

Hence, with 95% confidence, between 2,670,830 and 4,133,251 receive State Registered chiropody treatment in the U.K.

When expressed as percentages of the population:

1.064-3.087% receive private State Registered chiropody treatment.

3.47-4.02% receive NHS chiropody treatment only.

0.158-0.160% receive treatment at Schools of Chiropody.

With 95% confidence, between 4.692% and 7.267% of the population receive State Registered chiropody treatment.

To Ascertain Whether Chiropody Records Demonstrate Adequate Differential for an Individual Identification to be Made.

For identification to be viable, chiropody records must demonstrate lesion pattern individuality. To indicate the level of individuality given by distribution and type of chiropody lesions, record card final entries were compared for differentiation as follows:

Index cards were marked with age, sex, social class and final treatment notes from a random selection of NHS record cards. Random method used a one in three selection from record cards at two clinics. Three hundred cards were selected to represent population ratio of male/female and social class distribution. This was to restore imbalances in lesion patterns caused by these factors. Few Social Class 1 subjects were available, so Social Classes 1, 11 and 11 non-manual were considered as one group and 111 manual, 1V and V another group.

This random representative selection was made by drawing index cards blindly, until a selection of the correct proportions was obtained, discarding cards surplus to requirements.

Three hundred cards were chosen as the largest number envisaged that could be obtained from the clinics, taking random selection into account. Both clinics were within the same Health District.

Selected cards were sorted into respective lesion patterns as follows:

By considering lesion permanence and situation, from the 300 cards, selections were made in the following order:

1. All those including Onychogryphotic or Onychauxic 2nd nails.
2. Remaining cards including Onychogryphotic or Onychauxic 1st nails.
3. Remaining cards including Onychogryphosis or Onychauxis of all lesser toes (i.e. 3rd, 4th and 5th toes).
4. Remaining cards including 1st and 5th Metatarso phalangeal joint (MPJt) lesions together.
5. Remaining cards including 1st MPJt lesions.
6. Remaining cards including 5th MPJt lesions.
7. Remaining cards including 2nd MPJt lesions.
8. Remaining cards including 3rd MPJt lesions.
9. Remaining cards including 4th MPJt lesions.
10. Remaining cards including 1st toe plantar digital lesions.

11. Remaining cards including 2nd toe apical lesions.
 12. Remaining cards including 3rd toe apical lesions.
 13. Remaining cards including 4th toe apical lesions.
 14. Remaining cards including 5th toe apical lesions.
 15. Remaining cards including plantar calcaneal lesions.
 16. Remaining cards including 2nd toe dorsal lesions.
 17. Remaining cards including 5th toe dorsal lesions.
 18. Remaining cards including interdigital lesions.
 19. Remaining cards including generalised plantar metatarsal lesions.
 20. Remaining cards including subungual lesions.
 21. Cards recording no pathology.
- Categories were further subdivided, with lesion situation priorities as before, enabling all lesion situations to be recorded and isolation of identical or similar lesion patterns. Onychogryphosis and Onychauxis were not separated, as following treatment they may not be distinguishable and the differentiation could be subjective.

Ethical Considerations.

This section is research based wholly on medical records, so no specific consent was sought. The information obtained could not be related to individuals, in line with Medical Research Council Guidance (Medical Research Council, p.4).

Results.

48.7% of the U.K. population are male and 51.3% female (Table 8).

Fifty eight male and 93 female cards were proportionally and randomly selected from subdivisions of social classes 1, 11 and 111 non-manual and 88 male, 61 female cards from subdivisions of social classes 111 manual, 1V and V (Table 9) reflecting these percentages. Two hundred and sixty four obviously different patterns were observed on the 300 selected cards. Patterns observed more than once are recorded in Table 10.

Lesion patterns were considered similar, if visual identification would not distinguish between them. Lesions were sometimes implied, despite exact detail not being recorded (e.g. R/Ist reduced implies 1st nail thickening). Information recorded on these 300 cards showed most patterns of chiropodial pathology to differ. From this information the SE Proportion calculation shows for the population, with 95% confidence, for any sample of 300 chiropody patients examined, the proportion of different lesion patterns observed will be between 84.32 and 91.67% (i.e. 253 to 275) (Appendix 12).

From this information, for NHS chiropody patients, at any one time:

Table : 8
Population of the UK.

Statistic	Number
Population of the UK	56,900,000
Male population of the UK	27,700,000
Female population of the UK	29,200,000

(Government statistical service 1989)

Table : 9

Social Class, England and Wales

MEN	WOMEN		Sample sizes	
	Quality check %	Census %	Men 2933	Women 1945
I	5.8	5.8	0.9	0.9
II	21.7	21.9	20.5	20.3
III(m)	11.4	11.7	39.2	39.3
III(m)	40.2	39.7	8.5	9.0
IV	16.0	15.7	22.6	22.7
V	4.9	5.3	8.3	7.8

Quality check is considered the most accurate. (Government statistical service 1981)

Table : 10
Lesion patterns observed more than once In a sample of
300 treatment record cards.

Lesion pattern observed	No. times observed
1. Both 2nd nails, Implied thickening of nail plate.	2
2. Left 1st nail, Implied thickening of nail plate, with subungual debris both sulci.	2
3. Right 1st nail, Implied or recorded thickening of nail plate, and left 1st nail, subungual debris both sulci.	2
4. Both 1st nails, Implied, or recorded thickening.	3
5. Both feet, all nails, recorded thickening with callus plantar metatarsal area, plus Heloma Milliare.	2
6. Both feet, callus, plantar surface of 1st metatarsal Head area.	3
7. Left foot, callus, plantar surface of 1st metatarsal Head area.	2
8. Both feet, callus, plantar surface of 5th Metatarsal Head area.	2
9. Left 3rd MPJt area, Heloma Durum, with both 1st nails Implied subungual debris, both sulci.	2
10. Both feet callus, plantar surface of 1st toe, with generalised callus, plantar metatarsal area.	2
11. Both feet, callus, plantar surface of 1st toe.	2
12. Left apex of 4th toe, pressure point.	2
13. Both feet, generalised callus, plantar surface of calcaneal area, generalised callus, plantar metatarsal area, 1st both sulci, Implied or recorded subungual debris.	3
14. Left foot generalised callus, plantar metatarsal area, with heloma milliare or nuclei.	2
15. Both feet, generalised callus, plantar metatarsal area with heloma milliare, or nuclei.	2
16. Both feet, generalised callus, plantar metatarsal area.	6
17. Right foot, generalised callus, plantar metatarsal area.	2
18. Both 1st nails, both sulci, Implied or recorded subungual debris.	10
19. No pathology recorded.	3

With 95% confidence, at least $\frac{253}{300}$ to $\frac{275}{300}$ different lesion patterns will occur.

With 95% confidence, at least $\frac{233}{300}$ to $\frac{259}{300}$ lesion patterns will occur only once.

Three patients of the 300 had no recorded pathology. The SE proportion shows for the population, with 95% confidence, any sample of 300 chiroprody patients will contain 0% to 2.13% without chiroprodial pathology (i.e. between 0 and 6.39) (Appendix 14). Eighteen out of 264 pathology patterns occurred more than once.

Determination of whether a Chiroprodist can, in practice, use Chiroprody Records to give an Indicative Identification of an Individual.

This sub-aim was to determine whether chiroprodists can, in practice, indicatively identify subjects from chiroprody record information. Pilot tests were conducted to assess feasibility. Following this, three different situations were tested where indicative identification may be required.

Due to access difficulties and subject availability, the tests used live not deceased NHS patient records.

Pilot Test.

In the pilot tests, no randomness or patient selection procedures were used, the main aim being to indicate study feasibility. One hundred consecutive patients attending an NHS Chiroprody clinic were involved. Two tests were

undertaken, the first to indicate whether chiropodists could identify/eliminate subjects, using an available chiropody record. The second to indicate whether chiropodists could identify a subject from five previous recipients of chiropody treatment. Record cards used were not made by any particular chiropodist, although most were last entered by the chiropodist undertaking the pilot test.

Pilot Test 1.

The subject presented both feet. That subjects record card had previously been paired with another chosen randomly. Treatment notes were hidden at this stage and personal details exactly covered with A4 width envelopes. The two cards were mixed, rendering the correct card unidentifiable. One was drawn blindly, giving a 50/50 chance of that card appertaining to the subject. The examining chiropodist compared the subjects chiropodial lesions and deformities with those noted on the card, checking retrospective notes in addition to last entered notes, giving an opinion as to whether those notes referred to that subject. This decision was checked, by revealing personal details on the card, and the correctness of the decision recorded.

If the record card was not of that subject, Pilot Test 2 was undertaken.

Pilot Test 2.

This followed pilot test 1 when required, in identical circumstances. The remaining (correct) card with personal details hidden, was mixed with four other randomly chosen cards, also with hidden personal details, giving five unidentifiable records, of which one referred to the subject. The examining chiropodist compared lesions noted on each card with that subjects feet to attempt to identify the correct card. By revealing personal details on the chosen card, the correctness of the decision was recorded.

Ethical Considerations.

The pilot tests are tests of chiropody record accuracy and ability to identify individuals from these records. This is research based wholly on medical records. The Medical Research Council refers specifically to such research (Medical Research Council, p.3) and considers that subject to certain safeguards, medical information on identified individual patients should be available without explicit consent. Following the Medical Research Council recommendations, care was taken to ensure the information obtained could not be related to individuals and was treated confidentially. No non-chiropodially qualified person was involved in data handling and subjects verbal permission was obtained. Refusal to comply would have been respected. Results were presented so that identification of individuals was not possible.

Results.

In pilot test 1, 96/100 subjects were correctly identified (96%). In pilot test 2, 57/59 subjects were correctly identified (96.6%). 94% of subjects were correctly identified throughout both tests. It therefore appeared feasible to continue with controlled tests of chiropodists ability to use treatment records in identification.

Controlled Tests.

Tests 1 and 2 were then undertaken with more stringent criteria. Ten chiropodists undertook the required tests. Although ideally, they should have been randomly chosen, due to the volume of work involved, volunteers were required instead. The tests demonstrated the potential success of such identification methods, compared the success of identification from notes made by the identifying chiropodist with identification from notes made by others, indicated probable success in practice and checked whether similar success is expected in different regions.

Volunteers were given method sheets (Appendix 15). The tests were conducted in three different situations. Situation 1 where a subject requires identification from records last made by the examining chiropodist. Situation 2 where the subject requires identification from notes made by another nominated chiropodist and Situation 3 where the subject requires identification from notes made by random

chiropodists.

Situations 1 and 2 indicated whether identification would best be undertaken by the chiropodist last entering treatment notes on that subject, or by another chiropodist. Situation 3 demonstrated how successful identification would be in practice. Proportions correctly identified by chiropodists were compared to indicate whether some chiropodists were more successful than others. Of the ten volunteer chiropodists, five were from the Sheffield Health Authority and five from the Brighton Health Authority, to compare results between different Districts. The tests were conducted as follows:

Situation 1, Test 1.

Where subjects require identification/elimination using one set of records, last made by the examining chiropodist. This test was conducted in a face to face patient contact situation. Subjects were randomly chosen from NHS chiropody patients, taking one in every three patients attending, with the following exclusions:

1. Those without foot pathology (such patients have no chiropodial problems).
2. Lower limb amputees (identity may be obvious from the amputation).
3. Those under 65 years old (to reduce possible age differentiation bias, as most NHS patients are over 65).
4. New patients (with no available chiropodial history).

5. Those not last treated by the examining chiroprapist (these patients are not pertinent to this situation).
6. Subjects previously tested in this exercise (to avoid bias from replication).

The test was conducted on 30 subjects as in the pilot tests, but with refinements. Subjects presented both feet for examination. That subject's record card had been paired with another randomly chosen record also last entered by the examining chiroprapist. The treatment notes were hidden and personal details covered with A4 width envelopes. The cards were mixed, rendering the correct card unidentifiable. One was drawn blindly, giving a 50/50 change of that card appertaining to that subject.

The examining chiroprapist compared the subject's chiropodial lesions and deformities with those on the card, checking retrospective notes and diagnoses, giving opinion as to whether those notes referred to that subject. This decision was checked by revealing personal details on the card and the correctness of the decision recorded, plus age and sex of the subject and relevant notes of difficulties or exceptional ease, or reason for failure to identify on a data capture sheet (Appendix 16).

To assist the examining chiroprapist, an information recording chart was devised (Appendix 17), containing diagrammatic representation of the foot. Foot lesions were charted on this, along with lesions noted on the record

card at last treatment for simple comparison. If the record card was not of the subject, Test 2 was undertaken.

Situation 1, Test 2.

Where subjects require identification from five previous chiropody patients, whose records were last made by the examining chiropodist and immediately followed Test 1 when required. Circumstances and criteria were as in Test 1. The remaining (correct) notes for the subject with personal details hidden were mixed with four other randomly chosen records (drawn blindly from a bank of clinic records), last entered by the examining chiropodist. A4 width envelopes covered personal details, giving five sets of unidentifiable records, one of which appertained to that subject. The examining chiropodist then compared lesions noted on each card with that subject's feet, to attempt to identify the correct card from this comparison, as in Pilot Test 2. By revealing personal details on the chosen card, the correctness of the decision was recorded on the data capture sheet. When 30 subjects had been tested in Situation 1, Tests 1 and 2 were conducted in Situation 2.

Situation 2.

Where subjects require identification from treatment notes last made by another chiropodist. Tests 1 and 2 were conducted on subjects whose records had last been entered by a nominated chiropodist, to demonstrate whether chiropodists could identify from another chiropodists

notes. Due to high turnover of NHS staff and changing workload programmes, chiropodists used notes last entered by chiropodists whose workload most coincided with their own, to conclude this aspect of study quickly, secure from altered work situation obstacles. Ideally, the nominated chiropodist whose notes were to be used would be chosen randomly.

Tests 1 and 2 were conducted as in Situation 1, but using treatment notes last entered by the nominated chiropodist. Results were recorded on data capture sheets.

When 30 subjects had been tested in Situation 2, Tests 1 and 2 were conducted in Situation 3.

Situation 3.

This situation utilized random chiropodists notes, indicating how successful identification would be in practice, when both feet are intact. Circumstances and criteria were as in Situations 1 and 2. The method to choose chiropodists notes at random was as follows:

Examining chiropodists listed all chiropodists whose workload coincided with their own. They passed through this list repeatedly, tossing a coin by each name and recording heads as and tails as X. This was repeated until 30 ticks had been placed by listed chiropodists. The resulting chart dictated the randomness to be adhered to when testing other chiropodists notes (i.e. by proceeding through the list, the examining chiropodist either ignored, or tested records last made by each listed chiropodist as

their notes arose in the course of the clinical day, depending on whether ticked or crossed). As 30 ticks had been made, 30 subjects were thus tested. To avoid bias in Situation 3, additional precautions were required. Examining chiropodists needed knowledge of whether record cards had been last entered by the chiropodist whose notes were to be used. To read notes prior to testing would give knowledge of those details, introducing bias. Therefore, examining chiropodists either obtained third party assistance to check cards beforehand, or covered up treatment details, so only the last entering chiropodist's signature was visible, ascertaining whether the last entered notes were to be used.

The next precaution was in selecting another card for the 50/50 selection procedure, prior to comparison with the subjects chiropodial status. The other cards used, must also have been last entered by the chiropodist whose notes were being tested, as would the four other cards utilized in Test 2. Therefore, in choosing these cards, either third party assistance, or covering of treatment notes and checking final signatures were again recommended.

Analysis of Results.

From resultant data, several aspects were analyzed. Using the χ^2 test to indicate differences in proportions, differences between examining chiropodists results were analyzed for significant differences in chiropodists abilities to identify.

The χ^2 test was then used to indicate any significant differences in proportions identified between the two Districts, to show whether subjects in different areas can be identified with equal success rate.

The χ^2 test was also used to indicate any significant difference between identification from notes last made by the examining chiroprapist and identification from another's notes, to indicate which procedure would be best in practice.

The χ^2 test was finally used to indicate any significant difference between results from a nominated chiroprapist's notes and notes taken at random, to show whether in practice identification success would be significantly different.

Ethical Considerations.

The same ethical considerations for the pilot tests apply here, therefore identical precautions were taken.

Results.

All ten chiroprapists completed all the tests. Proportions correctly identified/eliminated are listed in Table 11. One chiroprapist (No. 9) deviated from protocol in Test 2, by testing all subjects, not just those whose records were not actively used in Test 1. Potential bias was

Table : 11
Proportions correctly Identified/ Eliminated by Judgement

	Chiropodist			Test A			Test B		
	Situation 1	Situation 2	Situation 3	Situation 1	Situation 2	Situation 3	Situation 1	Situation 2	Situation 3
1	$\frac{30}{30}$ (100%)	$\frac{28}{30}$ (93.33%)	$\frac{29}{30}$ (96.66%)	$\frac{17}{17}$ (100%)	$\frac{14}{14}$ (100%)	$\frac{15}{15}$ (100%)	$\frac{14}{14}$ (100%)	$\frac{15}{15}$ (100%)	
2	$\frac{30}{30}$ (100%)	$\frac{28}{30}$ (93.33%)	$\frac{30}{30}$ (100%)	$\frac{17}{17}$ (100%)	$\frac{15}{17}$ (88.23%)	$\frac{15}{17}$ (88.23%)	$\frac{15}{17}$ (88.23%)	$\frac{15}{17}$ (88.23%)	
3	$\frac{30}{30}$ (100%)	$\frac{30}{30}$ (100%)	$\frac{30}{30}$ (100%)	$\frac{15}{15}$ (100%)	$\frac{15}{15}$ (100%)	$\frac{29}{30}$ (96.66%)	$\frac{15}{15}$ (100%)	$\frac{29}{30}$ (96.66%)	
4	$\frac{30}{30}$ (100%)	$\frac{30}{30}$ (100%)	$\frac{30}{30}$ (100%)	$\frac{16}{16}$ (100%)	$\frac{17}{18}$ (94.44%)	$\frac{13}{16}$ (81.25%)	$\frac{17}{18}$ (94.44%)	$\frac{13}{16}$ (81.25%)	
5	$\frac{29}{30}$ (96.66%)	$\frac{28}{30}$ (93.33%)	$\frac{26}{30}$ (86.66%)	$\frac{14}{14}$ (100%)	$\frac{18}{18}$ (100%)	$\frac{15}{16}$ (93.75%)	$\frac{18}{18}$ (100%)	$\frac{15}{16}$ (93.75%)	
6	$\frac{25}{30}$ (83.33%)	$\frac{17}{30}$ (56.66%)	$\frac{18}{30}$ (60%)	$\frac{4}{5}$ (80%)	$\frac{11}{12}$ (91.66%)	$\frac{7}{12}$ (58.33%)	$\frac{11}{12}$ (91.66%)	$\frac{7}{12}$ (58.33%)	
7	$\frac{17}{30}$ (56.66%)	$\frac{19}{30}$ (63.33%)	$\frac{17}{30}$ (56.66%)	$\frac{9}{14}$ (64.31%)	$\frac{11}{15}$ (73.33%)	$\frac{7}{12}$ (58.33%)	$\frac{11}{15}$ (73.33%)	$\frac{7}{12}$ (58.33%)	
8	$\frac{30}{30}$ (100%)	$\frac{30}{30}$ (100%)	$\frac{30}{30}$ (100%)	$\frac{2}{2}$ (100%)	$\frac{4}{4}$ (100%)	$\frac{8}{8}$ (100%)	$\frac{4}{4}$ (100%)	$\frac{8}{8}$ (100%)	
9	$\frac{22}{30}$ (73.33%)	$\frac{20}{30}$ (66.66%)	$\frac{26}{30}$ (86.66%)	$\frac{26}{30}$ (86.66%)	$\frac{23}{30}$ (76.66%)	$\frac{24}{30}$ (80%)	$\frac{23}{30}$ (76.66%)	$\frac{24}{30}$ (80%)	
10	$\frac{25}{30}$ (83.33%)	$\frac{17}{30}$ (56.66%)	$\frac{19}{30}$ (63.33%)	$\frac{7}{15}$ (46.66%)	$\frac{12}{20}$ (60%)	$\frac{18}{23}$ (78.26%)	$\frac{12}{20}$ (60%)	$\frac{18}{23}$ (78.26%)	

SHEFFIELD DISTRICT

BRIGHTON DISTRICT

Table : 12
Reasons given for failure to identify/ eliminate by judgement.

Reason Given	No. failure in :		Total Failures
	Sheffield	Brighton	
Lesion pattern of common occurrence (e.g. single H.D. 5th, CMPA)	2	6	8
Notes Illegible	1	2	3
Abbreviations not understood	4	6	10
Diagnosis unwritten, would have helped	4	1	5
Notes incomplete, inadequate, or not specific (e.g. only 'routine treatment' written).	4	4	8
Condition changed/ resolved	5	5	10
Diagnosis incorrect		1	1
Forgot to check retrospective notes, which would have helped to confirm.	1		1
Carelessness - missed lesion on examination.	1		1
Carelessness - misread record card	1		1
Notes inaccurate, possibly due to previous mix-up and other patients' notes being entered on record card	1	2	3
No reason given		148	148
TOTAL	24	175	199

Care with Examination

introduced, in that chiroprapist 9 had previous sight of some records used in Test 2. Chiroprapist 9's Test 2 results were however similar to those of other chiropradists, so were allowed to stand.

One participating chiropradist (No. 8) recorded no failures in any tests. No deviation from protocol was admitted, hence this result must be accepted. Participating chiropradists were requested to note reasons for failure to identify/eliminate correctly. In 87 failures, no reason was given, either due to misunderstanding, disregard or uncertainty. The reasons given for failure are listed in Table 12, the most common being that the observed lesion pattern did not afford a high enough degree of identity for identification/elimination.

Of the 1,387 tests undertaken, 1,188 correct judgements were recorded, i.e. 85.65% of all judgements were correct. In Sheffield 96.88% of judgements were correct, compared with 73.9% in Brighton.

Data was initially analyzed to compare successful identifications in Sheffield with Brighton, indicating whether the same degree of identification success can be expected in different areas. For Test 1 there were $\frac{293}{300}$ correct judgements in Sheffield, compared with $\frac{222}{300}$ in

Brighton. The χ^2 test shows this difference is very highly

statistically significant with 99.9% confidence (Appendix 18).

For Test 2, $\frac{161}{158}$ correct judgements were made in Sheffield, compared with $\frac{109}{147}$ in Brighton. The χ^2 test shows this difference is very highly statistically significant with 99.9% confidence (Appendix 19). Therefore, there is a very highly statistically significant difference between different Districts, in the proportion of successful identifications/eliminations, with 97.8% success in Sheffield, and 74.05% in Brighton.

Data was analyzed for differences between proportions identified/eliminated, using the identifying chiropodist's own notes (Situation 1) and using another chiropodist's last entered notes (Situation 2), to indicate which method gives the most correct identifications.

For Test 1 $\frac{268}{300}$ correct judgements were made, using the identifying chiropodist's last entered notes, and $\frac{247}{300}$ using another chiropodist's last entered notes. The χ^2 test shows this difference is statistically significant with 99% confidence (Appendix 20). Thus, for Test 1, identification from ones' own notes appears more successful than from anothers notes, with 89.33% success in the former situation, compared with 82.3% in the latter.

For Test 2, $\frac{127}{145}$ correct judgements were made, using identifying chiropodist's own notes, compared with $\frac{140}{163}$ using another chiropodist's last entered notes. The χ^2 test shows this difference is not statistically significant, with the probability of occurring by chance being greater than 50% (Appendix 21). Thus, for Test 2, identification from ones' own notes appears to have similar success to identification from anothers notes, with 87.58% of judgements in the former situation being successful and 85.88% in the latter.

Data obtained was used to indicate whether all chiropodists identified with the same degree of success or not, for Situations 1 and 2 combined. A significant difference had been noted between Sheffield and Brighton, so the results for the two Districts were analyzed separately.

For Test 1, the χ^2 test applied to individual results for Sheffield showed differences between individual success in identification were not statistically significant, having greater probability than 10% of occurring by chance (Appendix 22).

The χ^2 test applied to the individual results obtained for Brighton for Test 1 showed differences observed were very highly significant, with the probability of occurring by chance being less than 0.1% i.e. with 99.9% confidence (Appendix 23). Thus, an apparent difference in successful

identification between chiroprodists in Brighton is shown. Inspection of the χ^2 table shows the largest contribution to the total χ^2 came from chiroprodist 8 (Appendix 23). The χ^2 test was reapplied, minus chiroprodist 8's results, showing differences amongst the remaining chiroprodists were non-significant, with the probability of arising by chance being greater than 10% (Appendix 24). Therefore, the success of the other Brighton chiroprodists in identification in Test 1 appears equal. Chiroprodist 8 appeared to identify with greater success for Test 1.

Data was similarly analyzed for Test 2, using Situations 1 and 2 combined. The χ^2 test applied to individual Sheffield results for Test 2, using Situations 1 and 2 combined, showed differences between individual success in identification were not statistically significant, with greater probability than 10% of having occurred by chance (Appendix 25).

The χ^2 test, applied to individual Brighton results for Test 2, using Situations 1 and 2 combined, showed statistically significant differences between individual success in identification, with less probability than 2% of occurring by chance (Appendix 26). Inspection of the χ^2 table shows the largest contribution to the total χ^2 came from chiroprodist 10 (Appendix 29). The χ^2 test was reapplied, minus chiroprodist 10's results, showing differences between remaining chiroprodists were non-

significant, with greater probability than 10% of occurring by chance (Appendix 27). Therefore, the success of the other chiropodists in Brighton to identify in Test 2 appears equal. Chiropodist 10 appeared to identify with significantly less success than the other Brighton chiropodists in Test 2. Test 1 results (for Situations 1 and 2) were compared with those of Test 2, to check whether equal success in both represented circumstances can be expected.

In Test 1, $\frac{515}{600}$ correct judgements were made for Situations 1 and 2 combined.

In Test 2, $\frac{267}{308}$ correct judgements were made for Situations 1 and 2 combined.

The X^2 showed these differences were not statistically significant, with the probability of occurring by chance being greater than 50% (Appendix 28). There appears to be equal success in the situations represented by each of these tests.

Data from Situation 3 was compared with that from Situation 2, to indicate whether any significant difference is expected in practice.

For Test 1, Situation 2, $\frac{247}{300}$ successful judgements were recorded, compared with $\frac{255}{300}$ for Situation 3. The χ^2 test shows this difference is non-significant, with over 10% probability of occurring by chance (Appendix 29).

For Test 2, in Situation 2, $\frac{140}{163}$ correct judgements were compared with $\frac{151}{179}$ for Situation 3. The X^2 test indicates

this difference is non-significant, with over 50% probability of occurring by chance (Appendix 30). There appears to be similar identification success in the situations represented by both Test 1 and 2.