stated that staff members will, '*react differently to that kind of situation (violence and aggression), so, it's whether you call it under-reporting or whether it's just inconsistent.'*

A senior manager expressed concern in the number of incidents not being recorded, '*I'm not confident anyway that we're reporting them at all. Unless it is somehow flagged up to myself and other senior colleagues in another way then it's quite critical information that's not being picked up*.' Medical staff also recognised under reporting as an issue but argued that this was the result of adverse incidents is seen as '*a management tool to control their activity*.'

Nurses and managers recognised that there was under-reporting across the four hospitals which was linked to feedback (see section 4.4.5). If feedback and under-reporting was not addressed this would undermine the whole process of reporting and recording and 'devalue the system and process which the technology provided'.

5.4.7 Data analysis

One director argued that the organisation had limited skills in data analysis and this was not foreseen in the early stages of the implementation. Another director interviewed was asked if the data in relation to patient safety had fed into future planning of patient services. The response was, '*not currently'.*

5.5 Limitations and Reflections on the Semi-Structured Interviews

One potential limitation of the interviews was that although I was a researcher, I was also a senior manager in the organisation. As a researcher, I was concerned that participants would be open and frank about the whole aspects of the EAIRRS.

My concerns about my perceived independence as a researcher were assuaged by comments made by some participants. At the end of one of the interviews with a very senior manager at an operational level, the person made comments when the semi- interview had come naturally to a closure and the tape had been turned off. The manager made comments about the processes and the author's position as a researcher. With permission the tape was switched back on and the manager stated *'I don't think your position in the organisation would have at all influenced what I would have said. I would have felt comfortable about saying or not saying, I think I would have said the same things if you had been a PhD student from the world of academia with no contact with us, I would probably answered the same way. But I do think that my whole perspective on this is around patient safety because of the Clinical Governance hat that you wear.*'

A Non-clinical manager also made comments about the conduct and presentation of the researcher *'I think as a researcher because you obviously had a plan, you explained what you were doing, you had planned questions there. It definitely wasn't as the Head of Clinical Governance which I think would have been a more 'hi there I'm here what can you tell me' a sought of chewing the fat kind of thing and it definitely was not that.'*

5.6 Chapter Summary

This chapter presented the findings from semi-structured interviews which were conducted to explore the causal attributions of the attitudes and perceptions expressed on the questionnaire.

A thematic analysis of the interview notes yielded seven main themes:

1) Leadership and Engagement;
2) Training, Staffing, and Skills;
3) Information and Technology;
4) Work Pressure and Time;
5) Feedback;
6) Under-reporting, and;
7) Data analysis.

The interview data has provided further insight into the questionnaire findings and suggests that not all of the dimensions in the model by Heeks et al (1999; 2005) are relevant for implementing and sustaining an EAIRRS in healthcare. This idea will be further explored in Chapter 6.