THE PATIENT'S AGENDA

WRITTEN LISTS OF PATIENTS' CONCERNS

IN PRIMARY CARE CONSULTATIONS

Thesis submitted for the degree of

Doctor of Medicine

at the University of Leicester

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February 1997
FOR HEAVEN'S SAKE, RELAX. FRANKLY, I THINK YOU'RE PARANOID!

THE LENGTHS TO WHICH YOU'LL GO TO GET AWAY FROM YOUR PATIENTS!

WHAT A LIST! depressed, run down, can't cope...

ER... KEEP TAKING THE TABLETS AND COME BACK AFTER MY HOLIDAY.

SHE WON'T HAVE IMPROVED...

BUT I MIGHT BE FEELING BETTER...

tired, demoralised, irritable....

THE AMBULANCE? I KNOW IT'S LATE... PLEASE... AS SOON AS YOU CAN!

I WAS SIMPLY TELLING HIM ALL MY PROBLEMS....

AND HE SORT OF COLLAPSED, MUTTERING SOMETHING ABOUT...

"OPTING OUT OF NIGHT VISITS"
To
My wife, Erica,
our children, Anthony and Rachael,
and my parents, Henry and Nora,
with love
“Patients who bring lists are neurotic, obsessional, or senile - or all three.” (Crichton 1995)

“Beware of freaks bearing lists”
(Godfrey 1992)

“Listen. Be human”
(Patient number 14310 - chapter seven)
ABSTRACT

THE PATIENT'S AGENDA:
WRITTEN LISTS OF PATIENTS' CONCERNS IN PRIMARY CARE CONSULTATIONS - BY JOHN F MIDDLETON

Introduction:

It is argued that the consultation is central to general practice and that the patient's agenda is of prime importance within it. A written list of patient's concerns is proposed as an aid to communication. However, some doctors have prejudices about patients and their lists.

Pilot work:

1. This involved the development of a form to be completed by patients prior to consultations (the 'list form').
   DESIGN: Controlled trial - 150 consultations.
   SUBJECT: The author.
   OUTCOME MEASURES: Number of problems identified, time, responses to questions on the form.
   RESULTS: Number of problems identified increased with completion of the 'list form' (1.52 cf 1.40), and increased further (1.65) when the form was seen by the doctor. Time per problem was reduced with the 'list form' (299.2 cf 357.3 seconds). However, none of the differences were significant. The form elicited a list of items, but not the patient's ideas or concerns.

2. A new form (the PtAF) was designed in order to help patients to express more of their ideas.
   DESIGN: Randomised controlled trial - 100 consultations.
   SUBJECTS: Five GPs (the author's partners).
   OUTCOME MEASURES: Number of problems, time, BTWS, doctor's and patient's satisfaction, doctor's stress and arousal, compliance with treatment and advice, repeat consultations.
   RESULTS: The PtAF was associated with an increase in problems identified (2.14 cf 1.70; P = 0.03) and longer consultations (624.1 cf 492.0 seconds; P = 0.015). It was more successful than the 'list form' in eliciting the patient's ideas.

3. An educational workshop, using a simulated patient, was designed. The aim was to increase the doctor's efficiency in using the PtAF.
   DESIGN: Trial in two phases, before and after an intervention (the workshop) - 80 consultations in total.
   SUBJECTS: Four GPs (the author's partners).
   OUTCOME MEASURES: Number of problems, time, BTWS, doctor's and patient's satisfaction.
RESULTS: After the workshop there was an increase in one item of the doctor's satisfaction scale - perceived understanding (100% cf 89.2%; P = 0.034). There were strong trends towards reduced time per problem, more problems identified and less time perceived by patients, but no other significant differences. Subsequently, the workshop was amplified from two to six hours and GPs recruited from practices in Nottinghamshire and Leicestershire for a larger study, the power calculation having been based on the reduction in time per problem. The incidence of lists brought to consultations and the characteristics of the patients involved were investigated in the author’s practice.

Patients and their lists:

DESIGN: Prospective survey.
SUBJECTS: Patients of the author’s practice who brought written lists to consultations in a twelve month period.
CONTROLS: Patients who attended a similar appointment slot, seven days earlier, who did not bring lists.
OUTCOME MEASURES: Incidence and content of lists, patient’s age, gender, social class, consultation rate and diagnostic labels in the notes.
RESULTS: Lists were found in one in a thousand consultations, brought by four in a thousand patients. They contained a mean of 4.8 items (including 3.2 symptoms). Patients with lists had more physical labels in their notes (P = 0.015) and a trend towards more psychological labels. There were no other significant differences in patients with and without lists.
CONCLUSIONS: List events were uncommon. There was little support for the perceptions of doctors about patients who bring lists. The increased number of items on lists are mainly symptoms which might be amalgamated. The increased number of physical labels might mean that patients who bring lists have more to remember.

Educational workshop:

DESIGN: Evaluation before and after an intervention (the workshop).
SUBJECTS: 31 GPs.
OUTCOME MEASURE: Questionnaire.
RESULTS: After the workshop, the doctors had increased confidence in understanding the patient’s agenda (P = 0.00000), identifying it (P = 0.0225), using it (P = 0.0014), understanding consultation models (P = 0.0343) and using the PtAF (P = 0.0002). There was no significant difference in doctors’ confidence about achieving relevant consultation outcomes.

Consultation outcomes of the PtAF and the workshop:

DESIGN: Randomised controlled trial of the PtAF in two phases, before and after the workshop - 1698 consultations.
SUBJECTS: 31 GPs who attended the workshop before phase two.
CONTROLS: 15 GPs who did not attend the workshop.
OUTCOME MEASURES: Number of problems, time, BTWS, doctor’s and patient’s satisfaction.
RESULTS: Analysis of variance showed independent effects of the PtAF and the workshop on increased problems identified and longer consultations (P = 0.0000), also of the PtAF on increased patient’s general satisfaction (P = 0.047) and perceived depth of relationship (P = 0.01) in the CSQ.
In phase one the PtAF was associated with identification of more problems (2.09 cf 1.87; P = 0.008), increased time (516.6 cf 473.0 seconds; P = 0.021), increased patient's general satisfaction (85.0% cf 83.1%; P = 0.03) in the CSQ, and increased health promotion (35.6% cf 28.0%; P = 0.03) in the DQ.

In phase two, compared with phase one, doctors who had not attended the workshop felt that patients were more at ease (87.8% cf 79.8%; P = 0.004) and that there was more openness to return (85.7% cf 78.2%; P = 0.017) when the PtAF was used (DQ). They also identified less problems (1.76 cf 1.90; P = 0.02) - significant only when the PtAF and no PtAF categories were combined. There were no differences between the two phases for the doctors who attended the workshop.

In phase two using the PtAF, doctors who had attended the workshop identified more problems (2.17 cf 1.87; P = 0.001) in more time (540.0 cf 485.8 seconds; P = 0.022) and felt that they had more understanding (94.1% cf 89.5%; P = 0.04) in the DQ, compared with control doctors. Without the PtAF, they also identified more problems (1.98 cf 1.65; P = 0.0001) and felt that patients were more able to express feelings (76.3% cf 67.8%; P = 0.004) in the DQ, compared with control doctors.

Doctors who attended the workshop and used the PtAF took more time (540.0 cf 468.7 seconds; P = 0.001) but felt that their understanding was reduced (94.1% cf 96.3%; P = 0.014) in the DQ, compared with consultations where the PtAF was not used. Control doctors using the PtAF identified more problems (1.87 cf 1.65; P = 0.038) in more time (485.5 cf 431.1 seconds; P = 0.01) and felt that patients were more able to express feelings (74.7% cf 67.8%; P = 0.049) though there was less time (84.4% cf 90.5%; P = 0.029) in the DQ; also patients perceived an increased depth of relationship (77.2% cf 74.1%; P = 0.024) in the CSQ, in these consultations compared with those where the PtAF was not used.

A five times Bonferoni correction was applied to these comparisons.

**CONCLUSIONS:**

Doctors identify more problems, with a tendency to longer consultations, if they use the PtAF or if they attend an educational workshop. There were no differences in patient's and doctor's satisfaction, time per problem or BTWS.

**The patient's agenda:**

**DESIGN:**

Analysis of contents of the PtAFs collected in the previous study.

**SUBJECTS:**

Patients who completed the PtAF.

**RESULTS:**

The mean number of issues raised was 1.56 and the mean number of symptoms was 1.71. 95.5% of patients made entries under 'points to raise', 97.0% under 'action requested' (69.3% explanation, 54.6% prescription and 44.3% investigation), 59.1% under 'thoughts' and 46.4% under 'questions'. Content analysis showed that 67.7% of patients requested explanation, 61.1% expressed ideas, 56.6% requested treatment, 44.2% requested treatment, 41.9% were at the limit of anxiety, 37.7% expressed opinions, 28.7% gave reasoning, 23.7% were at the limit of tolerance, 22.4% asked questions about treatment, 21.6% reported information about their situation, 19.3% raised issues, 14.2% had administrative requests, 7.3% requested test results, 6.9% commented on previous management, 3.6% commented on communication and 2% commented on time.

**CONCLUSIONS:**

The following plan for the initial phase of the consultation is suggested:

1. Elicit the list of issues
2. Value the ideas, concerns, expectations and questions
3. Understand the reasoning and the patient’s standpoint.

**General conclusions:**

There appears to be little basis for the prejudices which some doctors have about patients and written lists. Use of the PtAF and attendance at an educational workshop are each associated with the identification of more problems and a tendency for longer consultations. The reasons for the lack of change in patient’s and doctor’s satisfaction, and BTWS are not clear. The patient’s problems may be associated with complex agendas which include ideas and reasoning. It is suggested that medical education should focus on the patient’s agenda and that consultation time should be sufficient to address this agenda.
SUMMARY

The central role of the consultation in general practice and the importance of the doctor-patient relationship within it are discussed. Changes in the relationship and sources of conflict are examined. A new model of the consultation, based on the agendas of both parties, is described. The prime importance of the patient’s agenda is explained. A written list of the patient’s concerns is proposed as an aid to communication. However, it has been found that some doctors have negative views of patients and their lists. Outcome measures to evaluate the use of lists in consultations are discussed.

Three pilot studies are described. In the first one, the use of the ‘list’ form (appendix one) in the author’s own consultations was associated with the identification of more problems and less time spent per problem. However, the differences were not significant and the form failed to elicit the patient’s ideas and expectations. The second pilot was a randomised controlled trial of a new form, the PtAF (appendix two), in the consultations of the author’s partners. The PtAF was associated with more problems in proportionately more time, but was more successful in eliciting the patient’s ideas. However, there was a tendency for the doctors to feel more stressed and less satisfied. The third pilot tested the effects of an educational workshop designed to help the doctors use the PtAF more efficiently. After the workshop there was a trend towards reduced time per problem.

A study of the natural incidence of lists and the patients who brought them in the author’s practice is described. Lists occurred in one in a thousand consultations and were brought by four in a thousand patients. Patients bringing lists were more likely to have increased numbers of physical labels in their case notes. The mean number of items on the lists was 4.8 of which most (3.2) were symptoms.

An educational workshop, developed from the pilot work, is described. 31 GPs attended the workshop, after which their confidence in using the PtAF, understanding different models of the consultation, understanding, identifying, and working with the patient’s agenda was increased.
A randomised controlled trial of the PtAF and the educational workshop, involving 46 GPs in a variety of practice situations throughout Leicestershire and Nottinghamshire, is described. The PtAF and the educational workshop were independently associated with an increased number of problems identified and a tendency to longer consultations. These amounted to between four and five new problems in 20 to 25 minutes extra time per 20 patients.

A qualitative analysis of the content of the PtAF is described. A mean of 1.6 problems was found. 68% of patients requested explanation from the doctor and 61% expressed ideas. Sixteen themes were identified.

It appears that the prejudices of some doctors about lists and patients who bring them have little basis. Although there were more items on the lists than problems found in a typical consultation, it might have been possible to have amalgamated some of the symptoms which made up the bulk of the lists. The extra problems, identified by doctors when patients used the PtAF or after attending the educational workshop, appear to be 'important' as they were defined by the doctors. The problems are also often associated with a complex system of ideas and concerns. Valuing these ideas and the underlying reasoning may increase co-operation between patients and doctors. This may result in more efficient use of resources and increased professional morale. The extra time for listening may be found through delegation of tasks, or because longer consultations may be cost effective. Educational intervention at an early stage in medical training is suggested. The workshop package is suitable for use in vocational training and continuing medical education. Future work might focus on interviews with patients, videos of consultations, and use of resources.

ACKNOWLEDGEMENTS

I would like to thank the following for advice in the early stages of the project: Professors David Metcalfe (University of Manchester), Mike Pringle and Idris Williams (University of Nottingham), Robin Fraser (University of Leicester), Drs. Henry Patterson (University of Leicester) and Cheryl Haslam (University of Loughborough).
I would also like to thank Robin Fraser for continued encouragement and support with protected time, The Royal College of General Practitioners for supporting the project with a research training grant (particularly Professor Denis Pereira Gray for his encouragement), the 46 GPs and their staff who took part in the trial, my partners and staff who participated in the pilots and list collection, the simulated patients (Peter, Michelle, Carolyn and Nick), Drs. Richard Baker and Francine Cheater for reading and criticising the draft, Elan Preston-Whyte for advice on questionnaire design, Nick Longford and Sue Hills for statistical advice.

Cartoons are reproduced by kind permission of ‘DOCTOR’ (It’s a doc’s life) and 'GENERAL PRACTITIONER' (Dr Whittle).

Last but not least, I would like to thank Dr. Bob McKinley for acting as my mentor, especially for helping me wrestle with SAS and SPSS, my father Henry and my sister Mary for their help and encouragement, and my wife Erica for her support and tolerance.

**ABBREVIATIONS**

BTWS - ‘By the way syndrome’
CSQ - Consultation satisfaction questionnaire (appendix four)
DQ - Doctor’s questionnaire (appendix five)
PtAF - Patient’s agenda form (appendix two)
# TABLE OF CONTENTS : SUMMARY

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>PREFACE</td>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>CHAPTER ONE : INTRODUCTION</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>Part One : The Consultation</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>Part Two : Outcome Measures</td>
<td>33</td>
</tr>
<tr>
<td></td>
<td>CHAPTER TWO : DEVELOPMENT WORK</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>The <code>list</code> form</td>
<td>40</td>
</tr>
<tr>
<td></td>
<td>The PtAF</td>
<td>44</td>
</tr>
<tr>
<td></td>
<td>The educational workshop</td>
<td>52</td>
</tr>
<tr>
<td></td>
<td>CHAPTER THREE : METHODOLOGY</td>
<td>74</td>
</tr>
<tr>
<td></td>
<td>CHAPTER FOUR : PATIENTS AND THEIR LISTS</td>
<td>93</td>
</tr>
<tr>
<td></td>
<td>CHAPTER FIVE : EDUCATIONAL WORKSHOP</td>
<td>104</td>
</tr>
<tr>
<td></td>
<td>CHAPTER SIX : RANDOMISED CONTROLLED TRIAL OF THE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EFFECTS OF THE PtAF AND OF THE EDUCATIONAL WORKSHOP</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ON OUTCOMES OF THE CONSULTATION</td>
<td>111</td>
</tr>
<tr>
<td></td>
<td>CHAPTER SEVEN : THE PATIENT'S AGENDA</td>
<td>146</td>
</tr>
<tr>
<td></td>
<td>CHAPTER EIGHT : CONCLUSIONS</td>
<td>165</td>
</tr>
<tr>
<td></td>
<td>APPENDICES</td>
<td>173</td>
</tr>
<tr>
<td></td>
<td>BIBLIOGRAPHY</td>
<td>180</td>
</tr>
</tbody>
</table>
# TABLE OF CONTENTS: DETAIL

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PREFACE</strong></td>
<td>9</td>
</tr>
<tr>
<td><strong>CHAPTER ONE: INTRODUCTION</strong></td>
<td>11</td>
</tr>
<tr>
<td><strong>PART ONE: THE CONSULTATION</strong></td>
<td>12</td>
</tr>
<tr>
<td>1.1: The consultation in primary care</td>
<td>12</td>
</tr>
<tr>
<td>1.2: The doctor's role</td>
<td>13</td>
</tr>
<tr>
<td>1.3: The doctor-patient relationship</td>
<td>14</td>
</tr>
<tr>
<td>1.3.1: Tradition</td>
<td>14</td>
</tr>
<tr>
<td>1.3.2: Paternalism or equality</td>
<td>14</td>
</tr>
<tr>
<td>1.3.3: The future</td>
<td>15</td>
</tr>
<tr>
<td>1.4: Why patients consult</td>
<td>16</td>
</tr>
<tr>
<td>1.4.1: The tip of an iceberg</td>
<td>16</td>
</tr>
<tr>
<td>1.4.2: Patients' wants</td>
<td>16</td>
</tr>
<tr>
<td>1.4.3: Summary</td>
<td>17</td>
</tr>
<tr>
<td>1.5: Conflicts</td>
<td>18</td>
</tr>
<tr>
<td>1.5.1: Signs of trouble</td>
<td>18</td>
</tr>
<tr>
<td>1.5.2: Different agendas</td>
<td>20</td>
</tr>
<tr>
<td>1.5.3: Communication problems</td>
<td>21</td>
</tr>
<tr>
<td>1.5.4: Summary</td>
<td>22</td>
</tr>
</tbody>
</table>
1.6 : Models of the consultation  
1.6.1 : Traditional models  
1.6.2 : The agenda model  
1.7 : Teaching the consultation  
1.8 : Patients' lists  
1.9 : Summary of part one  
PART TWO : OUTCOME MEASURES  
1.1 : Observed behaviour  
1.2 : Consultation time  
1.3 : Number of problems  
1.4 : Questionnaires  
1.5 : Repeat consultations  
1.6 : Physical parameters  
1.7 : Summary of part two  
CHAPTER TWO : DEVELOPMENT WORK  
2.1 : Introduction  
2.2 : The 'list' form  
2.2.1 : Introduction
3.1 : Introduction

3.2 : Aims and objectives

3.2.1 : Aim 1

3.2.2 : Aim 2

3.2.3 : Aim 3

3.2.4 : Aim 4

3.3 : Methodology

3.3.1 : Aim 1

3.3.2 : Aim 2

3.3.3 : Aim 3

3.3.4 : Aim 4

3.4 : Summary

3.5 : Tables 3.1 to 3.2 and figure 3.1

CHAPTER FOUR : PATIENTS AND THEIR LISTS

4.1 : Introduction

4.2 : The incidence of lists

4.3 : Patients who brought lists in practice

4.4 : The content of lists

4.5 : Discussion
CHAPTER FIVE : EDUCATIONAL WORKSHOP

5.1 : Introduction

5.2 : The workshop

5.3 : Evaluation

5.4 Discussion

5.5 : Tables 5.1 to 5.2

CHAPTER SIX : RANDOMISED CONTROLLED TRIAL OF THE EFFECTS OF THE PtAF AND OF THE EDUCATIONAL WORKSHOP ON OUTCOMES OF THE CONSULTATION

6.1 : Introduction

6.2 : Results

6.2.1 : Response rates

6.2.2 : Doctors, practices and patients

6.2.3 : Introduction to the analysis

6.2.4 : ANOVA

6.2.5 : Comparisons within phase one

6.2.6 : Comparisons of phase two with phase one

6.2.7 : Comparisons within phase two
8.3.1: Doctors
8.3.2: Patients
8.3.3: Society
8.4: Further questions
8.5: Areas for future research
8.6: Recommendations

APPENDICES

APPENDIX 1: THE `LIST` FORM
APPENDIX 2: THE PtAF
APPENDIX 3: EDUCATIONAL WORKSHOP QUESTIONNAIRE
APPENDIX 4: CONSULTATION SATISFACTION QUESTIONNAIRE (CSQ)
APPENDIX 5: DOCTOR'S QUESTIONNAIRE (DQ)

BIBLIOGRAPHY
PREFACE

For the last sixteen years I have been involved in teaching about the consultation in primary care, as a trainer, course organiser and associate adviser.

As a trainer in the practice, I usually suggest that new registrars should view the videotape of their own consultations privately before talking to me about their problems. Almost invariably, the problems are connected with giving an explanation to the patient at the end of the consultation. Many of the registrars want to know how to make the patient listen to the explanation without interrupting. They are often under the impression that, if they can make their delivery more professional (just like their trainer), patients will take their explanations more seriously. On viewing the videotape together, it is usually obvious that the patient is not interested, or only marginally interested in the explanation being given because they have other concerns. The root of the problem appears to lie not at the conclusion but at the beginning of the consultation, as the doctor has not been sufficiently attentive to the concerns of the patient.

Nor is this problem confined to registrars in general practice. During my work, firstly as a course organiser and latterly as an adviser, I have had the opportunity of observing many experienced doctors consulting, both live and on video, with both real and simulated patients. Whilst most of this experience has been in the South Trent sub-region, I have also observed many consultations in other parts of the country.

Doctors frequently fail to address the patient's concerns. This problem has been documented in the literature since 1976. It is my observation that the problem is still widespread, even in doctors who teach about the consultation, despite the publication of sophisticated models which set the tasks out clearly.

A more patient-centred approach seemed to be required. This conclusion led me to develop the 'agenda model' which was published in 1989. It became clear to me that, since the patient is usually the agent through whom the outcomes of the consultation are achieved, failure to address the patient's concerns is likely to interfere with outcomes which might be desired by the doctor. On the other hand, a
more patient-centred approach might be more likely to result in co-operative action towards common goals.

If discovering the patient's agenda is the vital piece of the jigsaw, asking the patient to write it down seems to be a sensible idea. However, the prospect of patients bearing lists is not welcomed without reservation by all doctors.

Although the agenda may include a list, the way the patient views the problem is at least as important. Therefore, a considerable amount of development work took place in order to produce a suitable form which would encourage the patient to reveal more of the agenda. During this development work it became apparent that the use of an agenda form in the consultation was by no means easy for the doctors, who found themselves in an unfamiliar situation. This led to the development of a training workshop, using simulated patients, which was designed to familiarise the doctors with the use of the agenda form, in the hope of achieving improved efficiency in dealing with a potential increase in problems identified.

The main study in this thesis concerns an investigation into the effects of the two instruments which had been developed, namely the agenda form and the educational workshop, on outcomes of the consultation. During this study, most of the patient's agenda forms were collected, and the content was analysed.

Perhaps it should be pointed out that having all patients bring lists or even agenda forms to future consultations is not an objective of this project. It is an attempt to focus the thinking of doctors on the importance of the patient's agenda in practice rather than just in theory, and thus to improve outcomes through increased co-operation. I hope that it will be of interest to those who are involved in medical education.
CHAPTER ONE: INTRODUCTION

Part one discusses the consultation in general practice and the central role of the doctor-patient relationship. The ways in which this relationship are changing and the potential sources of conflict are examined. Reasons why patients consult are considered, as are different models which doctors use to make sense of the consultation. A new model, based on the agendas of both parties, is described. This model highlights the importance of the patient’s agenda. Implications for teaching are discussed. A written list as an aid to communication is proposed.

Part two discusses possible outcome measures for the consultation, which might be used to evaluate the effects of lists.
PART ONE : THE CONSULTATION

1.1 : The consultation in primary care

Everything in medicine flows from the interaction between the patient and the doctor, according to Spence (1960). Thus the consultation is in the front line of general practice and at the core of the health service (BMA et al 1994, Starfield 1994, McBride and Metcalfe 1995). Anything which improves the quality of communication between patients and doctors in the consultation has the potential of improving efficiency in the whole sphere of health care.

Although most consultations take place in the doctor’s consulting room, this may change. The telephone can reduce the need for face to face contacts (Marsh et al 1987, Hallam 1991 and 1993, Nagle et al 1992, Brown and Armstrong 1995) and the future may bring remote consultations by video-telephone, with both parties having access to the latest medical information on the internet or cd rom. Nevertheless, good communication between patients and doctors will remain of the utmost importance.

Shortly before the advent of the health service reforms, Kamien (1987) reported undesirably rapid consulting and high referral rates in the United Kingdom. In a health service which is free to patients at the point of use, the pressure on general practitioners (GPs) to offer a large number of appointments is understandable. This is reflected in the General Practice fourth national study 1991/92 when 80% of the population consulted in one year, an average of 3.8 times per person. On the other hand, the frequency of health promotion as a component of the consultation had risen, by 67% in the previous ten years, to just over a third of consultations (RCGP et al 1995, Gill et al 1995, Carr-Hill et al 1996). Whether this went beyond recording of information is questionable in the context of short consultations. Despite the evoked picture of a service under strain, it is claimed that the efficiency of primary care saves expensive secondary resources and is the reason why the United Kingdom manages to provide a health service which is comparatively cheap (Starfield 1994).
1.2: The doctor's role

According to the Leeuwenhorst Working Party, GPs are responsible for personal and continuing care of individuals, families and practice populations. They work in teams of other professionals to deliver treatment, preventive measures and education. They have a professional responsibility to the community (RCGP 1972). Their aim is to make early diagnoses in physical, social and psychological terms (Gray 1961). However, their competence in the last two might be questioned by social scientists. Indeed doctors working in a 'polyclinic' culture might not regard the social and psychological aspects as important, according to Gill et al (1995) and Kiderman et al (1995). GPs themselves might question the premise that they always seek to convert undifferentiated problems into physical diagnoses. The 'triple diagnosis' could be seen as part of a manifesto, which attempted to establish general practice as a specialty in its own right.

It has been argued that GPs should recognise the limitations of medicine, whilst continuing to be educated in the university of life (Chariton 1993 and 1995, MacNaughton 1995, Smith and Taylor 1996, McWhinney 1996). However, even the notion of 'holistic medicine' could be interpreted as an attempt by doctors to assume expertise and responsibility for everything. An extreme view is that doctors pretend to know everything, but in reality know nothing (White 1992). Dalrymple (1995) considered that the 'superman' image may still be important for some doctors. Perhaps it is difficult for the medical profession to shake off the past, which is rooted in the necessity of ritual, mystery and placebo treatments.

Sweeney (1994) defended the referral system and the role of the GP as gatekeeper. He argued that the GP is in an unique position as an interpreter of the interface between undifferentiated problems and illness, that most patients can be helped to cope, and that the referral of a minority is made appropriately and economically. Given reasonable continuity of care, the claim seems realistic (Starfield 1994, Sweeney and Pereira Gray 1995, Franks et al 1992). The argument appears to be supported by the finding that doctors used less resources when the patient was well known to them (Hjortdahl et al. 1991). In a similar vein, Thomson
1991 emphasised the value of the family doctor who knows the family history, although Coulter (1995) remained unconvinced.

1.3 : The doctor-patient relationship

1.3.1 : Tradition

Freeling and Harris (1984) have described the doctor-patient relationship in interactionist terms, highlighting the powerful role of feelings in the consultation. Balint (1964) considered that the relationship constituted an investment for mutual benefit, with the GP taking on an "apostolic function" which enhanced the placebo effect of the drug "doctor". The GP has also been the advocate of the individual patient and, prior to the health service reforms, it could have been argued that this role was predominant over that of gate keeper, since there was little pressure to limit either prescribing or referrals.

1.3.2 : Paternalism or equality

Transactional analysis (Beme 1964 and 1969, Tucker 1987) would classify some traditional doctor-patient interactions as being of the parent to child type. However, partnership rather than paternalism has been advocated increasingly in recent times (Lawrence 1988, CHARLES, Prince of Wales 1992, McKinstry 1992, Neville 1992, Neighbour 1992).

This involves, in the first place, the sharing of ideas and information. Ridsdale et al. (1994) have pointed out how this can help patients to accept that tiredness does not always have a physical cause. Secondly, it involves shared decision making, according to Tate (1990) and Pitts (1987). Woodward (1988) considered it logical that patients should take more responsibility for the decisions which affect them, as long as they are properly informed. Woodward (1992) also recognised that some doctors might feel uneasy if they relinquish control, even if they accept the principle that a confluence of ideas with the patient is to be desired. Learning more about sharing ideas, information and decision making in the consultation would free doctors from the need to assume responsibility for everything, and might promote a more healthy partnership with patients. The notion of the patient as "consumer" may
be alien to some doctors, but Campbell (1990) has argued that informed choice and consumerism are practically synonymous.

A note of caution must be sounded because some patients, especially the elderly, do not like the sharing approach (McIntyre 1987). Also, there is evidence that this approach does not work if it is not well integrated with the doctor's usual consulting style (Savage and Armstrong 1990). It is possible that patients will become less ready to share information with a doctor who is perceived as an agent of an insurance company, or of the state (Noakes 1990). Trust is likely to remain an important ingredient of the doctor-patient relationship. Thomas (1987) found that patients feel better, as well as more satisfied, if the doctor is 'positive', i.e. makes a firm diagnosis and sells the management in a confident manner. This seemed to be confirmed by Savage and Armstrong (1990) who showed that a 'directive' as opposed to a 'sharing' style in the explanation phase of the consultation led to greater patient satisfaction. Nevertheless, being positive and sharing do not have to be mutually exclusive.


1.3.3: The future

Colman (1992) argued that the relationship between patients and their GPs should be valued as the key to the efficiency of primary care, and that this relationship should be protected against threats from the public health - epidemiological axis. The author considers that weakening of the relationship may threaten the gate keeper role and thus the cost efficiency of primary care (Middleton 1990a). Branthwaite (1996) discussed ways of handling the evolving doctor-patient
relationship, coming to the conclusion that “we need more in-depth information about the patients’ perspectives on the consultation and their aims as active agents in their own medical welfare”.

1.4: Why patients consult

1.4.1: The tip of an iceberg

Hannay (1980) showed that illness which is presented to the doctor may represent the tip of an iceberg because traditional medicine interacts with self-care by the individual and complementary therapy (Pietroni 1986, 1987 and 1987). The reasons for consulting are complex, and may behave as a ‘cascade of antecedents’ according to Pill and Stott (1987) and Martin (1986). Antecedents may include folk and health belief models which vary according to the sociocultural situation and family network (Becker et al. 1974, Helman 1981 and 1986, King 1984, Van der Kar et al. 1992, Marteu et al 1995, Cunningham-Burley et al 1996, Mayer et al 1996). Fear and anxiety in relation to health beliefs have been found to be the most important factor in the decision to consult in the UK (Lydeard and Jones 1989, Wyke et al. 1990, Kettell et al. 1992). In the case of children, parents’ concepts of normality and change in behaviour appeared to be crucial (Irvine and Cunningham-Burley 1991, Holme 1995, Osman and Dunt 1995). There may be several different reasons for consulting which are in operation at the same time. Beale et al. (1992) showed that patients tend to raise other issues when they are seen in chronic disease management clinics.

1.4.2: Patients’ wants

Consumer surveys in the UK have shown that what patients value most is the doctor’s willingness to listen (Which 1987, 1989). Secondly, patients want doctors to take time to explain properly (Which 1989, Cartwright and Anderson 1981). Thirdly, more information is required (Which 1989, Rigge 1989, Williams and Calnan 1991). Fourthly, patients would like more of the doctors’ time. It is not clear whether this means time in absolute terms or whether it would be sufficient if the doctors paid more attention and involved the patient to a greater degree.
Factor analysis of a questionnaire in a Family Practice Centre in America yielded five main requests: medical information, psycho-social assistance, therapeutic listening, general health advice, and biomedical treatment (Like and Zyzanski 1986). Van der Kar et al. (1992) found that patients in the Netherlands are predominantly interested in obtaining information. In the UK, patients are especially interested in explanations (Weinman 1993) and opportunities to discuss their concerns (Bertakis et al. 1991). Armstrong (1991) argued that patients wish above all else to have their questions heard.

Expectations which patients have of their consultations vary in relation to ethnic and socio-cultural differences (Gillam 1987, Gillam et al. 1989), as well as uncertainty, coping style and attitude to medication (Webb and Lloyd 1994). Satisfaction with consultations depends on the degree to which those expectations are met (Kidd and Marteau 1993), and on the opportunity to discuss psychosocial issues relevant to their problems (Bertakis et al 1991).

Berger and Mohr 1976 argued that the doctor’s ability to understand the patient’s point of view lies at the core of a successful consultation. Asking why the patient is consulting is a step forward according to Kindelan and Kent (1988) and Arborelius et al. (1991). Asking for the patient’s views on the cause of the problem helps the doctor’s understanding and, in some cases helps to make a diagnosis (Peppiatt 1992). Cromarty (1996) demonstrated, by interviews prompted by video feedback of consultations in the UK, that patients’ explanatory models often do not coincide with those of doctors.

1.4.3 : Summary

The reasons for consulting are complex. Expectations may vary with sociocultural differences. Most patients want doctors to understand their ideas about the problems presented and to provide appropriate information.
1.5 : Conflicts

1.5.1 : Signs of trouble

Long and Hawkins (1988) described different varieties of dysfunctional consultations. Some doctors complain of an excess of trivia in consultations, though this perception might be due to failure to tune into the patient’s needs (Lau 1987). A tendency to interrupt patients’ accounts prematurely (Simpson et al 1991, McBride and Metcalfe 1995) might have been related to doctors’ fears that patients will ramble without purpose (Thom 1996). Tylee et al (1995) found that psychiatric symptoms raised later in the consultation are less likely to be addressed.

Stimson and Webb (1975) found that some patients may react by interrupting and reformulating the original problem, in an attempt to gain the doctor’s attention. The doctor’s apparent failure to grasp the problem may result in doubts about competence. These may subsequently affect the patient’s compliance. In addition patients often redress the imbalance of power, by enlarging their roles and including remarks which they would like to have made, when describing the consultations to friends and members of the family. However, Carman and Britten (1995) found that more assertive behaviour by patients may lead to conflict with doctors. In the United States, Roter (1977) found that a group of patients, who had been trained to ask direct questions, experienced increased anxiety, anger and negative affect in consultations. Although they were also less satisfied, they were more likely to keep follow up appointments. Despite the conflict, it could be argued that they were gaining something from the consultations, even if this was the mere hope that the situation might improve on subsequent occasions.

Patients are sometimes seen as ‘problems’ by doctors (Stimson 1976, Groves 1978, Cohen 1986, Jones and Morrell 1995). They may appear to have unreasonable demands, though Haslam (1987) recognised this as a legitimate form of self expression. Somatisation, the ‘heartsink’ phenomenon, puzzling behaviours and anger are examples of problems encountered by doctors.
Somatisation is thought to be the process by which psychological stresses and conflicts become manifest as physical symptoms. It has been suggested that it is important to detect these 'functional illnesses' at an early stage, before the process becomes difficult to reverse (Howard 1991). Although these patients are supposed to present physical symptoms in lieu of psychological distress, Wright (1990) found that somatisers had lower psychological distress scores than did psychiatric patients. However, Wright et al (1996) considered that this group was significant in terms of unrecognised psychiatric illness. Mumford et al. (1990) found somatisation to have a multifactorial aetiology. Weich et al (1995) found it to be a heterogenous category, with the 'pure' form uncommon. In this respect, it is similar to the 'heartsink' phenomenon. Indeed, Bass (1992) was of the opinion that there is a considerable degree of overlap between the two.

Mathers et al (1995) found heartsink patients to be such a disparate group that they may have been a function of the individual doctors. It is clear that, for whatever reason, many of these patients make only some doctors' hearts sink (O'Dowd 1988, Gerrard and Riddell 1988, Jewell 1988, McDonald and O'Dowd 1991). O'Dowd (1988) suggested a way of coping with them, by reviewing the notes and making a 'contract' to cover the nature and frequency of consultations. The 'Socratic' approach has been suggested as a way for the doctor to retain some authority, whilst putting power and responsibility in the hands of the patient (Anon 1992).

If some doctors prefer to deal with clear-cut physical problems, perhaps it is not surprising if some patients find it easier to engage their attention with physical symptoms. If patients became less 'heartsink' when doctors reviewed the case notes to try and understand them, it might reflect on communication in the consultation. The psychodynamic approach to 'difficult' patients involves either spending longer initially, or achieving sudden insights (the 'flash') by tuning into the patient's feelings (Balint 1964, Balint and Norell 1973).

Doctors sometimes appear to be puzzled by the behaviour of patients in the consultation. The 'Sheherazade' (Walker 1988) and 'Azazel' (Carne 1989) syndromes seem to be manifestations of this puzzlement. In the former, the patient was seen by the doctor as constantly producing new presentations in order to engage his attention. In the latter, a child was described as being presented as a
scapegoat for underlying family problems. It seems likely that something was going on in the social-psychological sphere, and the doctor did not fully understand it. Inventing labels could be a way of coping with this lack of understanding.

Anger in patients may have complex causation, but an important factor appears to be poor communication with the doctor (Grimshaw 1987, Herman 1990, Bird 1991). One of the defence organisations has cited good communication as the best way of minimising litigation (Grace 1987).

Complaints of ‘trivia’, ‘demanding’ behaviour, ‘problem patients’ and strange syndromes may all be signs of distress in the doctor-patient relationship. It is possible that they could all be addressed by improving communication.

1.5.2 : Different agendas

Patients’ expectations of consultations have been discussed in section 1.4. On the other hand, Winefield and Murrell (1991) found that doctors appeared to be more motivated towards finding defined medical problems with clear solutions. This conflict of agendas may prevent co-operation. Laing (1970) has described the potential for ‘knots’ of misunderstanding. It has been suggested that it is a question of attitude, that is the extent to which the doctor really wants to know about the patient’s perspective (Which 1987). In an ideal world the doctor should be interested, but the pressure of time and other tasks may explain why the patient’s agenda can sometimes get short shrift.

Increasing conflicts have been reported between advocacy and funding, health promotion, epidemiological data collection and policing, the doctor’s external agenda and that of the patient (Noakes 1990, Dunstan 1994, Handy 1994. Graffy and Jacobson 1995, Goodwin 1995, Grahame-Smith 1995, Heath 1995. Pendleton 1995, Skrabanek 1995, Wright 1996, Fugelli 1996). Stott (1993) considered that there was a danger of outside forces (the public health authorities and the extended primary health care teams) causing disintegration of the functions of the consultation. However, work in the Netherlands suggested that doctors with an ‘integrated’ style helped their patients to feel more healthy and to have more realistic expectations about the possibilities of professional help for common
ailments. This style of consulting meant that the doctor was both 'patient and goal-oriented', keeping unnecessary investigation, prescribing and referral to a minimum (Huygen et al. 1992).

It could be argued that computers in the consulting room occupy time and space as well as representing some of the conflicts. Dean (1988) described a consultation of "only 107 key strokes" with evident enthusiasm. Pringle et al. (1984) reported patients' worries about confidentiality. Ridsdale and Hudd (1991) found that most patients would like the opportunity to share access to the screen with the doctor. However, doctors who are more patient-orientated may have more difficulty in adapting to computers as they are more aware of their attention being divided, (Herzmark et al. 1984). Bainbridge (1996) questioned whether there could be a 'correct' position for the terminal. Pringle et al. (1984, 1985, 1985, 1986) found that there is a danger of the 'computer's agenda' dominating consultations. Doctors have increased arousal and are prompted to address more screening and health promotion issues. There are more doctor-initiated medical items, with more doctor-centred speech. If increased consulting time is not available, there is a tendency to constriction of other issues which might otherwise have been raised by patients. In a review of 30 papers on the use of computers in the consultation, Sullivan and Mitchell (1995) felt that the patient's agenda and 'holism' tended to be lost.

1.5.3: Communication problems

Conflict of agendas, as discussed in 1.5.2, is a source of problems in communication. However, deficiencies in communication skills on both sides can also be important. Doctors' interview techniques have been criticised. Beckman and Frankel (1984) found that early interruption of patients' accounts leads to loss of relevant information. Williams and Calnan (1991) found that 38% of patients feel unhappy at being unable to discuss personal issues during consultations. Tuckett et al. (1985) made audiorecordings of consultations and interviewed patients afterwards. They concluded that there was little dialogue and little sharing of ideas. Consequently, the doctors' actions were unlikely to be 'reactive' to the patients' agendas. A common example of this is where doctors issued prescriptions which were not wanted by patients (Cartwright and Anderson 1981). It appears that such prescriptions are often an attempt to cover a deficiency in the communication or, in
the case of ‘placebos’, a way of retaining power (Bradley 1992). Webber et al. (1994) found that patients, in an inner city practice who were referred for counselling, either did not understand what was involved or did not want it. Rollnick et al (1993) found that attempts by the doctor to induce change in behaviour failed because the patient was not at the right stage to accept it. In Spain, Martinez de la Iglesia et al. (1990) found that patients of lower socioeconomic status perceive that their doctors pay them less attention. They also have a poorer understanding of doctors’ explanations.

Norton and Smith (1995) and Thorn (1996) found hidden agendas on both sides which interfered with straightforward negotiation. It is possible that conflict of agendas is responsible for the difficulty, which some patients have, in raising the most important issue until the last minute. This phenomenon, often called ‘by the way syndrome’ (BTWS), has sometimes been viewed as perverse behaviour from the point of view of doctors. However, the explanation may be related to the considerable barrier represented by the doctor’s agenda, and by being on another’s territory. Ellis (1991) felt that ‘by the way syndrome’ was associated with unhappy patients. Thistlethwaite (1992) felt that the phenomenon was associated with conflict of agendas, and Haslam (1992) acknowledged that the doctor’s agenda often smothers that of the patient. Piquet (1991) and Douglas (1992) offered advice to patients on how to talk to the doctor.

1.5.4: Summary

There are signs of distress in some consultations. The main causes appear to be conflicting agendas of patients and doctors, and problems in communicating about them.
1.6 : Models of the consultation

1.6.1 : Traditional models

In the last twenty years there appears to have been evolution from a mainly doctor-centred position to one in which the patient’s ideas and expectations have been given increased emphasis. The models of Byrne and Long, Stott and Davis, Pendleton et al, and Neighbour will be discussed.

Byrne and Long (1976) identified six stages from analysis of audio tapes. These were establishing a relationship, discovering why the patient had come, conducting an examination, considering the problem, making a plan and closing the consultation. During these stages, the doctor was likely to take the lead, with minimal involvement of the patient. The term ‘doctor-centred’ was coined to describe this behaviour. This model is still in widespread use by GP trainers (in the author’s experience as an associate adviser). The advantages are a clear view of the way a typical interaction evolves in time, and prompting to fill in any stage which is missing. The outline is relatively easy to remember ‘on the hoof’. Byrne and Long found that doctors’ consulting styles remained relatively fixed. It appeared that many doctors were still working predominantly in the bio-medical doctor-centred mode, despite the large psycho-social components in many consultations (Middleton and Johnson 1988 unpublished). A ‘verbal examination’ (Byrne and Long stage 3) is a very telling description of the way in which a traditional history can be taken. Byrne and Long found that the most frequent problem in consultations was a failure to discover why patients had come. Later studies, also using audio recordings, found that little had changed in this respect (Tuckett et al. 1985). Although Byrne and Long’s model remains an important contribution to making sense of the consultation, its emphasis is on management of presenting problems.

Stott and Davis (1979) proposed three additional tasks. These were management of continuing problems, modification of help-seeking behaviour and opportunistic health promotion. The new model was an attempt to provide ‘‘an acceptable concept of the practical potential in every single consultation in primary care which can be easily memorized, understood and used’’. If the doctors in Byrne and Long’s
research had confined themselves, in the main, to dealing with problems presented by patients, it is understandable in the context of short consultations. Expanding the potential of the consultation was a revolutionary step. The first and last of the extra tasks are easy to remember and have been accepted as essential components of ideal consultations. Pill et al. (1989) looked at opportunistic health promotion in consultations with 130 working class mothers over 5 years. They found that the recall of and response to advice was remarkably high, when the doctor recorded advice on lifestyle. However, patients do not always welcome or expect such advice, especially in the field of exercise. 'Modification of help-seeking behaviour' appears to have a doctor centred and perhaps negative tone which seems out of harmony with the present day. It could be argued that education about appropriate use of the service is a legitimate task in some cases, but perhaps other tasks should be more prominent. However, future consulting behaviour can be influenced by education, for example about cough (Rutten et al. 1991). The model added three more tasks for the doctor. It was intended as an outline, to be elaborated by knowledge and skills, but it did not address the challenge of why the patient had come, any more than Byrne and Long.

The theme of essential tasks in the consultation was developed by Pendleton et al (1984), who approached the problem from a social skills perspective. Their premise was that consultation skills could be broken down into manageable components, which could be learned by practice and immediate feedback. Seven tasks were identified as follows:

1. To define the reason for the patient's attendance, including:
   (i) The nature and history of the problems.
   (ii) Their aetiology.
   (iii) The patient's ideas, concerns and expectations.
   (iv) The effects of the problems.
2. To consider other problems:
   (i) Continuing problems.
   (ii) At-risk factors.
3. To choose with the patient an appropriate action for each problem.
4. To achieve a shared understanding of the problems with the patient.
5. To involve the patient in the management and to involve him/her to accept appropriate responsibility.
6. To use time and resources appropriately.
7. To establish or maintain a relationship with the patient which helps to achieve the other tasks.

The list of tasks was comprehensive. However, it is not easy to remember the detail in the heat of the consultation itself. Perhaps it is most suitable as a tool with which to dissect consultations recorded on video. Care must be taken, because the tool tends to emphasise the extent to which many consultations fall short of the ideal. In fact, Pendleton found it necessary to devise rules to ensure that any feedback is constructive. "Involving the patient" and achieving "shared understanding" were expressions which reflected an attempt to move the focus of power in consultations away from the doctor. Most significantly, discovering the reason for the patient's attendance was placed at the head of the list of tasks, and this was further divided into ideas, concerns and expectations. Pendleton's model attempted to look beyond the presenting problem, and to understand the patient's perspective. However, despite the patient-centred language, it is possible for doctors to be distracted by the complexity of the tasks which seem to represent a further increase in the doctor's agenda (Middleton 1991b). In any case, finding out about the patient's ideas, concerns and expectations is more easily said than done. For example, Britten (1994) found that patients may have fears about medication. More research on communication about treatment has been advocated by Sensky and Catalan (1992). Considering the patient's concerns means more than ticking off the appropriate boxes. Nevertheless, the model was a considerable step forward, in that it attempted to address those concerns and to involve the patient in decision making.

Neighbour (1987) described five check points in the consultation: connecting, summarising, handing over, safety-netting and house-keeping. The first three resembled some of Pendleton's tasks (first, fourth and fifth). However, the last two were new. These involved anticipation of problems which might affect the patient after the consultation, and the doctor's awareness of being fit to give the next patient a proper hearing. Neighbour also gave an account of verbal and non-verbal communication skills. The new video assessment of the MRCGP examination uses a combination of Pendleton's tasks and Neighbour's last two check points. Tate
(1994) has written a handbook on communication, drawing on both models and advocating flexibility in consulting styles to suit the needs of particular patients. As yet, however, there is no evidence to contradict Byrne and Long’s finding of doctors’ inflexibility.

Despite the apparent trend towards recognition of the patient’s contribution and increasing emphasis on appropriate communication skills, the traditional models (especially Pendleton et al) might be argued to have overloaded the doctor with tasks to be achieved in the consultation.

1.6.2: The agenda model

The author’s aims, in devising a new model, were to achieve simplicity and to promote the importance of the patient’s contribution in practice. The model was described in Middleton (1989) and elaborated in relation to a hypothetical case in Middleton (1991a-d). It may be applied to the interaction between any parties, not just patients and doctors. It follows that the contributions of both are important. The model (figure one) is not immediately connected with tasks, though each component may trigger them. The agendas of both parties must be reconciled, using communication skills, in order to arrive at a negotiated plan of management.

The patient’s agenda has been discussed in section 1.4 (p16). To help make sense of complex agendas, this component was divided into problems, underlying ideas and reasoning (Middleton 1991a). In order to understand why the patient has come, it is necessary to engage with all three levels of the patient’s agenda according to Fox (1995), Haslam (1995) and Owen (1996). The importance of patients’ ‘stories’ has been highlighted by Brody (1987) and Charon (1993). The doctor’s agenda (Middleton 1991b) has been discussed in section 1.5.2 (p20), in relation to tasks which may conflict with the patient’s agenda. The first part of the doctor’s agenda ought to be to attend to the concerns of the patient according to Launer (1995). In addition, risk factors and continuing problems must be considered. Also, the doctor may have a personal agenda which impinges on the interaction. The negotiated plan (Middleton 1991c) can be divided into management of problems and health promotion. It is important to realise that the term ‘management’ is meant to include anything which focuses on the solution of a problem. This includes the taking of a
history by closed questions. At each stage, it may be necessary to draw on a `menu` of communication skills (Middleton 1991d), in order to elicit the agendas and to negotiate an acceptable plan. These are considered further in section 1.7 below. Stanley (1987) has pointed out that good communication not only produces better outcomes, but is also an end in itself. The dialogue is actually a therapeutic process according to Bendix (1982).

Doctors may need to act as salesmen in order to implement plans. Establishing a need for the `product` involves the exploration of potential for common ground and showing relevance to the `consumer`. This may be particularly true in relation to health promotion (Strube 1987, Sullivan 1988, Brody et al 1989, King 1989, Pill et al 1989, Anon 1991, Campion 1991, Walker 1994, Fox 1995). Since the patient is the agent through whom the plan must be achieved, it follows that the patient's agenda is the vital component to be addressed.

1.7 : Teaching the consultation

The importance of communication skills in relation to the elicitation and reconciliation of agendas has been highlighted in section 1.6.2 (p26). However, Moorhead and Winfield (1991) found little enthusiasm amongst British medical students for patient-centred training. Frederickson and Bull (1992) concluded, from their survey of teaching in medical schools throughout the United Kingdom, that the emphasis was still on disease and that only lip service was paid to the area of communication. Hoffbrand (1989) argued that the system of closed questioning, traditionally taught to medical students, should be abandoned because it was counterproductive. It is evident that teaching about communication leaves much to be desired. Research in North America has shown similar problems with doctor-patient communication (Stewart et al. 1979, Starfield et al. 1981, Burack and Carpenter 1983, Good and Good 1982, Greenfield et al. 1985, Wasserman et al. 1983. Beckman and Frankel 1984, Beckman et al. 1985). Henbest and Stewart (1990) and Stewart (1991) found that although a patient-centred approach can be more efficient if the doctor is well trained in the method, consultation time is significantly increased with partially trained doctors. Havelock (1990) has highlighted the need for a greater focus on training in communication skills in the UK.
Several North American teaching texts have proposed the following sequence for the early part of the consultation (Riccardi and Kurtz 1983, Cohen-Cole 1991, Lipkin 1987, Silverman and Draper 1995):

(i) encouraging the patient to discuss his/her main concerns by attentive listening without interruption or premature closure.
(ii) confirming the list identified so far by summarising.
(iii) checking repeatedly for additional concerns, ‘is there anything else you wished to discuss today?’ until the patient indicates that there are none.
(iv) negotiating an agenda for the consultation.

Goldberg et al. (1993), working in Manchester, have found that the ability to detect psychological distress is increased, after training based on the North American guidelines. However, despite accepting the importance of the patient’s contribution, it appeared that relinquishing control may still be a problem for some doctors according to Woodward (1992).

From a behavioural perspective (Argyle 1972, Heath 1986 - social skills model), microteaching is appropriate according to Varnam (1983). This method involves frequent repetition of short sequences of behaviour with immediate feedback on performance. Maguire et al. (1986) reported on the performance of young doctors, five years after having been taught interviewing skills during a fourth year psychiatric clerkship at Manchester University. Half of the doctors had been randomised to a conventional teaching group, and the other half received video feedback training. The latter had superior skills associated with making accurate diagnoses in both psychiatric and physically ill patients. However, both groups still used closed questions and were more reluctant to cover psychosocial problems in physically ill patients. Also, all the doctors were deficient in obtaining or taking account of patients’ views when discussing findings with them. The authors advocated video feedback training as part of an enhanced communication skills package for all medical students. Maguire and Faulkner (1988) showed how video feedback training could improve the doctors’ handling of bad news and difficult questions. Evans et al. (1987) showed that a program of skills training for doctors can increase patients’ satisfaction. Nevertheless, there appears to be no evidence that video feedback training is yet widespread.
From the internal or experiential perspective, Neighbour (1987) has added the dimension of right brain awareness to the accounts of teaching about feelings and empathy (Balint 1964, Truax and Carkhuff 1965, Balint and Norell 1973, Freeling and Harris 1984, Middleton 1991e, Charlton 1993, Courtenay 1995). Games theory has also been integrated into the teaching of consultation skills (Berne 1964 and 1969, Tucker 1987). Self awareness may also increase the doctor's sensitivity to the feelings and motivations of patients.

Familiarity with a `menu` of skills is essential, if only to enable appropriate referral. These include brief psychotherapy and counselling (Parry 1975, Lang et al 1984, Rowland et al. 1989, Cocksedge 1993, Speirs and Jewell 1995), categories of intervention (Heron 1975) and negotiating (Brunsdon 1992, Ballard 1992, Defeat Depression Campaign consensus group 1995, Howie et al 1995, Thom 1996). The latter appears to be one of the main factors leading to increased patients' satisfaction with consultations as found by Brody et al. (1989). Giving bad news is one important area which Buckman (1989) described in relation to cancer patients. The message was: check for readiness and understanding at each stage, and give the information in small digestible packets. Watching, listening to and understanding the patient was just as important as how skillfully the doctor explained. The author has surveyed teaching techniques in relation to adult learning (Middleton 1990). It is important to motivate learners by taking account of their stage of understanding.

Counselling, sharing, negotiating and selling have much in common, and they are all relevant to consultation skills. Appropriate use of skills should facilitate the achievement of a negotiated plan which takes account of both agendas. Traditional methods of medical education have left something to be desired. In the author's opinion, the North American approach appears to be a way forward. The main effect of the latter is to elicit a list of the patient's concerns.
1.8 : Patients’ lists

The agenda model (section 1.6.2, p26) assigned key importance to the patient’s agenda. Screening questionnaires, for example in anxiety, depression and psychosocial problems, have been shown to reveal issues which would otherwise have been missed by doctors (Goldberg and Bridges 1987, Wright and Perini 1987, Comey 1988, Wilkinson and Barczak 1988). It seems logical that the patient’s agenda could be made more explicit by writing it down. Patients have been urged to ask questions, and to structure their consultations by writing lists (Which 1991).

However, patients who bring lists seem to provoke strong reactions in many doctors. The author found that GP trainers have a negative stereotype of them (middle aged, middle class and neurotic - Middleton 1994). Crichton (1995) posed the question: are they ‘neurotic, obsessional, or senile - or all three?’ However, he suggested that it may be helpful to read the list, to see if the problems are related. Bumum (1985) agreed with Charcot’s view of ‘la maladie du petit papier’ as a sign of psychiatric problems. Godfrey (1992) described these patients as ‘freaks’. His strategy for dealing with them was to take the list off the patient and to strike off all the items except the first two. Duckworth (1994) included bringing a long list as one of the three things most likely to drive doctors insane (the other two were self diagnosis and bringing magazine articles). Doctors also worried about the lists taking too much time according to Dawood (1995) and Copperfield (1996). Rhodes (1992), writing from a games theory perspective, saw list bringing as a strategy by the patient to gain power in the consultation. O’Donnell (1994) appeared to view the production of a list on a laptop computer as the ultimate in one-upmanship by the patient. The author’s impression from these articles, and from many cartoons which have appeared in the medical media (e.g. ‘It’s a doc’s life’ in ‘DOCTOR’), is that doctors were worried about the patients being ‘heartsink’, the lists being too long/time-consuming, and the prospect of surrendering control of the consultation.

Support for lists is less easy to find (Which 1991, Weinman 1993). Entwisle (1989) considered a list to be the lesser of two evils (the other evil being BTWS). Harkin (1994) found covert lists to be frustrating, and was more receptive to written ones as a result. However, there have been attempts, in North American clinics, to obtain patients’ wishes in writing before the consultation. Like and Zyganski (1986) used a
semistructured interview and a self-administered questionnaire. They used factor analysis to show that there were five major requests: 'medical information', 'psycho-social assistance', 'therapeutic listening', 'general health advice' and 'biomedical treatment'. List forms have been found to be feasible in the clinic context (Inui et al 1979, Thompson and Nanni 1990, Lambert 1995, Meredith et al 1995). Webb and Lloyd (1994) used a self-administered questionnaire (based on Mushlin and Appel 1980) before the consultation. This questionnaire asked for a description of the presenting problem, the degree of any perceived functional limitation and any anxiety associated with the problem. They were also asked if they had any other health problems and how they rated their general health. Patients' expectations of the consultation were obtained by asking: 'How do you think the doctor will be able to help you with your problem?' and instructing patients to tick as many of the following which were applicable: give you a prescription, refer you to hospital, give you advice, help you in some other way.

The author has shown that it is feasible, in British general practice, for patients to fill in an agenda form in the waiting room, provided that they are warned to bring spectacles or interpreters if needed. Increased numbers of problems were identified with more efficient use of time, the changes being more marked if the form was shown to the doctor, though not statistically significant (Middleton 1995). The development and testing of this form is described in chapter two.

1.9 : Summary of part one

The consultation occupies a crucial place in a primary care led health service. The role of the GP and the doctor-patient relationship have been changing. A more equal relationship requires attention to the patient's perspective. There are conflicts between the expectations of individual patients and tasks which others expect of doctors. In particular, the roles of advocate and gate keeper to scarce resources are difficult to reconcile. The conflicts are compounded by problems in communication.

Models of the consultation have moved towards the patient's perspective in theory, but have increased the doctor's tasks in practice. The author has devised a new model which puts the emphasis on identification of the patient's agenda. Teachers will need to address a 'menu' of communication skills, for example by video
feedback training. The North American guidelines have emphasised the importance of eliciting the patient's list. Written lists offer the prospect of improved communication and outcomes for the consultation, but some doctors do not welcome them.
PART TWO : OUTCOME MEASURES

In order to test the hypothesis that writing a list improves outcome, available measures were considered. These included observed behaviour in the consultation, time taken, number of problems identified, questionnaires, repeat consultations and physical parameters.

1.1 : Observed behaviour

There have been three developments from the video-rating scale of Pendleton et al (1984). The video component of the MRCGP examination is in the final stages of testing. The package accepted for summative assessment (Campbell et al 1995) has been validated only for minimal competence. Mapping (Hayes 1990, Arborelius and Bremberg 1992) gives a finger print for each consultation which might be developed for assessment. Two other packages have completed studies of validity and reliability, but await wider application in the UK (Cox and Mulholland 1993, Fraser et al 1994). Other scales have demonstrated reliability within initial studies (Bensing 1991, Lassen 1991, Goldberg et al 1993). Henbest and Stewart (1989) have described a measure of patient-centredness. 'TIMER' (Pringle et al 1985 and 1986, Pringle and Stewart-Evans 1990) is based on interactional analysis (IA) which samples behaviour at fixed intervals. The computer program 'CATER' (McGlade 1989) avoids this limitation, but awaits wider application. Video analysis is labour intensive and is beset with ethical restrictions related to informed consent (Southgate 1993, Field 1995). Audio tapes are perhaps less intrusive, but miss non-verbal behaviour (Korsch 1972, Bain 1976, Byrne and Long 1976, Roter 1977, Carter et al 1982, Inui et al 1982, Tuckett et al 1985). Feedback from simulated patients based on real consultations, using a marking schedule produced by experts, has yet to overcome problems of validity (Rashid et al 1994).
1.2: Consultation time

Time taken is important as a resource and is easy to measure, although ambiguous in terms of quality. There have been arguments for smaller list size, in order to allow more time for consultations (Knight 1987, Roland 1987, Ridsdale 1989, Campbell and Howie 1992), although the benefits seem to disappear below 2,500 patients per doctor (Wilkin and Metcalfe 1984, Butler and Calnan 1987). Longer consultations have been recommended widely (Roland 1989, Roland et al 1989, Wilson 1989 and 1991, Ridsdale 1991, Howie et al 1991 and 1992, Wilson et al 1992, Hazzard 1995, Tudor Hart 1995), and short ones criticised (Hull 1984, Morrell et al 1986, Roland et al 1986, Howie 1987, Heaney et al 1991, Manton 1996). The `gold standard` of ten minutes is probably a compromise which reflects conditions in the UK according to Mowat (1995). Harrison (1987) and Lowenthal and Bingham (1987) found that patients themselves can choose appropriately within a range of five to fifteen minutes. There is evidence from Europe that longer consultations than this were associated with lower patient satisfaction and perhaps quality (Andersson and Mattson 1989, Hofmans-Okkes 1991).

1.3: Number of problems

Patients often have more than one problem to discuss. The mean number ranged from 1.2 to 3.9 in published studies, the variation perhaps being partly due to the difficulty in the definition of a `problem`, with consequent effects on reliability and consistency in different studies (Starfield et al. 1981, Good and Good 1982, Greenfield et al. 1985, Wasserman et al. 1983, Silverman and Draper 1995, Middleton 1995). The number of problems elicited by the doctor might be used as a measure of quality, in view of previous arguments about the importance of the patient’s agenda (part one, section 1.6.2, p26). This could be combined with time taken, to produce `time per problem`. The latter might become a measure of efficiency.
1.4: Questionnaires

Multidimensional questionnaires (including physical, psychological and social components) such as the Sickness Impact Profile, the Functional Limitations Profile and the Nottingham Health Profile are very long and cannot be used for comparison because a substantial minority of patients score zero (Hopton et al 1991, Wilkin et al 1992). Paterson (1996) described a patient-generated measure which cannot be used for comparing different individuals.

The development of a questionnaire to measure satisfaction is a major undertaking (Locker and Dunt 1978, Carter and Inui 1988, Hulka and Zyganski 1992, Sweeney 1992, Stone 1993). The extensive work in America has been reviewed by Wilkin et al (1992). Validity and reliability need more work even in established instruments. Sensitivity may also be a problem because of the tendency towards positive responses. Use of the (American) Medical Interview Satisfaction Scale (Wolf et al 1978) in the UK (Treadway 1983, Winefield and Murrell 1991) has been criticised by Baker (1989). Grogan et al (1995) have used a questionnaire which is not consultation-specific and has only one factor relating to the doctor's performance. However, the Consultation Satisfaction Questionnaire (CSQ) has been thoroughly tested for use in the UK (Baker and Whitfield 1992), and has begun to find wider application (Himmel et al 1993, Wilson et al 1995, Poulton 1996), although Lewis and Williamson (1995) cautioned that the scores might decline on repeated testing over time. The author's own questionnaire was overtaken by this review of the literature and discarded after being used in some pilot studies described in chapter two.

A number of questionnaires of doctor's satisfaction have been put together for use in specific studies, but there has been little work on validity and reliability (Rashid et al 1989, Winefield and Murrell 1991, Kidd and Marteau 1993).

The 'mood adjective checklist' (MACL) has been developed by Mackay et al. (1978) and validated by King et al. (1983). It has been used to compare levels of stress and arousal, before and after consultation sessions, in both patients and doctors (Pringle et al. 1984 and 1984, Wilson et al. 1991). Nevertheless, it is not clear that the
instrument can be used to compare individual consultations, since the effect of stress may persist for some time.

Griffith (1990) has reviewed the difficulties associated with attempts to measure compliance with treatment. This is a consequence of the fact that most studies are unable to measure it directly. In a study by Martin and Bass (1989), compliance with medication was measured by self-reporting. Patients were identified as non-compliant if they could not identify the condition for which they were taking the drug, could not recall the dosage schedule, or reported missing one or more doses either in the preceding week or in an average week. Lassen (1991) assessed compliance using two items on a questionnaire, which was administered three weeks after the consultation. Kincey et al. (1975) claim to have shown an association between patients' satisfaction and subsequent compliance. Validity and reliability do not yet appear to have been established.

1.5 : Repeat consultations

It could be argued that more attention to the patient's agenda might reduce the need for patients to consult again. This would be easy to measure by review of the notes. Repeat consultations for two months after prescription of antibiotics have been studied. Newer antibiotics did not generate significantly less appointments (Davey et al 1994).

1.6 : Physical parameters

Horder and Moore (1990) have reported two studies which appear to have demonstrated positive physical outcomes when the locus of control in the consultation was shifted in the direction of the patient. Kaplan et al. (1989) showed improvement in HbA1 in diabetic clinics. Inui et al. (1976) showed improvement in blood pressure readings. Because of the unpredictable case mix and consequent difficulty in obtaining matched controls, studies like these would not be feasible in British general practice, although clinic based studies are a possibility.
1.7: Summary of part two

Outcome measures for the consultation are needed to test the hypothesis about written lists producing improvement. Behaviour can be observed by video recordings. There are few methods of analysis which have been developed fully, in terms of validity and reliability, and those which have are awaiting wider application. Audio recordings miss non-verbal behaviour. Recordings of consultations are beset with ethical difficulties and their analysis is extremely labour intensive. The time taken and number of problems identified (thus time per problem) are easy for the doctor to measure. However, the former is ambiguous as a measure of quality. Questionnaires of satisfaction require prolonged development. Only the CSQ satisfies these criteria for the UK. The MACL could be used as a measure of stress, but it is uncertain whether it can be applied to individual consultations. Preliminary studies with a compliance questionnaire have been carried out, but validity and reliability are yet to be established. Repeat consultations are easy to measure and might be reduced by addressing the patient's agenda successfully. Physical parameters are feasible to use in clinic based practice, but not in British general practice for short term studies. Pilot work, using some of these outcome measures, is described in chapter two.
Figure 1.1: The agenda model
CHAPTER TWO : DEVELOPMENT WORK

2.1 : Introduction

Chapter one described the background relating to the list (part one - section 1.8) and possible outcome measures (part two). The ‘list’ form evolved through three versions in preliminary pilot studies, using the author’s consultations. A new patient’s satisfaction form was also tested, but was overtaken by the literature review and discarded (see chapter one, part two - section 1.4, p35).

In this chapter, three main pilot studies are described. The first used the ‘list’ form. In the light of the results, this was discarded and the ‘patient’s agenda form’ (PtAF) was designed. The PtAF was used in the two remaining pilots. Additional outcome measures were also tested. In order to familiarise the doctors with use of the PtAF, an educational workshop was designed, and the effects of it were tested in the third pilot.

2.2 : The ‘list’ form

2.2.1 : Introduction

The use of pre-consultation forms in the context of North American clinic based practice has been discussed in chapter one (section 1.8, p30). There were two themes involved in the development of the ‘list’ form (appendix 1). The first was to elicit a list of problems (see the North American guidelines for teaching, in chapter one, part one - section 1.7, p27), such as might be written on a piece of paper by some patients. It was assumed that most patients would carry a list of problems to be raised ‘in their heads’ even if they would not normally write them down. The second was to attempt to make sense of the problems raised by using the classification of reasons for attendance devised by Stewart et al (1975) - limit of tolerance, limit of anxiety, administrative (request for a certificate or similar) and ‘ticket of admission’ (initial problem presented is not the real reason for attending). This classification was represented by questions A-D on a seven point Likert scale.
The form was tested in a pilot study of the author's consultations in 1992. Some of the results have already been reported (Middleton 1995).

2.2.2: Aims

1. To test the feasibility of the 'list' form.
2. To test the feasibility of outcome measures.

2.2.3: Methods

SETTING: An urban practice in Loughborough, Leicestershire.

SUBJECT: The author.

DESIGN: Prospective, non-blind, non-randomised controlled trial.

Consecutive appointments on Wednesday and Thursday mornings were allocated to each of three categories (A, B, C) in three adjacent weeks. Patients assigned to A and B were advised, on booking the appointments, to draw up a list of their concerns, to bring spectacles or an interpreter if needed, and to come five minutes early to complete a form. They were given the 'list' form on arrival, asked to complete it in the waiting room, and to hand it to the doctor on entering the consulting room. Parents accompanying children completed the form on their behalf.

A (50 consultations): The doctor began the consultation by studying the 'list' form (One of these consultations was excluded because the patient was unwilling to complete the form).

B (48 consultations): The doctor placed the 'list' form face down in a box without looking at it, stating that it was to be used for a survey.

C (52 consultations): No 'list' forms were issued. This category served as a control.
OUTCOME MEASURES:

1. Number of problems identified by the doctor.
2. Consultation time in seconds - the doctor operated a stop watch which was stopped during interruptions.
3. Time per problem in seconds - derived from 1 and 2.
4. Responses to questions A-D on the `list' form.

ANALYSIS:

Parametric data (Time, time per problem) - Two tailed t test (two group comparison); Anova (three group comparison).

Non-parametric data (number of problems) - Mann-Whitney U test (two group comparison); Kruskal-Wallis test (three group comparison).

The SAS statistical package was used for analysis.

2.2.4: Results

The mean number of problems identified increased with a list, with a further increase when the list was shown. Time per problem was reduced with a list, but there was no further reduction when the list was shown. These differences were not, however, significant (table 2.1, p61).

97 out of 98 patients allocated to groups A and B completed the `list' form, a response rate of 99.0%. The responses to questions A-D are shown in table 2.2. (p62). Most scores were at the extreme positive end of the Likert scale. A third had reached the limit of tolerance of their problems, a third had come for certificates or other administrative reasons and a fifth had reached the limit of anxiety. Few patients admitted to having a `ticket of admission'. Responses to the list section of the form were brief, almost invariably one word for each problem. One significant problem (a request for a vasectomy) was written on a form which was not shown, and came to light after the patient had left. This required follow up.
2.2.5 : Discussion

It was feasible for most patients to complete the 'list' form when given advance warning. The outcome measures were all feasible in the context of this study. Inviting the patients to write a list did not result in a deluge of problems. However, it is possible that the format did not encourage longer lists. The act of making a list may improve communication by helping patients to organise their thoughts. Sharing the list with the doctor might further improve the consultation by making the patient's agenda explicit. Consultations were more efficient in terms of more problems being found and less time being spent on each problem when lists were made and shown. The trend was most obvious in relation to the number of problems identified, but the differences between the groups were not significant. Limitations of the study were the use of the author's own consultations (introducing the possibility of bias in a non-blind trial) and the lack of randomisation to the three groups.

The responses for the 'tolerance limit', 'anxiety limit' and 'administrative' categories of the form confirmed that these are useful concepts for the doctor to keep in mind in the consultation. However, there may have been some overlap between the categories, for example patients who were both at the limit of tolerance and of anxiety. The small incidence of 'ticket of admission' might have been misleading, since patients might have been unwilling to declare it in advance. However, only one extra instance of this phenomenon was found during the consultations.

Since patients did not elaborate their problems in the list section, the form did not reveal ideas, concerns or expectations. This might have been due to lack of space, or possibly to having been constrained by the framework provided by questions A-D.

In order to elicit patients' ideas, it was felt necessary to design a new 'patient's agenda form' (PtAF) for use in later studies. The 'list not shown' category was discarded in order to avoid future ethical problems and to reduce the number of consultations required.
2.3 : The PtAF

2.3.1 : Introduction

Drawing on the experience with the `list` form, and the work of Mushlin and Appel (1980) reported in chapter one (part one, section 1.8, p30), a new patient's agenda form (PtAF) was designed (appendix 2). Three quarters of the space was allotted to open questions in order to encourage the patient to express ideas and queries, as well as a list of concerns. A number of closed questions were added in order to identify administrative requests and other action expected of the doctor. Outcome measures were discussed in chapter one (part two).

2.3.2 : Aims

1. To investigate the feasibility of using the PtAF.
2. To elicit patients' ideas.
3. To investigate the effect of using the PtAF on the outcomes of consultations.
4. To evaluate the feasibility of additional outcome measures.

2.3.3 : Methods

SETTING : An urban practice in Loughborough, Leicestershire.

SUBJECTS : Five general practitioners (the author's partners).

DESIGN : Prospective, non-blind, randomised, controlled trial.

100 appointment slots (20 per doctor) were allocated randomly to study or control groups, using a table of random numbers. When the patient called at the desk or telephoned, the appointment was allocated 'blind', that is the receptionist could not see whether the appointment slot was in the study or control group. When the appointment had been made the receptionist turned over a card, which identified the group applicable, and gave the appropriate instructions.
All patients were told that 'they were in a survey'. Study group patients were asked to think of their list of concerns, to bring spectacles or an interpreter if needed, and to come five minutes early in order to complete a PtAF. Patients were asked to hand the form to the doctor on entering the consulting room. Control group patients were neither asked to complete a PtAF, nor to think about a list. All patients were advised that they would be asked to complete a satisfaction form after the consultation. On attending the reception desk after the consultation, all patients were warned to expect a short postal questionnaire in one week.

OUTCOME MEASURES:

1. Consultation time (seconds) - measured with a stop watch (stopped for interruptions) by the doctor.
2. Number of separate issues or problems identified by the doctor.
3. Time per problem (seconds) - derived from 1 and 2.
4. Incidence of BTWS - assessed by the doctor. The definition used was: where a new issue is raised by the patient after rising to go, or after the doctor has put away the notes or finished writing/printing the prescription.
5. Doctor's satisfaction - measured by a questionnaire (Rashid et al 1989) completed after each consultation by the doctor (DQ).
6. Doctor's stress and arousal - measured by a checklist of adjectives (King et al 1983) completed after each consultation by the doctor (SAQ).
7. Patient's satisfaction - measured by a questionnaire (Baker 1990) completed after leaving the consulting room by the patient (CSQ).
8. Patient's compliance with treatment and advice - measured by a postal questionnaire (Lassen 1991) administered seven days after the consultation.
9. Repeat consultations for old or new problems in the four weeks following the original consultation - assessed by review of the notes. This was done by the same doctor who was involved in the original consultation.
10. Content of the PtAF - measured by the number of replies to questions 1-4 and the categories of reply.
11. Doctor interviews - Within seven days of the consultations, the doctors were invited to be interviewed on the subject of using the PtAF by the author for 20-30 minutes. The interviews were semi-structured, using the questions from the doctor's questionnaire (DQ). In addition, they were asked: "Do you think that completing the
PtAF had any effect on patients' satisfaction?"; and "Do you have any ideas for using the PtAF more effectively?". Doctors were invited to expand on their answers and supplementary questions about reasoning were asked.

ANALYSIS:

Student's T test (two-tailed) was used for parametric data (time, time per problem) and the Mann-Whitney U (Wilcoxon Rank Sum W) test for non-parametric data. The data were analysed using the SAS statistical package.

2.3.4: Results

2.3.4.1: Response rates

In the study group, six of the patients booked did not attend the surgery, leaving 44 who all completed a patient's agenda form. All 50 of the control patients attended the surgery. None of the patients had brought a written list.

Response rates were as follows: PtAF - 100% of patients who attended; doctor's stress and arousal - 97.9% (PtAF 98%, no PtAF 97.7%); doctor's satisfaction - 89.4% (PtAF 86%, no PtAF 93.2%); patient's satisfaction - 100%; compliance questionnaire - 55.3% (PtAF 52.0%, no PtAF 59.1%).

2.3.4.2: Number of problems, time, BTWS, CSQ, compliance, follow up consultations, SAQ and DQ

There was an increase in the number of problems identified from a mean of 1.7 in the control group to 2.14 in the study group (P = 0.03). There was a corresponding increase in consultation time (table 2.3a, p63) from a mean of 492 seconds (8 minutes 12 seconds) in the control group to 624.1 seconds (10 minutes 24.1 seconds) in the study group (P = 0.015, 95% CI = -26.1 to -238.1). None of the other differences (BTWS, CSQ, compliance, follow up consultations, SAQ, DQ - tables 2.3a-e, pp63-68) were significant, although there was a trend towards increased general satisfaction but a decrease in the other patient's satisfaction items with the
PtAF (table 2.3b, p64). There was also an increase in doctors’ perceived stress (table 2.3d, p66).

2.3.4.3 : Content of the PtAF

Numerical responses to questions on the PtAF were as follows:

question 1 (points to raise) - 44 (100%);
question 2 (thoughts) - 32 (72.7%);
question 3 (questions) - 24 (54.5%);
question 4 (action required) - 41 (93.2%), of whom:
27 (61.4%) wanted treatment,
36 (81.8%) wanted explanation,
29 (65.9%) wanted investigation,
2 (4.5%) wanted a note and 2 circled the ‘other’ category (both requests for specific procedures).

The responses to questions 1-3 contained a variety of medical symptoms and conditions, although the numbers of each category were small. There were broad categories of statement which recurred:

Reporting information - e.g. “I feel better on the treatment”.

Expressing an opinion about the cause, diagnosis or treatment - e.g. “Headache.....due to exam stress”, or “Rash.......?heat”.

Questions about diagnosis, treatment, investigation, prognosis, or simply asking for advice - e.g. “Knee pain.......do I exercise or rest it?”, or “Chest pain.......is it angina?”.

Commenting on the system or process of care - e.g. “Sickness.......why no visit”.

In contrast with the previous versions of the agenda form, most of the responses were more than just lists of problems. Many of the patients had written down at least some of their ideas about the problems:
e.g. “Strain......recurrence of an old problem”, or “Back pain......age.....previous operation”.

In some cases there appeared to be a deeper layer of reasoning : e.g. “Headache......is it my sinuses again.......are the earache and sore throat connected?”, or “Depression.....connected with my cycle......is it an early menopause and if so is there non-drug treatment available?”

2.3.4.4 : Views of doctors

Four doctors were interviewed, the fifth being unable to make time due to service commitments.

DOCTOR A: This doctor felt that most things were not affected by the agenda form.

“I feel comfortable with lists and encourage patients to bring them. Patients often come with shopping lists. The agenda form increases time. My stress stays the same unless the list is four or more problems. Listening time per problem goes down for a long list. I think it (the form) helps to make a correct assessment - listening is more focused. One patient got stroppy when some items were deferred. Widespread lists long-term would be intimidating for doctors. The problem of the middle-aged neurotic heartsink remains.”

DOCTOR B : This doctor highlighted a number of improvements using the agenda form. It was felt that there were increases in understanding of patients’ views, awareness of prevention issues, doctors’ and patients’ satisfaction. Other things were unchanged.

“Consultations are easier to control with a list - it fits in with my style. Patients probably also felt happier - more in control with lists. I find I have to restate the questions (on the form) to the patient. My stress is probably reduced by a list, although it might possibly inhibit the patient from raising other issues by the way. If there is a long list, there’s less time for the patient to talk. It might be worth putting something in the practice leaflet, perhaps suggesting a longer appointment for a long list.”
DOCTOR D: This doctor also felt that most things were unchanged.

"The form may have slightly increased the number of issues. Listening was reduced due to having preconceived ideas due to the list. Explanation was more specific. You could educate some patients about organising their thoughts before coming to the surgery or writing lists. Lists presented at all consultations would be artificial. I hated having to fill out all the forms (doctor's satisfaction and stress/arousal questionnaires)."

DOCTOR E: This doctor highlighted increased numbers of problems, longer consultations, more correct assessment, more explanation which was more focused, and increased likelihood of correct treatment or advice.

"I had no negative vibes (I do normally with lists). Listening was reduced because the list was written down and I could see the priorities. Patients were less at ease - they were embarrassed at writing a list. They were less able to express feelings. The list constrained them. Doctors and patients would both need practice to use this system. It should be offered as an option rather than a universal measure."

A summary of the main points from the interviews is given in table 2.4 (p69).

2.3.5: Discussion

The PtAF appeared to have achieved the objective of producing a more differentiated response as opposed to a list of problems, although this is based on an overall impression rather than a formal analysis of the content of the forms. Broad categories of response which were identified might be used as the basis for content analysis of a larger sample. The doctors felt that they had made better assessments and focused on relevant explanations, although they believed that listening was reduced, perhaps because a written agenda was more explicit or because increased numbers of problems were associated with more pressure on time.
Use of the PtAF was associated with a 25% increase in the number of problems identified by the doctors in this pilot study. There was a corresponding increase in consulting time since the time taken per problem remained constant. The pilots using the author's consultations (section 2.2, p40) had suggested the possibility of more efficient use of time. It is possible that the doctors in this study might have improved their efficiency in using the form with appropriate training and opportunity to practise. Indeed this issue was raised by Dr. E in the interview.

The extra problems found may not have been relevant. However, the problems were defined by the doctors not the patients. For example, "headache, sore throat and aching all over" would be likely to be classified by the doctor as one problem (a 'flu-like illness). Secondly, a common self-limiting condition like a throat infection might be viewed as trivial by some GPs, but is a legitimate concern to be addressed from the patient's point of view. For example, the patient might be concerned about the possibility of something more serious.

No significant changes were found with the other outcome measures, though some trends have been noted. However, this was a small study of low power. The response rate to the compliance questionnaire was too low (55%) to attach much value to the inconclusive results. It is possible that the rate would have been improved by following up non-responders. In the case of the review of notes, it could be argued that four weeks was not long enough to show any difference in repeat consultations for the same problem. Dr. D appeared to speak for the others about the burden of form filling. It is possible that 12% of patients in the study group who failed to attend their appointments were voting with their feet. On the other hand, this drop-out rate had not been a feature of the previous study (section 2.2, p40). Nevertheless, in a further study, a patient's information leaflet and user-friendly telephone instructions might help to remedy the situation.

It was concluded that a training package for doctors should be developed. If doctors could become more familiar with the use of the form, they might deal with an increased number of problems more efficiently, thus reducing time per problem. It is
possible that training might also have an effect on patient’s and doctor’s satisfaction. In order to gain co-operation of doctors and their staff for a large study, it would be advisable to reduce and simplify the tasks.
2.4 : The educational workshop

2.4.1 : Introduction

The previous study (section 2.3, p44) suggested that doctors need to be educated in using the PtAF. The doctors were issued with a leaflet which explained the background to the project and how the PtAF would help the doctor to discover the patient's agenda. From experience of using the PtAF and from discussion with medical educators, three phases were identified:

1. Receiving and understanding the information.
2. Agreeing a plan of management.
3. Checking completion of the plan.

The management plan includes everything which takes place after exploring the agenda, for example examination of a particular system. These three phases are suitable for the 'microteaching' technique (Varnam 1983). Based on the social skills model, this technique involves repetition of short sequences of behaviour with immediate feedback, until the desired level of performance is achieved. The doctors were provided with a leaflet which explained phases 1-3 with the aid of the following examples:

PHASE 1:

The form contains the patient's list of problems, ideas, questions and wants. Doctors must not only understand what is on the form, but must also let the patient know that they have understood and intend to respond.

(a) Checking understanding: this involves summarising and clarifying the information.

"I see you have pains in the back and legs, and also a 'funny' head."

"What do you mean by a 'funny' head?"
(b) Asking if there is anything else: this may require courage because doctors are sometimes apprehensive about provoking a deluge of additional items. However, this fear has not been borne out by pilot studies. The question is designed to avoid BTWS and should help to manage time more efficiently.

"Is there anything else you want to tell me, or that you want me to do today?"

(c) Signaling understanding and readiness to respond: if the patient is confident that the doctor has understood the concerns and is ready to deal with them, there will be an increased likelihood of co-operation with a shared plan of management.

"Okay, I understand that this dizziness is frightening you."
"I'm going to look into that, and hopefully reassure you."

PHASE 2:

The doctor's response must be relevant to the patient's agenda. However, it does not mean that everything must necessarily be done in one consultation. The plan of management should be negotiated between the patient and doctor.

(a) Time management: in practice, most items can be managed in one consultation. Time-consuming procedures might be deferred until another occasion. This is usually acceptable to patients, provided that an initial assessment has been made.

"With your permission, I'd like to run some tests and then bring you back for a full examination."

(b) Checking relevance of the management plan:

"I'm going to look in your ears and check your blood pressure. Is that what you wanted?"
PHASE 3:

At the end of the consultation, it is worth summarising what has been achieved, and again checking relevance to the patient’s agenda.

(a) Summarising:

“I haven’t found anything serious, so it looks like the dizziness is part of the virus infection which is giving you the aches and pains.”

(b) Checking relevance:

“Do you think that I’ve dealt with the problems you raised, and are these tests okay with you?”

The package was designed to be used in a small group led by a facilitator (in this case, the author). The consultation experience was provided by a simulated patient, capable of playing several roles developed from videotapes of real consultations (Rashid et al 1994). After each phase the author stopped the consultation, whereupon the simulated patient gave feedback to the doctor, first in role, then out of role. The other doctors then had an opportunity to discuss what they had observed. Each phase was practised until satisfactory performances were obtained. Finally, the consultation was practised as a whole. There was an opportunity for each doctor in the group to consult with the simulated patient.

2.4.2: Aims

1. To evaluate the effects of the educational workshop on outcomes of the consultation.

2.4.3: Methods

SETTING: An urban practice in Loughborough, Leicestershire.
SUBJECTS: Four general practitioners (the author’s partners). All the doctors had taken part in the previous study (section 2.3, p44).

Design: prospective non-blind trial in two phases, before and after the educational intervention.

Phase 1: ten consecutive patients per doctor were asked to complete a PtAF in the waiting room (having been warned at booking, in a similar way to the previous study) and to hand it to the doctor on entry to the consulting room.

Intervention: The doctors were issued with an explanatory leaflet and attended a two hour educational workshop (section 2.4.1, p52) within seven days of completing phase 1.

Phase 2: this was identical to phase 1. Phases 1 and 2 were completed within 14 days.

OUTCOME MEASURES: As section 2.3.3 (p44), numbers 1-5 and 7.

1. Consultation time in seconds.
2. Number of separate issues or problems identified by the doctor.
3. Time per problem in seconds.
4. Incidence of BTWS.
5. Doctor’s satisfaction (DQ).
6. Patient’s satisfaction (CSQ).

ANALYSIS: As section 2.3.3 (p44).

2.4.4: Results

Two patients did not attend their appointments in phase one. The response rates for the PtAF, CSQ and DQ for the total of 78 consultations were 100%. There was a significant rise in doctor’s perceived understanding in phase two (89.2% cf 100%; P = 0.034, table 2.5c, p72). No other measures changed significantly. There was a 17% saving in time per problem (348.8 cf 290.7 seconds; P = 0.057) with an
increased number of problems identified (table 2.5a, p70), also a fall in perceived time by the patient (80.8% cf 77.0%; P = 0.057, table 2.5b, p71) and the doctor (table 2.5c, p72) in phase 2 of the study. Other trends were: increased BTWS (table 2.5a, p70); increased perceived professional care and reduced perceived depth of relationship in the CSQ (table 2.5b, p71); increased doctor's general satisfaction and perception by doctors of satisfactory explanation of treatment, space allowed for patients to express feelings and openness to return, and reduced space for patients' questions and satisfactory explanation of problems in the DQ (table 2.5c, p72).

Informal feedback from the doctors before the workshop suggested that they all felt apprehensive about the prospect of spending longer in discovering the patient's agenda, but that they appreciated the reduction in the burden of form filling compared with the previous study. During the workshop, the author observed that the doctors appeared to change their behaviour in the direction of making more effective initial assessments of the problems with the aid of the PtAF. It appeared that they were then able to plan the remainder of the consultation to make more efficient use of time by avoiding repetition. However, two hours was not enough to achieve the tasks comfortably, in the perception of the author and participants.

2.4.5: Discussion

The workshop was demonstrated to be feasible for a small group of doctors, using a facilitator and a simulated patient as resources. This was relatively labour intensive and all those involved were aware of the pressure of time. After the workshop there were increased numbers of problems identified, including an increase in BTWS, associated with a reduction in time spent per problem. Both patients and doctors were aware of increased pressure of time in the consultation. Other responses by patients were mixed (CSQ), but those of the doctors were generally more positive, including an increase in satisfaction and a significant increase in perceived understanding (DQ).

It is possible that familiarity with using the form in phase 2, rather than the workshop, was responsible for the increase in perceived understanding and possible increase in efficiency (increased problems and reduced time per problem). However, all the doctors were already familiar with using the form from the previous study (in which
their performances were similar to phase 1). The negative effects on patient's and doctor's perceived time might have been due to the doctors making time saving their main priority. This may have reflected the short time devoted to the workshop.

For the doctors, this was a major change in consulting style, and they had to suppress the desire to move on to closed questions and examination. Their uneasiness about this is understandable for established principals. It is possible that the workshop would be more acceptable during vocational training. On the other hand, it shows that established principals can change their behaviour. These were subjective observations, but the more positive responses to the DQ in phase two suggest that the doctors might have been more comfortable with using the PtAF after the workshop.

Again, this was a small study of low power which may not be generalisable. There were indications that education could increase doctors' efficiency in dealing with increased numbers of problems, using the PtAF, at the cost of increased pressure of time. It is possible that running the workshop on a larger scale, with more time available, might help to address the difficulties (chapter five).

2.5 : Summary

The use of the 'list' form was shown to be feasible, and associated with trends of increasing problems identified and reduced time per problem in the author's consultations. However, the form did not elicit the patient's ideas and expectations (section 2.2, p40).

In order to address this problem, the PtAF was designed. This was associated with significantly increased numbers of problems identified and a corresponding increase in time, in the consultations of the author's partners. The form revealed more complex agendas, including ideas and expectations. There were mixed effects on patient's satisfaction. However, although the doctors felt that their explanations were more focused, they were generally less satisfied and more stressed (section 2.3, p44).
An educational workshop was designed in order to train these doctors in the more efficient use of the PtAF. The workshop was associated with an increase in the number of problems identified with reduced time per problem, and increased doctor’s satisfaction including a significant increase in the doctor’s perceived understanding. However, all participants in the consultations and workshop were aware of the pressure of time.

As pilots, all three studies were of low power and questionable generalisability, but they furthered the development of the project. Further studies were needed in order to address the issues which had been raised.

Firstly, an extended educational workshop was needed. It was necessary to provide adequate time, experience of different roles of simulated patients and more opportunity for peer interaction. In order to test the effects of the PtAF and the workshop in combination and separately, and to obtain generalisable results, a large multi-practice study was required. The power calculation was based on the figures for time per problem in the second and third pilot studies (sections 2.3 and 2.4, pp44,52). This outcome was chosen because of the trends towards increased efficiency in the consultations of the author with the `list` form (section 2.2, p40) and in those of the partners with the PtAF, after the workshop (section 2.4, p52). Also, the author considered that the prospect of revealing more of the patient's agenda without a corresponding increase in time taken would be of more appeal to doctors. A spin off from this study was a large scale analysis of the content of responses to the PtAF, which had been piloted (section 2.3, p44).

However, negative perceptions of lists and patients who brought them have been identified (chapter one, part one - section 1.8, p30 ; Middleton 1994). Such perceptions amongst doctors might inhibit the task of addressing the patient’s agenda more explicitly. It was, therefore, necessary to investigate whether or not
these perceptions were justified. A survey was needed in order to identify the frequency of lists, their content and the characteristics of patients who brought them.

The methodology relating to these studies is described in chapter three.
2.6: Tables 2.1 to 2.5
Table 2.1: Effects of using the 'List' form on number of problems identified (problems) - Kruskal Wallis (3 groups), Mann-Whitney U (2 groups); mean duration of consultation (time) and time spent per problem - Anova (3 groups), 2 tailed t test (2 groups)

<table>
<thead>
<tr>
<th>Outcomes</th>
<th>Group A</th>
<th>Group B</th>
<th>Group C</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(list shown, n = 49)</td>
<td>(list not shown, n = 48)</td>
<td>(no list, n = 52)</td>
<td>3 groups (A v B, A v C, B v C)</td>
</tr>
<tr>
<td>Problems : mean (SD)</td>
<td>1.65 (1.03)</td>
<td>1.52 (0.65)</td>
<td>1.40 (0.60)</td>
<td>0.64</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.84, 0.52, 0.34)</td>
</tr>
<tr>
<td>Time (seconds) : mean (SD)</td>
<td>445.9 (263.8)</td>
<td>406.4 (141.5)</td>
<td>456.0 (255.7)</td>
<td>0.52</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.36, 0.85, 0.23)</td>
</tr>
<tr>
<td>Time per problem(seconds) : mean (SD)</td>
<td>299.2 (163.7)</td>
<td>302.3 (135.5)</td>
<td>357.3 (219.6)</td>
<td>0.18</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.92, 0.13, 0.13)</td>
</tr>
</tbody>
</table>
Table 2.2: 'List' form - reasons for attendance at consultations (number of responses to questions A-D) on a seven point Likert scale

<table>
<thead>
<tr>
<th>Likert scale responses (n = 97)</th>
<th>Negative</th>
<th>Neutral</th>
<th>Affirmative</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Point 1</td>
<td>Point 2</td>
<td>Point 3</td>
</tr>
<tr>
<td>A: fed up (tolerance limit)</td>
<td>7</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B: worried (anxiety limit)</td>
<td>7</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>C: requesting paper (administrative)</td>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>D: real reason not stated ('ticket')</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Table 2.3: Results of trial of PtAF

Table 2.3a: Effects of using the PtAF, compared with control consultations, on number of problems identified (problems) and BTWS

- Mann-Whitney U test, mean consultation time and time spent per problem - 2 tailed t test

<table>
<thead>
<tr>
<th>Outcome</th>
<th>No PtAF (control)</th>
<th>PtAF (study)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 50</td>
<td>n = 44</td>
<td>(95% CI)</td>
<td></td>
</tr>
<tr>
<td>Number of problems:</td>
<td>1.70 (1.04)</td>
<td>2.14 (1.19)</td>
<td>0.030</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTWS</td>
<td>2 (4.0)</td>
<td>4 (9.1)</td>
<td>0.314</td>
</tr>
<tr>
<td>Number (%)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in seconds:</td>
<td>492.02 (233.27)</td>
<td>624.14 (277.57)</td>
<td>0.015 (-238.1 to -26.1)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time per problem:</td>
<td>351.73 (220.05)</td>
<td>365.30 (219.36)</td>
<td>0.766</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2.3b: Effects of using the PtAF, compared with control consultations, on patients’ satisfaction (CSQ) - Mann-Whitney U test

<table>
<thead>
<tr>
<th>Outcome</th>
<th>No PtAF (control)</th>
<th>PtAF (study)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 50</td>
<td>n = 44</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General satisfaction</td>
<td>80.07 (13.84)</td>
<td>82.87 (14.26)</td>
<td>0.337</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>82.64 (10.63)</td>
<td>81.86 (10.25)</td>
<td>0.718</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>75.66 (14.89)</td>
<td>74.18 (12.43)</td>
<td>0.601</td>
</tr>
<tr>
<td>Perceived time</td>
<td>76.39 (14.64)</td>
<td>73.19 (18.14)</td>
<td>0.403</td>
</tr>
</tbody>
</table>
Table 2.3c: Effects of using the PtAF, compared with control consultations, on compliance with treatment and advice, and follow up consultations (follow up) - Mann-Whitney U test

<table>
<thead>
<tr>
<th>Outcome</th>
<th>No PtAF (control)</th>
<th>PtAF (study)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 50</td>
<td>n = 44</td>
<td></td>
</tr>
<tr>
<td>Compliance with treatment</td>
<td>88.0</td>
<td>81.0</td>
<td>0.507</td>
</tr>
<tr>
<td>Compliance with advice</td>
<td>84.6</td>
<td>84.6</td>
<td>1.0</td>
</tr>
<tr>
<td>Follow up: same problem</td>
<td>36.0</td>
<td>38.6</td>
<td>0.786</td>
</tr>
<tr>
<td>Follow up: new problem</td>
<td>20.0</td>
<td>18.1</td>
<td>0.807</td>
</tr>
</tbody>
</table>
Table 2.3d: Effects of using the PtAF, compared with control consultations, on doctors' stress and arousal (SAQ) - Mann-Whitney U test

<table>
<thead>
<tr>
<th>Outcome</th>
<th>No PtAF (control)</th>
<th>PtAF (study)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 50</td>
<td>n = 44</td>
<td></td>
</tr>
<tr>
<td>Doctor's arousal</td>
<td>53.7</td>
<td>53.0</td>
<td>0.806</td>
</tr>
<tr>
<td>Doctor's stress</td>
<td>7.2</td>
<td>11.3</td>
<td>0.159</td>
</tr>
</tbody>
</table>
Table 2.3e: Effects of using the PtAF, compared with control consultations, on doctors' satisfaction (DQ) - Mann-Whitney U test

<table>
<thead>
<tr>
<th>Outcome %</th>
<th>No PtAF (control)</th>
<th>PtAF (study)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 50</td>
<td>n = 44</td>
<td></td>
</tr>
<tr>
<td>Correct assessment</td>
<td>83.7</td>
<td>73.2</td>
<td>0.239</td>
</tr>
<tr>
<td>Listening</td>
<td>90.7</td>
<td>92.7</td>
<td>1.0</td>
</tr>
<tr>
<td>Understanding</td>
<td>86.0</td>
<td>90.2</td>
<td>0.553</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>88.4</td>
<td>75.6</td>
<td>0.127</td>
</tr>
<tr>
<td>Enough time</td>
<td>88.4</td>
<td>73.2</td>
<td>0.076</td>
</tr>
</tbody>
</table>

67
Table 2.3e (continued)

<table>
<thead>
<tr>
<th>Outcome %</th>
<th>No PtAF (control)</th>
<th>PtAF (study)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n = 50</td>
<td>n = 44</td>
<td></td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>81.4</td>
<td>78.0</td>
<td>0.703</td>
</tr>
<tr>
<td>Correct action</td>
<td>90.7</td>
<td>80.5</td>
<td>0.181</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>93.2</td>
<td>85.0</td>
<td>0.110</td>
</tr>
<tr>
<td>Space for questions</td>
<td>81.4</td>
<td>78.0</td>
<td>0.703</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>58.1</td>
<td>63.4</td>
<td>0.791</td>
</tr>
<tr>
<td>Health promotion</td>
<td>34.9</td>
<td>31.7</td>
<td>0.758</td>
</tr>
<tr>
<td>Openness to return</td>
<td>76.7</td>
<td>85.0</td>
<td>0.341</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>86.4</td>
<td>78.0</td>
<td>0.119</td>
</tr>
</tbody>
</table>
Table 2.4: Doctors’ views about the effects of using the PtAF compared with control consultations

<table>
<thead>
<tr>
<th>Doctor</th>
<th>A</th>
<th>B</th>
<th>D</th>
<th>E</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient at ease</td>
<td>No</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Doctor at ease</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Increased number of problems</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Increased time</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>More listening</td>
<td>No</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Better assessment</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Better explanation</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>More appropriate action</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>More preventive awareness</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>More satisfaction for both parties</td>
<td>Yes</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2.5: Evaluation of the educational workshop

Table 2.5a: Effects of education (phase 2), compared with consultations before education (phase 1), on number of problems identified (problems) and BTWS - Mann-Whitney U test, mean consultation time (time) and time taken per problem - 2 tailed t test

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Phase 1 (n = 38)</th>
<th>Phase 2 (n = 40)</th>
<th>P value (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of problems:</td>
<td>1.68 (0.82)</td>
<td>2.05 (0.99)</td>
<td>0.091</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTWS : %</td>
<td>5.3</td>
<td>7.5</td>
<td>0.711</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in seconds</td>
<td>511.2 (252.0)</td>
<td>521.3 (212.5)</td>
<td>0.295</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time per problem</td>
<td>348.8 (207.0)</td>
<td>290.7 (151.5)</td>
<td>0.057 (-24.39 to 140.64)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2.5b: Effects of education (phase 2), compared with consultations before education (phase 1), on patients' satisfaction (CSQ) -

**Mann-Whitney U test**

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Phase 1 (n = 38)</th>
<th>Phase 2 (n = 40)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>87.5 (12.1)</td>
<td>87.9 (14.5)</td>
<td>0.306</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>83.9 (10.5)</td>
<td>88.4 (11.7)</td>
<td>0.514</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>75.1 (14.8)</td>
<td>71.9 (16.1)</td>
<td>0.614</td>
</tr>
<tr>
<td>Perceived time</td>
<td>80.8 (11.7)</td>
<td>77.0 (16.3)</td>
<td>0.057</td>
</tr>
</tbody>
</table>
Table 2.5c: Effects of education (phase 2), compared with consultations before education (phase 1), on doctors' satisfaction (DQ) -

Mann-Whitney U test

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Phase 1 (n = 38)</th>
<th>Phase 2 (n = 40)</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct assessment</td>
<td>92.1</td>
<td>90.0</td>
<td>0.747</td>
</tr>
<tr>
<td>Listening</td>
<td>94.7</td>
<td>95.0</td>
<td>0.958</td>
</tr>
<tr>
<td>Understanding</td>
<td>89.2</td>
<td>100.0</td>
<td>0.034</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>89.5</td>
<td>87.2</td>
<td>0.756</td>
</tr>
<tr>
<td>Enough time</td>
<td>97.4</td>
<td>87.5</td>
<td>0.104</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>--------------------------------------</td>
<td>---------</td>
<td>-------</td>
<td>----------</td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>91.9</td>
<td>84.6</td>
<td>0.310</td>
</tr>
<tr>
<td>Correct action</td>
<td>89.5</td>
<td>90.0</td>
<td>0.939</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>83.8</td>
<td>92.5</td>
<td>0.254</td>
</tr>
<tr>
<td>Space for questions</td>
<td>84.2</td>
<td>75.0</td>
<td>0.317</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>47.4</td>
<td>60.0</td>
<td>0.266</td>
</tr>
<tr>
<td>Health promotion</td>
<td>26.3</td>
<td>17.5</td>
<td>0.349</td>
</tr>
<tr>
<td>Openness to return</td>
<td>83.8</td>
<td>95.0</td>
<td>0.109</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>86.8</td>
<td>92.5</td>
<td>0.413</td>
</tr>
</tbody>
</table>
CHAPTER THREE : METHODOLOGY

3.1 : Introduction

Persistent problems with communication between patients and doctors were discussed in chapter one (part one). A new model of the consultation (Middleton 1989) was developed, which focused on the patient’s agenda (Middleton 1991a). It was found that doctors had some negative attitudes towards patients who brought lists (Middleton 1994). The use of a 'list' form was found to be feasible in general practice consultations (Middleton 1995). This form did not succeed in eliciting the patient’s ideas and it was superseded by the PtAF.

The pilot studies (chapter two) suggested that the combination of the PtAF and an educational workshop resulted in doctors identifying more problems with more efficient use of time, although with variable effects on patient’s and doctor’s satisfaction.

In order to investigate whether doctors’ negative perceptions of patients who brought lists were justified, lists brought to consultations were collected and analysed. The patients’ notes were analysed and compared with controls who did not bring lists (chapter four).

Further studies to investigate the effects of the educational workshop (chapters five and six) and the PtAF in a larger group of doctors (chapter six) were designed. These enabled investigation of the content of the patient’s agenda by analysing the responses to the PtAF (chapter seven). The aims and methodology of these studies are described below.
3.2 : Aims and objectives

3.2.1 : Aim 1

To investigate the incidence and characteristics of lists, and the characteristics of patients who bring them in general practice.

3.2.1.1 : OBJECTIVE 1 :

To determine the incidence of lists in practice.

- Hypothesis 1 : The incidence of lists in general practice consultations is at least one in 100 consultations.

Rationale : The perception of the popular medical press about the frequency of lists has been discussed in chapter one (part one - section 1.8, p30).

3.2.1.2 : OBJECTIVE 2 :

To investigate the characteristics of patients who brought lists in practice.

- Hypothesis 2 : Patients who bring lists are more likely to be female, middle aged, middle class and to present with psychological or psychiatric problems.

Rationale : The above characteristics were perceptions of doctors about patients who brought lists (Middleton 1994).

3.2.1.3 : OBJECTIVE 3 :

To investigate the content of lists.

- Hypothesis 3 : Lists contain at least four items.
Rationale: The perception of the popular medical press that lists are long in terms of physical size and number of items (discussed in chapter one, part one - section 1.8, p30).

3.2.2: Aim 2

To develop an educational package to enable doctors to make better use of the PtAF and thus to improve their communication skills.

3.2.2.1: OBJECTIVES 1-6:

To increase the ability of doctors to:

1. understand the concept of the patient’s agenda
2. use the PtAF
3. identify the patient’s agenda
4. work with the patient’s agenda
5. achieve relevant outcomes
6. understand different models of the consultation.

- Hypothesis: The educational workshop will increase doctors’ confidence that they can achieve objectives 1-6.

Rationale: The objectives were based on the content and results of the pilot workshop reported in chapter two (section 2.4, p52).

3.2.3: Aim 3

To investigate the effect of using the PtAF and the effect of the educational workshop on the outcome of consultations in general practice.

3.2.3.1: OBJECTIVE 1:

To investigate the effect of the PtAF on outcomes of the consultation.
• Hypothesis 1 : Use of the PtAF will result in an increased number of problems identified by the doctor.

Rationale : This result was obtained in the pilot study reported in chapter two (section 2.3, p44).

3.2.3.2 : OBJECTIVE 2 :

To investigate the effect of the educational workshop on outcomes of the consultation.

• Hypothesis 2 : After attending the educational workshop the doctor will spend less time per problem.

Rationale : This trend was observed in the pilot study reported in chapter two (section 2.4, p52).

3.2.4 : Aim 4

To investigate the nature of the patient's agenda using the PtAF.

3.2.4.1 : OBJECTIVE 1 :

To investigate the content of the PtAF.

• Hypothesis 1 : A majority of patients (more than 50%) will exhibit ideas underlying the problems on the PtAF.

Rationale : The model of the patient's agenda (Middleton 1991a) postulated the existence of layers of thought underlying the problems. This complexity was confirmed by the pilot study reported in chapter two (section 2.3, p44).
3.3 : Methodology

3.3.1 : Aim 1

3.3.1.1 : OBJECTIVE 1 :

To investigate the incidence of lists.

SETTING: A seven partner group practice of 10,700 patients in an East Midlands market town.

SUBJECTS: Patients of the author's practice who brought written lists to consultations from 11.5.92 to 10.5.93 inclusive.

DESIGN: Prospective survey.

All patients who brought a written list during the study were requested by the doctor during the consultation to surrender it, "for the purpose of research into communication". In all the cases of patients who were unwilling to surrender their lists, the doctors were able to view and make a summary of the lists. The identification details of patients who brought lists were noted by the doctor who was consulting. Typed reminders ("Have you had a list today?") were added to the doctor's list of appointments. The doctors were also reminded by the author at the weekly practice meeting. This resulted in the identification of two additional subjects who brought one list each. The total number of consultations with the doctors during the study period was obtained from the appointment books.

OUTCOME MEASURE: The number of occasions on which lists were brought by patients.

3.3.1.2 : OBJECTIVE 2 :

To investigate the characteristics of patients who brought lists in practice.

SETTING, AND SUBJECTS: As 3.3.1.1 above.
DESIGN: Prospective controlled survey - otherwise as 3.3.1.1 above.

CONTROLS: Patients who attended during the same appointment slot for the same doctor, seven days previously, and who did not bring lists. If no patient attended, or if the patient was under the age of sixteen, replacements were selected by going back a further week. This applied to two patients, who did not attend control appointments and seven children, making a total of nine replacements.

EXCLUSIONS: Children under the age of sixteen (or list written by a parent) and the corresponding controls. Thus, two patients in the study group whose mothers brought lists and the corresponding controls were excluded, four in total, leaving 35 in each of the study and control groups.

OUTCOME MEASURES:

1. Age on 10.5.93.
2. Gender
3. Social class (I-V).
4. Number of consultations (including visits) from 11.5.89 to 10.5.93
5. Number of visits from 11.5.89 to 10.5.93.
6. Diagnostic labels in the case summaries.

ANALYSIS:

Age, number of consultations, number of visits, psychological (psychological and psychiatric) and physical labels in the case notes for the two groups were compared using the Mann-Whitney U test. The other variables were compared using the Chi-square test. Analysis was performed using the SPSS statistical package.
3.3.1.3: OBJECTIVE 3:

To investigate the content of lists in practice.

SETTING, SUBJECTS AND DESIGN: As 3.3.1.1 (p78).

OUTCOME MEASURES:

1. Number of problems identified on the lists.
2. Number of symptoms identified on the lists.
3. Area occupied by the lists (cm²).
4. Categories identified on the lists.

ANALYSIS:

Content analysis (Berelson 1952 and 1971) was used to develop the categories. The data were entered on an Excel spreadsheet.

Content analysis is suitable for the systematic and quantitative description of the manifest part of communication. Therefore it is ideal for the analysis of written data. It involves the development of categories into which the information can comfortably be fitted. These categories are the units of measurement. It is essentially a qualitative method which yields numerical results. These must be interpreted in the light of the subjectivity of the categories. The numerical results are amplified by the use of appropriate examples to illustrate the categories which have been defined. To some extent, the problem with subjectivity can be minimised by careful definition of the categories. This allows the possibility of the results being validated by another investigator (as described in 3.3.4.1, p86). Usually, some categories are derived from existing relevant literature, and extra categories are defined by careful reference to the data. Theoretically derived categories are discarded if not justified by the content of the data (examples of this are given below).

There appears to have been no previous work on the analysis of lists brought to consultations. Therefore two theoretical frameworks relating to the patient’s agenda (Stewart et al 1975, Middleton 1991a) were used to develop categories, in the first
instance. Other categories arose from symptoms or illness labels which appeared on the patient's list or on the PtAF.

Stewart et al (1975) described four reasons for visiting the doctor:

1. Limit of tolerance
2. Limit of anxiety
3. Administrative
4. Ticket of admission.

This framework was discussed in relation to the development of the 'list' form (chapter two - section 2.2, p40). The 'ticket' category had been found not to be useful in the pilot studies, because it was rare for patients to signal on the form that they wished to raise another unspecified issue. It was, therefore discarded as a potential category.

The author has proposed the existence of three layers in the patient's agenda (Middleton 1991a):

1. Problems or issues
2. Underlying ideas
3. Reasoning behind the ideas.

Pilot analysis of PtAFs supported the three layered approach (chapter two - section 2.3, p44). Some broad categories of response emerged from the same source. These were:

1. questions (about diagnosis, treatment, investigation, or prognosis)
2. reporting information (e.g. progress of treatment)
3. expressing opinions (about cause, diagnosis or treatment)
4. commenting on the process of care.
Therefore the initial categories, chosen as a starting point for the analysis, were:
Stewart et al: 1-3
Middleton: 2,3
Pilot data: 1-4 (as in the previous paragraph)
Subdivisions of these categories were defined during systematic analysis of the data.

There was inevitably some overlap between the categories identified. An entry was made for each category which seemed applicable. Examples of the categories were highlighted by recording key words or phrases. Typical examples for each category were chosen. This process was carried out for the non-clinical categories only. The clinical categories were very numerous and examples of the latter were lists of symptoms or descriptions of signs.

3.3.2: Aim 2

3.3.2.1: OBJECTIVES 1-6:

To increase the ability of doctors to: understand the concept of the patient’s agenda; use the PtAF; identify and work with the patient’s agenda; achieve relevant outcomes; understand different models of the consultation.

SUBJECTS: Thirty one GPs who attended the educational workshop. The selection and recruitment of subjects is described under section 3.3.3 below.

DESIGN: Comparison of doctors’ responses to a questionnaire before and after an intervention (an educational workshop - described in chapter five).

QUESTIONNAIRE (Appendix 3): This was developed from one used at a clinical teachers’ workshop which is run regularly at Leicester University Department of General Practice (Preston-Whyte et al 1993). Another source of influence was the package of outcome questionnaires developed by South East Thames Region (Grant et al 1993). Relevant items were derived from objectives 1-6. Responses were on a five point Likert scale (‘strongly agree’ to ‘strongly disagree’).
ANALYSIS: Responses to each item on the questionnaire before and after the workshop were compared using the Mann-Whitney U (Wilcoxon Rank Sum W) test, and the SPSS statistical package.

3.3.3: Aim 3

3.3.3.1: OBJECTIVES 1-2:

To investigate the effect of the PtAF; To investigate the effect of the educational workshop.

SETTING: Group practices and partnerships in a variety of situations (rural to inner city) in Leicestershire and Nottinghamshire.

SUBJECTS AND CONTROLS:
An initial letter about the aims of the study was sent to all GPs on the Leicestershire and Nottinghamshire Health Authority lists. A second letter giving details was sent to all those who expressed interest. Respondents to the second letter were stratified in terms of gender and possession of the MRCGP diploma, giving four categories. Within each category doctors were allocated randomly to control or study conditions. Doctors were selected randomly for the control and study groups, preserving a similar proportion of the four categories as existed in the stratified sample. Final recruitment was carried out by telephone. Replacements were needed for doctors who were unavailable during the three weeks of the study, also for those who dropped out in the preceding weeks. These were selected randomly from the equivalent category and group (e.g. female, non-MRCGP, control). A table of random numbers was used. As an insurance against unexpected late drop-outs, more doctors were recruited than needed. The result was a study group of 31 doctors and 15 controls.
DESIGN: Prospective, non-blind, randomised, controlled trial.

This is shown in figure 3.1 (p92). The study was divided into two phases, taking place over three weeks in November 1995. In the first phase (week one), appointment slots in a consultation session for each doctor were allocated randomly to PtAF or non-PtAF categories, using a table of random numbers. When the patient called at the desk or telephoned, the appointment was allocated "blind", that is the receptionist could not see which category was applicable. When the appointment was made the receptionist turned over a card, which identified the category, and gave the appropriate instructions.

All patients were told that "they were in a survey" when booking the appointment and were given an information sheet on arrival. PtAF patients were asked to think of their list of concerns, to bring spectacles or an interpreter if needed, and to come five minutes early in order to complete the PtAF. Patients were asked to hand the form to the doctor on entering the consulting room. All patients were advised that they would be asked to complete a satisfaction form after the consultation.

Between the two phases (week two), the study doctors attended the educational workshop (chapter five). Control doctors did not attend the workshop. The procedure for the second phase (week three) was similar to that of phase one. One member of staff in each participating practice was recruited to supervise the administration of the study.

OUTCOME MEASURES:

1. number of problems identified by the doctor.
2. time per consultation in seconds - measured by the doctor with a stop watch, stopped for interruptions.
3. time per problem in seconds - derived from 1 and 2.
4. CSQ: patient's satisfaction (Baker 1990 - appendix four) - completed by the patient after the consultation and placed in a box on the reception desk.
5. DQ: doctor's satisfaction (Rashid et al 1989) - completed by the doctor after the consultation.
6. Incidence of BTWS (defined in chapter two - section 2.3, p44) - recorded by the doctor.

Outcome measures 1, 2, 5 and 6 were combined in a doctor’s encounter form (appendix five).

POWER:

The following calculations used figures for time per problem (seconds) from the second and third pilot studies reported in chapter two. In the absence of data, figures for the ‘educated no list’ category were assumed to lie mid way between the ‘no list’ category in the second pilot study and the ‘not educated list’ category in the third pilot (table 3.1, p87). For a test at the 95% level with 90% power, the numbers needed in each group can be calculated using the formula (Armitage and Berry 1994):

\[
n = \left( \frac{za + zb}{s/d} \right)^2,
\]

where \(z = d/S.E.diff\), \(s^2 = s1^2 + s2^2\) and \(d = m1-m2\) (S.E.diff = standard error of the difference, \(s =\) standard deviation, \(m =\) mean, \(1\) and \(2\) are the groups being compared, \(a =\) level of significance and \(b =\) power). Numbers for comparison are shown in table 3.2 (p91).

The effect of the list system is shown by EL v ENL and the effect of education by EL v NEL (figure 3.1, p92). This required a control group of 15, and a study group of 30 doctors. Each doctor had to carry out eight consultations in each of the groups, except that the control doctors were involved in sixteen consultations per group in the second phase of the study (groups NEL and NENL).

ANALYSIS:

Parametric (consultation time, time per problem): Two tailed t test.

Non-parametric (number of problems, patient’s satisfaction, doctor’s satisfaction, doctor age, BTWS): Mann-Whitney U (Wilcoxon Rank Sum) test; doctor/practice factors: Chi - square test.
Three or more factors: ANOVA.

All of the above tests were carried out using the SPSS statistical package.

3.3.4: Aim 4

3.3.4.1: OBJECTIVE 1:

To investigate the content of the PtAF

SUBJECTS: As 3.3.3.1(p83) - PtAF category.

DESIGN AND SETTING: As 3.3.3.1(p83). The PtAF was handed to the doctor during the consultation.

OUTCOME MEASURES:

1. Frequency of responses to questions 1-4 on the PtAF.
2. Categories of response on the PtAF.

ANALYSIS:

1. Frequency of responses to questions.

The presence of responses to questions 1-3 and the `other` category in question 4 were scored. `Yes` responses were scored for the individual components of question four (prescribe, explain, investigate or write note). A positive score for question four overall was recorded if any of the `yes` categories were circled or if there was a response to the `other` category. This analysis was piloted in the feasibility study described in chapter two (section 2.3, p44).

2. Content analysis - as described in 3.3.1.3 (pp80-82). The initial categories were also informed by those identified on patients` lists in chapter four (table 4.3, p103).
Requests and symptoms from the patients' lists were added to the previous list of categories, derived from theoretical models and PtAF analysis in chapter two.

A pilot analysis of 100 PtAFs was carried out, with the purpose of developing and refining the categories already identified. No new broad groups emerged as a result. A number of subdivisions were identified (for example: 'commenting about communication', 'reporting information about own situation'). The subdivisions are detailed in chapter seven. An estimate of the number of separate issues or problems was made for each form.

INTER-RATER AND INTRA-RATER COMPARISONS:

A sample of 100 forms was scored by a social science graduate engaged in research in the field of discourse analysis at the University of Loughborough. The latter was provided with definitions of the main non-clinical categories. A measure of inter-rater reliability was obtained by comparing the scores for each category on individual forms with those relating to the same sample from the data set. The same forms were then re-scored by the author to provide a measure of intra-rater reliability.

The appropriate measure of overall agreement for nominal data (Posner et al 1990) is known as Kappa ($K$) (Cohen 1960). Cohen (1960) stated that the Kappa coefficient is directly interpretable as the proportion of joint judgements in which there is agreement, after chance agreement has been excluded. Its upper limit is +1.00, and its lower limit falls between zero and -1.00, depending on the distribution of judgements by the two judges. The lower limit of Kappa will approach zero as the number of ratings per subject increases (Posner et al 1990).

The formula for calculating Kappa is given by Altman (1991): $K = \frac{Po - Pe}{1 - Pe}$, where $Po$ is the observed proportional agreement and $Pe$ is the expected proportion of agreements by chance.

Kappa statistics are often seen in the context of reliability studies designed to assess the reproducibility of measuring devices, in this case human raters (Davies and Fliess 1982).
Altman (1991) gives the following scale for interpreting a value of Kappa:

<table>
<thead>
<tr>
<th>Value of Kappa</th>
<th>Strength of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt; 0.20</td>
<td>Poor</td>
</tr>
<tr>
<td>0.21 - 0.40</td>
<td>Fair</td>
</tr>
<tr>
<td>0.41 - 0.60</td>
<td>Moderate</td>
</tr>
<tr>
<td>0.61 - 0.80</td>
<td>Good</td>
</tr>
<tr>
<td>0.81 - 1.00</td>
<td>Very Good</td>
</tr>
</tbody>
</table>

DATA MANAGEMENT:

For both the frequency and content analyses, the data were entered onto a spreadsheet. The number of entries (and percentage of the total number of forms) for each category was calculated. The mean, median and standard deviation of the number of problems per form was also calculated, using the Excel statistical function.

3.4 : Summary

The findings of the literature review (chapter one) and the pilot studies (chapter two) led to the formulation of four main aims and twelve objectives. The methodology relating to each objective was described. Results of the studies designed to address aims 1-4 are discussed in chapters 4-7 respectively.
3.5: Tables 3.1 to 3.2 and figure 3.1
### Table 3.1: Time taken per problem in seconds (from the pilot studies) - used as a basis for the power calculation (Aim 3)

<table>
<thead>
<tr>
<th>Group</th>
<th>Unit of measurement = Consultation</th>
<th>Unit of measurement = Doctor</th>
</tr>
</thead>
<tbody>
<tr>
<td>'List' = PtAF</td>
<td></td>
<td></td>
</tr>
<tr>
<td>List (L)</td>
<td>365 (219)</td>
<td>365 (91)</td>
</tr>
<tr>
<td>No list (NL)</td>
<td>352 (220)</td>
<td>352 (92)</td>
</tr>
<tr>
<td>Doctor educated - list (EL)</td>
<td>291 (152)</td>
<td>292 (52)</td>
</tr>
<tr>
<td>Doctor educated - no list (ENL)</td>
<td>350 (220)</td>
<td>354 (91)</td>
</tr>
<tr>
<td>Doctor not educated - list (NEL)</td>
<td>349 (207)</td>
<td>353 (50)</td>
</tr>
</tbody>
</table>
Table 3.2: Results of power calculation for Aim 3

<table>
<thead>
<tr>
<th>Comparison</th>
<th>Number of consultations needed</th>
<th>Number of doctors needed</th>
</tr>
</thead>
<tbody>
<tr>
<td>EL v ENL</td>
<td>214</td>
<td>30</td>
</tr>
<tr>
<td>(educated list v educated no list)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EL v NEL</td>
<td>206</td>
<td>15</td>
</tr>
<tr>
<td>(educated list v not educated list)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Figure 3.1: Design of the main study

<table>
<thead>
<tr>
<th>Control Doctors</th>
<th>Study Doctors</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>15</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

#### Phase 1 (720 Consultations)

<table>
<thead>
<tr>
<th>No List (CNL)</th>
<th>List (CL)</th>
<th>List (SL)</th>
<th>No List (SNL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>120 patients</td>
<td>120 patients</td>
<td>240 patients</td>
<td>240 patients</td>
</tr>
</tbody>
</table>

**Educational Workshop**

#### Phase 2 (960 Consultations)

<table>
<thead>
<tr>
<th>DR Not Educ</th>
<th>DR Not Educ</th>
<th>DR Educ</th>
<th>DR Educ</th>
</tr>
</thead>
<tbody>
<tr>
<td>No List (NENL)</td>
<td>List (NEL)</td>
<td>List (EL)</td>
<td>No List (ENL)</td>
</tr>
<tr>
<td>240 patients</td>
<td>240 patients</td>
<td>240 patients</td>
<td>240 patients</td>
</tr>
</tbody>
</table>

**Total 1680 Consultations**
CHAPTER FOUR : PATIENTS AND THEIR LISTS

4.1 : Introduction

Doctors' attitudes to lists and patients who bring them have previously been explored (Middleton 1994). An investigation of the incidence of lists in one practice was conducted. The lists were analysed and the characteristics of the patients who brought them were compared with doctors' perceptions that these patients are more likely to be "female, middle aged, middle class and neurotic" (Middleton 1994). Aims (3.2 : Aim 1, p75) and methodology (3.3 : Objectives 1-3, p78) were described in chapter three.

4.2 : The incidence of lists

OBJECTIVE 1 : To investigate the incidence of lists in practice.

HYPOTHESIS 1 : The incidence of lists in general practice consultations is at least one in 100 consultations.

Results

43 lists were collected from 38,340 consultations in the study period (0.1% of consultations per annum). Two of these were obtained by reminders at the weekly practice meetings. It is not known whether the reminders printed on the doctors' surgery lists resulted in any extra lists being identified.

4.3 : Patients who brought lists in practice

OBJECTIVE 2 : To investigate the characteristics of patients who brought lists in practice.

HYPOTHESIS 2 : Patients who bring lists are more likely to be female, middle aged, middle class and to present with psychological or psychiatric problems.
Results

37 patients (0.4%) brought lists to consultations during the twelve months of the study. Two of these were excluded from the analysis because they were parents presenting children. There were no significant differences between patients who brought lists and controls in age, civil state, gender, social class, number of consultations, or visits (table 4.1a-c, pp99-101). However, list patients were more likely to have physical labels in their case notes (296 cf 217, P = 0.015 - table 4.2, p102). There was also a non-significant trend towards more psychological labels in the notes of list patients (59 cf 34).

4.4 : The content of lists

OBJECTIVE 3 : To investigate the content of lists.

HYPOTHESIS 3 : Lists contain four items or more.

Results

43 lists were brought by patients and 32 were surrendered to the doctors. Eleven of the lists were not surrendered, but nine of these were viewed and summarised by the doctors. The remaining two lists were not viewed directly, but the doctors were able to elicit the items during the consultation. Four of the lists were partly illegible, including two which had been written by doctors. These lists were brought by 37 patients. One patient had written five lists, of which two were for himself and three were for his wife. One patient brought three lists and three patients brought two. 29 patients brought a list on one occasion. Two of these lists had been written by mothers presenting a child at the consultation.

Of the 32 lists surrendered by patients, 28 were written on a piece of scrap paper and four were written on postcards. The mean area of the lists was 137.0 sq.cm., which is approximately the size of a standard postcard.
The mean number of items in 43 lists was 4.8 (median/mode 4, range 1-9). The mean number of symptoms in 37 lists was 3.2 (median/mode 3, range 1-7). It was possible to identify a format or style in 36 of the lists. This was not possible in seven of the lists which had been written by doctors, as the format had been altered by being summarised.

Fifteen lists contained unstructured prose:

e.g. “SERC - took for about 3 days. HEADACHES so stopped. Took Panadol for headaches - NO MORE DIZZINESS. Shoulders and neck - chiropractor. Letter from hospital”.

Eight lists contained numbered categories:

e.g. “1. Hospital 2. Which pill.....3. Pepcid - how long?”

Seven lists contained a list of words or phrases:

e.g. “Canesten, insulin, arm, mosquitoes, Period tab, E111”.

Four lists were letters written to the doctor. One list was a diary of events and one had labelled categories rather than numbers. The categories identified on the lists are shown in table 4.3 (p103).

4.5: Discussion

Hypothesis one stated that the incidence of lists is at least one in a hundred consultations. However, the observed incidence of lists in this study was approximately one in a thousand, brought by four in a thousand of the practice population. Thus, lists appear to be far from common.
Hypothesis two stated that patients who bring lists are more likely to be female, middle aged, middle class and to present with psychological or psychiatric conditions. However, list patients were not significantly different from controls except that they had more physical labels in their case notes than did the controls. The increased trend towards psychological labels was not significant. These findings did not support the views of Leicestershire trainers.

Hypothesis three stated that lists would contain more than three items. The mean number of items per list was nearly five, which appears to confirm the perceptions of long lists in the popular medical press. This is more than twice the figure found using 'list' forms (Middleton 1995). However, most of these items are accounted for by symptoms which might be able to be rationalised by the doctor. Since the case notes of list patients contained an excess of all labels, it could be argued that patients with more items to remember may be more likely to write them down.

The lists were physically small (in contrast with the perception of the popular medical press) and a majority showed evidence of organisation. They were not just lists of problems but included specific requests, reported information and offered opinions. With two exceptions, the doctors were able to view the lists and the majority of patients were prepared to surrender them.

One of the problems with the study is the small number of lists found, which makes it necessary to exercise caution in generalising from the findings to other practice populations. It could be argued that lists were missed by the doctors, and that those collected are unrepresentative of all the lists available. However, the dual system of reminders to the doctors was intended to minimise the likelihood of lists being missed. Also, the incidence of one in a thousand consultations is similar to that found in the study reported in chapter seven. Another problem is that the study was carried out in one practice only. Moreover, the lists were collected by the author and his partners. This raises the possibility that the behaviour of this particular practice population, perhaps influenced by the views of the doctors on lists, is very different from the population at large.

Bearing these limitations in mind, these findings run contrary to the opinions of Leicestershire trainers and the popular medical press about lists and the patients
who bring them. The one exception to this is the increased number of items on lists, compared with consultations using either the list form or the PtAF.
4.6: Tables 4.1 to 4.3
Table 4.1a: Patients who brought lists, compared with controls - age and consulting rate (Mann-Whitney U test)

<table>
<thead>
<tr>
<th>Study</th>
<th>Control</th>
<th>Probability - 2 tailed</th>
</tr>
</thead>
<tbody>
<tr>
<td>n = 35</td>
<td>n = 35</td>
<td>(z, kurtosis, skewness)</td>
</tr>
<tr>
<td>Age:</td>
<td>Mean (SD)</td>
<td>53.3 (20.2)</td>
</tr>
<tr>
<td></td>
<td>(-1.04, -1.45, -0.09)</td>
<td></td>
</tr>
<tr>
<td>No of consultations:</td>
<td>Mean (SD)</td>
<td>31.3 (18.6)</td>
</tr>
<tr>
<td></td>
<td>(-1.23, -0.85, 0.40)</td>
<td></td>
</tr>
<tr>
<td>No of visits:</td>
<td>Mean (SD)</td>
<td>1.5 (3.0)</td>
</tr>
<tr>
<td></td>
<td>(-0.62, 11.77, 3.14)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 4.1b: Patients who brought lists, compared with controls - civil state and gender (Chi-square test)

<table>
<thead>
<tr>
<th>Civil state</th>
<th>Study n = 35</th>
<th>Control n = 35</th>
<th>Probability (chi²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>4</td>
<td>6</td>
<td>Married v single</td>
</tr>
<tr>
<td>Married</td>
<td>17</td>
<td>12</td>
<td>0.30 (1.26) - 1df</td>
</tr>
<tr>
<td>Widowed</td>
<td>2</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>1</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Unspecified</td>
<td>11</td>
<td>11</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>10</td>
<td>16</td>
<td>0.20 (1.82) - 1df</td>
</tr>
<tr>
<td>Female</td>
<td>25</td>
<td>19</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.1c: Patients who brought lists, compared with controls - social class (Chi-square test)

<table>
<thead>
<tr>
<th>Social class</th>
<th>Study n = 35</th>
<th>Control n = 35</th>
<th>Probability (chi²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>1</td>
<td>6</td>
<td>(I + II) v (III + IV + V)</td>
</tr>
<tr>
<td>II</td>
<td>10</td>
<td>7</td>
<td>0.70 (0.24) - 1df</td>
</tr>
<tr>
<td>III</td>
<td>22</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>IV</td>
<td>2</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>V</td>
<td>0</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>I + II</td>
<td>11</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>III + IV + V</td>
<td>24</td>
<td>22</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.2: Comparison of the number of psychological and physical labels from the notes of patients who brought lists and controls (Mann-Whitney U test)

<table>
<thead>
<tr>
<th>Number of labels</th>
<th>Study (n = 35)</th>
<th>Control (n = 35)</th>
<th>Probability - 2 tailed (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychological:</td>
<td>59</td>
<td>34</td>
<td>0.073 (-1.794)</td>
</tr>
<tr>
<td>(mean, median, SD)</td>
<td>(1.69, 2.00, 1.76)</td>
<td>(1.00, 0, 1.37)</td>
<td></td>
</tr>
<tr>
<td>Physical:</td>
<td>296</td>
<td>217</td>
<td>0.015 (-2.432)</td>
</tr>
<tr>
<td>(mean, median, SD)</td>
<td>(8.71, 8.00, 4.03)</td>
<td>(6.20, 5.00, 3.89)</td>
<td></td>
</tr>
</tbody>
</table>
Table 4.3: Content of lists (frequencies of categories appearing more than once are given in brackets)

SYMPTOMS (37) - reported verbatim: Pain (19), Tired (8), Headache, Rash (7 each), Dizzy (6), Bleeding, Lump, Indigestion (4 each), Sleep problem, Feeling sick, Swelling, Spot, Hot & cold (3 each), Cough, Frightened of crowded places, Itch, Sore eyes, Blocked nose, Strong urine, Bad taste, Feeling cold, Blurred vision (2 each).

REQUEST ABOUT MEDICATION (26): Repeat prescription (22), Modify repeat script (3).

QUESTIONS (20).

REPORTING INFORMATION (17): Progress of condition (11), Self medication (5), Stressful episode (2).

OFFERING OPINION (12): Thrush (2), Rheumatic (2).

OTHER REQUEST (11): Examination (6), Referral (5).
CHAPTER FIVE : EDUCATIONAL WORKSHOP

5.1 : Introduction

The educational workshop was based on the pilot described in chapter two (section 2.4, p52), but expanded from two hours to a whole working day. To encourage attendance, approval for the Postgraduate Education Allowance (PGEA) for six hours was secured and the workshop was held in an hotel close to the Nottinghamshire/Leicestershire borders, avoiding holiday periods, so that it was as convenient as possible for all participants. Aims (3.2 : Aim 2, p76) and methodology of evaluation (3.3 : objectives 1-6, p78) were described in chapter three. The workshop was used as an intervention in the study which is reported in chapter six.

5.2 : The workshop

The workshop was designed with reference to the following principles :-

(i) practice with and feedback from simulated patients (Rashid et al 1994)

(ii) microteaching (Varnam 1993)

(iii) adult learning in a postgraduate context (Schon 1987, Middleton 1990b)

Thus the workshop was designed to enable all the participants to practise each of the three phases (described in chapter two, section 2.4, p52) with simulated patients in small groups, in a safe environment.

31 GPs participated in two groups of ten and one of eleven. Each group had a similar mix of genders, doctors with and without MRCGP, and doctors from Leicestershire and Nottinghamshire. A facilitator was chosen from each group by prior agreement. The three facilitators all had previous experience of leading group work with GPs.

An introduction to the day was given by the author, with the aid of overheads and handouts. The talk covered the agenda model in relation to other models of the consultation, reasons why patients consult, the background to the development of
simulated patients and the three phases of the workshop. Following this, the day was divided into four sessions. One group session was allocated to each of the three phases, with a final session allocated to the complete consultation incorporating all three. In this respect, the workshop differed from the one in the pilot study where all the phases were compressed into two hours. Each of the phases comprises a small sequence of behaviour, suitable for practice with immediate feedback.

Another difference was that a demonstration video was used in the group work. This showed a simulated consultation which was designed to demonstrate the desired behaviours in each phase of the consultation. The following structure was used in the small group sessions:

(i) video demonstration
(ii) doctor consults with simulated patient
(iii) doctor gives feedback on own performance
(iv) feedback from the rest of the group
(v) feedback from the simulated patient
(vi) repeat the sequence with different doctors.

Pendleton's rules (Pendleton et al 1984) were used in order to ensure that feedback was constructive. The facilitators were provided with written instructions for each session so that the tasks and procedures were clear, including the need to stop the consultations when the relevant phase(s) for that session had been completed. During the group sessions, the author circulated between the three groups in order to clear up any remaining queries about the procedures.

The simulated patients offered three roles each and changed groups after each session in order to allow every doctor to experience as many as possible of the nine roles available. The structure of the day is summarised below:

Introduction to the workshop
Session 1 : Receiving and understanding the information (phase 1. Page 52)
Session 2 : Agreeing a plan of management (phase 2, p53)
Session 3 : Checking completion of the plan (phase 3, p54)
Session 4 : The complete consultation (phases 1-3, pp52-54).
5.3 : Evaluation

OBJECTIVES 1-6: To increase the ability of doctors to: understand the concept of the patient's agenda; use the PtAF with confidence; identify the patient's agenda accurately; work with the patient's agenda effectively; achieve relevant outcomes; understand different models of the consultation.

HYPOTHESIS: The educational workshop will increase doctors' confidence that they can achieve objectives 1-6.

Participants completed a questionnaire (chapter three, section 3.3.2, p82) immediately before and after the workshop. The workshop was also evaluated by outcome measures of consultations. This is discussed in chapter six.

Results

Of the 31 participants, 26 (84%) completed the pre-course questionnaire and 30 (97%) completed the post-course questionnaire. There was a positive shift from the pre-course to the post-course questionnaire in response to all questions (table 5.1, p109). All the shifts were statistically significant except for question five. Written comments from the doctors are shown in table 5.2 (p110).

5.4 Discussion

Participants reported increased confidence in their ability to understand the concept of the patient's agenda, to use the PtAF, to identify the patient's agenda accurately, to work with the patient's agenda effectively and to understand different models of the consultation. Although there was no change in their perception of their ability to achieve the outcomes of the consultation, participants believed that they had achieved the educational goals.

Although the questionnaire was derived from an existing instrument (Preston-Whyte et al 1993) the reliability had not been examined. Question five may have been poorly worded. 'Outcomes of the consultation' is a phrase which appears to include
a number of possible components, for example patients' and doctors' satisfaction or symptom resolution, which might have been the subjects of separate questions. Some of these were measured in the study reported in chapter six. However, it is not clear whether the participants understood that these outcomes were the ones meant or whether they interpreted 'outcomes' in a broader sense.

It has been demonstrated in chapter one that problems with identifying the patient's agenda were identified twenty years ago (Byrne and Long 1976). Moreover, the patient's ideas, concerns and expectations have been highlighted more than a decade ago (Pendleton et al 1984), and the concepts have been embedded in the fabric of vocational training. Therefore, it could be argued that the patient's agenda is a low educational priority for established doctors, especially those who have been vocationally trained. Nevertheless, the low pre-course score and subsequent improvement on the question about consultation theory suggests that either the theoretical lessons of vocational training may have faded in this area or they were ineffective in the first place. There is also the question of whether or not addressing the patient's agenda is a practical proposition for doctors. In the first place, there may have been a relative lack of training in skills as opposed to theory about the consultation. Secondly, increasing pressures on doctors' time may detract from their ability to engage with the patient's agenda.

Written comments were generally positive. One doctor (1) expressed surprise at getting so much out of a session on the consultation. The opportunity for learning from peers was highlighted by another doctor (6), and this was a conscious feature of the design of the workshop. The comment about confusion in the first two sessions may reflect initial reaction to unfamiliar techniques (7). One of the comments (4) was ambiguous and could be interpreted as either 'I know it all already' or 'Is it too late for me to change?'.

The responses to the questionnaires were the perceptions of the doctors. They do not necessarily reflect objective performance. However, measures of performance, before and after the educational workshop are discussed in chapter six.
5.5: Tables 5.1 to 5.2
<table>
<thead>
<tr>
<th>Doctor's confidence in:</th>
<th>Before (n = 26) mean (median, range)</th>
<th>After (n = 30) mean (median, range)</th>
<th>2 tailed P Mann-Whitney U (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Understanding agenda</td>
<td>3.2 (3, 2-5)</td>
<td>4.3 (4, 2-5)</td>
<td>&lt; 0.00001 (-1.55)</td>
</tr>
<tr>
<td>2. Using the PtAF</td>
<td>3.3 (3.5, 2-5)</td>
<td>4.2 (4, 3-5)</td>
<td>0.0002 (-3.67)</td>
</tr>
<tr>
<td>3. Identifying agenda</td>
<td>3.7 (4, 2-5)</td>
<td>4.1 (4, 3-5)</td>
<td>0.0225 (-2.28)</td>
</tr>
<tr>
<td>4. Using agenda</td>
<td>3.4 (4, 1-5)</td>
<td>4.2 (4, 3-5)</td>
<td>0.0014 (-3.20)</td>
</tr>
<tr>
<td>5. Achieving outcomes</td>
<td>3.7 (4, 3-5)</td>
<td>3.9 (4, 3-5)</td>
<td>0.3346 (-0.96)</td>
</tr>
<tr>
<td>6. Understanding models</td>
<td>3.2 (3, 1-5)</td>
<td>3.8 (4, 2-5)</td>
<td>0.0343 (-2.12)</td>
</tr>
</tbody>
</table>
Table 5.2: Written comments of workshop participants

All the comments on the questionnaires are listed below:

1. "I am surprisingly stimulated into learning more about consultation theory/technique."

2. "A good session! V. enjoyable."

3. "A thoroughly enjoyable learning experience!"

4. "Good exercise - particularly useful for younger GPs."

5. "I would like to do this again"

6. "It was worthwhile learning re: consulting skills and opinions (and ploys!) from other GPs."

7. "I was 1/2 hr late so rather confused at the start. Although it seemed that the whole group was confused re: phase 1+2 especially, we improved our understanding after JM paid us a visit."

8. "Would have been helpful to have timetable for the day sent before the day."
CHAPTER SIX : RANDOMISED CONTROLLED TRIAL OF THE EFFECTS OF THE PtAF AND OF THE EDUCATIONAL WORKSHOP ON OUTCOMES OF THE CONSULTATION

6.1 : Introduction

Pilot studies on the PtAF (2.3, p44) and educational workshop (2.4, p52) were reported in chapter two. A multipractice study was needed to test the generalisability of the previous findings. The aims (3.2 : Aim 3, p76) and methodology (3.3 : Objectives 1 and 2, p78) were described in chapter three.

OBJECTIVE 1 : To investigate the effect of the PtAF.

HYPOTHESIS 1 : Use of the PtAF will result in an increased number of problems identified by the doctor.

OBJECTIVE 2 : To investigate the effect of the educational workshop.

HYPOTHESIS 2 : After attending the educational workshop the doctor will spend less time on each problem identified.

6.2 : Results

6.2.1 : Response rates

187 (15.2% of 1230) doctors responded to an initial letter. 103 (8.4%), from which the sample of 46 was drawn, responded to a second letter (see chapter three - section 3.3.3.1, p83). There were 15 `control` and 31 `study` doctors giving 1712 appointments in total. 16 of these, eight `list` and eight `no list`, from one of the `study` doctors in phase two, were excluded because the packet containing the outcome forms was lost in the post. This left a total of 1696 appointments.
The rates of non-attendance of 1696 appointments were 5.1% overall, 4.4% (of 848) for `list`, 4.7% (of 848) for `no list` and 0.5% for appointments whose category was unspecified.

Response rates to the outcome measures from the total of 1619 consultations attended were as follows: number of problems 94.0%, time 94.3%, BTW 93.4%, DQ 94.3% (lowest was explanation of treatment - 93.5%) and CSQ 90.9% (lowest was perceived time - 90.5%).

6.2.2: Doctors, practices and patients

After stratification for gender and possession or non possession of the MRCGP, there were no significant differences between the study and control groups in terms of doctor and practice characteristics table 6.1 (a-b, pp121-122). In 190 (11%) of the consultations, children were presented by adults (104 `list`, 86 `no list`: chi² = 1.705, P = 0.192).

6.2.3: Introduction to the analysis

The data are complex. They will be presented firstly as an analysis of variance (ANOVA) which examines the effects of the major factors: `list` (PtAF), `study` (educational workshop) and `delay` (time elapsed between phases one and two). Then the individual comparisons within and between phases and arms of the trial (figure one) will be presented to further explore the effects seen in the ANOVA. The data are summarised in table 6.9 (a-c, pp142-144) and study design with group labels shown in figure 6.1 (p145).

6.2.4: ANOVA

The influences of `list`, `study` and `delay` on the number of problems, time, time per problem and responses to the CSQ in the whole data set were compared using ANOVA. `Delay` was not found to have a significant influence (P > 0.05). Therefore the ANOVA was repeated for `list` and `study` alone. There were no significant effects of either factor on time per problem, perceived professional care or perceived time (P > 0.05). The figures for other outcome measures are shown in table 6.2.
These show independent effects of 'list' and 'study' on number of problems identified (P < 0.0001) and consultation time (P < 0.0001; P = 0.007), also of 'list' on patients' general satisfaction (P = 0.047) and patients' perceived depth of relationship (P = 0.01).

Since the power calculation was based on the outcome 'time per problem' in the pilot studies, and since no significant differences were found in this study, a retrospective power calculation was done. The standard errors of the differences between the groups EL and ENL, and between EL and NEL were 15.42 and 14.54 respectively. Using the standard deviations for each group (tables 6.4a and 6.5a, pp127,130) and the formula quoted in chapter three (p85), in each case this gives a power of 95% at the 0.05 significance level.

6.2.5: Comparisons within phase one

These baseline comparisons are of outcome measures relating to study and control group doctors, and to 'list' (PtAF) and 'no list' (no PtAF).

Table 6.3 (a-c app124-126) compares the baseline consultations of study and control doctors. Patients perceived that the depth of relationship was higher (76.9% cf 74.6%; P = 0.023) and doctors perceived that the patients were more at ease (86.3% cf 80.4%; P = 0.001) in the study group.

Table 6.4 (a-c pp127-129) compares baseline consultations with and without the PtAF. Doctors identified more problems (2.09 cf 1.87; P = 0.008) in more time (516.6 cf 473.0 seconds; P = 0.021) and were more likely to deliver health promotion advice (35.6% cf 28.0%; P = 0.03), using the PtAF. Also patients were more satisfied (85.0% cf 83.1%; P = 0.03) with these consultations.
6.2.6: Comparisons of phase two with phase one

These comparisons are concerned with the effect of 'delay' or the passage of time from phase one to phase two. The educational workshop, attended by only the study doctors between the two phases, is an additional factor.

In the control groups using the PtAF (CL v NEL), the doctors felt that patients were more at ease (79.8% cf 87.8%; P = 0.0038) and that there was increased openness for patients to return (78.2% cf 85.7%; P = 0.0173) in phase two compared with phase one. Otherwise, there were no significant differences between the equivalent groups (CNL v NENL, SL v EL, SNL v ENL) in the two phases of the study.

In both of the control groups combined (CL+CNL v NEL+NENL), there were less problems identified in phase two compared with phase one (1.76 cf 1.90; P = 0.0203). There were no significant differences in the equivalent combined groups in the study arm (SL+SNL v EL+ENL).

6.2.7: Comparisons within phase two

These include comparisons of the consultation outcomes of 'study' doctors (those who had attended the educational workshop) and 'control' doctors (who had not attended the workshop), also outcomes of 'list' (PtAF) and 'no list' (no PtAF) consultations for 'study' and 'control' doctors separately.

Table 6.5 (a-c pp130-132) compares consultations of 'study' and 'control' doctors using the PtAF (EL v NEL). 'Study' doctors identified more problems (2.17 cf 1.87; P = 0.001) in more time (540.0 cf 485.8 seconds; P = 0.022) and felt that they had more understanding of the patients' problems (94.1% cf 89.5%; P = 0.04).

Table 6.6 (a-c pp133-135) compares the same groups without the PtAF (ENL v NENL). Again, the 'study' doctors identified more problems (1.98 cf 1.65; P = 0.0001) and also felt that they were more likely to have given opportunities for patients to express feelings (76.3% cf 67.8%; P = 0.004). The difference in consultation time failed to reach significance (468.7 cf 431.1 seconds; P = 0.052).
Table 6.7 (a-c pp136-138) compares outcomes of consultations of "study" doctors with and without the PtAF (EL v ENL). The PtAF was associated with longer consultations (540.0 cf 468.7 seconds; P = 0.001) but the doctors felt that they had less understanding (94.1% cf 96.3%; P = 0.014). However, there was no difference in the number of problems identified (2.17 cf 1.98; P = 0.126).

Table 6.8 (a-c pp139 -1414) compares consultation outcomes of "control" doctors with and without the PtAF (NEL v NENL). The PtAF was associated with more problems being identified (1.87 cf 1.65; P = 0.038) in more time (485.5 cf 431.1 seconds; P = 0.01). Patients perceived a greater depth of relationship (77.2% cf 74.1%; P = 0.024) and doctors felt that they had allowed more time for patients to express feelings (74.7% cf 67.8%; P = 0.049), though the doctors felt more short of time (84.4% cf 90.5%; P = 0.029).

6.3 : Discussion

The main findings emerged from the ANOVA (table 6.2, p123) which demonstrated independent effects associated with both the PtAF and the educational workshop on increased numbers of problems (P = 0.0001) in proportionately increased time (P = 0.0001 and 0.007). The PtAF was also associated with increased scores in two components out of four in the patient's questionnaire (CSQ) which just reached conventional levels of significance (P < 0.05).

There are a number of consistent themes in the results. The PtAF and the educational workshop were each associated with increased numbers of problems identified and longer consultations. However, the time taken per problem did not change. Changes in the doctor and patient satisfaction measures were not consistent. There was no effect of delay from phase one to two, suggesting that the "control" doctors did not learn by the experience of taking part in phase one. There was also no difference between the two phases for the "study" doctors who took part in the educational workshop. It could be explained by extraneous effects, such as changes in incidence of infective illness in the community or media stories (like the 'pill scare') which may have occurred during the interval between the two phases of the study. For example, there may have been less problems to have been identified during the time of phase two. This explanation receives support from the reduction in
the number of problems in the control arm from phase one to two. It could be argued that the lack of an equivalent change in the study arm is explained by the effect of education in increasing the number of problems identified. Nevertheless, the effect of education emerges more clearly in the comparisons within phase two. 'Study' doctors identified more problems than 'control' doctors with and without the PtAF (and took longer, whilst feeling that they had less understanding with the PtAF). Using the PtAF made no difference to the number of problems identified by 'study' doctors. This suggests that the effects of the PtAF and the workshop were not additive. The doctors who had attended the educational workshop not only did not need to use the PtAF, but they may even have been hindered by it.

There are several problems to address. Firstly, caution should be exercised in generalising from this study, although the practices were in a variety of areas, ranging from inner city to rural and two health authorities were involved. However, it would not have been possible to have conducted the study without a substantial commitment from motivated doctors and their practice staff.

Secondly, the trial was non-blind. For example, the 'study' doctors knew beforehand that they were going to attend a workshop and this may have altered their behaviour in phase one. Similarly, the knowledge that the PtAF was designed to facilitate the doctors to address the patient's agenda may have altered the doctor's behaviour in consultations without the PtAF.

Thirdly, there is the question of the effect of multiple outcome measurements on the significance of tests. The extensive development of the CSQ has demonstrated that there are four orthogonal scales within it. The DQ has not had the benefit of such development and it seems likely that many of its components are inter-related with each other and also with items from the CSQ. Also, time and number of problems are likely to be correlated. Although there were 21 different outcome measures they were not independent. Therefore it is argued that the classical Bonferoni correction is too conservative. If the effect of the DQ is discounted, because of its probable lack of independence from the CSQ, a 5 times Bonferoni correction seems reasonable.

The significant differences would then be as follows:-
Phase one (baseline consultations):
Study doctors felt that patients were more at ease
Use of the PtAF was associated with the identification of more problems

Phase two v phase one:
`Control` doctors using the PtAF felt that patients were more at ease in consultations following a `delay` (between phases one and two of the study)

Phase two (after `delay` and/or education):
`Study` doctors found increased numbers of problems, with or without the PtAF, compared with `control` doctors
The PtAF was associated with increased consultation time for `study` doctors, compared with consultations where the PtAF was not used

This correction removes the statistical difference of time except for one comparison. However, the time taken per problem (approximately five minutes) was very stable across the whole study and the increased numbers of problems identified appear to correspond to an increase of 20-25 minutes taken per 20 patients.

The first hypothesis stated that doctors would identify more problems when patients use the PtAF. This was confirmed in phase one of the trial. The second hypothesis stated that the educational workshop would reduce time taken per problem. This change was not observed. However, the workshop increased the number of problems identified with or without the PtAF.

Given the demonstrated power of the study to detect a difference of 58 seconds in time taken per problem found in the pilot (chapter three - table 3.1: NEL minus EL, p90), that no differences were found in this study may be a reflection of the time pressure in the pilot educational workshop. Although the workshop in this study was based on the one used in the pilot, time pressure was reduced by holding it over a whole day as opposed to an evening. The doctors in the pilot may have focused their attention on dealing with the problems quickly, whereas the workshop in this study may have emphasised the importance of understanding the patient’s agenda rather than saving time. Secondly, the doctors were experienced principals, perhaps already working near their maximum efficiency in problem solving.
There were no significant changes in BTWS in this study nor were there in the pilots. If anything the trends were towards an increased incidence of this phenomenon in consultations with the PtAF or after the educational workshop. This went against the author’s original expectation because it appeared theoretically that making the patient’s agenda more explicit would reduce the incidence of BTWS later in the consultation. However, this relied on an assumption that the patient would be able to produce all of the agenda at the beginning of the consultation, given advance warning and appropriate facilitation. This assumption is perhaps incorrect. It is possible that patients may remember important issues part way through the consultation. Also, sensitive issues may not be written down nor presented immediately. Some issues may be repressed from consciousness, but may come to the surface if the conditions are conducive. The PtAF may play a part in this, perhaps by signaling to the patient that the doctor really wants to know their concerns. The educational workshop may increase the doctor’s sensitivity to the patient wanting to bring up further issues. Another factor to consider is that, despite being given a careful definition of BTWS, doctors’ ideas about the phenomenon probably vary considerably. For example, some might consider that the patient’s hand must be on the handle of the door ready to go, whilst others might count issues raised after the initial history has been taken. The reliability of doctors in assessing this phenomenon was not established.

The limited number and scale of differences in the questionnaire scores might raise the question about their sensitivity to change, in the context of the comparison of groups of individual consultations. It might be argued that the responses of both doctors and patients are connected with their feelings about previous encounters and about other individuals. There is also the tendency of respondents to score satisfaction questionnaires positively. It is more difficult to demonstrate positive changes against this background. In particular, the DQ might accentuate this tendency by the forced choice ‘yes/no’, which seems to anticipate a ‘yes’ response. The CSQ (which has been developed more thoroughly) appears better, in having a five point Likert scale with equal numbers of questions phrased in reverse order. However, it is also possible that patients might have been confused or irritated by being apparently asked the same questions over again. Yet another possible
explanation for the limited changes is that the PtAF might have raised expectations in the patients which were not met by the doctors, despite the educational workshop.

It is possible that other outcome measures might have demonstrated more change. It could be argued that longer consultations addressing more problems might reduce the need for follow up, though this might be manifest in the medium to long term. If these consultations achieved more co-operation it might also have an effect on prescribing costs, referrals and complaints over a period of time. If education and use of the PtAF affected the doctors' behaviour in the consultation, this could have been observed on video recordings. For example, videos could be analysed with respect to patient-centred behaviours or incidence of BTWS.

Perhaps it was optimistic to expect great changes in behaviour or outcomes from a single day of education for established GP principals. In order to achieve greater efficiency (more problems with minimal increase in time) or other benefits, it could be argued that education should be given much earlier and possibly that identification of the patient's agenda should be a central feature of medical education. Nevertheless, the changes associated with the workshop demonstrate that a package of short duration, suitable for inclusion in a program of continuing medical education (CME), can produce measurable beneficial outcomes.

The increased number of problems associated with the PtAF and with the educational workshop were of the order of four or five new problems per session of twenty patients. At five minutes per problem, the doctors might have taken 20 to 25 minutes longer to complete such sessions. It might be objected that the extra problems were 'trivia' and best left undiscovered. Whilst it is not possible to make an inference about the extra problems compared with the others in this study, the problems were defined by the doctors themselves. If the extra problems were important, it implies that doctors were failing to address some of the patient's agenda during consultations conducted in the traditional manner. It could also be argued that the number of problems identified is a crude measure of the patient's agenda, perhaps the tip of an iceberg. Evidence about the underlying ideas is presented in chapter seven.
6.4: Tables 6.1 to 6.9 and figure 6.1
<table>
<thead>
<tr>
<th>Doctor/practice factors</th>
<th>Study % (number), n = 31</th>
<th>Control % (number), n = 15</th>
<th>P value (chi$^2$)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male gender</td>
<td>74.2 (23)</td>
<td>66.7 (10)</td>
<td>0.60 (0.282)</td>
</tr>
<tr>
<td>Female gender</td>
<td>25.8 (8)</td>
<td>33.3 (5)</td>
<td>0.60 (0.282)</td>
</tr>
<tr>
<td>MRCGP diploma</td>
<td>61.3 (19)</td>
<td>66.7 (10)</td>
<td>0.75 (0.124)</td>
</tr>
<tr>
<td>UK Medical School</td>
<td>96.8 (30)</td>
<td>86.7 (13)</td>
<td>1.0 (0)</td>
</tr>
<tr>
<td>Inner city practice</td>
<td>12.9 (4)</td>
<td>6.7 (1)</td>
<td>0.60 (1.005)</td>
</tr>
<tr>
<td>Urban practice</td>
<td>51.6 (16)</td>
<td>66.7 (10)</td>
<td>0.60 (1.005)</td>
</tr>
<tr>
<td>Semi-rural/rural practice</td>
<td>35.5 (11)</td>
<td>26.7 (4)</td>
<td>0.600 (1.005) - 2df</td>
</tr>
</tbody>
</table>
Table 6.1b: Comparison of doctor age in study and control groups - Mann-Whitney U test

<table>
<thead>
<tr>
<th>Doctor’s age</th>
<th>Study % (number), n = 31</th>
<th>Control % (number), n = 15</th>
<th>P = 0.245 (z = -1.164)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age 25-29</td>
<td>0</td>
<td>6.7 (1)</td>
<td></td>
</tr>
<tr>
<td>Age 30-34</td>
<td>22.6 (7)</td>
<td>20.0 (3)</td>
<td></td>
</tr>
<tr>
<td>Age 35-39</td>
<td>19.4 (6)</td>
<td>26.7 (4)</td>
<td></td>
</tr>
<tr>
<td>Age 40-44</td>
<td>32.3 (10)</td>
<td>40.0 (6)</td>
<td></td>
</tr>
<tr>
<td>Age 45-49</td>
<td>19.4 (6)</td>
<td>6.7 (1)</td>
<td></td>
</tr>
<tr>
<td>Age 50-54</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Age 55-59</td>
<td>6.5 (2)</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Table 6.2: Effects of ‘list’ (PtAF/no PtAF) and ‘study’ (study/control doctors) on number of problems identified by doctors, consultation time, patients' general satisfaction and perceived depth of relationship - ANOVA

<table>
<thead>
<tr>
<th>Outcome</th>
<th>‘List’ (PtAF/no PtAF)</th>
<th>‘Study’ (study/control doctors)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>P value (F)</td>
<td>P value (F)</td>
</tr>
<tr>
<td>Number of problems</td>
<td>&lt; 0.0001 (17.32)</td>
<td>&lt; 0.0001 (21.22)</td>
</tr>
<tr>
<td>Time</td>
<td>&lt; 0.0001 (20.18)</td>
<td>0.007 (7.41)</td>
</tr>
<tr>
<td>General satisfaction (CSQ)</td>
<td>0.047 (3.94)</td>
<td>0.276 (1.19)</td>
</tr>
<tr>
<td>Depth of relationship (CSQ)</td>
<td>0.010 (6.65)</td>
<td>0.053 (3.75)</td>
</tr>
</tbody>
</table>
Table 6.3a: Baseline (phase 1) comparison of consultation outcomes of study and control doctors: time (T test), problems and BTWS (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>Study (n = 470)</th>
<th>Control (n = 230)</th>
<th>2 tailed P : T test (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mann - Whitney U (z)</td>
</tr>
<tr>
<td>Number of problems :</td>
<td>2.02 (2.0, 1.10)</td>
<td>1.90 (2.0, 0.90)</td>
<td>0.430 (-0.79)</td>
</tr>
<tr>
<td>Mean (Median, SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in seconds :</td>
<td>498.0 (235.0)</td>
<td>488.3 (276.4)</td>
<td>0.651 (-32.2 to 51.5)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time per problem :</td>
<td>294.1 (178.2)</td>
<td>291.0 (181.3)</td>
<td>0.832 (-25.7 to 31.9)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTWS : %</td>
<td>20.0</td>
<td>16.7</td>
<td>0.299 (-1.04)</td>
</tr>
</tbody>
</table>

124
Table 6.3b: Baseline (phase one) - comparison of consultation outcomes of study and control doctors: patient's satisfaction questionnaire (CSQ), (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>CSQ - % (Median, SD)</th>
<th>Study (n = 470)</th>
<th>Control (n = 230)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>83.8 (86.7, 13.4)</td>
<td>84.6 (86.7, 13.1)</td>
<td>0.414 (-0.82)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>84.8 (85.0, 11.2)</td>
<td>84.7 (84.3, 10.0)</td>
<td>0.764 (-0.30)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>76.9 (80.0, 13.7)</td>
<td>74.6 (76.0, 13.7)</td>
<td>0.023 (-2.27)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>75.8 (80.0, 15.6)</td>
<td>75.9 (80.0, 14.1)</td>
<td>0.999 (-0.001)</td>
</tr>
<tr>
<td>DQ : %</td>
<td>Study (n= 470)</td>
<td>Control (n = 230)</td>
<td>2 tailed P (z)</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------------</td>
<td>-------------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Correct assessment</td>
<td>85.3</td>
<td>86.7</td>
<td>0.983 (-0.02)</td>
</tr>
<tr>
<td>Listening</td>
<td>90.7</td>
<td>92.9</td>
<td>0.869 (-0.16)</td>
</tr>
<tr>
<td>Understanding</td>
<td>89.7</td>
<td>91.7</td>
<td>0.976 (-0.03)</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>86.3</td>
<td>80.4</td>
<td>0.001 (-3.21)</td>
</tr>
<tr>
<td>Enough time</td>
<td>85.5</td>
<td>85.8</td>
<td>0.554 (-0.59)</td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>79.6</td>
<td>83.3</td>
<td>0.511 (-0.66)</td>
</tr>
<tr>
<td>Correct action</td>
<td>84.5</td>
<td>85.4</td>
<td>0.685 (-0.41)</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>86.5</td>
<td>84.6</td>
<td>0.142 (-1.47)</td>
</tr>
<tr>
<td>Space for questions</td>
<td>84.7</td>
<td>85.0</td>
<td>0.323 (-0.99)</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>73.2</td>
<td>71.7</td>
<td>0.309 (-1.02)</td>
</tr>
<tr>
<td>Health promotion</td>
<td>32.7</td>
<td>29.2</td>
<td>0.271 (-1.10)</td>
</tr>
<tr>
<td>Openness to return</td>
<td>82.9</td>
<td>83.8</td>
<td>0.704 (-0.38)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>85.3</td>
<td>85.4</td>
<td>0.440 (-0.77)</td>
</tr>
</tbody>
</table>
Table 6.4a: Baseline (phase 1) - consultation outcomes with and without the PtAF: time (T test), problems and BTWS
(Mann - Whitney U test)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>PtAF (n = 342)</th>
<th>No PtAF (n = 355)</th>
<th>2 tailed P: T test (95%CI)</th>
<th>Mann - Whitney U (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of problems :</td>
<td>2.09 (2.0, 1.12)</td>
<td>1.87 (2.0, 0.94)</td>
<td>0.008 (-2.67)</td>
<td></td>
</tr>
<tr>
<td>Time in seconds :</td>
<td>516.6 (265.4)</td>
<td>473.0 (230.6)</td>
<td>0.021 (6.6 to 80.6)</td>
<td></td>
</tr>
<tr>
<td>Time per problem :</td>
<td>288.5 (173.4)</td>
<td>297.9 (184.8)</td>
<td>0.488 (-36.3 to 17.4)</td>
<td></td>
</tr>
<tr>
<td>BTWS : %</td>
<td>20.8</td>
<td>17.3</td>
<td>0.247 (-1.16)</td>
<td></td>
</tr>
</tbody>
</table>
Table 6.4b: Baseline (phase one) - consultation outcomes with and without the PtAF: patient's satisfaction questionnaire (CSQ).

(Mann - Whitney U test)

<table>
<thead>
<tr>
<th>CSQ - % (Median, SD)</th>
<th>PtAF (n = 342)</th>
<th>No PtAF (n = 335)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>85.0 (86.7, 13.3)</td>
<td>83.1 (86.7, 13.2)</td>
<td>0.030 (-2.17)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>85.6 (85.7, 10.6)</td>
<td>84.0 (82.9, 11.0)</td>
<td>0.072 (-1.80)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>76.9 (80.0, 14.1)</td>
<td>75.4 (76.0, 13.3)</td>
<td>0.113 (-1.59)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>76.4 (80.0, 15.1)</td>
<td>75.3 (80.0, 15.2)</td>
<td>0.329 (-0.98)</td>
</tr>
<tr>
<td>DQ : %</td>
<td>PtAF (n = 342)</td>
<td>No PtAF (355)</td>
<td>2 tailed P (z)</td>
</tr>
<tr>
<td>--------</td>
<td>---------------</td>
<td>---------------</td>
<td>---------------</td>
</tr>
<tr>
<td>Correct assessment</td>
<td>86.4</td>
<td>86.0</td>
<td>0.986 (-0.02)</td>
</tr>
<tr>
<td>Listening</td>
<td>91.9</td>
<td>91.9</td>
<td>0.783 (-0.28)</td>
</tr>
<tr>
<td>Understanding</td>
<td>90.8</td>
<td>90.8</td>
<td>0.932 (-0.09)</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>85.3</td>
<td>84.4</td>
<td>0.648 (-0.46)</td>
</tr>
<tr>
<td>Enough time</td>
<td>85.0</td>
<td>87.1</td>
<td>0.311 (-1.01)</td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>83.1</td>
<td>79.5</td>
<td>0.166 (-1.39)</td>
</tr>
<tr>
<td>Correct action</td>
<td>85.6</td>
<td>84.9</td>
<td>0.887 (-0.14)</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>86.9</td>
<td>85.7</td>
<td>0.853 (-0.19)</td>
</tr>
<tr>
<td>Space for questions</td>
<td>86.9</td>
<td>83.6</td>
<td>0.064 (-1.85)</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>75.0</td>
<td>71.2</td>
<td>0.243 (-1.17)</td>
</tr>
<tr>
<td>Health promotion</td>
<td>35.6</td>
<td>28.0</td>
<td>0.030 (-2.17)</td>
</tr>
<tr>
<td>Openness to return</td>
<td>81.7</td>
<td>85.7</td>
<td>0.074 (-1.78)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>86.4</td>
<td>85.2</td>
<td>0.775 (-0.29)</td>
</tr>
<tr>
<td>Outcome</td>
<td>Study (n = 226)</td>
<td>Control (n = 225)</td>
<td>2 tailed P : T test (95%CI) Mann - Whitney U (z)</td>
</tr>
<tr>
<td>------------------------</td>
<td>----------------</td>
<td>------------------</td>
<td>-----------------------------------------------</td>
</tr>
<tr>
<td>Number of problems :</td>
<td>2.17 (2.0, 1.17)</td>
<td>1.87 (2.0, 1.03)</td>
<td>0.001 (-3.25)</td>
</tr>
<tr>
<td>Mean (Median, SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in seconds :</td>
<td>540.0 (236.2)</td>
<td>485.8 (242.8)</td>
<td>0.022 (7.4 to 95.6)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time per problem :</td>
<td>288.6 (161.0)</td>
<td>290.9 (146.4)</td>
<td>0.917 (-30.1 to 27.1)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTWS : %</td>
<td>18.2</td>
<td>14.8</td>
<td>0.341 (-0.95)</td>
</tr>
</tbody>
</table>

Table 6.5a: Phase two - comparison of consultation outcomes of 'study' and 'control' doctors using the PtAF : time (T test), problems and BTWS (Mann - Whitney U test)
<table>
<thead>
<tr>
<th>CSQ - % (Median, SD)</th>
<th>'Study' (n = 226)</th>
<th>'Control' (n = 225)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>83.7 (86.7, 13.7)</td>
<td>85.1 (86.7, 12.5)</td>
<td>0.353 (-0.93)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>84.9 (85.7, 11.5)</td>
<td>84.7 (82.9, 10.3)</td>
<td>0.517 (-0.65)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>76.6 (80.0, 14.4)</td>
<td>77.1 (76.0, 13.4)</td>
<td>0.865 (-0.17)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>77.5 (80.0, 14.3)</td>
<td>76.7 (80.0, 17.0)</td>
<td>0.896 (-0.13)</td>
</tr>
<tr>
<td>DQ : %</td>
<td>EL</td>
<td>'Study' (n = 226)</td>
<td>NEL</td>
</tr>
<tr>
<td>-------------------------</td>
<td>--------</td>
<td>------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Correct assessment</td>
<td>89.8</td>
<td>84.4</td>
<td>0.085</td>
</tr>
<tr>
<td>Listening</td>
<td>93.2</td>
<td>92.4</td>
<td>0.737</td>
</tr>
<tr>
<td>Understanding</td>
<td>94.1</td>
<td>89.5</td>
<td>0.040</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>88.1</td>
<td>87.8</td>
<td>1.000</td>
</tr>
<tr>
<td>Enough time</td>
<td>89.8</td>
<td>84.4</td>
<td>0.085</td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>86.4</td>
<td>84.0</td>
<td>0.524</td>
</tr>
<tr>
<td>Correct action</td>
<td>88.1</td>
<td>85.2</td>
<td>0.310</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>89.0</td>
<td>86.5</td>
<td>0.277</td>
</tr>
<tr>
<td>Space for questions</td>
<td>88.6</td>
<td>85.7</td>
<td>0.480</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>78.0</td>
<td>74.7</td>
<td>0.462</td>
</tr>
<tr>
<td>Health promotion</td>
<td>33.1</td>
<td>35.0</td>
<td>0.575</td>
</tr>
<tr>
<td>Openness to return</td>
<td>85.6</td>
<td>85.7</td>
<td>0.775</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>87.7</td>
<td>82.3</td>
<td>0.119</td>
</tr>
<tr>
<td>Outcome</td>
<td>'Study' (n = 222)</td>
<td>'Control' (n = 231)</td>
<td>2 tailed P : T test (95%CI)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>-------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
</tr>
<tr>
<td>Number of problems :</td>
<td>1.98 (2.0, 0.93)</td>
<td>1.65 (2.0, 0.73)</td>
<td>0.0001 (-3.9)</td>
</tr>
<tr>
<td>Mean (Median, SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time in seconds :</td>
<td>468.7 (203.8)</td>
<td>431.1 (207.6)</td>
<td>0.052 (-0.4 to 75.7)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time per problem :</td>
<td>278.3 (164.0)</td>
<td>301.5 (183.4)</td>
<td>0.158 (-55.4 to 9.0)</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BTWS : %</td>
<td>23.8</td>
<td>21.1</td>
<td>0.327 (-0.98)</td>
</tr>
</tbody>
</table>
Table 6.6b: Phase two - comparison of consultation outcomes of study and control doctors without the PtAF:

Patient's satisfaction questionnaire (CSQ), (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>CSQ - % (Median, SD)</th>
<th>'Study' (n = 222)</th>
<th>'Control' (n = 231)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>83.4 (86.7, 14.8)</td>
<td>83.6 (86.7, 12.3)</td>
<td>0.675 (-0.42)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>84.9 (82.9, 11.1)</td>
<td>83.6 (82.9, 12.3)</td>
<td>0.211 (-1.3)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>75.9 (76.0, 14.6)</td>
<td>74.1 (72.0, 13.4)</td>
<td>0.140 (-1.5)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>74.9 (80.0, 18.2)</td>
<td>75.0 (80.0, 15.6)</td>
<td>0.535 (-0.62)</td>
</tr>
<tr>
<td>DQ</td>
<td>ENL 'Study' (n = 222)</td>
<td>NENL 'Control' (n = 231)</td>
<td>2 tailed P (z)</td>
</tr>
<tr>
<td>-------------------------</td>
<td>-----------------------</td>
<td>--------------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Correct assessment</td>
<td>82.5</td>
<td>89.3</td>
<td>0.102 (-1.64)</td>
</tr>
<tr>
<td>Listening</td>
<td>90.4</td>
<td>93.8</td>
<td>0.692 (-0.40)</td>
</tr>
<tr>
<td>Understanding</td>
<td>86.3</td>
<td>92.1</td>
<td>0.157 (-1.42)</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>84.2</td>
<td>85.1</td>
<td>0.519 (-0.64)</td>
</tr>
<tr>
<td>Enough time</td>
<td>85.0</td>
<td>90.5</td>
<td>0.361 (-0.91)</td>
</tr>
<tr>
<td>Explanation: problem</td>
<td>80.4</td>
<td>85.1</td>
<td>0.462 (-0.73)</td>
</tr>
<tr>
<td>Correct action</td>
<td>86.3</td>
<td>88.0</td>
<td>0.793 (-0.26)</td>
</tr>
<tr>
<td>Explanation: treatment</td>
<td>85.4</td>
<td>87.2</td>
<td>0.578 (-0.56)</td>
</tr>
<tr>
<td>Space for questions</td>
<td>82.9</td>
<td>86.8</td>
<td>0.649 (-0.46)</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>76.3</td>
<td>67.8</td>
<td>0.004 (-2.87)</td>
</tr>
<tr>
<td>Health promotion</td>
<td>27.1</td>
<td>28.5</td>
<td>0.891 (-0.14)</td>
</tr>
<tr>
<td>Openness to return</td>
<td>82.5</td>
<td>87.6</td>
<td>0.418 (-0.81)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>82.5</td>
<td>86.4</td>
<td>0.651 (-0.45)</td>
</tr>
</tbody>
</table>
Table 6.7a: Phase two - comparison of consultation outcomes of 'study' doctors with and without the PtAF: time (T test), problems and BTWS (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>PtAF (n = 226)</th>
<th>No PtAF (n = 222)</th>
<th>2 tailed P: T test (95%CI) Mann - Whitney U (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of problems</td>
<td>2.17 (2.0, 1.17)</td>
<td>1.98 (2.0, 0.93)</td>
<td>0.126 (-1.53)</td>
</tr>
<tr>
<td>Mean (Median, SD)</td>
<td>540.0 (236.2)</td>
<td>468.7 (203.8)</td>
<td>0.001 (27.8 to 109.4)</td>
</tr>
<tr>
<td>Time in seconds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>288.6 (161.0)</td>
<td>278.3 (164.0)</td>
<td>0.474 (-19.3 to 41.4)</td>
</tr>
<tr>
<td>Time per problem</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>18.2</td>
<td>23.8</td>
<td>0.095 (-1.67)</td>
</tr>
<tr>
<td>BTWS : %</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 6.7b: Phase two - comparison of consultation outcomes of 'study' doctors with and without the PtAF:

Patient's satisfaction questionnaire (CSQ), (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>CSQ - % (Median, SD):</th>
<th>PtAF (n = 226)</th>
<th>No PtAF (n = 222)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>EL</td>
<td>ENL</td>
<td></td>
</tr>
<tr>
<td>General satisfaction</td>
<td>83.7 (86.7, 13.7)</td>
<td>83.4 (86.7, 14.8)</td>
<td>0.963 (-0.05)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>84.9 (85.7, 11.5)</td>
<td>84.9 (82.9, 11.1)</td>
<td>0.825 (-0.22)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>76.6 (80.0, 14.4)</td>
<td>75.9 (76.0, 14.6)</td>
<td>0.507 (-0.66)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>77.5 (80.0, 14.3)</td>
<td>74.9 (80.0, 18.2)</td>
<td>0.439 (-0.77)</td>
</tr>
<tr>
<td>DQ %</td>
<td>EL PtAF (n = 226)</td>
<td>ENL No PtAF (n = 222)</td>
<td>2 tailed P (z)</td>
</tr>
<tr>
<td>--------------------------</td>
<td>------------------</td>
<td>-----------------------</td>
<td>----------------</td>
</tr>
<tr>
<td>Correct assessment</td>
<td>89.8</td>
<td>82.5</td>
<td>0.080 (-1.75)</td>
</tr>
<tr>
<td>Listening</td>
<td>93.2</td>
<td>90.4</td>
<td>0.726 (-0.35)</td>
</tr>
<tr>
<td>Understanding</td>
<td>94.1</td>
<td>96.3</td>
<td>0.014 (-2.45)</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>88.1</td>
<td>84.2</td>
<td>0.470 (-0.72)</td>
</tr>
<tr>
<td>Enough time</td>
<td>89.8</td>
<td>85.0</td>
<td>0.650 (-0.45)</td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>86.4</td>
<td>80.4</td>
<td>0.212 (-1.25)</td>
</tr>
<tr>
<td>Correct action</td>
<td>88.1</td>
<td>86.3</td>
<td>0.873 (-0.16)</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>89.0</td>
<td>85.4</td>
<td>0.548 (-0.60)</td>
</tr>
<tr>
<td>Space for questions</td>
<td>88.6</td>
<td>82.9</td>
<td>0.293 (-1.05)</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>78.0</td>
<td>76.3</td>
<td>0.857 (-0.18)</td>
</tr>
<tr>
<td>Health promotion</td>
<td>33.1</td>
<td>27.1</td>
<td>0.248 (-1.15)</td>
</tr>
<tr>
<td>Openness to return</td>
<td>85.6</td>
<td>82.5</td>
<td>0.612 (-0.51)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>87.7</td>
<td>82.5</td>
<td>0.388 (-0.86)</td>
</tr>
</tbody>
</table>
Table 6.8a: Phase two - comparison of consultation outcomes of 'control' doctors with and without the PtAF: time (T test), problems and BTWS (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>PtAF (n = 225)</th>
<th>No PtAF (n = 232)</th>
<th>2 tailed P: T test (95%CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of problems :</td>
<td>1.87 (2.0, 1.03)</td>
<td>1.65 (2.0, 0.73)</td>
<td>0.038 (-2.07)</td>
</tr>
<tr>
<td>Time in seconds :</td>
<td>485.8 (242.8)</td>
<td>431.1 (207.6)</td>
<td>0.010 (13.8 to 96.4)</td>
</tr>
<tr>
<td>Time per problem :</td>
<td>290.9 (146.4)</td>
<td>301.5 (183.4)</td>
<td>0.495 (-41.1 to 19.9)</td>
</tr>
<tr>
<td>BTWS : %</td>
<td>14.8</td>
<td>21.1</td>
<td>0.096 (-1.67)</td>
</tr>
</tbody>
</table>
Table 6.8b: Phase two - comparison of consultation outcomes of 'control' doctors with and without the PtAF: patient's satisfaction questionnaire (CSQ), (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>CSQ - % (Median, SD)</th>
<th>PtAF (n = 225)</th>
<th>No PtAF (n = 232)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>General satisfaction</td>
<td>85.1 (86.7, 12.5)</td>
<td>83.6 (86.7, 12.3)</td>
<td>0.205 (-1.27)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>84.7 (82.9, 10.3)</td>
<td>83.6 (82.9, 10.9)</td>
<td>0.371 (-0.89)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>77.2 (76.0, 13.4)</td>
<td>74.1 (72.0, 13.4)</td>
<td>0.024 (-2.26)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>76.7 (80.0, 17.0)</td>
<td>75.0 (80.0, 15.6)</td>
<td>0.106 (-1.62)</td>
</tr>
</tbody>
</table>
Table 6.8c: Phase two - outcomes of 'control' doctors with and without the PtAF: doctor's questionnaire (DQ). (Mann - Whitney U test)

<table>
<thead>
<tr>
<th>DQ: %</th>
<th>NEL PtAF (n = 225)</th>
<th>NENL No PtAF (n = 232)</th>
<th>2 tailed P (z)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correct assessment</td>
<td>84.4</td>
<td>89.3</td>
<td>0.108 (-1.61)</td>
</tr>
<tr>
<td>Listening</td>
<td>92.4</td>
<td>93.8</td>
<td>0.702 (-0.38)</td>
</tr>
<tr>
<td>Understanding</td>
<td>89.5</td>
<td>92.1</td>
<td>0.325 (-0.98)</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>87.8</td>
<td>85.1</td>
<td>0.171 (-1.37)</td>
</tr>
<tr>
<td>Enough time</td>
<td>84.4</td>
<td>90.5</td>
<td>0.029 (-2.18)</td>
</tr>
<tr>
<td>Explanation: problem</td>
<td>84.0</td>
<td>85.1</td>
<td>0.908 (-0.12)</td>
</tr>
<tr>
<td>Correct action</td>
<td>85.2</td>
<td>88.0</td>
<td>0.356 (-0.92)</td>
</tr>
<tr>
<td>Explanation: treatment</td>
<td>86.5</td>
<td>87.2</td>
<td>0.947 (-0.07)</td>
</tr>
<tr>
<td>Space for questions</td>
<td>85.7</td>
<td>86.8</td>
<td>0.917 (-0.10)</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>74.7</td>
<td>67.8</td>
<td>0.049 (-1.97)</td>
</tr>
<tr>
<td>Health promotion</td>
<td>35.0</td>
<td>28.5</td>
<td>0.112 (-1.59)</td>
</tr>
<tr>
<td>Openness to return</td>
<td>85.7</td>
<td>87.6</td>
<td>0.556 (-0.59)</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>82.3</td>
<td>86.4</td>
<td>0.248 (-1.16)</td>
</tr>
</tbody>
</table>
Table 6.9: Summary of results: Problems, time and BTWS (table 6.9a); CSQ (table 6.9b); DQ (table 6.9c)

(Figure 6.1 shows group labels in phases 1 and 2)

<table>
<thead>
<tr>
<th>Outcome</th>
<th>PHASE 1</th>
<th>PHASE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CNL (n = 121)</td>
<td>CL (n = 119)</td>
</tr>
<tr>
<td>Number of problems</td>
<td>1.83 (n = 121)</td>
<td>1.98 (n = 119)</td>
</tr>
<tr>
<td>Mean (Median, SD)</td>
<td>2.00,0.85</td>
<td>2.00,0.95</td>
</tr>
<tr>
<td>Time in seconds</td>
<td>472.1</td>
<td>504.6</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>259.2</td>
<td>292.9</td>
</tr>
<tr>
<td>Time per problem</td>
<td>294.9</td>
<td>287.2</td>
</tr>
<tr>
<td>Mean (SD)</td>
<td>195.5</td>
<td>166.4</td>
</tr>
<tr>
<td>BTWS: %</td>
<td>14.0</td>
<td>19.3</td>
</tr>
</tbody>
</table>
Table 6.9b

<table>
<thead>
<tr>
<th></th>
<th>PHASE 1</th>
<th>PHASE 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>CSQ - % (Median, SD):</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CNL (n = 121)</td>
<td>CL (n = 119)</td>
<td>SL (n = 241)</td>
</tr>
<tr>
<td>General satisfaction</td>
<td>83.9 (86.7, 12.5)</td>
<td>84.9 (86.7, 13.2)</td>
</tr>
<tr>
<td></td>
<td>85.3 (86.7, 13.6)</td>
<td>85.9 (86.7, 10.9)</td>
</tr>
<tr>
<td></td>
<td>(n = 250)</td>
<td>(n = 225)</td>
</tr>
<tr>
<td>Perceived professional care</td>
<td>84.5 (85.7, 10.1)</td>
<td>85.9 (85.7, 9.9)</td>
</tr>
<tr>
<td></td>
<td>84.9 (82.9, 13.6)</td>
<td>84.9 (82.9, 13.2)</td>
</tr>
<tr>
<td></td>
<td>(n = 231)</td>
<td>(n = 226)</td>
</tr>
<tr>
<td>Perceived depth of relationship</td>
<td>73.8 (76.0, 13.3)</td>
<td>75.3 (76.0, 14.1)</td>
</tr>
<tr>
<td></td>
<td>77.7 (76.0, 14.1)</td>
<td>77.7 (76.0, 13.2)</td>
</tr>
<tr>
<td></td>
<td>(n = 231)</td>
<td>(n = 225)</td>
</tr>
<tr>
<td>Perceived time</td>
<td>76.5 (80.0, 12.9)</td>
<td>75.2 (80.0, 15.3)</td>
</tr>
<tr>
<td></td>
<td>76.9 (80.0, 15.1)</td>
<td>74.7 (80.0, 16.1)</td>
</tr>
<tr>
<td></td>
<td>(n = 225)</td>
<td>(n = 226)</td>
</tr>
</tbody>
</table>

143
<table>
<thead>
<tr>
<th>DQ : %</th>
<th>PHASE 1</th>
<th></th>
<th>PHASE 2</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>CNL (n = 121)</td>
<td>CL (n = 119)</td>
<td>SL (n = 241)</td>
<td>SNL (n = 250)</td>
</tr>
<tr>
<td>Correct assessment</td>
<td>85.1</td>
<td>88.2</td>
<td>85.5</td>
<td>86.4</td>
</tr>
<tr>
<td>Listening</td>
<td>93.4</td>
<td>95.7</td>
<td>91.7</td>
<td>91.2</td>
</tr>
<tr>
<td>Understanding</td>
<td>92.6</td>
<td>90.8</td>
<td>90.9</td>
<td>90.0</td>
</tr>
<tr>
<td>Patient at ease</td>
<td>81.0</td>
<td>79.8</td>
<td>88.0</td>
<td>86.0</td>
</tr>
<tr>
<td>Enough time</td>
<td>86.8</td>
<td>84.9</td>
<td>85.1</td>
<td>87.2</td>
</tr>
<tr>
<td>Explanation : problem</td>
<td>82.6</td>
<td>84.0</td>
<td>82.6</td>
<td>78.0</td>
</tr>
<tr>
<td>Correct action</td>
<td>86.0</td>
<td>84.9</td>
<td>85.9</td>
<td>84.4</td>
</tr>
<tr>
<td>Explanation : treatment</td>
<td>83.5</td>
<td>85.7</td>
<td>87.6</td>
<td>86.8</td>
</tr>
<tr>
<td>Space for questions</td>
<td>80.2</td>
<td>89.9</td>
<td>85.5</td>
<td>85.2</td>
</tr>
<tr>
<td>Space for feelings</td>
<td>66.9</td>
<td>76.5</td>
<td>74.3</td>
<td>73.2</td>
</tr>
<tr>
<td>Health promotion</td>
<td>27.3</td>
<td>31.1</td>
<td>37.8</td>
<td>28.4</td>
</tr>
<tr>
<td>Openness to return</td>
<td>85.1</td>
<td>85.7</td>
<td>86.7</td>
<td>85.2</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>89.3</td>
<td>78.2</td>
<td>83.4</td>
<td>84.0</td>
</tr>
</tbody>
</table>
### Figure 6.1: Study design

<table>
<thead>
<tr>
<th>CONTROL ARM</th>
<th>STUDY ARM</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNL</td>
<td>CL</td>
</tr>
<tr>
<td></td>
<td>SL</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>NENL</td>
<td>NEL</td>
</tr>
<tr>
<td></td>
<td>EL</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key**

L = list (PtAF), NL = no list, S = study doctors, C = control doctors, E = educated (workshop), NE = not educated.
CHAPTER SEVEN : THE PATIENT'S AGENDA

7.1 : Introduction

The development of the PtAF (Appendix two) was described in chapter two (section 2.3, p44). This form was used in the randomised controlled trial which was described in chapter six. The present chapter gives an account of the analysis of data from all the PtAFs which were collected. No distinction was made between forms collected in phases one or two of the study. Aims (3.2 : Aim 4, p77) and methodology (3.3 : Objective 1, p86) were discussed in chapter three.

AIM FOUR - OBJECTIVE : To investigate the content of the PtAF.

HYPOTHESIS : A majority of patients (more than 50%) will exhibit ideas underlying the problems on the PtAF.

7.2 : Results

7.2.1 : Introduction

848 appointments were allocated to each of the `list` and `no list` categories. In the `list` category 37 (4.4%) patients did not attend their appointments, compared with 40 (4.7%) in the `no list` category and nine (0.5%) whose category was unspecified. The rate of non-attendance was 86 (5.1%) for the whole of the study. 756 PtAFs were returned from a total of 811 appointments which were attended by patients allocated to the `list` category. It is not known whether any of the missing 55 forms were completed by the patients but not collected or returned by the doctor. A further seven of the 756 forms which were returned were not completed. This gives a response rate for forms which were returned of 99.1%, and an overall response rate of 93.0% for appointments attended. Eight forms (1.1%) of those returned were written for the patient by a member of staff. One patient, who completed a form, arrived with a written list also (0.06% of 1696 consultations in the main study).
7.2.2 : Quantitative results

Table 7.1 (p161) shows the frequency of responses to questions 1-4 (including subdivisions of question 4). Almost all of the patients had specific points to raise (question 1), and requested action to address them (question 4). In order of frequency they also requested explanations (question 4.1), expressed thoughts (question 2), requested treatment (question 4.2), asked questions (question 3) and requested investigations (question 4.3). None of these questions scored below 44%.

7.2.3 : Comparison with pilot PtAF analysis and list collection

The mean number of problems or issues per PtAF was 1.56 (Median 1, SD 1.03, Range 0-11). The mean number of symptoms identified per PtAF was 1.71 (Median 1, SD 1.10, Range 0-10).

In the pilot study (p44), the number of problems (1.7 cf 1.6) and the number of symptoms (1.5 cf 1.7) identified were similar to this study. There were more responses to question 2 : thoughts/ideas (72.7% cf 59.1%). In question 4, more requested explanation (81.8% cf 69.3%), more requested investigation (65.9% cf 44.3%) and less wanted notes (4.5% cf 14.6%). The content analysis showed similar scores for ideas, anxiety limit, reasoning and limit of tolerance (other categories were not collated).

A comparison can also be made between this study and the list collection reported in chapter four (section 4.4, p94), although the latter involved the collection of lists which were brought spontaneously by patients instead of using the PtAF. The number of problems (4.8 cf 1.6) and symptoms (3.2 cf 1.7) were considerably higher in the list collection. Nevertheless, there were similarities in the frequency of requesting action, requesting treatment, questions and reporting information. However, the list collection patients were more likely to request examination (14.0% cf 3.6%) and referral (14.0% cf 2.3%).

147
7.2.4 : Qualitative results

7.2.4.1 : INTER-RATER AND INTRA-RATER RELIABILITY

Table 7.2 (a-b p162-163) includes Kappa ratings for all the categories which scored 0.21 and more (fair agreement) for both inter-rater and intra-rater comparisons in the same sample of 100 PtAFs. Categories which did not meet this criterion, such as subdivisions of the category : `offering opinion`, were excluded from the analysis.

In the main categories, `anxiety limit` showed moderate agreement in both comparisons \( (k = 0.42, k = 0.54) \). However, the percentages of this category in the sample (10-14) were considerably lower than in the whole data set (41.9). `Reasoning` showed moderate inter-rater agreement \( (k = 0.6) \) and `tolerance limit`, which also had a higher percentage in the whole data set (7-10 c.f. 23.7), showed fair intra-rater agreement \( (k = 0.4) \). Otherwise all the agreements were good or very good for the main non-clinical categories (table 7.2a, p162).

7.2.4.2 : NON - CLINICAL CATEGORIES

Table two shows the frequency of categories identified in the content analysis. In the main categories (table 7.2a, p159) `requests` (96%), were the most common, followed by `ideas` (61%), `questions` (49%), `anxiety limit` (42%), `offering opinion` (38%), `reasoning` (29%), `reporting information` (27%) and `tolerance limit` (24%). Subsidiary categories are also shown (table 7.2b, p163). The latter were subdivisions of the main categories.

7.2.4.3 : THEMES

The following themes all satisfied the criterion specified in 7.2.4.1 above. They are presented in order of frequency in the data (table 7.2,a-b pp162-163) :-
REQUESTING EXPLANATION (67.7%):

The most frequent theme identified was a request for explanation. This was usually to help the patient to make sense of what was happening.

12408: "...headaches.....I do not know what could be causing the problem that why I have come to see the doctor. Hoping that the doctor will be able to explain or try to help me find the problem as I can not understand while I keep get my problem......"

Sometimes the request was for explanation about what to expect during the course of a condition.

10116: "I have been to hospital, and want Doctor to explain what is going to happen........explain things to my wife.......what aftercare I will need."

IDEAS UNDERLYING (61.1%):

The next most frequent theme was the expression of the patient's own ideas in relation to a problem. Usually the ideas related to the causes and effects of problems being presented. In most cases the ideas were presented without any reasoning to support them.

This category was the subject of the chapter's main hypothesis (7.1, p146). It was taken from the 'patient's agenda' model which has been described in chapter three (Middleton 1991a).

13105: "....I believe that there is something wrong with my neck + it either creates other symptoms or is a by product of something else......."

REQUESTING TREATMENT (56.6%):

Almost as frequent was a request for the doctor to prescribe treatment for a problem. Usually this involved medicines, but minor surgical procedures were also included.
13113: "I would like treatment for a verruca on my right foot please........Treat on the spot."

REQUESTING INVESTIGATION (44.2%):

Nearly half of the patients requested to be sent for some kind of test or investigation. These commonly involved blood tests or X rays. Some patients included information to back up their requests.

12306: "Want to know if I can go for X-ray on my ankles + knees. They are very painful and have started to swell."

ANXIETY LIMIT (41.9%):

Between a third and a half of patients appeared to express fear or anxiety about a problem as the main reason for consulting. Literally they had reached the limit of being able to cope with the worry without consulting the doctor.

This category was taken from the model of why patients consult the doctor which was described in chapter three (Stewart et al 1975).

21612: "I have got a mole. It is getting bigger. Is it bad."

13603: "My left eye is giving me immense pain !........if you spend enough time thinking about it (especially when its at its worst) the term 'migraine' dissappears and darker scarier alternatives suggest themselves - 'What is it! Tell me anything + everything it could be! (so I can worry properly !)"
OFFERING OPINION (37.7%):

There was a considerable degree of overlap between this category and 'ideas underlying'. Entries were made where a definite opinion was expressed, usually in the form of a diagnosis. Subdivisions of this category did not meet the criterion for inter-rater and intra-rater agreement.

24103: "....3 days off school, not picking up. headache. diarrhea. aching especially around lungs - front & back. coughing with flegm........Virus or beginnings of pneumonia......."

REASONING (28.7%):

Between a quarter and a third of patients supported their ideas, opinions or questions with reasons.

This category was taken from the 'patient's agenda' model discussed in chapter three (Middleton 1991a).

10801: "....smear.....Why 6 monthly if there is abnormal cells?"

One patient requested that the doctor should give reasons for any reply to the question which was asked.

11104: "....spots.....Possibly viral or stress related because it is recurring and worsening.....What in your opinion is the cause.......& why do you think that?"

TOLERANCE LIMIT (23.7%):

In this category it appeared that the main reason for consulting the doctor was that the patient was unable to tolerate the problem or symptoms any longer. Thus, relief from symptoms was more important than worry about their significance.

The category was taken from the model of why patients consult the doctor which was discussed in chapter three (Stewart et al 1975).
21602: “1. My back hurts. 2. I’m fed up with it.”

QUESTIONS ABOUT TREATMENT (22.4%):

Many questions sought to clarify whether or not a particular treatment was appropriate. Others were concerned with lack of effect or harmful effects.

10809: “...indigestion.....I told the doctor at the hospital about this....and he gave me the name of a medicine that can be prescribed it began with G but I can’t remember the name.....Do you think maybe I need to go back on the bicarb tablets that I used to be on before?”

20407: “Why was it when I started to take the Paramax they work and now they don’t.”

REPORTING INFORMATION ABOUT OWN SITUATION (21.6%):

These were statements about how the patients’ lives were affected by their conditions or problems. They seemed to represent attempts by the patients to make the doctors understand something of their point of view.

20501: “...shoulder pains......have to lift and care for my disabled husband.”

22702: “Want to emphasise the seriousness of my phobia. Not typical of my personality. Have extreme reactions which are beginning to affect my life.”

RAISING ISSUES (19.3%):

These were specific issues connected with third parties, hospital visits or media stories (almost exclusively the current oral contraceptive pill ‘scare’). Subdivisions of this category did not meet the criterion of inter-rater and intra-rater agreement.

21608: “1. I want to change my pill. 2. Is what I read in the newspaper true? 3. Am I in danger. 4. Has any damage been done?...........”
ADMINISTRATIVE (14.2%) :

A minority of patients attended mainly or solely with the intention of obtaining a medical certificate, or the doctor’s signature on some other document.

This category was taken from the model of why patients consult the doctor which was described in chapter three (Stewart et al 1975).

13401 : “I wont a clubnote......”

20202 : “I am feeling better. Can you fill in my Insurance Form, please.”

REQUESTING TEST RESULT (7.3%) :

A request for the result of a test was sometimes accompanied by expressed expectations that the problem would be explained or that further investigation would be done if not.

13105 : “What has my blood test shown? What does it mean? Is this the only test I can have? What else is available to me? Where do I go from here?......”

COMMENTING ON PREVIOUS MANAGEMENT (6.9%) :

These were usually complaints about previous contact with a doctor or another member of the team.

23915 : “....Knowing the trouble and being so near why he didn’t come out the first time we rang.”

23515 : “...I feel since physio the pain is worse. I wish that I had not had physio.....”
COMMENTING ON COMMUNICATION (3.6%)

A few patients commented on the difficulties they perceived in communicating with doctors. Some identified a need for doctors to listen more. Others felt that their ideas and concerns had not been taken seriously in the past. One patient expressed the view that doctors should not be told what to do.

34306: “When you try to explain your symptoms it's very difficult to get a doctor to understand. I think they need to spend more time listening.”

14310: “1) For the doctor to be non-judgemental 2) To listen to what the patient wants/alleviate fears/explain. 3) For the Doctor to react to the patient as one human being to another human being. I find Doctors can be distant and superior. I often dread coming as I have been made to feel silly, and as though I am wasting one Doctor's time. In the past, I don't feel I have been listened to, and on occasions steam-rollered. Although I totally acknowledge that for Doctors it is a job of work, I feel I would benefit if I (as far as is possible, considering the large number of patients in a practice) could be treated as an individual. To listen to me - understand my fears/ignorance, and explain things to me in a proper manner. Listen. Be human.”

33306: “...Tinnitus....Whatever is responsible for this - as a professional woman - you do not tell the Doctor what to do.”

COMMENTING ON TIME (2.0%):

Those patients who commented invariably perceived a shortage of time in the consultation. Some of them felt that this had prevented them from raising important issues with the doctor.

11003: “I didn't mention on last visit as queue of people waiting.”
SUMMARY OF THEMES:

These are presented in descending order of frequency in the data

1. What is happening and what should I expect?
2. These are my ideas.
3. Please treat my problem.
4. Please do tests.
5. I am worried about the problem.
6. This is my self-diagnosis.
7. This is why I think so.
8. I am "fed up" with the problem.
9. Is the treatment correct?
10. This is what it is like for me.
11. I heard something on the news.
12. Please give me a certificate.
13. Does the test result solve the problem?
14. I wish to complain.
15. Please listen and take me seriously.
16. Please take enough time.

7.2.4.4: CLINICAL CATEGORIES

Table 7.3 (p164) shows the frequencies of the main clinical categories identified on the PtAF compared with similar categories in the general practice fourth national morbidity survey (RCGP et al 1995).

Respiratory conditions in the morbidity figures are between three and four times the frequency found on the PtAF. However, the former include ear, nose and throat conditions and, when both categories on the PtAF are added together, the discrepancy is much less. The next largest difference is in the figures for neurological conditions, although the morbidity data also includes conditions affecting the sense organs. Adding together respiratory, ENT, eye and neurological conditions on the PtAF (37.9%), and respiratory and neurological conditions in the
morbidity figures 61.5%) there remains a large discrepancy. The other main differences are between the figures for infections, skin conditions and cancers. In all of these there is a considerable shortfall in the figures from the PtAF. There are no other marked differences after the figures for immunological, allergic and endocrine conditions have been combined.

7.3 : Discussion

Although the pilot study (Chapter two - section 2.3, p44) had suggested the possibility of patients being put off by the prospect of having to complete a PtAF (12% of those in the 'list' category did not attend compared with none in the 'no list' category), this was not borne out in the present study. The response rate was high, whether taken as a percentage of the appointments attended or of the number of forms returned by the doctors.

The quantitative results show the response rates to the different components of the PtAF. Nearly all of the patients signaled on the PtAF that they had issues to raise and required some kind of action by the doctor. The most frequent request was for explanation. The content of the responses is addressed by the qualitative analysis.

Although the frequencies of some of the clinical categories showed superficial concordance with national morbidity figures, there were marked differences in others. In all of these cases the frequencies were higher in the national morbidity figures. However, it is difficult to compare diagnoses made by GPs in face to face consultations with the author’s interpretation of what was written on the PtAF. Since patients were selected randomly for the PtAF from general practice consultations in a wide range of practice situations, it seems likely that those patients would have presented a representative range of medical conditions. Another possible explanation for the differences is that the study was completed during three weeks of the year in one region whereas the morbidity figures are national and collected over a longer period.

The rigor of the qualitative analysis for non-clinical categories was demonstrated by the inter-rater and intra-rater comparisons which showed 'good' or 'very good' agreement for most of the main categories. The agreement for the main categories:
'anxiety limit', 'tolerance limit' and to a lesser extent 'reasoning' was less impressive. However, these categories may have required more interpretation than others. Also, the first two categories were considerably less frequent in the consecutive sample of 100 than in the whole data set.

Pilot work using the PtAF, reported in chapter two, showed broadly similar frequencies of the main categories (including the three discussed in the previous paragraph) which were measured. The lists collected from patients (chapter four) also showed some similarities in the frequency of categories identified, although there were marked differences in the number of problems and symptoms compared with those elicited in both instances by the PtAF.

The main hypothesis of the study was confirmed by the finding that ideas were expressed on a majority of the PtAFs. However, the reasoning behind these ideas appeared on only a minority of the forms. It could be argued that ideas imply reasoning whether or not the latter was written down. It could also be argued that ideas cannot be properly understood without access to the reasons why people hold those ideas. For example, patient 11104 felt that spots could be 'viral or stress related'. In such a case the explanatory model of the doctor might overlap with or be completely at variance with that of the patient. In order to negotiate a common understanding of the problem the reasoning expressed ('because it is recurring and worsening') might be a useful starting point. However, this might be only the first link in a complex chain of arguments. Why does the patient think that worsening symptoms mean a virus or stress? A videotape of the consultation might have furnished the answer. If the doctor makes false assumptions, the patient may not see the plan of management as relevant and not co-operate with it. Cromarty (1996) found, in interviews with patients, that their explanatory models often did not coincide with those of doctors.

It was suggested in chapter six that the extra problems revealed by using the PtAF were important because they were defined by the doctors themselves. If some of the information on the forms might have been missed by doctors without the aid of the PtAF, it is worth considering possible consequences. For example, the following might represent a missed opportunity to investigate for allergy to a parasite.
"..he has had the worms once before and they went next day but he keeps on complaining about tummy pains and after that he got Astma Then he has got worms again and his Astmas came back worst, As it anything to do with his Astmas".

It is arguable how much of this information might have been conveyed verbally in a consultation by a patient with a deficiency in communication skills. If the doctors missed important issues without the PtAF, it is possible that they also missed some of the ideas and reasoning connected with issues which they did detect.

Whether the frequencies of the themes identified reflect their relative importance for patients is a matter for speculation. For some of the themes, for example the complaints about insufficient time and listening, what appeared on the PtAF might represent the tip of an iceberg. It could be argued that more sensitive and especially contentious issues would be more difficult than others to put in writing. Perhaps the structure of the PtAF, in effect, gave selective permission for some issues rather than others. For example, there was a direct question about investigation but not about complaints. The relative importance of the issues and themes for patients might be explored further by interviews, possibly combined with analysis of videotaped consultations. Tuckett et al (1985), using audiotapes and interviews, found that complaints about poor communication were common.

Nevertheless, the patient's agenda is revealed as complex and multilayered, not merely a list of items. Indeed the lists are short. Overcoming barriers in communication between patients and doctors is a challenge. Training doctors to value the patient's agenda and addressing the problem of time pressure appear to be priorities.

The themes identified in the qualitative analysis have been listed in order of frequency in the data (7.2.4.3, p148). Byrne and Long (1976) posed the question 'why did the patient come?' In attempting to answer this question, which still causes problems for doctors, these themes would provide a comprehensive set of prompts. They also provide amplification of the theoretical framework constructed for this study from the combination of two models (Middleton 1989 and 1991a, Stewart et al 1975).
Combining the sixteen themes and the two models, the following plan for the initial phase of the consultation might be employed:

1. Elicit the list of issues
2. Value the ideas, concerns, expectations and questions
3. Understand the reasoning and the patient's standpoint.

These three points are an outline classification of the patient's agenda which is one component of the agenda model (chapter one - figure 1.1, p39, Middleton 1989) - the most important component, in the author's contention.

Eliciting the patient's agenda is sometimes easier said than done, especially by doctors in training. The following measures might be adopted in medical education, with suitable modifications for vocational training and undergraduate level. Firstly, the PtAF has been demonstrated to be able to gather information from patients. It could be used with simulated patients as well as in real consultations. Secondly, the educational workshop using simulated patients has been demonstrated to be effective in training doctors to identify more problems. Thirdly, the three points and fourteen themes could provide a route map for those who wish to understand why the patient may have come.
7.4: Tables 7.1 to 7.3
Table 7.1: Frequency of responses to questions on the PtAF

<table>
<thead>
<tr>
<th>Question</th>
<th>Number (%) n = 756</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1. Points to raise</td>
<td>722 (95.5)</td>
</tr>
<tr>
<td>Q2. Thoughts</td>
<td>447 (59.1)</td>
</tr>
<tr>
<td>Q3. Questions</td>
<td>351 (46.4)</td>
</tr>
<tr>
<td>Q4. Action request (overall)</td>
<td>733 (97.0)</td>
</tr>
<tr>
<td>Q4.1 Explain</td>
<td>524 (69.3)</td>
</tr>
<tr>
<td>Q4.2 Prescribe</td>
<td>413 (54.6)</td>
</tr>
<tr>
<td>Q4.3 Investigate</td>
<td>335 (44.3)</td>
</tr>
<tr>
<td>Q4.4 Write note</td>
<td>110 (14.6)</td>
</tr>
<tr>
<td>Q4.5 Other</td>
<td>70 (9.3)</td>
</tr>
</tbody>
</table>
Table 7.2a: Frequency of main non-clinical categories on the PtAF with inter and intra-rater comparisons on a sample of 100 forms

Kappa values: F (0.21 - 0.40) = fair, M (0.41 - 0.60) = moderate, G (0.61 - 0.80) = good, VG (0.81 - 1.0) = very good.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Whole data set</th>
<th>Sample from data set</th>
<th>Inter-rater comparison</th>
<th>Intra-rater comparison</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(number) n = 756</td>
<td>n = 100</td>
<td>n = 100 (Kappa value)</td>
<td>n = 100 (Kappa value)</td>
</tr>
<tr>
<td>Request</td>
<td>95.4 (721)</td>
<td>99</td>
<td>95 (0.92, VG)</td>
<td>94 (0.90, VG)</td>
</tr>
<tr>
<td>Ideas underlying</td>
<td>61.1 (462)</td>
<td>61</td>
<td>64 (0.90, VG)</td>
<td>63 (0.94, VG)</td>
</tr>
<tr>
<td>Questions</td>
<td>48.7 (368)</td>
<td>59</td>
<td>48 (0.62, G)</td>
<td>55 (0.86, VG)</td>
</tr>
<tr>
<td>Anxiety limit</td>
<td>41.9 (317)</td>
<td>10</td>
<td>14 (0.42, M)</td>
<td>13 (0.54, M)</td>
</tr>
<tr>
<td>Offering opinion</td>
<td>37.7 (285)</td>
<td>34</td>
<td>35 (0.94, VG)</td>
<td>34 (1.0, VG)</td>
</tr>
<tr>
<td>Reasoning</td>
<td>28.7 (217)</td>
<td>30</td>
<td>24 (0.60, M)</td>
<td>28 (0.86, VG)</td>
</tr>
<tr>
<td>Reporting information</td>
<td>26.6 (201)</td>
<td>18</td>
<td>16 (0.78, G)</td>
<td>16 (0.78, G)</td>
</tr>
<tr>
<td>Tolerance limit</td>
<td>23.7 (179)</td>
<td>10</td>
<td>9 (0.80, G)</td>
<td>7 (0.40, F)</td>
</tr>
<tr>
<td>Raising issues</td>
<td>19.3 (146)</td>
<td>19</td>
<td>18 (0.90, VG)</td>
<td>15 (0.66, G)</td>
</tr>
<tr>
<td>Commenting on the system</td>
<td>14.9 (113)</td>
<td>11</td>
<td>12 (0.84, VG)</td>
<td>11 (1.0, VG)</td>
</tr>
<tr>
<td>Administrative</td>
<td>14.2 (107)</td>
<td>14</td>
<td>13 (0.86, VG)</td>
<td>14 (1.0, VG)</td>
</tr>
</tbody>
</table>
Table 7.2b: Frequency of subsidiary non-clinical categories on the PtAF with inter and intra-rater comparisons on a sample of 100 forms

Kappa values: F (0.21 - 0.40) = fair, M (0.41 - 0.60) = moderate, G (0.61 - 0.80) = good, VG (0.81 - 1.0) = very good.

<table>
<thead>
<tr>
<th>Categories</th>
<th>Whole data set (number) n = 756</th>
<th>% Sample from data set n = 100</th>
<th>Inter-rater comparison n = 100 (Kappa value)</th>
<th>Intra-rater comparison n = 100 (Kappa value)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Request: explanation</td>
<td>67.7 (512)</td>
<td>67</td>
<td>63 (0.88, VG)</td>
<td>64 (0.92, VG)</td>
</tr>
<tr>
<td>Request: treatment</td>
<td>56.6 (428)</td>
<td>64</td>
<td>54 (0.68, G)</td>
<td>55 (0.72, G)</td>
</tr>
<tr>
<td>Request: investigation</td>
<td>44.2 (334)</td>
<td>45</td>
<td>43 (0.92, VG)</td>
<td>41 (0.82, VG)</td>
</tr>
<tr>
<td>Questions: treatment</td>
<td>22.4 (169)</td>
<td>25</td>
<td>24 (0.92, VG)</td>
<td>33 (0.52, M)</td>
</tr>
<tr>
<td>Reporting: own situation</td>
<td>21.6 (163)</td>
<td>12</td>
<td>8 (0.34, F)</td>
<td>11 (0.84, VG)</td>
</tr>
<tr>
<td>Request: test result</td>
<td>7.3 (55)</td>
<td>6</td>
<td>5 (0.66, G)</td>
<td>7 (0.72, G)</td>
</tr>
<tr>
<td>Comment: management</td>
<td>6.9 (52)</td>
<td>3</td>
<td>2 (0.34, F)</td>
<td>2 (0.34, F)</td>
</tr>
<tr>
<td>Comment: communication</td>
<td>3.6 (27)</td>
<td>4</td>
<td>5 (0.60, M)</td>
<td>5 (0.60, M)</td>
</tr>
<tr>
<td>Comment: time</td>
<td>2.0 (15)</td>
<td>3</td>
<td>3 (1.0, VG)</td>
<td>3 (1.0, VG)</td>
</tr>
<tr>
<td>Clinical categories (PtAF)</td>
<td>% (number) n = 756</td>
<td>GP 4th national morbidity survey (classification numbers)</td>
<td>%</td>
<td></td>
</tr>
<tr>
<td>--------------------------------------------</td>
<td>--------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----</td>
<td></td>
</tr>
<tr>
<td>Orthopaedic/rheumatic</td>
<td>16.3 (123)</td>
<td>Musculoskeletal and connective tissue (710-739)</td>
<td>19.5</td>
<td></td>
</tr>
<tr>
<td>Non-specific symptoms</td>
<td>16.0 (121)</td>
<td>Symptoms, signs and ill-defined conditions (780-799)</td>
<td>19.4</td>
<td></td>
</tr>
<tr>
<td>Gynaecological/female problems</td>
<td>15.6 (118)</td>
<td>Genitourinary (580-629) and pregnancy related (630-679)</td>
<td>15.9</td>
<td></td>
</tr>
<tr>
<td>ENT</td>
<td>15.6 (118)</td>
<td>See 'Respiratory'</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Psychiatric/psychological</td>
<td>12.0 (91)</td>
<td>Mental disorders (290-319)</td>
<td>9.3</td>
<td></td>
</tr>
<tr>
<td>Respiratory (except ENT)</td>
<td>11.2 (85)</td>
<td>Respiratory including ENT (460-519)</td>
<td>39.3</td>
<td></td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>10.8 (82)</td>
<td>Digestive system (520-579)</td>
<td>11.1</td>
<td></td>
</tr>
<tr>
<td>Skin</td>
<td>10.4 (78)</td>
<td>Skin and subcutaneous tissue (680-709)</td>
<td>18.6</td>
<td></td>
</tr>
<tr>
<td>Cardiovascular</td>
<td>8.5 (64)</td>
<td>Circulatory system (390-459)</td>
<td>11.9</td>
<td></td>
</tr>
<tr>
<td>Neurological</td>
<td>6.6 (50)</td>
<td>Nervous system and sense organs (320-389)</td>
<td>22.2</td>
<td></td>
</tr>
<tr>
<td>Eye</td>
<td>4.5 (34)</td>
<td>See 'Neurological'</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Urological</td>
<td>3.8 (29)</td>
<td>See 'Gynaecological/female problems'</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Immunisation</td>
<td>2.1 (16)</td>
<td>See 'Endocrine'</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Allergy</td>
<td>1.9 (14)</td>
<td>See 'Endocrine'</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Endocrine</td>
<td>1.5 (11)</td>
<td>Endocrine, nutritional, metabolic and immunity (240-279)</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td>Dental</td>
<td>1.1 (8)</td>
<td>-</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Infections</td>
<td>0.7 (5)</td>
<td>Infectious and parasitic diseases (001-139)</td>
<td>17.9</td>
<td></td>
</tr>
<tr>
<td>Cancer</td>
<td>0.5 (4)</td>
<td>Neoplasms (140-239)</td>
<td>3.1</td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER EIGHT : CONCLUSIONS

8.1 : Introduction

Howie (1996) has raised the issue of a 'credibility gap' in general practice research. He contended that research should be relevant to clinical practice and the patient's agenda (rather than external managerial considerations), and based on adequate theory. This project evolved from personal observations about the importance of the patient's agenda in clinical practice and teaching. It required and received enthusiastic co-operation from fellow professionals and their staff in general practice. The theory behind it (Middleton 1989) evolved from the well established models of Byrne and Long (1976), and Stott and Davis (1979). The project appears to satisfy all of Howie's criteria.

8.2 : Findings

8.2.1 : Aim one (chapter four)

To investigate the incidence and characteristics of lists, and the characteristics of patients who bring them in general practice.

- Lists were uncommon - one in a thousand general practice consultations, brought by four in a thousand patients. The incidence of lists was similar to that found in the multipractice trial (aim three).

- Patients who brought lists were not significantly different from controls, except that they had larger numbers of physical labels in their case notes. The increased number of psychological labels in list patients was not significant.

- Lists were relatively long with a mean of four items though most of these were symptoms which might have been amalgamated by doctors.
8.2.2: Aim two (chapter five)

To develop an educational package to enable doctors to make better use of the PtAF and thus to improve their communication skills.

- Attendance by doctors at an educational workshop was associated with increased confidence that they could: understand the concept of the patient’s agenda, use the PtAF, identify and work with the patient’s agenda, and understand different models of the consultation.

8.2.3: Aim three (chapter six)

To investigate the effect of using the PtAF and the effect of the educational workshop on the outcome of consultations in general practice.

- Use of the PtAF and attendance at the educational workshop had independent effects on increased numbers of problems identified and a tendency towards longer consultations.

- There were no differences in patient’s and doctor’s satisfaction, time per problem and BTWS

8.2.4: Aim four (chapter seven)

To investigate the nature of the patient’s agenda using the PtAF.

- The PtAF contained a mean of 1.6 problems, with a majority expressing underlying ideas and requesting explanations. A number of themes were identified which were synthesised into a model of the consultation.
8.3 : What the findings mean

8.3.1 : Doctors

Doctors' perceptions of patients and their lists were largely unsupported by this study. Although there appear to be a larger number of items on the lists than are presented at other consultations, the difference would probably be less marked if some of the symptoms were amalgamated. On the other hand, patients who bring lists voluntarily may do so because they have more items to remember.

More problems are identified and consultations tend to last longer as a result of using the PtAF or of attending an educational workshop. These findings may not be immediately appealing to doctors, in the context of increasing workload and pressure of time. However, consulting as rapidly as possible does not seem to be the answer either. Maximum throughput in minimum time, by ignoring patients' agendas and hoping that they will stay away, is perhaps an extreme view of what could happen. Nevertheless, it is the author's impression that some doctors hope the patient will have only one problem and no ideas. If so, this is likely to be a reflection of the pressure of workload. Whether unsatisfied patients tend to stay away or whether they contribute further to the workload is not clear.

The lack of change in doctor's satisfaction with consultations, despite the confidence expressed after the educational workshop, is perhaps surprising. There may have been factors associated with the interventions which reduced doctor's satisfaction. For example, the identification of more problems may have put the doctor under more pressure in real consultations as opposed to the simulations in the workshop. Also, there remain questions about the validity, reliability and sensitivity of the questionnaire.

The failure to reduce time per problem after the workshop was not expected (since the power calculation was based on this factor). Although the pilot study showed a strong trend towards such a reduction, it is possible that the longer workshop used in the main study emphasised the patient's agenda more than saving time. Perhaps it was also surprising that the incidence of BTWS was not reduced. It is possible that
both interventions tended to increase the likelihood of this phenomenon by signaling to the patient that the doctor was receptive to new information. However, the reliability of recording BTWS was not addressed in the study.

Are the extra problems and associated ideas, which might be missed by busy doctors, important? Since the problems were defined by the doctors in this research, it seems likely that they were important to doctors. The ideas were obviously important to the patients, but perhaps they would also have afforded useful insights for doctors. At the very least, valuing the patient's ideas is a way of securing cooperation with a negotiated plan of management. Logic suggests that this cooperation is essential in securing better compliance, efficient use of scarce resources, minimising complaints and ultimately raising professional morale.

One of the issues in the debate about health care is that of 'evidence based medicine' and widespread use of protocols in clinical care. Doctors might have concerns about the place of individual patients who might not fit exactly into these protocols. There is a potential for achieving greater cooperation in the consultation by helping patients to place their ideas and reasoning in the context of expert knowledge, to which they will have increasing access through advances in information technology.

8.3.2: Patients

How might the findings affect patients? Having their agendas addressed more completely would be an improvement, and this research has shown two approaches which can help (the PtAF and education). That doctors sometimes fail to find out the reason for the patient's attendance is not a new finding. It was pointed out by Byrne and Long (1976) and confirmed by Tuckett et al (1985). However, this research has quantified the number of problems missed, compared with consultations using the PtAF. On average, a fifth to a quarter of patients go away without having communicated one extra problem. Moreover, the patient's agenda is more complex than a mere list of problems. The complexity has been addressed in theory (e.g.: Helman 1981, Pendleton et al 1984, Stewart et al 1975), but perhaps not sufficiently in clinical practice. It has been demonstrated in this project by analysis of patients' lists and the PtAF. Recently, there have been calls for doctors to attach more value
to narrative knowledge and patients' stories (Brody 1987, Charon 1993, Owen 1995). This would be good news for patients. For doctors to listen more and to value their ideas and reasoning would make consultations more co-operative. Cromarty (1996), in a study of video recordings and interviews, found that patients sometimes give up on consultations without overt conflict, if they judge that the doctor is unlikely to address their agenda. Although few patients bring written lists, perhaps many more have lists with their associated ideas and reasoning in their heads. It is possible that more patients would have an overt aide memoire if doctors could overcome their prejudices against pieces of paper. It seems that patients will benefit from this research only if it affects the way doctors behave in practice.

Neither of the interventions in the study affected the level of patient's satisfaction. This could be explained by the doctor being put under pressure by the identification of extra problems, and perhaps failing to meet increased expectations engendered by the PtAF or by a more open approach. It is also possible that the questionnaire is not sufficiently sensitive where the consultation is used as a unit of measurement. Whatever the reason, it appears logical that patient's satisfaction should increase if the agenda is met more completely. Perhaps measures to reduce the pressure on the doctor, such as increased delegation, would result in greater satisfaction being associated with more problems identified.

8.3.3 : Society

Resources are an important issue. This research reinforces the argument for longer consultations (chapter one 1.2 p34). If the problems and ideas are important, sufficient time to address them is needed. Delegation of work to other health professionals is one possible solution to the problem of busy doctors. The PtAF could be used by practice nurses, if they were involved in screening consultations. It might also be useful to facilitate shared decision making in chronic disease management (e.g. asthma clinics).

It is possible that longer consultations which addressed the patient's agenda would be more cost effective. Consultation rates and use of resources might be reduced by better communication between patients and doctors. Whether this is the case with the use of the PtAF and the educational workshop has not been addressed by this
research. Nevertheless, longer consultations do not necessarily mean increased numbers of doctors.

8.4 : Further questions

The pilot work had raised an expectation that time per problem could be reduced as a result of doctors attending an educational workshop. It appeared logical that, if the tasks were defined early, efficiency would be increased. In practice the time remained constant at approximately five minutes per problem throughout the whole study. One possible interpretation is that established principals might already be working near to their maximum efficiency, although it might also be the case that they are 'too set in their ways' to learn new techniques. This raises the possibility that education of this kind at an earlier stage of the doctor's career might reduce time taken per problem. Some practical suggestions were given at the end of chapter seven.

There were minimal changes on the doctor's and patient's satisfaction scales. One interpretation is that the interventions had no effect on satisfaction. It is possible that the doctors identified the agendas more completely but were not so effective in dealing with what emerged. Expectations might have been raised, only to be disappointed by the outcome of the consultation. On the other hand, it is not certain that the questionnaires are appropriate for measuring changes in individual consultations, since previous experience may influence responses.
8.5 : Areas for future research

1. Prospective studies based on large practices using the PtAF could be evaluated by performance indicators including the CSQ, consultation rates, prescribing and referral data.

2. Modifications of the PtAF for use with clinical entities (for example, asthma) in outpatient clinics could be evaluated by clinical outcomes such as peak flow rate.

3. The problems elicited by use of the PtAF in general practice could be explored by video analysis of the consultations combined with interviews of the patients.

4. The educational package could be amplified for use in vocational training courses. It could be evaluated by performance of the participants in real or simulated consultations, for example by the Leicester Assessment Package (Fraser et al 1994).

5. Practice outcomes, following attendance by partners at the educational workshop, could be evaluated prospectively by performance indicators, also by video analysis of the individual partners’ consultations.

8.6 : Recommendations

The research has implications for teaching. If the patient’s agenda is a vital piece of the jigsaw and if the missed problems and ideas are important, it is necessary to re-examine the methods and outcomes used in medical education. The themes identified on the PtAF might be used to illustrate the content of patients’ agendas. How to address the patient’s agenda in practical terms should be the central plank of medical education, which should be emphasised from the earliest stages of the undergraduate curriculum. The North American approach to teaching consultation skills has much to recommend it (chapter one - section 1.7, p27). The findings of this research suggest that it would be useful to combine the policy of eliciting the list with exploring and valuing the patient’s ideas, concerns, expectations and questions, as well as attempting to understand the patient’s reasoning and viewpoint. The ability of
simulated patients to give feedback about their agendas is an important part of the educational workshop.

The workshop developed for this project is suitable for use either in vocational training or continuing medical education. Further development is needed to enable similar educational methods to be applied at an undergraduate level. This will require co-operation of undergraduate and postgraduate medical education organisations.
APPENDIX 1: THE 'LIST' FORM

The list of problems I wish to discuss with the doctor is as follows (three is not the limit):-

1.
2.
3.

-------------------------------------------------------------

In questions A, B, C, D below, please ring the number which most closely represents your point of view, or make a mark on the line.

NO__________________________________________YES

1 2 3 4 5 6 7

-------------------------------------------------------------

A. I am fed up with the symptoms.

1 2 3 4 5 6 7

B. I am worried about the symptoms.

1 2 3 4 5 6 7

C. I have come for a certificate, repeat prescription, letter or other document.

1 2 3 4 5 6 7

D. My real reason for coming is something else (not on the list).

1 2 3 4 5 6 7
APPENDIX 2 : THE PATIENT'S AGENDA FORM (PtAF)

TO HELP YOUR DOCTOR -

1. Please make a list of the points you wish to raise :-

2. Do you have any thoughts about these points  
   (for example, the cause of your problem)? :-

3. Do you have any questions? :-

4. What would you like the doctor to do (please circle yes or no).
   
   Prescribe          Yes  No
   Explain            Yes  No
   Investigate       Yes  No
   Write note        Yes  No

   Other (please say what it is) :-

175
APPENDIX 3: EDUCATIONAL WORKSHOP QUESTIONNAIRE

1. I thoroughly understand the concept of the patient's agenda.
   Strongly Agree / Agree / Not Sure / Disagree / Strongly Disagree

2. I am confident in using the patient’s agenda form.
   Strongly Agree / Agree / Not Sure / Disagree / Strongly Disagree

3. I am confident in identifying the patient’s agenda in consultations.
   Strongly Agree / Agree / Not Sure / Disagree / Strongly Disagree

4. I am confident about working with patients’ agendas in the consultation.
   Strongly Agree / Agree / Not Sure / Disagree / Strongly Disagree

5. I am confident that I can achieve relevant outcomes in the consultation.
   Strongly Agree / Agree / Not Sure / Disagree / Strongly Disagree

6. I have a good understanding of different models of the consultation.
   Strongly Agree / Agree / Not Sure / Disagree / Strongly Disagree
APPENDIX 4:
CONSULTATION SATISFACTION QUESTIONNAIRE (CSQ)

Introduction
This form contains a list of questions about your views on the last visit you made to the doctor. Please answer all of them. Your answers will be kept entirely confidential, and will not be shown to the doctor, so feel free to say whatever you wish. Please do not write your name on the form.
For question 1 onwards, circle the answer that is nearest your opinion. "Neutral" means you have no feelings either way.

FOR EXAMPLE
“This doctor was bored”

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Agree</th>
<th>Agree</th>
<th>Neutral</th>
<th>Disagree</th>
<th>Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I am totally satisfied with my visit to this doctor.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. This doctor was very careful to check everything when examining me.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I will follow this doctor’s advice because I think he/she is absolutely right.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. I felt able to tell this doctor about very personal things.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. The time I was able to spend with the doctor was a bit too short.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. This doctor told me everything about my treatment.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Some things about my consultation with the doctor could have been better.</td>
<td>Strongly Agree / Agree / Neutral / Disagree / Strongly Disagree</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please turn over
8. There are some things this doctor does not know about me.

9. This doctor examined me very thoroughly.

10. I thought this doctor took notice of me as a person.

11. The time I was allowed to spend with the doctor was not long enough to deal with everything I wanted.

12. I understand my illness much better after seeing this doctor.

13. This doctor was interested in me as a person, not just my illness.

14. This doctor knows all about me.

15. I felt this doctor really knew what I was thinking.

16. I wish it had been possible to spend a little longer with the doctor.

17. I am not completely satisfied with my visit to the doctor.

18. I would find it difficult to tell this doctor about some private things.
APPENDIX 5: DOCTOR’S QUESTIONNAIRE (DQ)

Please complete or tick against your answer.

1. Patient’s agenda form. yes .... no ....
2. Consultation time. mins .... secs ....
3. How many separate issues did you identify? ........
4. By - the - way events. yes .... no ....
5. Parent or guardian presenting a minor (completing a form) yes .... no ....
6. Are you satisfied that you made the correct assessment of yes .... no ....
   the patient’s true problems?
7. In your opinion, were you actually listening to what the yes .... no ....
   patient had to say? (be honest)
8. Did you understand what the patient was saying? (be honest) yes .... no ....
9. Did you feel that the patient was at ease talking to you? yes .... no ....
10. Do you feel you gave the patient enough time? yes .... no ....
11. Were you satisfied that you explained the nature of the yes .... no ....
    problem to the patient?
12. Were you happy with the treatment and/or advice you gave yes .... no ....
    to the patient?
13. Did you think you explained satisfactorily the advice yes.... no ....
    given or how to take the treatment?
14. Did you give the patient an opportunity to ask any questions? yes .... no ....
15. Was the patient given the opportunity to express anxieties yes .... no ....
    or emotional feelings as necessary?
16. Did you give advice on healthy living and preventative measures? yes .... no ....
17. Did you leave it open for the patient to return if not better? yes .... no ....
18. Were you satisfied with the outcome of the consultation? yes .... no ....
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194


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I reckon I can save another minute per patient if they...

For you, Mr. Patient...

He's reducing his workload or near that.

As against 1-4 problems from non...

I came back pain, what all this?

"A rash on my shoulders and some...

A patient list recommended by a lecturer...

GP who treated 100 patients who were here...

No list when they presented...

Enough five hours each week, that's enough...

Please remember your class number.

If my calculations are correct...

...even better...

He's saved a minute on each patient.

Please note your class number.

I reckon I can save another minute per patient if they...

...longer with 1-2 problems.

And that's the interesting part. Only list were no answers straightly.

While lone...

"It's better on the lists where a..."