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Modelling the IR task: supporting the user

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Submitted for Examination of
Doctor of Philosophy

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Table of Contents - volume 2

		Page
Appendices		2
3a	Pre-test questionnaire	3
3b	Tutorial document for MEDLINE	8
3c	Querying to evaluating transition data	15
3d	Search query histories	17
5a	Transitional probabilities and frequencies	35
6a	Pre-test questionnaire Liber/ PTRC	51
6b	Post test questionnaires Liber	55
6c	Post test questionnaires PTRC	57

Appendix 3a Pre-test questionnaires for medical students in study of MEDLINE

Questionnaire Ref. No._____

This section is design to assess your educational background in relation to the subject area of the study. Please add any further comments that you feel are helpful or ask if a you are unclear about anything.

For the purpose of this study definitions for the following terms are as follows:

Information retrieval system : any computer based system which can be used to find information on a particular topic eg. Library catalogue system; pysclit; Medline etc.

Search : the seeking of information to satisfy a single task

Information Need : A need arising from the lack of knowledge relating to a problem situation

1. Have you ever conducted a search for information using the Medline database ?

Yes _____
No _____ -> go to 7

If "Yes" At what approximate date did you last use this?

_____ Date

2. How many searches have you performed on Medline in the past ?

a) Year _____ Searches

b) Month _____ Searches

3. How much time was spent interacting with this database at each visit (approx. hrs.) ?

_____hrs.

4. Is this a typical monthly activity

Yes _____
No _____

If "No" what is the activity for a typical month ?

Number of searches _____
Interaction time per use of the system _____

5. Can you list the facilities that you use or normally use whilst searching the Medline database? (e.g. thesaurus, Index, search operators, etc.)

Facilities

6. Do your searches generally focus on a single subject area (eg. cardiology) or multiple subject areas (eg. cardiology and casualty policy) ?

Multiple _____ Single _____

7. Have you **ever** performed searches on other information retrieval systems (e.g. library system, article index, etc.) ?

Yes _____
No _____ -> go to 11

8. Please fill in the table about information retrieval systems you have used in the **past month** ?

Database name (eg. Medline , Library catalogue etc.)	Database type (e.g. text article retrieval etc.)	Number of searches (search is defined as the retrieval of information to satisfy an information need)	Time spent using the system (approx. hours)

9. Is this a typical months activity

Yes _____
No _____

If "No" please fill in the table below for the activity of a typical month?

Database name (e.g Medline, Library Catalogue etc.)	Database type (eg. text article retrieval etc.)	Number of searches (search is defined as the retrieval of information to satisfy an information need)	Time spent using the system (approx. hours)

10. In what year did you first use an information retrieval systems?

_____ Year

If less than 1 yr. ago in what month was this ? _____ Month

11. Have you undergone formal training in the use of information retrieval?

Yes _____. Please fill in the table below on the extent and level of this training
No _____-> go to 12

Type of training e.g.(course; tutorial; book; pamphlet and other) if other please state what	Year of training	Level of educational or job training (e.g. undergraduate etc.)	Information retrieval system specific (Yes/ No)	Name of the system trained on (eg. Medline, Library system etc.)	Subject area training aimed at (e.g. computers; medicine etc.)

12. Please fill in the table about your behaviour when you are looking for sources of information:

Subject topic areas you generally search for information on	Method of searching for information (Paper based/ Computer based / Both)	Reason for choice of search method

13. Please fill in the table about the databases you would normally use when looking for information. When you start a search do you have a clear picture of the information you want or do you develop this picture of the information required as you use the database?

Database name	Information required	
	Clear at start	Developed using database

14. In general how often do you perform the same searches at different points in time, either due to search failure or due to the occurrence of the same information need?

_____ None / Times returned to the same search topic

15. Considering your educational background, searching you have done and any other sources of information (eg. text books), how familiar are you with the subjects of:

Subject	Not at all familiar (No previous knowledge)	Little familiarity (Awareness of some topics within the subject area)	Quite familiar (Knowledge of the structure and topics incorporated within the subject area)	Very familiar (Expert in the subject area with in depth knowledge of the subject area)
A Obstetrics				
B General Medicine				
C Cardiology				
D Public Health				
E Neurology				
F Oncology				

16. Please list any educational qualifications or jobs held and their level in the following subject areas.

Subject area	Type of educational material (book; pamphlet and other) if other please state what	Job or educational training (eg. course or tutorial)?
Obstetrics		
General Medicine		
Cardiology		
Public Health		
Neurology		
Oncology		

Appendix 3b Tutorial document for the MEDLINE interface

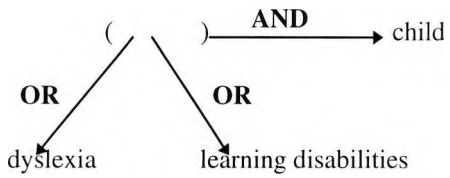
Ref. No. _____

Training material about the Medline information retrieval system

This training document outlines the searching language and retrieval facilities of the Medline database. This information will aid you in the production of effective and efficient search strategies which targets information that satisfies your requirement.

Medline language which allows the construction of search strategies

The Medline search language allows you to produce complex and precise strategies of related terms eg.



This section of the training material will first introduce the operators for combining terms and then will show the structure of valid search statements for the database. Please note that all searches are *upper/lower case insensitive*.

Medline Operators:

Medline search operators allow the combination of terms into complex inter-related structures. The structures are matched by the computer against the articles in the database.

Operator	Action produced	Example	Results
AND	Finds articles that contain both of two terms	dyslexia AND child	Articles are returned by the system which include **both** dyslexia and child. These terms may occur in any of the fields for an article i.e. title, abstract etc.
OR	Finds articles that contain either or both of two terms	dyslexia OR learning disabilities	This operator allows the search to be kept broad and can be used to broaden a previous search. It expands the number of articles deemed as relevant to the task as it returns all articles in which the terms are present **either together** or **separately**..
NEAR	Finds articles that contain both of two terms in the same sentence	dyslexia NEAR child	Articles will be returned only if the terms given are **within** the proximity of **the same sentence**. Thus this can be used to narrow the articles seen as relevant if it is expected that the terms are tightly related to each other.
NOT	Finds articles that contain one term but not another	dyslexia NOT adult	This allows you to **exclude articles** which are known to be within the subject topic area of the search but aren't relevant to the task you are trying to perform. Thus this allows the narrowing of the articles which are relevant.
IN	Finds articles that contain a term in a specified field	Freud IN au	Articles are returned in which Freud is the author
WITH	Finds articles that contain both of two terms in the same field	dyslexia WITH child	This retrieves articles in which the terms dyslexia and child occur in a single field. i.e. in the title, abstract etc.

Valid Search Statements:

This section shows the valid syntax for search statements. Strategies can be defined which allow you to locate the information required precisely and, with the use of search operators, allow the refinement of search strategies in the light of search results. These facilities allow your search strategy to develop in response to information gained whilst searching, aiding in the development of the problem situation to be solved. These valid search statements are all entered in the search field.

Type of search	Syntax	Examples
Specific term	term	dyslexia child
Term with truncation and thus all concepts which include the letters given by the searcher	part_of_a_term*	haem* child*
Term with wild cards and thus all terms which include the two strings given around a central undefined string.	term_part1?term_part2	colo?r ch?ld dysl?a
Building on a previous search requests	#Search_Strategy_Number Search_Operator term	#3 AND blood #3 OR blood #3 NEAR blood
Phrase which is to be matched in its entirety and thus terms which occur in this order and proximity	term term term	new york city learning disabilities
Phrase with hyphens	term-term	drug-abuse
Term or Phrase limited to a field	term IN field_identifier	Freud IN au English IN cp
Multiple terms combined with operators. Allowing a search to be given a more complex and inter-related structure	term Search_Operator term Search_Operator term	dog OR puppy OR canine dyslexia OR child (dyslexia OR learning disabilities) AND child
Multiple terms separated by semi-colons in which a separate search is implemented for each of the concepts given **but** these will **not be combined** at all. Thus there will be an article set for each of the terms between the semi-colons	term; term; term	heart; lung; liver
Any of the above can be grouped with parenthesis	(term Search_Operator term) Search_Operator term	(dog OR Heart) NEAR puppy (lung NEAR cancer) AND causes

Medline retrieval facilities

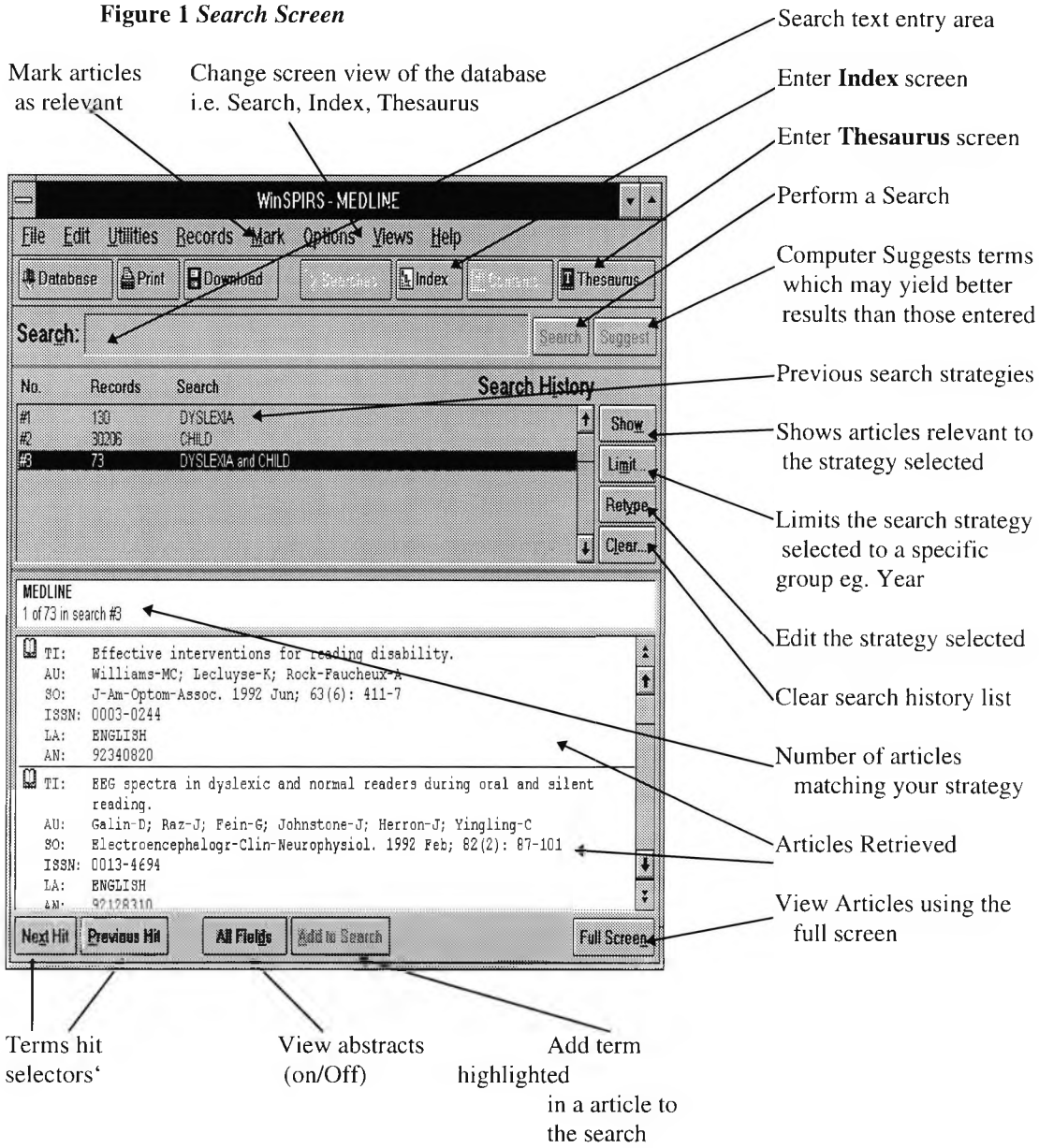
Search: allows strategies (terms and search operators) to be performed. Search strategies can be progressively refined using Medline search operators to link new terms with previous strategies.

To perform a search:

1// Type the strategy to be used into the search text entry area (eg. dyslexia AND child)

2// Perform the search by clicking on the Search button

Figure 1 *Search Screen*



Current search history: Strategies contained in the ***Search History*** (see figure 1) in the ***Search Screen*** are reusable through their selection and modification.

To re-use a past search strategy

1// Selection is performed by double clicking on the strategy one wishes to use.

2// Modification can be performed in two ways:

a) Click on the re-type button and amend the strategy by selecting the portion to be changed using the left and right cursors and editing the target text.

b) Use Medlines search operators to alter the granularity of the search e.g. AND cancer

3// Perform the search by clicking on the Search button

Employing operators to narrow and broaden searches:

Medline allows the production of complex searches in which the results of previous searches can be used to develop a narrower or broader selection of articles. This is done by narrowing or broadening the terms used by either using the ***Thesaurus*** (to be described later) to widen the scope of the terms used or extending the search strategy using AND and OR operators. For example #1 AND child, #1 OR child where #1 identifies the strategy number 1.

Performing lateral searching : terms included in the articles resulting from a previous search can be selected using the mouse and then searched for directly without having to re-type the key terms.

1// Select "term" within the record by double clicking on it with the left mouse button
2// Click on the ***Add to Search*** button
3// Click on the ***Search*** button

Note. This doesn't narrow down the search but implements a new search/ search space.

Index: Alphabetical list of the terms for various fields and field sets (author, abstract, etc.) in the database and the number of articles which contain the term. The default is to use the indexes for all fields.

To Search the Index:

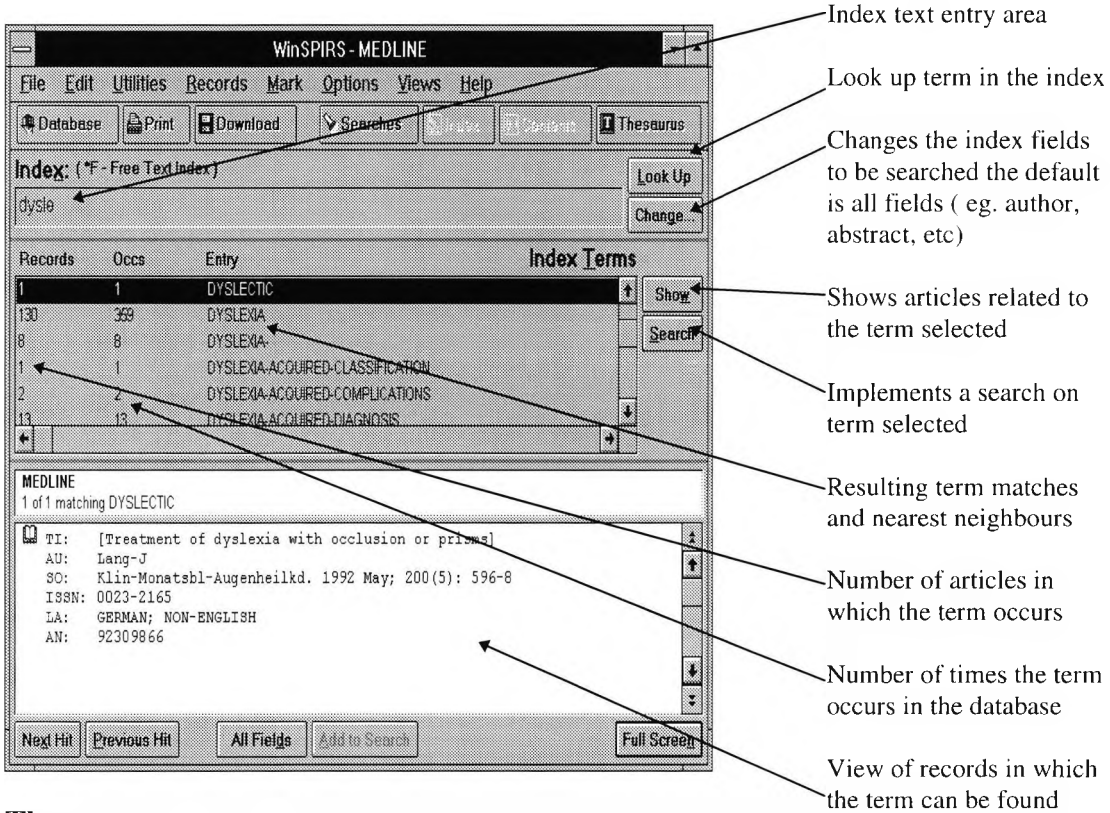
1. Click the ***Index*** button or select ***Index*** from the ***Views*** menu in the ***Search***, or ***Thesaurus*** screen
2. Type a term in the ***Index: text entry area*** of the ***Index screen*** (see figure 2). The alphabetical list of index terms alters to match your term
3. Click the ***Show*** button to display the articles associated with the term highlighted.

N.B. You can look at the articles associated with another index term by clicking on that term and clicking the ***Show*** button

To use index terms in your search:

1. Select one or more terms. To select multiple terms, hold down the [Shift] or [Ctrl] key and click on the desired items.
2. Click the ***Search*** button. The terms appear in the ***Search history*** area of the ***Search screen***. If you have selected multiple terms, the database combines them with the OR operator.

Figure 2 ***Index screen***



Thesaurus: The ***Thesaurus*** is a list of controlled vocabulary on which the index is standardised. This enables you to select and search for synonyms, related terms, preferred terms and a definition for a

term. The hierarchical nature of the thesaurus allows you to select more general (broader) and more specific (narrower) terms to be used in your search.

To look up a thesaurus term:

1. Click the ***Thesaurus*** button or select ***Thesaurus*** from the ***Views*** menu to enter the ***Thesaurus screen*** (see figure 3)
2. Type a term in the ***Thesaurus: text entry area*** and click the ***Look Up*** button. The permuted index is displayed, with term you typed highlighted
3. If desired, click the ***Term Information*** button to see details about the term such as definitions, scope notes and broader and narrower terms.

To search for the term:

1. Choose a type of search from the search options area.

    - ***Single Term*** searches for just the term you have selected

    - ***Explode*** searches for the selected term, plus all of its narrower terms as included in the ***Thesaurus***.

2. Click the ***Search Now*** or ***Add to List*** button only for articles containing that term.

    - ***Search Now*** searches for the term immediately.

    - ***Add to List*** adds the term to the list to be searched for later. You can then search for several thesaurus terms by clicking the search list button.

Figure 3 Thesaurus

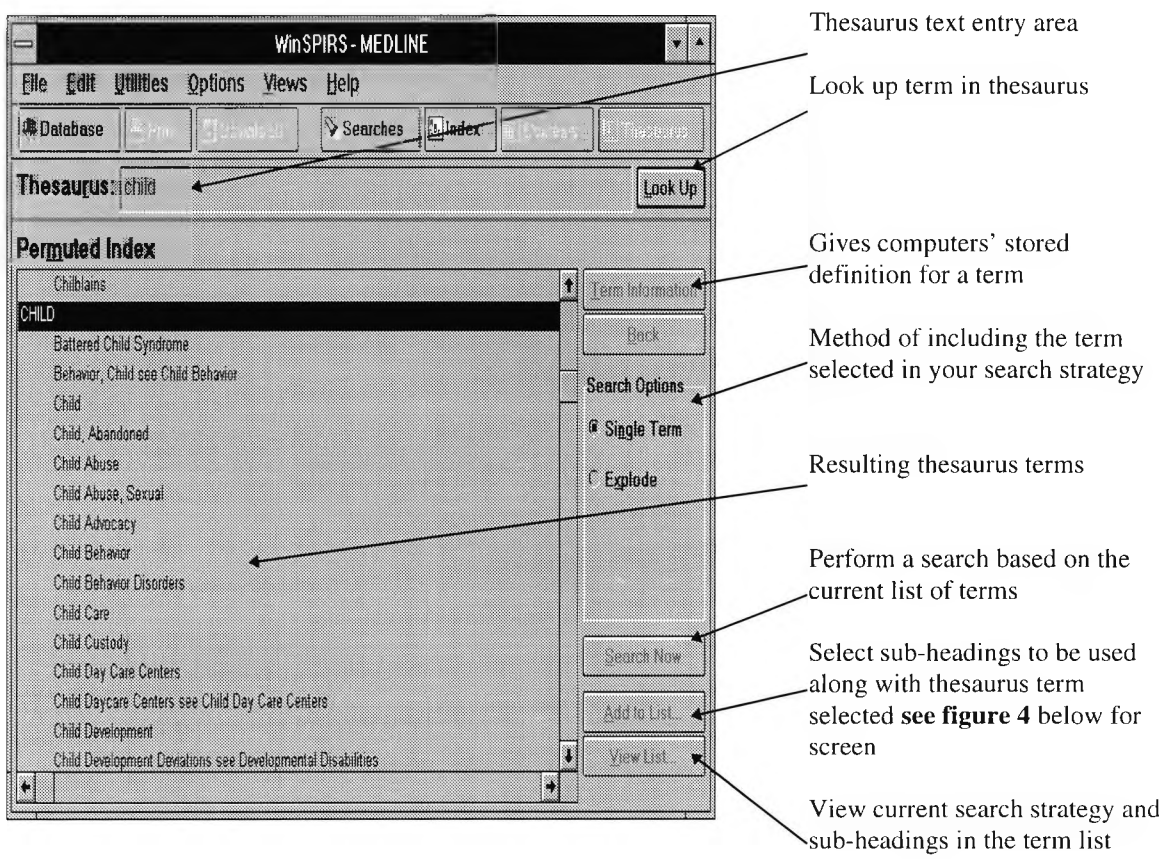
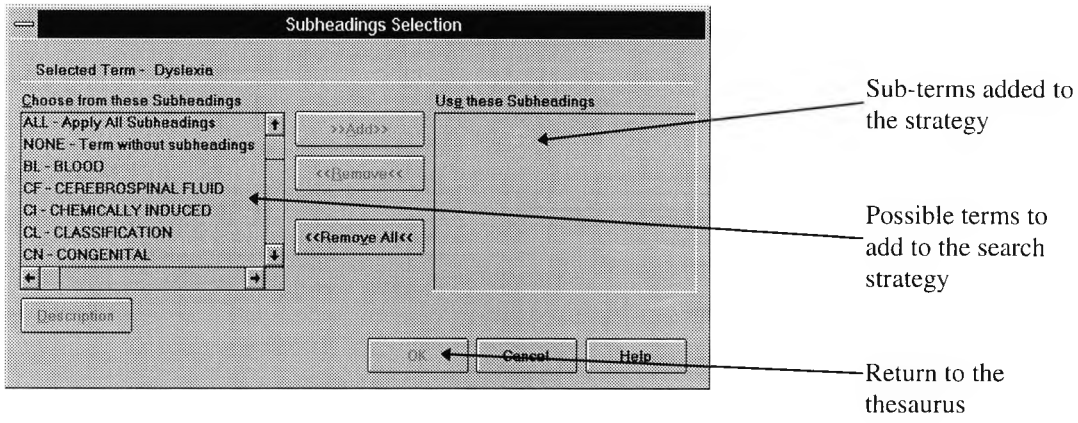
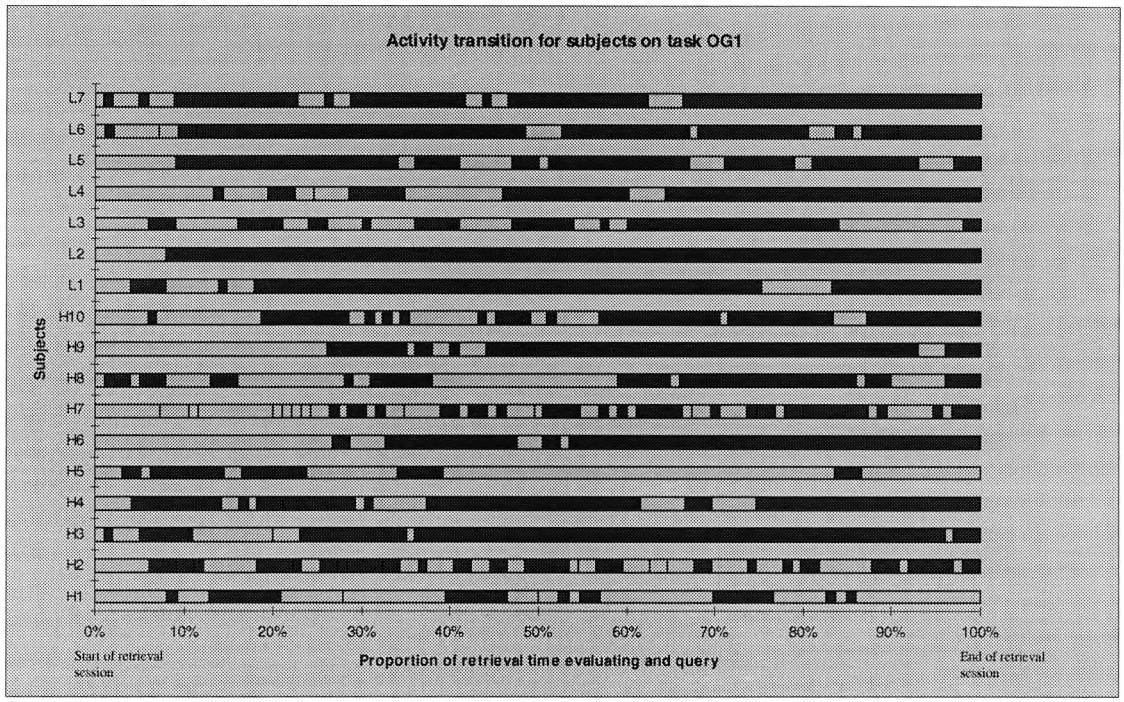


Figure 4 ***Sub-term selection to add to a search***

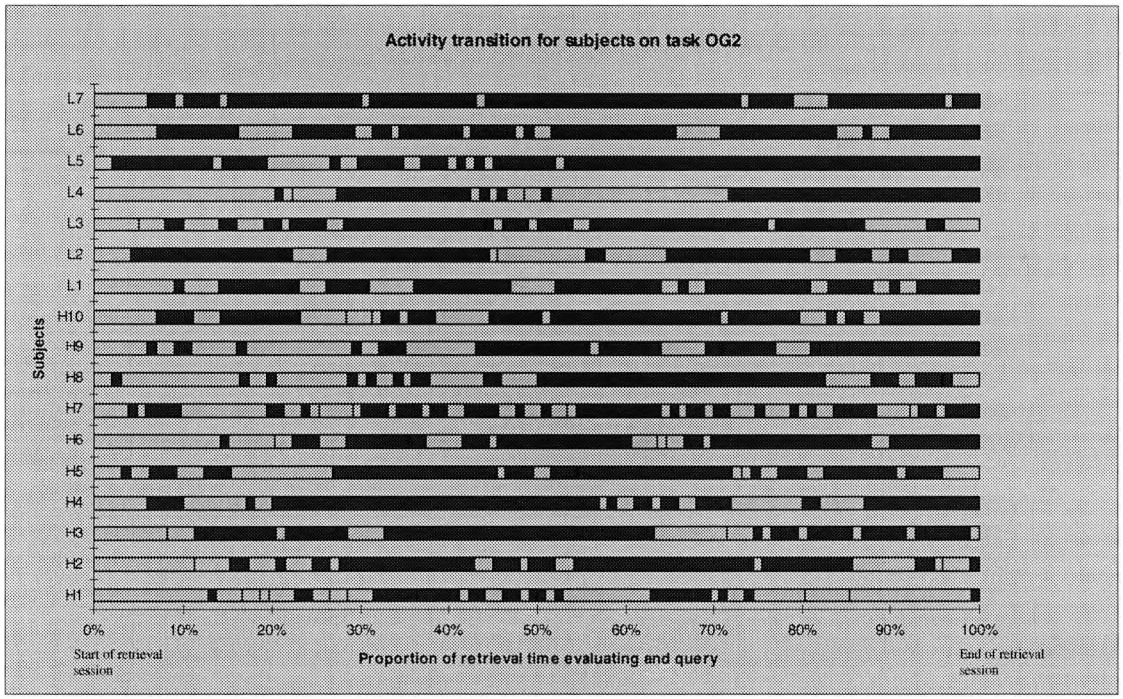


Appendix 3c Querying and evaluating transitions

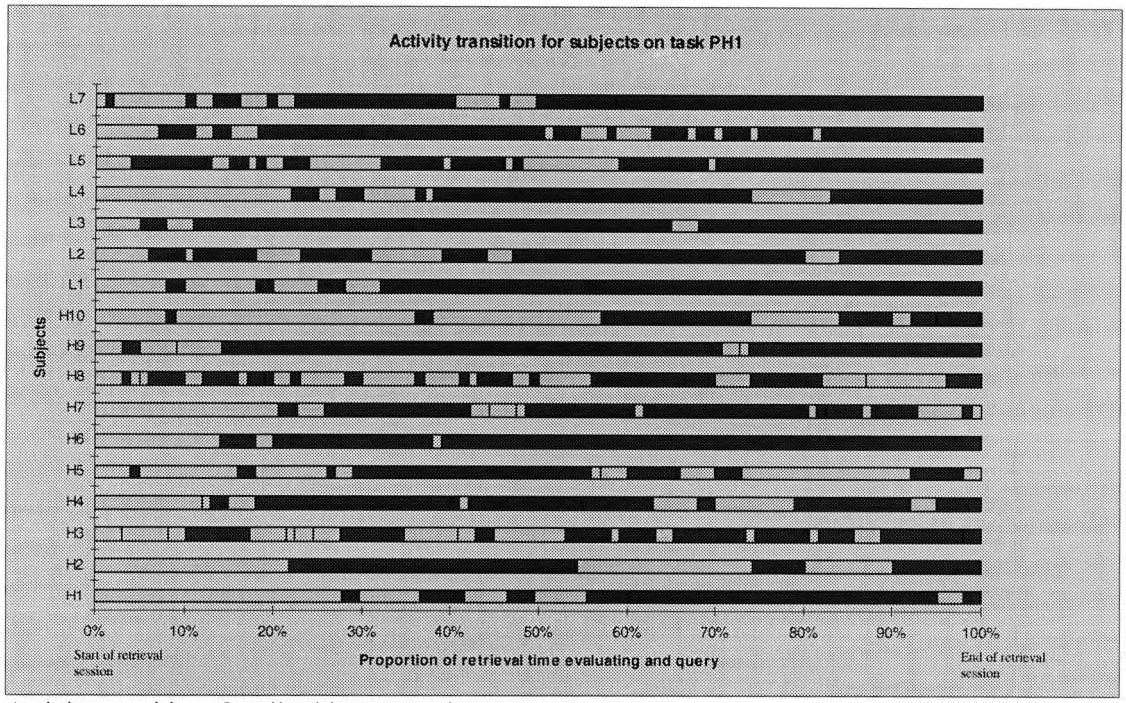
The Dark shades indicate periods of evaluation whereas the lighter areas are periods of searching.



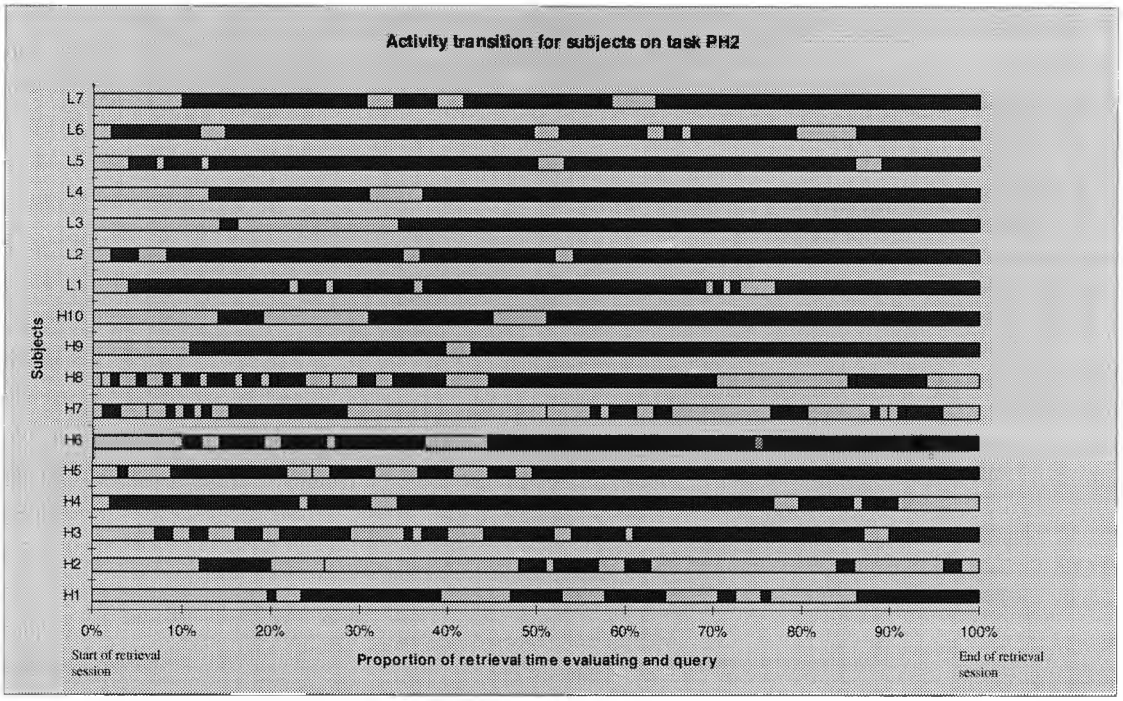
Activity transitions for searchers on task OG1



Activity transitions for all subjects on task OG2



Activity transitions for all subjects on task PH1



Activity transitions for subjects on task PH2

Appendix 3d Searcher query Histories

High Device Knowledge

Subject H1

Task OG1

Request No.	Number of records retrieved	Query articulated
1	139	PILL
2	1136	CONTRACEPT*
3	1187	#1 or #2
4	11538	FAILURE*
5	37	#4 and #3
6	391	SOCIO
7	6924	ECONOM*
8	2481	SOCIO*
9	8848	#7 or #8
10	2	#9 and #5
11	4654	REASON*
12	8704	EXPLA*
13	286	#11 and #12
14	0	#13 and #5
15	22441	CLASS*
16	2	#15 and #5
17	221	UNEMPLOY*
18	6218	COST*
19	6430	#17 or #18
20	0	#19 and #5
21	37	#5
22	0	#13 and #5
23	1717	SOCIO?ECONOMIC
24	54	#23 and #3
25	550	#2 and ORAL
26	67	#25and #1
27	3	#26and #23

Task OG2

Request No.	Number of records retrieved	Query articulated
1	289	CAESAREAN*
2	3784	SAFETY
3	26556	INFECTION*
4	32623	STAT*
5	26763	EPIDEMIOLOG*
6	52043	#4 or #5
7	6708	ECONOMIC*
8	638	PRICE*
9	1239	FINANC*
10	6218	COST*
11	11374	#7 or #8 or #9 or #10
12	82421	#2 or #3 or #6 or #11
13	111	#12 and #1
14	13605	PLAN*
15	1147	ELECTIVE*
16	2	LSCS
17	14726	#14 or #15 or #16
18	13	#17 and #13
19	3225	EMERGENCY
20	554	URGENT*
21	88	#19 and #20
22	0	#21 and #13
23	0	#21 and #1
24	11599	SECTION*
25	6	#21 and #24
26	5	CESARIAN*
27	0	#26 and #1
28	294	#26 or #1
29	0	#28 and #21
30	11613	#28 or #24
31	6	#30 and #21
32	63227	COMPAR*
33	0	#18 and #31 and #32
34	4	#32 and #18
35	6	#31
36	18204	PRIMARY
37	10535	SECONDARY
38	26037	#36 or #37
39	16	#38 and #28
40	0	#39 and #21
41	16	#39
42	13	#18
43	76	#32 and #28
44	3393	ANAEST*
45	8545	ANEST*
46	10517	#44 or #45
47	2361	#46 in TI
48	68	#43 not #47
49	51	#43 not #46
50	79	#28 in TI
51	5	#49 and #50
52	76	#43

Task PH1

Request No.	Number of records retrieved	Query articulated
1	96	BLOOD SUGAR
2	7210	GLUCOSE
3	7249	#1 or #2
4	7580	LIPID*
5	3388	MYOCARDIAL INFARCTION
6	2079	MI
7	5257	#5 or #6
8	390	CARDIAC ARREST*
9	5605	#8 or #7
10	14620	MALE or MALES
11	331	#9 and #10
12	14174	#3 or #4
13	23	#11 and #12
14	618	IMPORTAN*
15	4779	RELEVAN*
16	5378	#14 or #15
17	1	#16 and #13
18	23	#13

Task PH2

Request No.	Number of records retrieved	Query articulated
1	0	NATIONAL HEALTH SERVICE AND EFFICIENCY AND AUDIT
2	4	NATIONAL HEALTH SERVICE AND EFFICIENCY
3	0	NATIONAL HEALTH SERVICE AND EFFICIENCY AND AUDIT*
4	6	NATIONAL HEALTH SERVICE AND AUDIT*

Subject H2

Task OG1

Request No.	Number of records retrieved	Query articulated
1	201	ORAL CONTRACEPTIVE USE
2	10	#1 and FAILURE
3	0	#2 and (SOCIO-ECONOMIC STATUS OR SOCIAL CLASS)
4	45	#1 and PREGNANCY*
5	1	#4 and SOCIAL CLASS
6	0	#4 and SOCIO-ECONOMIC STATUS
7	26	CONTRACEPTIVE and FAILURE
8	0	#7 and SOCIO-ECONOMIC STATUS
9	0	#7 and SOCIAL CLASS
10	0	#7 and EPIDEMIOLGY*
11	45	#1 and EPIDEMIOLOGY*
12	0	#11 and FAILURE
13	13	#11 and PREGNANCY
14	0	CONTRACEPTION FAILURE AND REASONS
15	0	CONTRACEPTION FAILURE AND INCOME
16	1	#1 and SUCCESS
17	0	CONTRACEPTIVE and SUCESS
18	13	COMPLIANCE and (SOCIOECONOMIC STATUS OR SOCIAL CLASS)
19	14	#1 and COMPLIANCE
20	0	#19 and SOCIAL CLASS
21	1	PATIENT EDUCATION AND SOCIAL CLASS
22	0	CONTRACEPTION FAILURE AND PATIENT EDUCATION
23	0	CONTRACEPTION SUCCESS AND PATIENT EDUCATION

Task OG2

Request No.	Number of records retrieved	Query articulated
1	288	CAESAREAN
2	44	#1 and ELECTIVE
3	0	#2 and SAFETY
4	5	#2 and FETUS
5	2	#2 and MOTHER
6	1	#2 and INFECTION
7	0	#2 and COST
8	1612	ECONOMIC in TI,AB,MESH
9	288	CAESAREAN in TI,AB,MESH
10	108	explode "CESAREAN-SECTION"/ adverse-effects , economics , mortality , statistics-and-numerical-data
11	5	#1 and ELECTIVE and EMERGENCY

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	67	#1 and LIPIDS
3	8	#2 and MALE
4	3	#1 and MALE and GLUCOSE
5	2	#1 and LIPIDS and MALE and GLUCOSE

Task PH2

Request No.	Number of records retrieved	Query articulated
1	3225	EFFICIENCY
2	6	#1 and NHS
3	14	#1 and AUDIT
4	0	INCREASED EFFICIENCY AND AUDIT
5	50	COST and AUDIT
6	16	AUDIT and INTRODUCTION
7	11	#5 and BENEFIT
8	0	AUDIT and SAVING

Subject H3

Task OG1

Request No.	Number of records retrieved	Query articulated
1	0	ORAL CONTACEPTIVE PILL AND PREGNANCY
2	5	ORAL CONTRACEPTIVE PILL AND PREGNANCY
3	0	ORAL CONTRACEPTIVE PILL AND FAILURE RATES
4	4	CONTRACEPTIVE FAILURE
5	26	CONTRACEPTIVE and FAILURE
6	24	#5 and (ENGLISH in LA)

Task OG2

Request No.	Number of records retrieved	Query articulated
1	0	ELECTIVE and EMERGENCY and CAESARIAN SECTION
2	4	ELECTIVE and EMERGENCY and CAESAREAN SECTION
3	19	CAESAREAN SECTION AND INFECTION
4	13	#3 and (ENGLISH in LA)
5	108	explode "CESAREAN-SECTION"/ adverse-effects , economics , mortality , statistics-and-numerical-data
6	64	#5 and (ENGLISH in LA)
7	5	#6 and ELECTIVE
8	4	#6 and EMERGENCY
9	1	#6 and COST
10	0	#6 and EFFICIENCY

Task PH1

Request No.	Number of records retrieved	Query articulated
1	71	MYOCARDIAL INFARCTION AND MALES
2	2	MYOCARDIAL INFARCTION AND MALES AND LIPIDS
3	0	LIPD PROFILES WITH MYOCARDIAL INFARCTION
4	0	LIPD PROFILES NEAR MYOCARDIAL INFARCTION
5	0	LIPD PROFILES AND MYOCARDIAL INFARCTION
6	2	MYOCARDIAL INFARCTION AND MALES AND BLOOD GLUCOSE
7	1	#6 and (ENGLISH in LA)
8	3388	MYOCARDIAL INFARCTION in TI,AB,MESH
9	384	"MYOCARDIAL-INFARCTION"/etiology , metabolism , prevention-and-control
10	264	#9 and (ENGLISH in LA)
11	6	#10 and BLOOD GLUCOSE
12	4	#10 and BLOOD LIPIDS
13	7	MYOCARDIAL INFARCTION AND MALES AND DIABETES
14	5	#13 and (ENGLISH in LA)

Task PH2

Request No.	Number of records retrieved	Query articulated
1	16	CLINICAL AUDIT
2	18	CLINICAL AUDIT*
3	9	#2 and OUTCOME
4	1	#2 and EFFICIENCY
5	4	explode "MEDICAL-AUDIT"/ economics , trends
6	320	MEDICAL-AUDIT*
7	298	#6 and (ENGLISH in LA)
8	7	#7 and EFFICIENCY

Subject H4

Task OG1

Request No.	Number of records retrieved	Query articulated
1	18	ORAL CONTRACEPTIVE PILL
2	139	PILL
3	29	CONTRACEPTIVE PILL
4	1	#3 and FAILURE
5	445	SOCIAL CLASS
6	3	#5 and PILL
7	10	SOCIO-ECONOMIC CLASS

Task OG2

Request No.	Number of records retrieved	Query articulated
1	6	CAESARIAN SECTION
2	247	CAESAREAN SECTION
3	1	#2 and PLANNED
4	25	#2 and EMERGENCY
5	0	#2 and ECONOMICS
6	0	#2 and ECONOMY
7	0	#2 and EFFICIENCY
8	651	PLANNED
9	58	#8 and PREGNANCY
10	19	#8 and BIRTH

Task PH1

Request No.	Number of records retrieved	Query articulated
1	Failed	BLOOD SUGAR AND LIPIDS
2	383	GLUCOSE and LIPIDS
3	9	#2 and MYOCARDIAL INFARCTION
4	2572	explode "MYOCARDIAL-INFARCTION"/ all subheadings

Task PH2

Request No.	Number of records retrieved	Query articulated
1	6	NHS and EFFICIENCY
2	11	NHS and AUDIT
3	11	NHS and AUDIT*
4	15	DECREASED EFFICIENCY
5	1	INEFFICIENCY and NHS

Subject H5

Task OG1

Request No.	Number of records retrieved	Query articulated
1	0	CONTACEPTIVE-PILL
2	0	CONTRACEPTIVE-PILL
3	636	CONTRACEPTIVE
4	269	#3 and ORAL
5	68	#4 and PREGNANCY
6	12	#4 and FAILURE
7	6	#4 and SOCIOECONOMIC

Task OG2

Request No.	Number of records retrieved	Query articulated
1	2	CAESAREAN-SECTION
2	7	CAESARIAN
3	288	CAESAREAN
4	31	EMERGENCY and #3
5	26	#4 not ELECTIVE
6	3	#5 and MATERNAL
7	2	#5 and FOETAL
8	44	#3 and ELECTIVE
9	39	#8 not EMERGENCY
10	1	#9 and INFECTION
11	8	#9 and MATERNAL
12	0	#9 and FOETAL
13	0	#9 and ECONOMIC*
14	1	#9 and SOCIOECONOMIC

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	214	#1 and MALE*
3	149	#2 not FEMALE*
4	0	#3 and BLOOD-SUGAR
5	5	#3 and GLUCOSE
6	911	"BLOOD-GLUCOSE-ANALYSIS"
7	3	#6 and #3
8	50	#3 and RISK-FACTORS
9	6	#8 and LIPID
10	2	#8 and BLOOD-GLUCOSE

Task PH2

Request No.	Number of records retrieved	Query articulated
1	0	CLINICAL-AUDITING
2	29	AUDITING
3	11	#2 and CLINICAL
4	266	NHS
5	1	#2 and #4
6	0	#4 and INCREASED-EFFICIENCY
7	0	#4 and INCREASED EFFICIENCY

Subject H6

Task OG1

Request No.	Number of records retrieved	Query articulated
1	1	ORAL CONTRACEPTIVE PILL AND FAILURE
2	12	ORAL and CONTRACEPTIVE and FAILURE
3	0	ORAL and CONTRACEPTIVE and FAILURE and SOCIAL and ECONOMIC

Task OG2

Request No.	Number of records retrieved	Query articulated
1	0	C?ESARIAN SECTION* AND SAFE* AND INFECTION
2	63	C?ESAR?AN SECTION* AND INFECTION
3	1	C?ESAR?AN SECTION* AND INFECTION AND SAFE*
4	8	C?ESAR?AN SECTION* AND INFECTION AND OUTCOME
5	1	C?ESAR?AN SECTION* AND INFECTION AND OUTCOME AND EMERGENCY
6	14	C?ESAR?AN SECTION* AND COST*
7	1	C?ESAR?AN SECTION* AND COST* AND EMERGENCY
8	0	PLANNED C?SAR?AN SECTION* AND SAFE*
9	0	PLANNED C?SAR?AN SECTION* AND INFECTION
10	2	PLANNED C?SAR?AN SECTION*
11	18	EMERGENCY C?SAR?AN SECTION*
12	7	C?SAR?AN SECTION* AND COST
13	8	C?SAR?AN SECTION* AND ECONOMICS

Task PH1

Request No.	Number of records retrieved	Query articulated
1	22	BLOOD GLUCOSE AND MYOCARDIAL INFARCTION
2	8	BLOOD GLUCOSE AND MYOCARDIAL INFARCTION AND LIPID*
3	2	BLOOD GLUCOSE AND MYOCARDIAL INFARCTION AND LIPID* AND MALE
4	8	BLOOD GLUCOSE AND MYOCARDIAL INFARCTION AND LIPID*

Task PH2

Request No.	Number of records retrieved	Query articulated
1	0	NATIONAL HEALTH SERVICE AND EFFICIENCY AND AUDIT
2	4	NATIONAL HEALTH SERVICE AND EFFICIENCY
3	0	NATIONAL HEALTH SERVICE AND EFFICIENCY AND AUDIT*
4	6	NATIONAL HEALTH SERVICE AND AUDIT*

Subject H7

Task OG1

Request No.	Number of records retrieved	Query articulated
1	18	OCP
2	473	CONTRACEPTION
3	385	CONTRACEPTION in TI,AB,MESH
4	21	#2 and FAILURE
5	7	#4 and ORAL
6	2	#5 and REASON*
7	0	#6 and SOCIO-ECON*
8	255	SOCIO-ECON* in TI,AB,MESH
9	6649	CLASS in TI,AB,MESH
10	6896	SOCIAL in TI,AB,MESH
11	1612	ECONOMIC in TI,AB,MESH
12	445	SOCIAL CLASS in TI,AB,MESH
13	359	(#6 and SOCIAL CLASS) OR SOCIAL-CLASS
14	0	#6 and SOCIAL?CLASS
15	0	#6 and INCOME
16	131	LOW INCOME in TI,AB,MESH
17	0	#6 and POVERTY
18	1	ORAL CONTRACEPTION AND FAILURE RATES
19	0	ORAL CONTRACEPTION AND COMPILANCE
20	0	ORAL CONTRACEPTION AND COMPILENCE
21	260	COMPIL* in TI,AB,MESH
22	0	ORAL CONTRACEPTION AND COMPLIENCE
23	2161	COMPLIANCE in TI,AB,MESH
24	730	"PATIENT-COMPLIANCE"/ without-subheadings
25	13	#24 and ORAL CONTRACEPT*
26	3	#25 and FAILUR*
27	1	#25 and SOCIAL*
28	0	#25 and SOCILA?CLASS
29	0	ORAL CONTRACEPTION AND SOCIAL?CLASS
30	5	CONTRACEPTION and SOCIAL?CLASS
31	1744	SOCIO?ECON*
32	1	#31 and ORAL CONTRACEPTION
33	1	#31 and CONTRACEPTION and FAILURE
34	14	FAILURE and ORAL CONTRACEPT*
35	57	FAILURE RATES
36	1	#35 and ORAL CONTRACEPTION
37	7792	SOCIAL?CLASS or SOCIAL*
38	359	SOCIAL?CLASS in TI,AB,MESH
39	0	#34 and POVERTY
40	1	#37 and ORAL CONTRACEPTION
41	1	#37 and FAILURE and CONTRACEPTION
42	0	NON?COMPI*
43	47910	COMPLI* in TI,AB,MESH
44	0	#5 and SOCIO?ECON*

Task OG2

Request No.	Number of records retrieved	Query articulated
1	288	CAESAREAN
2	9	CAESAREAN near OUTCOME
3	5	EMERGENCY and CAESAREAN and (MATERNAL or SAFETY)
4	0	#3 and INFECTION
5	16753	#3 or INFECTION
6	3	EMERGENCY and CAESAREAN and (INFECTION or STATISTICAL)
7	8	CAESAREAN and (STATISTICAL or ECONOMIC)
8	1	ECONOMIC and CAESAREAN
9	1	ECONOM* and CAESAREAN
10	1	CAESAREAN and (PLANNED or EMMERGENCY)
11	32	CAESAREAN and (PLANNED or EMERGENCY)
12	1	ECONOMIC and CAESAREAN
13	1619	ECONOMIC
14	1612	ECONOMIC in TI,AB,MESH
15	1	CAESAREAN and AUDIT*
16	572	AUDIT in TI,AB,MESH
17	1	EMERGENCY and DELIVERY and AUDIT*
18	0	CAESAREAN and (MATERNAL and (FOETAL or FETAL) and SAFETY)
19	4	CAESAREAN and SAFETY
20	6	CAESAREAN and EMERGENCY and (MATERNAL or FOETAL)
21	0	#20 and AUDIT*
22	2443	AUDIT* in TI,AB,MESH
23	0	#21 and ECON*
24	6799	ECONO* in TI,AB,MESH

Task PH1

Request No.	Number of records retrieved	Query articulated
1	2079	MI
2	0	M.I
3	7632	MYOCARDIAL
4	4578	INFARCTION
5	3388	MYOCARDIAL INFARCTION
6	45	HEART ATTACK in TI,AB,MESH
7	10618	MYOCARDIAL INFARCTION OR HEART DISEASE OR CORONARY
8	4	#7 and BLOOD SUGAR
9	28	#7 and LIPID PROFILE
10	426	#7 and MALE
11	36	#10 and LIPID
12	0	#11 and BLOOD SUGAR
13	96	BLOOD SUGAR in TI,AB,MESH
14	3704	(#11 and (BLOOD SUGAR OR GLUCOSE)) OR DIABETI*
15	0	#11 and DIABETIC and (BLOOD SUGAR OR GLUCOSE)
16	2	#11 and (SUGAR or GLUCOSE or DIABETI*)

Task PH2

Request No.	Number of records retrieved	Query articulated
1	0	FORMAL CLINICAL AUDITING
2	29	AUDITING
3	2451	AUDIT*
4	392	AUDIT* and CLINICAL
5	0	N.H.S and EFFICIENCY
6	32	HOPITAL and EFFICIENCY
7	53	AUDIT* and EFFICIE*
8	1	AUDITING and EFFICIENT*
9	1	AUDITING and EFFICIENCY
10	0	N.H.S and AUDITING
11	266	NHS
12	1	NHS and AUDITING
13	6	NHS and EFFICIENCY
14	0	NHS and EFFICIENCY and AUDITING
15	3236	(NHS and AUDIT*) or EFFICIENCY
16	21	NHS and (AUDIT* or EFFICI*)
17	11	NHS and AUDIT* and (AUDIT* or EFFICIENC*)
18	0	NHS and AUDIT* and EFFICIENCY
19	718	(INCREASED or DECREASED) and EFFICIENCY
20	1	(INCREASED or DECREASED) and EFFICIENCY and AUDIT*

Subject H8

Task OG1

Request No.	Number of records retrieved	Query articulated
1	18	ORAL CONTRACEPTIVE PILL
2	44	ORAL and CONTRACEPTIVE and PILL
3	926	CONTRACEPTIVE*
4	11594	ORAL*
5	484	PILL*
6	94	#3 and #4 and #5
7	242	SOCIO-ECONOMIC
8	529	#3 and #4
9	121	#3 and #5
10	556	#8 or #9 or #6
11	3	#10 and #7
12	1251	"SOCIOECONOMIC-FACTORS"
13	359	"SOCIAL-CLASS"
14	359	"SOCIAL-CLASS"
15	359	#13 or #14
16	1688	#12 or #14 or #7
17	13	#10 and #16
18	17	#10 and FAILURE
19	0	#10 and NON-COMPLIANCE
20	0	#16 and #18

Task OG2

Request No.	Number of records retrieved	Query articulated
1	288	CAESAREAN
2	289	CAESAREAN*
3	25	EMERGENCY CAESAREAN*
4	1	PLANNED CAESAREAN*
5	1	MATERNAL SAFETY
6	1	MATERNAL SAFETY*
7	52	MATERNAL and SAFETY
8	28	FETUS and SAFETY
9	1	FOETUS and SAFETY
10	29	#8 or #9
11	0	INFECTION and CAESEREAN
12	21	INFECTION and CAESAREAN
13	1	CAESAREAN and ECONOMIC*
14	289	#2 or #3 or #4
15	65	#7 or #8 or #9
16	2	#14 and #15
17	1	#7 and CAESAREAN

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	21	BLOOD SUGAR LEVELS
3	97	LIPID PROFILE
4	3	#1 and #3
5	214	#1 and MALE*
6	0	#5 and #3
7	0	#5 and #2
8	0	#1 and #2
9	143	LIPID PROFILE*
10	21	BLOOD SUGAR LEVELS*
11	96	BLOOD SUGAR
12	100	BLOOD SUGAR*
13	0	#5 and #9
14	0	#5 and #12
15	2682	BLOOD GLUCOSE
16	5	#15 and #5
17	10	LIPID and #5
18	3388	MYOCARDIAL INFARCTION
19	3421	MYOCARDIAL INFARCTION*
20	2720	BLOOD GLUCOSE*
21	7580	LIPID*
22	4	#19 and #20 and #21 and MALE*

Task PH2

Request No.	Number of records retrieved	Query articulated
1	16	CLINICAL AUDIT
2	16	CLINICAL AUDIT
3	18	CLINICAL AUDIT*
4	0	#3 and NHS
5	93	NATIONAL HEALTH SERVICE
6	0	#3 and #5
7	3225	EFFICIENCY
8	4	#7 and #5
9	0	#8 and #3
10	3225	EFFICIENCY*
11	94	NATIONAL HEALTH SERVICE*
12	273	NHS*
13	24	#11 and #12
14	343	#11 or #12
15	9	#14 and #10
16	0	#15 and #3
17	334	MEDICAL AUDIT
18	0	#17 and #15
19	11	#12 and AUDIT*
20	5407	DEFICIENCY
21	6	#20 and #17
22	7	#20 and AUDIT

Subject H9

Task OG1

Request No.	Number of records retrieved	Query articulated
1	582	CONTRACEPTIVE and (LA=ENGLISH)
2	56	#1 and (SOCIO-ECONOMIC or SOCIOECONOMIC or SOCIAL)
3	12	#2 and ORAL
4	0	#3 and FAIL*
5	12	#3
6	4	#3 and PILL

Task OG2

Request No.	Number of records retrieved	Query articulated
1	6	CAESARIAN SECTION AND (LA=ENGLISH)
2	4	CESARIAN SECTION AND #3
3	199	#1 or #2 or (LA=ENGLISH and CAESAREAN SECTION)
4	661	#3 or (CESAREAN SECTION AND LA=ENGLISH)
5	644	PLANNED in TI,AB,MESH
6	0	#4 and (PLANNED and EMERGENCY)
7	42	#4 and EMERGENCY
8	10	#4 and PLANNED
9	44	#4 and (EMERGENCY or UNPLANNED)
10	95	#4 and (PLANNED or ELECTIVE)
11	10	#9 and #10
12	129	#9 or #10
13	3	#12 and SAFETY
14	5	#12 and INFECTION
15	0	#12 and ECONOMIC*
16	2	#12 and COST*
17	26	#12 and RATE*

Task PH1

Request No.	Number of records retrieved	Query articulated
1	2458	MYOCARDIAL INFARCTION AND (LA = ENGLISH)
2	91	#1 and LIPID*
3	26	#2 and (MALE or MEN)
4	42	#1 and (GLUCOSE or SUGAR)
5	11	#4 and (MALE or MEN)

Task PH2

Request No.	Number of records retrieved	Query articulated
1	540	AUDIT and (LA=ENGLISH)
2	11	#1 and NHS
3	0	#2 and EFFICIENCY

Subject H10

Task OG1

Request No.	Number of records retrieved	Query articulated
1	46	ORAL CONTRACEPTION
2	7223	EFFICACY
3	4	#2 and #1
4	0	SOCIO-ECONOMIC in MESH
5	417	ECONOMIC in MESH
6	0	#5 and #1
7	5523	(ECONOM* or SOCIO) in MESH
8	0	#7 and #1
9	584	PRICE
10	0	#9 and #1
11	18	#1 in TI
12	99	NONCOMPLIANCE
13	1	#12 and #1

Task OG2

Request No.	Number of records retrieved	Query articulated
1	288	CAESAREAN
2	3225	EMERGENCY
3	31	#2 and #1
4	38	COMPARISON near (EMERGENCY or PLANNED or ELECTIVE)
5	0	#4 with 288
6	649	(MATERNAL or F?ETAL or NEONATAL) and (SAFETY or DISTRESS or INJURY)
7	26	#6 and #1
8	8	#7 and EMERGENCY
9	1490	(MATERNAL or F?ETAL or NEONATAL) and (SAFETY or DISTRESS or INJURY or MORBIDITY or MORTALITY)
10	28	#9 and EMERGENCY
11	288	#1
12	11	#9 and (EMERGENCY near #1)
13	1	(EMERGENCY near #1) and (INFECTION or SEPSIS)
14	1	(EMERGENCY near #1) and (INFECTION or SEPSIS or ANTIBIOTICS)
15	1	(EMERGENCY near #1) and (INFECTION or SEPSIS)
16	28	EMERGENCY near #1

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	3440	MYOCARDIAL INFARCT*
3	29930	GENDER or MALE or FEMALE or MEN or WOMEN
4	454	#3 and #2
5	444	#4 and (TG = "HUMAN")
6	356	BLOOD SUGAR OR HYPERGLYCAEMIA OR HYPOGLYCAEMIA
7	6571	DIABETES or #6
8	53	#7 and #5
9	5760	LIPID
10	20	#9 and #5
11	7	#10 and #8
12	66	#10 or #8
13	30	#2712 and (REVIEW in PT)
14	4	#13 and (LA = "ENGLISH")

Task PH2

Request No.	Number of records retrieved	Query articulated
1	93	N.H.S. or NATIONAL HEALTH SERVICE
2	18	CLINICAL AUDIT*
3	18	AUDIT* and #2
4	0	#2 and #1
5	6	AUDIT* and #1

Low Device Knowledge

Subject L1

Task OG1

Request No.	Number of records retrieved	Query
1	13	ORAL CONTRACEPTIVES AND FAILURE
2	0	ORAL CONTRACEPTIVE AND SOCIO-ECONOMIC
3	1	CONTRACEPTIVE PILL AND SOCIAL
4	7	ORAL CONTRACEPTIVES AND ECONOMICS

Task OG2

Request No.	Number of records retrieved	Query articulated
1	25	EMERGENCY CAESAREAN
2	1	EMERGENCY CAESAREAN AND INFECTION
3	0	EMRGENCY CAESAREAN AND SAFETY
4	4	EMERGENCY CAESAREAN AND MATERNAL
5	3	EMERGENCY CAESAREAN AND STATISTICS
6	35	ELECTIVE CAESAREAN
7	8	ELECTIVE CAESAREAN AND OUTCOME
8	1	ELECTIVE CAESAREAN AND INFECTION
9	0	ELECTIVE CAESAREAN AND ECONOMICS
10	2	ELECTIVE CAESAREAN AND STATISTICS

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	67	MYOCARDIAL INFARCTION AND LIPIDS
3	0	MYOCARDIAL INFARCTION AND LIPIDS AND BLOOD SUGAR LEVELS
4	9	MYOCARDIAL INFARCTION AND LIPIDS AND GLUCOSE

Task PH2

Request No.	Number of records retrieved	Query articulated
1	29	AUDITING
2	2	CLINICAL AUDITING
3	0	NHS EFFICIENCY
4	0	NHS AUDIT
5	1	NHS MANAGEMENT
6	574	AUDIT
7	0	AUDIT EFFICIENCY
8	14	AUDIT and EFFICIENCY

Subject L2

Task OG1

Request No.	Number of records retrieved	Query articulated
1	18	ORAL CONTRACEPTIVE PILL

Task OG2

Request No.	Number of records retrieved	Query articulated
1	247	CAESAREAN SECTION
2	3225	EMERGENCY
3	25	#1 and #2
4	1077	ELECTIVE
5	40	#1 and #4
6	0	FOETAL STRESS
7	5	FETAL STRESS
8	2	FETAL SAFETY
9	16748	INFECTION
10	19	#1 and #9
11	1619	ECONOMIC
12	1	#1 and #11
13	7	MATERNAL STRESS
14	0	#1 and #13
15	1	MATERNAL SAFETY
16	658	STATISTICAL DATA
17	2	#1 and #16

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	21	BLOOD SUGAR LEVELS
3	0	#1 and #2
4	4978	DIABETES MELLITUS
5	103	#1 and #4
6	425	GLUCOSE LEVELS
7	1	#1 and #6
8	12076	RISK FACTORS
9	595	#1 and #8
10	97	LIPID PROFILE
11	3	#1 and #10
12	544	CHOLESTEROL LEVELS
13	30	#1 and #12
14	169	BLOOD GLUCOSE LEVELS
15	0	#1 and #14
16	2682	BLOOD GLUCOSE
17	22	#1 and #16

Task PH2

Request No.	Number of records retrieved	Query articulated
1	2	CLINICAL AUDITING
2	29	AUDITING
3	266	NHS
4	3225	EFFICIENCY
5	6	#3 and #4
6	1	EVIDENCE BASED MEDICINE

Subject L3

Task OG1

Request No.	Number of records retrieved	Query articulated
1	0	CONTRACEPTIVE PILL AND FAILURE RATE
2	1	PILL and FAILURE RATE
3	0	ORAL CONTRACEPTIVE AND FAILUE RATE
4	0	OESTROGEN CONTRACEPTION AND FAILURE RATE
5	0	ORAL CONTRACEPTION AND FAILUE
6	2	ORAL CONTRACEPTION AND FAILURE
7	0	COMBINED CONTRACEPTIVE AND FAILURE RATE
8	21	CONTRACEPTION and FAILURE
9	2	CONTRACEPTION and SOCIO-ECONOMIC
10	1	FAMILY PLANNING AND FAILURE RATE
11	2	FAMILY PLANNING AND SOCIO-ECONOMIC

Task OG2

Request No.	Number of records retrieved	Query articulated
1	1	CAESARIAN SECTION AND SAFETY
2	1	CAESARIAN SECTION AND RISKS
3	4	CESARIAN SECTION
4	2	LSCS
5	6	CAESARIAN SECTION
6	18	OPERATIVE DELIVERY
7	247	CAESAREAN SECTION
8	10	#7 and RISKS
9	3	#7 and SAFETY
10	58	#7 and OUTCOME
11	19	#7 and INFECTION
12	24	#7 and STATISTICS
13	0	#7 and ECONOMICS

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3	MYOCARDIAL INFARCTION AND LIPID PROFILE
2	67	MYOCARDIAL INFARCTION AND LIPIDS
3	56	MYOCARDIAL INFARCTION AND GLUCOSE

Task PH2

Request No.	Number of records retrieved	Query articulated
1	574	AUDIT
2	14	AUDIT and EFFICIENCY

Subject L4

Task OG1

Request No.	Number of records retrieved	Query articulated
1	473	CONTRACEPTION
2	0	CONTACEPTIVE PILL
3	29	CONTRACEPTIVE PILL
4	0	#3 and FAILIURE
5	2	#3 and REVIEW
6	10	#3 and PREGNANCY
7	1	#3 and ECONOMIC
8	242	SOCIO-ECONOMIC
9	2	#1 and #8

Task OG2

Request No.	Number of records retrieved	Query articulated
1	7	CAESARIAN
2	288	CAESAREAN
3	371	CAES*
4	0	#1 and REVIEW
5	1	#2 and AUDIT
6	1	#1 and INFECTION
7	0	#1 and EMERGENCY
8	31	#2 and EMERGENCY
9	4	#2 and SAFETY
10	21	#2 and INFECTION
11	16	#2 and REVIEW

Task PH1

Request No.	Number of records retrieved	Query articulated
1	213	MYOCARDIAL INFARCT
2	2	#1 and LIPIDS
3	0	#1 and BLOOD SUGAR
4	6	#1 and DIABETES
5	2	#2
6	5	SUGAR and MYOCARDIAL

Task PH2

Request No.	Number of records retrieved	Query articulated
1	29	AUDITING
2	11	#1 and CLINICAL
3	1	#1 and NHS
4	11	#2

Subject L5

Task OG1

Request No.	Number of records retrieved	Query articulated
1	18	ORAL CONTRACEPTIVE PILL
2	0	FAILURE OF ORAL CONTRACEPTION
3	46	ORAL CONTRACEPTION
4	2	ORAL CONTRACEPTION AND FAILURE
5	2	ORAL CONTRACEPTION AND EFFECTIVENESS
6	201	ORAL CONTRACEPTIVE USE
7	1	ORAL CONTRACEPTIVES AND FAILURE RATES

Task OG2

Request No.	Number of records retrieved	Query articulated
1	1	CAESARIAN SECTIONS
2	0	CAESARIAN and EMERGENCY
3	288	CAESAREAN
4	31	CAESAREAN and EMERGENCY
5	1	CAESAREAN and MATERNAL SAFETY
6	0	CAESAREAN and FETAL SAFETY
7	0	PLANNED ANS CAESAREAN
8	1	PLANNED and CAESAREAN
9	4	CAESAREAN and SAFETY

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	0	MYOCARDIAL INFARCTION AND BLOOD SUGAR LEVELS
3	156	MYOCARDIAL INFARCTION AND DIABETES
4	3	MYOCARDIAL INFARCTION AND HYPERGLYCAEMIA
5	2	MYOCARDIAL INFARCTION AND HYPOGLYCAEMIA
6	0	MYOCARDIAL INFARCTION AND LIPIDAEMIA
7	67	MYOCARDIAL INFARCTION AND LIPIDS
8	15	MYOCARDIAL INFARCTION AND LIPIDS AND MEN

Task PH2

Request No.	Number of records retrieved	Query articulated
1	0	N.H.S.
2	93	NATIONAL HEALTH SERVICE
3	6	NATIONAL HEALTH SERVICE AND AUDIT
4	4	NATIONAL HEALTH SERVICE AND EFFICIENCY
5	14	AUDIT and EFFICIENCY

Subject L6

Task OG1

Request No.	Number of records retrieved	Query articulated
1	199	ORAL CONTRACEPTIVE
2	10	FAILURE and #1
3	242	SOCIO-ECONOMIC
4	0	#2 and #3
5	0	#3 and #1
6	10	#2
7	176	COMPLIANCE and DRUGS
8	7525	SOCIAL
9	9	#7 and #8
10	11	COMPLIANCE and CONTRACEPTION
11	1576	SOCIOECONOMIC
12	32	#11 and CONTRACEPTION
13	4	#12 and ORAL
14	32	#12

Task OG2

Request No.	Number of records retrieved	Query articulated
1	33	CAESAREAN SECTIONS
2	424	LABOUR
3	13	#2 and EMERGENCY
4	4497	DELIVERY
5	4522	BIRTH
6	60	#5 and CAESAREAN
7	2	#6 and INFECTION
8	21	CAESAREAN and INFECTION
9	4	CAESAREAN and SAFETY
10	64	CAESAREAN and RISK
11	0	#10 and REVIEWS
12	1	#10 in TI
13	42	CAESAREAN and MORTALITY
14	1	CAESAREAN and ECONOMIC
15	66	CAESAREAN and OUTCOME
16	115	CAESAREAN and COMPLICATIONS
17	51	#16 and DELIVERY

Task PH1

Request No.	Number of records retrieved	Query articulated
1	0	MYOCARIAL INFARCTION AND MALES
2	7632	MYOCARDIAL
3	71	INFARCTION and MALES and MYOCARDIAL
4	3618	LIPIDS
5	2	#3 and LIPIDS
6	0	LOW DENSITY LIPIDS AND MYOCARDIAL INFARCTION
7	1043	LOW and DENSITY and LIPOPROTEINS
8	30	#7 and MYOCARDIAL and INFARCTION
9	0	#8 and MALES
10	0	BLLOD SUGAR
11	4	BLOOD SUGARS
12	1385	CARBOHYDRATES
13	3388	MYOCARDIAL INFARCTION
14	3	#13 and #12
15	111	REVIEW and #13
16	1	#15 and MALES
17	3	#15 and LIPIDS
18	0	#15 and BLOOD SUGAR
19	1	#15 and GLUCOSE
20	7210	GLUCOSE
21	56	#13 and GLUCOSE
22	3	MALE and #21
23	27	#21 and RISK FACTORS

Task PH2

Request No.	Number of records retrieved	Query articulated
1	0	CLINICAL AUDITIING
2	2	CLINICAL AUDITING
3	6	EFFICIENCY and NHS
4	1	AUDITING and EFFICIENCY
5	0	NHS REFORM
6	0	NHS and #5
7	13	HOSPITAL and AUDITING

Subject L7

Task OG1

Request No.	Number of records retrieved	Query articulated
1	0	ORAL COTRACEPTIVE
2	199	ORAL CONTRACEPTIVE
3	11072	FAILURE
4	10	#2 and #3
5	242	SOCIO-ECONOMIC
6	0	#2 and #5
7	1619	ECONOMIC
8	0	#2 and #7
9	584	PRICE
10	0	#2 and #9
11	10	#4
12	13298	PREGNANCY
13	45	#2 and #12

Task OG2

Request No.	Number of records retrieved	Query articulated
1	288	CAESAREAN
2	3784	SAFETY
3	4	#1 and #2
4	1	MATERNAL SAFETY
5	61	#1 and MATERNAL
6	4	#1 and SAFETY
7	0	FOETAL SAFETY
8	61	#5
9	1001	INFECTION CONTROL
10	4	#1 and #9
11	9177	STATISTICS
12	31	#1 and #11
13	1619	ECONOMIC
14	1	#1 and #13

Task PH1

Request No.	Number of records retrieved	Query articulated
1	3388	MYOCARDIAL INFARCTION
2	11400	MALE
3	96	BLOOD SUGAR
4	97	LIPID PROFILE
5	0	#1 and #2 and #3
6	1	#1 and #3
7	142	#1 and #2
8	45	#1 and #2 and BLOOD
9	6402	DIABETES
10	156	#1 and #9
11	15	#1 and #2 and #9
12	156	#10

Task PH2

Request No.	Number of records retrieved	Query articulated
1	574	AUDIT
2	3225	EFFICIENCY
3	14	#1 and #2
4	266	NHS
5	0	#3 and #4
6	6	#2 and #4
7	11	#1 and #4

Appendix 5a Transitional probabilities and frequencies

H1 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	3	6	2	0	3	10	2	1	0	0	0	0	0	27
ir	6	0	0	0	5	0	0	0	0	0	0	0	0	11
fs	2	0	0	0	0	2	0	0	0	0	0	0	0	4
rs	2	0	0	0	1	4	1	1	6	5	0	0	0	20
rps	2	1	0	5	0	5	0	4	6	0	0	0	0	23
es	0	0	0	2	1	0	12	24	1	2	0	0	0	42
st	0	0	0	0	0	1	0	14	0	0	0	0	0	15
fq	0	0	0	0	0	0	0	0	0	53	0	0	0	53
rq	0	0	0	0	0	0	0	0	0	54	0	0	0	54
ei	1	0	0	1	1	1	0	1	2	0	106	6	0	119
er	6	0	0	9	10	16	0	7	34	1	0	15	8	106
ec	2	0	0	4	3	2	0	1	0	2	0	0	7	21
ed	1	0	0	1	3	1	0	0	5	0	0	0	0	11
														506
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.11	0.22	0.07	0	0.11	0.37	0.07	0.04	0	0	0	0	0	1
ir	0.55	0	0	0	0.45	0	0	0	0	0	0	0	0	1
fs	0.5	0	0	0	0	0.5	0	0	0	0	0	0	0	1
rs	0.1	0	0	0	0.05	0.2	0.05	0.05	0.3	0.25	0	0	0	1
rps	0.09	0.04	0	0.22	0	0.22	0	0.17	0.26	0	0	0	0	1
es	0	0	0	0.05	0.02	0	0.29	0.57	0.02	0.05	0	0	0	1
st	0	0	0	0	0	0.07	0	0.93	0	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0.01	0	0	0.01	0.01	0.01	0	0.01	0.02	0	0.89	0.05	0	1
er	0.06	0	0	0.08	0.09	0.15	0	0.07	0.32	0.01	0	0.14	0.08	1
ec	0.1	0	0	0.19	0.14	0.1	0	0.05	0	0.1	0	0	0.33	1
ed	0.09	0	0	0.09	0.27	0.09	0	0	0.45	0	0	0	0	1

H3 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	3	8	2	2	1	2	0	0	0	0	0	0	0	18
ir	8	0	0	0	0	0	0	0	0	0	0	0	0	8
fs	3	0	0	0	0	0	0	0	0	0	1	0	0	4
rs	0	0	0	0	3	5	0	1	3	1	0	1	0	14
rps	1	0	0	1	0	3	0	0	9	0	1	0	2	17
es	0	0	0	0	1	0	5	1	3	3	0	0	0	13
st	0	0	0	0	0	0	0	2	2	3	0	0	0	7
fq	0	0	0	1	0	0	0	0	0	7	0	0	0	8
rq	0	0	0	0	0	0	0	0	0	27	0	0	0	27
ei	0	0	1	1	2	0	1	0	1	0	36	2	1	45
er	0	0	0	4	5	0	0	1	2	0	0	22	3	37
ec	0	0	0	5	5	2	0	0	3	3	0	0	8	26
ed	0	0	0	2	0	2	0	3	4	1	0	1	0	13
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.17	0.44	0.11	0.11	0.06	0.11	0	0	0	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	0.75	0	0	0	0	0	0	0	0	0	0.25	0	0	1
rs	0	0	0	0	0.21	0.36	0	0.07	0.21	0.07	0	0.07	0	1
rps	0.06	0	0	0.06	0	0.18	0	0	0.53	0	0.06	0	0.12	1
es	0	0	0	0	0.08	0	0.38	0.08	0.23	0.23	0	0	0	1
st	0	0	0	0	0	0	0	0.29	0.29	0.43	0	0	0	1
fq	0	0	0	0.13	0	0	0	0	0	0.88	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0.02	0.02	0.04	0	0.02	0	0.02	0	0.8	0.04	0.02	1
er	0	0	0	0.11	0.14	0	0	0.03	0.05	0	0	0.59	0.08	1
ec	0	0	0	0.19	0.19	0.08	0	0	0.12	0.12	0	0	0.31	1
ed	0	0	0	0.15	0	0.15	0	0.23	0.31	0.08	0	0.08	0	1

H4 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	4	5	3	1	1	0	0	1	0	0	0	0	0	15
ir	5	0	0	0	0	1	0	0	0	0	0	0	0	6
fs	1	0	0	0	0	0	0	3	0	0	0	0	0	4
rs	1	0	0	0	0	2	0	1	0	0	0	1	1	6
rps	0	0	0	4	0	4	1	1	1	0	1	1	0	13
es	1	0	0	0	0	0	8	0	3	2	0	0	0	14
st	0	0	0	0	0	0	0	3	5	0	0	0	1	9
fq	0	0	0	0	0	0	0	0	0	12	0	0	0	12
rq	0	0	0	0	0	0	0	0	0	12	0	0	0	12
ei	0	0	0	0	3	0	0	0	0	0	24	0	0	27
er	0	0	0	1	4	4	0	0	2	0	0	12	2	25
ec	1	0	0	1	3	1	0	2	0	0	0	0	6	14
ed	0	0	0	3	2	2	0	1	1	1	0	0	0	10
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.27	0.33	0.2	0.07	0.07	0	0	0.07	0	0	0	0	0	1
ir	0.83	0	0	0	0	0.17	0	0	0	0	0	0	0	1
fs	0.25	0	0	0	0	0	0	0.75	0	0	0	0	0	1
rs	0.17	0	0	0	0	0.33	0	0.17	0	0	0	0.17	0.17	1
rps	0	0	0	0.31	0	0.31	0.08	0.08	0.08	0	0.08	0.08	0	1
es	0.07	0	0	0	0	0	0.57	0	0.21	0.14	0	0	0	1
st	0	0	0	0	0	0	0	0.33	0.56	0	0	0	0.11	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0.11	0	0	0	0	0	0.89	0	0	1
er	0	0	0	0.04	0.16	0.16	0	0	0.08	0	0	0.48	0.08	1
ec	0.07	0	0	0.07	0.21	0.07	0	0.14	0	0	0	0	0.43	1
ed	0	0	0	0.3	0.2	0.2	0	0.1	0.1	0.1	0	0	0	1

H5 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rg	ei	er	ec	ed	Total
ic	0	5	0	3	1	1	0	4	3	1	0	0	0	18
ir	3	0	0	0	0	1	0	1	1	0	0	0	0	6
fs	4	0	0	0	0	0	0	0	0	0	0	0	0	4
rs	4	0	0	0	1	1	0	2	5	1	1	0	0	15
rps	2	1	0	0	0	3	1	0	1	0	0	1	0	9
es	0	0	0	0	0	0	6	1	4	0	0	0	0	11
st	0	0	0	0	0	0	0	3	4	0	0	0	0	7
fq	0	0	0	0	0	0	0	0	0	13	0	0	0	13
rg	0	0	0	0	0	0	0	0	0	25	0	0	0	25
ei	0	0	0	1	0	0	0	0	0	0	39	2	0	42
er	2	0	0	5	6	4	0	0	5	1	0	16	1	40
ec	3	0	0	5	1	1	0	2	0	1	0	0	5	18
ed	0	0	0	1	0	0	0	0	2	0	0	0	0	3
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rg	ei	er	ec	ed	Total
ic	0	0.28	0	0.17	0.06	0.06	0	0.22	0.17	0.06	0	0	0	1
ir	0.5	0	0	0	0	0.17	0	0.17	0.17	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0.27	0	0	0	0.07	0.07	0	0.13	0.33	0.07	0.07	0	0	1
rps	0.22	0.11	0	0	0	0.33	0.11	0	0.11	0	0	0.11	0	1
es	0	0	0	0	0	0	0.55	0.09	0.36	0	0	0	0	1
st	0	0	0	0	0	0	0	0.43	0.57	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rg	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0.02	0	0	0	0	0	0	0.93	0.05	0	1
er	0.05	0	0	0.13	0.15	0.1	0	0	0.13	0.03	0	0.4	0.03	1
ec	0.17	0	0	0.28	0.06	0.06	0	0.11	0	0.06	0	0	0.28	1
ed	0	0	0	0.33	0	0	0	0	0.67	0	0	0	0	1

H6 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	5	6	0	1	1	1	1	1	0	0	0	1	0	17
ir	5	0	0	0	1	0	0	0	0	0	0	0	0	6
fs	3	0	0	0	0	0	0	1	0	0	0	0	0	4
rs	0	0	0	0	0	3	0	0	1	7	0	0	0	11
rps	3	0	0	0	0	0	0	1	0	0	1	0	0	5
es	0	0	0	0	0	0	4	1	5	0	0	0	0	10
st	0	0	1	0	0	0	0	1	3	0	0	0	0	5
fq	0	0	0	0	0	0	0	0	0	7	0	0	0	7
rq	0	0	0	0	0	0	0	0	0	17	0	0	0	17
ei	0	0	0	0	1	0	0	0	0	0	23	6	3	33
er	0	0	0	3	1	4	0	1	4	0	0	12	3	28
ec	0	0	0	6	1	2	0	1	2	1	0	0	5	18
ed	0	0	0	1	0	0	0	0	2	1	0	0	0	4
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.29	0.35	0	0.06	0.06	0.06	0.06	0.06	0	0	0	0.06	0	1
ir	0.83	0	0	0	0.17	0	0	0	0	0	0	0	0	1
fs	0.75	0	0	0	0	0	0	0.25	0	0	0	0	0	1
rs	0	0	0	0	0	0.27	0	0	0.09	0.64	0	0	0	1
rps	0.6	0	0	0	0	0	0	0.2	0	0	0.2	0	0	1
es	0	0	0	0	0	0	0.4	0.1	0.5	0	0	0	0	1
st	0	0	0.2	0	0	0	0	0.2	0.6	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0.03	0	0	0	0	0	0.7	0.18	0.09	1
er	0	0	0	0.11	0.04	0.14	0	0.04	0.14	0	0	0.43	0.11	1
ec	0	0	0	0.33	0.06	0.11	0	0.06	0.11	0.06	0	0	0.28	1
ed	0	0	0	0.25	0	0	0	0	0.5	0.25	0	0	0	1

H7 across task

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	6	2	1	0	5	0	1	4	0	0	0	0	19
ir	6	0	0	0	0	0	0	1	0	0	0	0	0	7
fs	1	0	0	0	0	1	0	2	0	0	0	0	0	4
rs	2	0	0	0	2	4	0	2	4	5	0	0	0	19
rps	3	0	0	1	0	0	0	5	4	0	0	1	2	16
es	0	0	0	0	0	1	9	3	5	10	0	0	1	29
st	0	0	0	0	0	0	0	3	9	1	0	0	0	13
fq	0	0	0	0	0	0	0	0	0	29	0	0	0	29
rq	0	0	0	1	0	0	0	0	0	51	0	0	0	52
ei	0	0	0	1	2	0	4	0	4	1	82	2	2	98
er	1	0	1	6	5	16	0	3	10	0	0	36	4	82
ec	3	1	0	9	3	6	0	4	7	1	0	0	6	40
ed	0	0	0	2	4	0	0	5	2	0	0	0	0	13
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.32	0.11	0.05	0	0.26	0	0.05	0.21	0	0	0	0	1
ir	0.86	0	0	0	0	0	0	0.14	0	0	0	0	0	1
fs	0.25	0	0	0	0	0.25	0	0.5	0	0	0	0	0	1
rs	0.11	0	0	0	0.11	0.21	0	0.11	0.21	0.26	0	0	0	1
rps	0.19	0	0	0.06	0	0	0	0.31	0.25	0	0	0.06	0.13	1
es	0	0	0	0	0	0.03	0.31	0.1	0.17	0.34	0	0	0.03	1
st	0	0	0	0	0	0	0	0.23	0.69	0.08	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0.02	0	0	0	0	0	0.98	0	0	0	1
ei	0	0	0	0.01	0.02	0	0.04	0	0.04	0.01	0.84	0.02	0.02	1
er	0.01	0	0.01	0.07	0.06	0.2	0	0.04	0.12	0	0	0.44	0.05	1
ec	0.08	0.03	0	0.23	0.08	0.15	0	0.1	0.18	0.03	0	0	0.15	1
ed	0	0	0	0.15	0.31	0	0	0.38	0.15	0	0	0	0	1

H8 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	9	3	0	3	0	0	1	2	0	0	0	0	0	18
ir	3	0	0	0	0	0	0	0	0	0	0	0	0	3
fs	2	0	0	0	0	1	0	1	0	0	0	0	0	4
rs	1	0	0	0	0	11	0	3	4	3	0	0	0	22
rps	0	0	0	5	0	4	0	2	7	0	0	0	1	19
es	0	0	0	0	0	0	4	7	9	9	0	0	0	29
st	0	0	0	0	0	0	0	6	1	1	0	0	0	8
fq	0	0	0	0	0	0	0	0	0	35	0	0	0	35
rq	0	0	0	0	0	0	0	0	0	39	0	0	0	39
ei	0	0	1	4	3	1	3	2	3	0	64	6	3	90
er	0	0	0	5	11	9	0	9	8	0	0	14	8	64
ec	1	0	0	6	3	1	0	2	1	3	0	0	3	20
ed	0	0	1	4	2	2	0	1	5	0	0	0	0	15
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.5	0.17	0	0.17	0	0	0.06	0.11	0	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	0.5	0	0	0	0	0.25	0	0.25	0	0	0	0	0	1
rs	0.05	0	0	0	0	0.5	0	0.14	0.18	0.14	0	0	0	1
rps	0	0	0	0.26	0	0.21	0	0.11	0.37	0	0	0	0.05	1
es	0	0	0	0	0	0	0.14	0.24	0.31	0.31	0	0	0	1
st	0	0	0	0	0	0	0	0.75	0.13	0.13	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0.01	0.04	0.03	0.01	0.03	0.02	0.03	0	0.71	0.07	0.03	1
er	0	0	0	0.08	0.17	0.14	0	0.14	0.13	0	0	0.22	0.13	1
ec	0.05	0	0	0.3	0.15	0.05	0	0.1	0.05	0.15	0	0	0.15	1
ed	0	0	0.07	0.27	0.13	0.13	0	0.07	0.33	0	0	0	0	1

H9 across tasks

merged

	ic	ir	fs	rs	rps	es	st	fq	rg	ei	er	ec	ed	Total
ic	3	5	1	2	5	0	0	0	0	0	0	1	0	17
ir	5	0	0	0	0	0	0	0	0	0	0	0	0	5
fs	3	0	0	0	1	0	0	0	0	0	0	0	0	4
rs	3	0	0	0	1	3	1	2	3	2	0	0	0	15
rps	1	0	0	3	0	3	0	3	3	0	1	0	0	14
es	0	0	0	0	0	0	11	0	1	2	0	0	0	14
st	0	0	0	0	0	0	0	0	12	0	0	0	0	12
fq	0	0	0	0	0	0	0	0	0	5	0	0	0	5
rq	0	0	0	0	0	0	0	0	0	24	0	0	0	24
ei	0	0	0	1	2	0	0	0	0	0	27	2	0	32
er	1	0	0	5	3	4	0	0	3	0	0	8	5	29
ec	0	0	0	2	1	1	0	0	0	0	0	0	6	10
ed	0	0	0	2	0	1	0	0	0	0	0	0	0	3

Transitional probabilities

	ic	ir	fs	rs	rps	es	st	fq	rg	ei	er	ec	ed	Total
ic	0.18	0.29	0.06	0.12	0.29	0	0	0	0	0	0	0.06	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	0.75	0	0	0	0.25	0	0	0	0	0	0	0	0	1
rs	0.2	0	0	0	0.07	0.2	0.07	0.13	0.2	0.13	0	0	0	1
rps	0.07	0	0	0.21	0	0.21	0	0.21	0.21	0	0.07	0	0	1
es	0	0	0	0	0	0	0.79	0	0.07	0.14	0	0	0	1
st	0	0	0	0	0	0	0	0	1	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rg	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0.03	0.06	0	0	0	0	0	0.84	0.06	0	1
er	0.03	0	0	0.17	0.1	0.14	0	0	0.1	0	0	0.28	0.17	1
ec	0	0	0	0.2	0.1	0.1	0	0	0	0	0	0	0.6	1
ed	0	0	0	0.67	0	0.33	0	0	0	0	0	0	0	1

H10 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	3	6	2	0	1	3	0	1	0	0	0	0	0	16
ir	6	0	0	0	0	0	0	0	0	0	0	0	0	6
fs	2	0	0	0	0	0	2	0	0	0	0	0	0	4
rs	1	0	0	0	0	1	0	2	6	3	0	0	0	13
rps	1	0	0	1	0	3	0	1	1	0	0	0	0	7
es	0	0	0	0	0	0	10	0	1	1	0	0	0	12
st	0	0	0	0	0	0	0	11	3	0	0	0	0	14
fq	0	0	0	0	0	0	0	0	0	16	0	0	0	16
rq	0	0	0	0	0	0	0	0	0	31	0	0	0	31
ei	0	0	0	1	0	1	0	0	1	0	44	6	1	54
er	1	0	0	4	5	3	0	0	11	1	0	12	7	44
ec	0	0	0	5	0	0	1	0	2	1	0	0	7	16
ed	0	0	0	2	1	1	1	1	7	1	0	0	0	14
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.19	0.38	0.13	0	0.06	0.19	0	0.06	0	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	0.5	0	0	0	0	0	0.5	0	0	0	0	0	0	1
rs	0.08	0	0	0	0	0.08	0	0.15	0.46	0.23	0	0	0	1
rps	0.14	0	0	0.14	0	0.43	0	0.14	0.14	0	0	0	0	1
es	0	0	0	0	0	0	0.83	0	0.08	0.08	0	0	0	1
st	0	0	0	0	0	0	0	0.79	0.21	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0.02	0	0.02	0	0	0.02	0	0.81	0.11	0.02	1
er	0.02	0	0	0.09	0.11	0.07	0	0	0.25	0.02	0	0.27	0.16	1
ec	0	0	0	0.31	0	0	0.06	0	0.13	0.06	0	0	0.44	1
ed	0	0	0	0.14	0.07	0.07	0.07	0.07	0.5	0.07	0	0	0	1

L1 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	5	0	0	1	0	0	5	2	0	0	0	0	13
ir	5	0	0	0	0	0	0	0	0	0	0	0	0	5
fs	3	0	0	0	0	0	0	0	0	0	0	0	0	3
rs	2	0	0	0	0	0	1	1	4	0	0	0	0	8
rps	0	0	0	0	0	0	0	1	1	0	0	0	0	2
es	0	0	0	0	0	0	6	0	0	0	0	0	0	6
st	0	0	0	0	0	0	0	0	7	0	0	0	0	7
fq	0	0	0	0	0	0	0	0	0	7	0	0	0	7
rq	0	0	0	0	0	0	0	0	0	18	0	0	0	18
ei	0	0	0	0	0	0	0	0	0	0	25	2	0	27
er	1	0	0	4	0	4	0	0	3	1	0	10	2	25
ec	1	0	0	2	1	0	0	0	0	1	0	0	7	12
ed	0	0	0	2	0	2	0	0	1	0	0	0	0	5
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.38	0	0	0.08	0	0	0.38	0.15	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0.25	0	0	0	0	0	0.13	0.13	0.5	0	0	0	0	1
rps	0	0	0	0	0	0	0	0.5	0.5	0	0	0	0	1
es	0	0	0	0	0	0	1	0	0	0	0	0	0	1
st	0	0	0	0	0	0	0	0	1	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0	0	0	0	0	0	0.93	0.07	0	1
er	0.04	0	0	0.16	0	0.16	0	0	0.12	0.04	0	0.4	0.08	1
ec	0.08	0	0	0.17	0.08	0	0	0	0	0.08	0	0	0.58	1
ed	0	0	0	0.4	0	0.4	0	0	0.2	0	0	0	0	1

L2

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	2	0	0	0	0	0	7	0	0	0	0	0	9
ir	2	0	0	0	0	0	0	0	0	0	0	0	0	2
fs	4	0	0	0	0	0	0	0	0	0	0	0	0	4
rs	2	0	0	0	0	1	0	4	0	1	0	0	0	8
rps	0	0	0	0	0	1	0	1	0	0	0	0	0	2
es	0	0	0	0	0	0	5	0	0	0	0	0	0	5
st	0	0	0	0	0	0	0	5	0	0	0	0	0	5
fq	0	0	0	0	0	0	0	0	0	22	0	0	0	22
rq	0	0	0	0	0	0	0	0	0	18	0	0	0	18
ei	0	0	0	0	0	0	0	0	0	0	40	1	0	41
er	1	0	0	2	1	0	0	1	16	0	0	16	4	41
ec	0	0	0	5	1	0	0	4	1	0	0	0	4	15
ed	0	0	0	1	0	3	0	0	1	0	0	0	0	5
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.22	0	0	0	0	0	0.78	0	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0.25	0	0	0	0	0.13	0	0.5	0	0.13	0	0	0	1
rps	0	0	0	0	0	0.5	0	0.5	0	0	0	0	0	1
es	0	0	0	0	0	0	1	0	0	0	0	0	0	1
st	0	0	0	0	0	0	0	1	0	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0	0	0	0	0	0	0.98	0.02	0	1
er	0.02	0	0	0.05	0.02	0	0	0.02	0.39	0	0	0.39	0.1	1
ec	0	0	0	0.33	0.07	0	0	0.27	0.07	0	0	0	0.27	1
ed	0	0	0	0.2	0	0.6	0	0	0.2	0	0	0	0	1

L3 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	6	0	0	0	0	0	4	1	0	0	0	0	11
ir	6	0	0	0	0	0	0	0	0	0	0	0	0	6
fs	4	0	0	0	0	0	0	0	0	0	0	0	0	4
rs	0	0	0	0	0	0	0	0	2	0	0	0	0	2
rps	0	0	0	0	0	0	0	0	0	0	0	0	0	0
es	0	0	0	0	0	0	14	0	0	0	0	0	0	14
st	0	0	0	0	0	0	0	1	13	0	0	0	0	14
fq	0	0	0	0	0	0	0	0	0	6	0	0	0	6
rq	0	0	0	0	0	0	0	0	0	24	0	0	0	24
ei	0	0	0	0	0	0	0	0	0	0	30	1	0	31
er	0	0	0	1	0	5	0	0	2	0	0	22	1	31
ec	1	0	0	1	0	8	0	1	5	1	0	0	4	21
ed	0	0	0	0	0	1	0	0	1	1	0	0	0	3
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.55	0	0	0	0	0	0.36	0.09	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0	0	0	0	0	0	0	0	1	0	0	0	0	1
rps	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####	#####
es	0	0	0	0	0	0	1	0	0	0	0	0	0	1
st	0	0	0	0	0	0	0	0.07	0.93	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0	0	0	0	0	0	0.97	0.03	0	1
er	0	0	0	0.03	0	0.16	0	0	0.06	0	0	0.71	0.03	1
ec	0.05	0	0	0.05	0	0.38	0	0.05	0.24	0.05	0	0	0.19	1
ed	0	0	0	0	0	0.33	0	0	0.33	0.33	0	0	0	1

L4 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	2	10	0	2	1	0	0	1	0	0	0	0	0	16
ir	10	0	0	0	0	0	0	0	0	0	0	0	0	10
fs	4	0	0	0	0	0	0	0	0	0	0	0	0	4
rs	0	0	0	0	0	2	0	1	4	0	0	0	0	7
rps	0	0	0	0	0	0	0	2	3	0	0	0	0	5
es	0	0	0	0	0	0	4	0	0	0	0	0	0	4
st	0	0	0	0	0	0	0	1	3	0	0	0	0	4
fq	0	0	0	0	0	0	0	0	0	8	0	0	0	8
rq	0	0	0	0	0	0	0	0	0	19	0	0	0	19
ei	0	0	0	0	0	0	0	0	0	0	27	5	0	32
er	0	0	0	5	1	2	0	1	6	1	0	17	1	34
ec	0	0	0	0	3	0	0	2	2	4	0	0	4	15
ed	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0.13	0.63	0	0.13	0.06	0	0	0.06	0	0	0	0	0	1
ir	1	0	0	0	0	0	0	0	0	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0	0	0	0	0	0.29	0	0.14	0.57	0	0	0	0	1
rps	0	0	0	0	0	0	0	0.4	0.6	0	0	0	0	1
es	0	0	0	0	0	0	1	0	0	0	0	0	0	1
st	0	0	0	0	0	0	0	0.25	0.75	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0	0	0	0	0	0	0.84	0.16	0	1
er	0	0	0	0.15	0.03	0.06	0	0.03	0.18	0.03	0	0.5	0.03	1
ec	0	0	0	0	0.2	0	0	0.13	0.13	0.27	0	0	0.27	1
ed	0	0	0	0	0	0	0	0	1	0	0	0	0	1

L5 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	9	2	2	2	0	0	0	1	0	0	0	0	16
ir	8	0	0	0	0	1	0	0	0	0	0	0	0	9
fs	2	0	0	0	0	0	0	2	0	0	0	0	0	4
rs	0	0	0	0	0	1	0	2	4	2	0	0	0	9
rps	1	0	0	1	0	0	0	2	1	0	0	0	0	5
es	0	0	0	0	0	0	4	0	0	1	0	0	0	5
st	0	0	0	0	0	0	0	0	5	0	0	0	0	5
fq	0	0	0	0	0	0	0	0	0	6	0	0	0	6
rq	0	0	0	0	0	0	0	0	0	19	0	0	0	19
ei	1	0	0	1	0	0	0	0	0	0	26	1	0	29
er	0	0	0	3	1	1	0	0	3	1	0	15	2	26
ec	2	0	0	2	2	0	1	0	1	0	0	0	7	15
ed	0	0	0	0	0	2	0	0	4	0	0	0	0	6
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.56	0.13	0.13	0.13	0	0	0	0.06	0	0	0	0	1
ir	0.89	0	0	0	0	0.11	0	0	0	0	0	0	0	1
fs	0.5	0	0	0	0	0	0	0.5	0	0	0	0	0	1
rs	0	0	0	0	0	0.11	0	0.22	0.44	0.22	0	0	0	1
rps	0.2	0	0	0.2	0	0	0	0.4	0.2	0	0	0	0	1
es	0	0	0	0	0	0	0.8	0	0	0.2	0	0	0	1
st	0	0	0	0	0	0	0	0	1	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0.03	0	0	0.03	0	0	0	0	0	0	0.9	0.03	0	1
er	0	0	0	0.12	0.04	0.04	0	0	0.12	0.04	0	0.58	0.08	1
ec	0.13	0	0	0.13	0.13	0	0.07	0	0.07	0	0	0	0.47	1
ed	0	0	0	0	0	0.33	0	0	0.67	0	0	0	0	1

L6 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	4	0	2	0	0	0	6	0	0	0	0	0	12
ir	3	0	0	0	0	0	0	0	2	0	0	0	0	5
fs	4	0	0	0	0	0	0	0	0	0	0	0	0	4
rs	0	0	0	0	1	0	0	5	7	0	0	0	0	13
rps	0	1	0	0	0	0	0	3	4	0	0	0	0	8
es	0	0	0	0	0	0	9	1	0	0	0	0	0	10
st	0	0	0	0	0	0	0	3	6	0	0	0	0	9
fq	0	0	0	0	0	0	0	0	0	22	0	0	0	22
rq	0	0	0	0	0	0	0	0	0	35	0	0	0	35
ei	0	0	0	0	0	0	0	0	0	0	58	3	0	61
er	4	0	0	1	1	5	0	0	7	3	0	25	12	58
ec	1	0	0	8	5	5	0	0	1	1	0	0	4	25
ed	0	0	0	2	1	0	0	4	8	0	0	0	0	15
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.33	0	0.17	0	0	0	0.5	0	0	0	0	0	1
ir	0.6	0	0	0	0	0	0	0	0.4	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0	0	0	0	0.08	0	0	0.38	0.54	0	0	0	0	1
rps	0	0.13	0	0	0	0	0	0.38	0.5	0	0	0	0	1
es	0	0	0	0	0	0	0.9	0.1	0	0	0	0	0	1
st	0	0	0	0	0	0	0	0.33	0.67	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0	0	0	0	0	0	0.95	0.05	0	1
er	0.07	0	0	0.02	0.02	0.09	0	0	0.12	0.05	0	0.43	0.21	1
ec	0.04	0	0	0.32	0.2	0.2	0	0	0.04	0.04	0	0	0.16	1
ed	0	0	0	0.13	0.07	0	0	0.27	0.53	0	0	0	0	1

L7 across tasks

merged														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	3	0	1	0	1	1	7	0	0	0	0	0	13
ir	2	0	0	1	0	0	0	0	0	0	0	0	0	3
fs	4	0	0	0	0	0	0	0	0	0	0	0	0	4
rs	2	0	0	0	0	2	0	7	0	1	0	0	0	12
rps	0	0	0	0	0	0	0	0	1	0	0	0	0	1
es	0	0	0	0	0	0	5	0	0	0	0	0	0	5
st	0	0	0	0	0	0	0	6	1	0	0	0	0	7
fq	0	0	0	0	0	0	0	0	0	20	0	0	0	20
rq	0	0	0	0	0	0	0	0	0	24	0	0	0	24
ei	0	0	0	0	0	0	0	0	1	0	41	6	0	48
er	4	0	0	3	0	0	1	0	12	1	0	12	7	40
ec	1	0	0	4	0	1	0	0	2	1	0	0	17	26
ed	0	0	0	3	0	1	0	0	7	1	0	0	0	12
Transitional probabilities														
	ic	ir	fs	rs	rps	es	st	fq	rq	ei	er	ec	ed	Total
ic	0	0.23	0	0.08	0	0.08	0.08	0.54	0	0	0	0	0	1
ir	0.67	0	0	0.33	0	0	0	0	0	0	0	0	0	1
fs	1	0	0	0	0	0	0	0	0	0	0	0	0	1
rs	0.17	0	0	0	0	0.17	0	0.58	0	0.08	0	0	0	1
rps	0	0	0	0	0	0	0	0	1	0	0	0	0	1
es	0	0	0	0	0	0	1	0	0	0	0	0	0	1
st	0	0	0	0	0	0	0	0.86	0.14	0	0	0	0	1
fq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
rq	0	0	0	0	0	0	0	0	0	1	0	0	0	1
ei	0	0	0	0	0	0	0	0	0.02	0	0.85	0.13	0	1
er	0.1	0	0	0.08	0	0	0.03	0	0.3	0.03	0	0.3	0.18	1
ec	0.04	0	0	0.15	0	0.04	0	0	0.08	0.04	0	0	0.65	1
ed	0	0	0	0.25	0	0.08	0	0	0.58	0.08	0	0	0	1

6a Pre-test questionnaire Liber/ PTRC

User Name: **Date:**

Multimedia Broker Evaluation

Pre-study Questionnaire

Thank you for taking part in this study. We hope you will find today's session interesting. This questionnaire is designed to collect background information about you, the user, to help us interpret the evaluation findings. For each question, circle the appropriate response or write your answer in the space provided.

1. What is your age?

<20 20-29 30-39 40-49 50-59 >60

2. Are you

Male Female

3. What is your job title? _____

4. Briefly describe your main job activities?

_____

_____

_____

_____

5. What type of computer system do you use?

PC 386	PC486	Pentium	Notebook
Mac II series	Quadra	PowerMac	PowerBook
IBM workstation	Sun workstation	Other	

6. What application software (e.g. Word, Access, Excel, etc) do you use most and how often?

1. 2. 3. 4.

Please say whether daily (D) weekly (W) or monthly (M).

7. What database systems do you use?

1. 2. 3. 4

8. How often do you browse for information using the above databases? (That is, look around for items of interest but without a specific goal in mind).

1	2	3	4	5
Less than once a week	Once a week	Every few days	At least once a day	Several times a day

9. How often do you search for information on a specific topic using the above databases?

1	2	3	4	5
Less than once a week	Once a week	Every few days	At least once a day	Several times a day

10. What kind of information do you browse or search for?

1. 2. 3. 4.

11. Do you have access to the World Wide Web?

At home?	Yes	No
At work?	Yes	No

12. How frequently do you use the WWW?

1	2	3	4	5
Less than once a week	Once a week	Every few days	At least once a day	Several times a day

13. How often do you browse for information? (That is, look around for items of interest but without a specific goal in mind).

1	2	3	4	5
Less than once a week	Once a week	Every few days	At least once a day	Several times a day

14. How often do you search for information on a specific topic?

1	2	3	4	5
Less than once a week	Once a week	Every few days	At least once a day	Several times a day

15. What kind of information do you browse or search for?

1. 2. 3. 4.

16. What sorts of problems do you encounter when you browse or search for information?

_____

_____

_____

_____

For each of the statements below, please mark the checkbox which in your opinion most closely matches your degree of agreement with the statement in relation to the information you require.

17. In general would you describe the types of information you require to satisfy your requirements from retrieval systems on the following scales:

Generality:- either high level information (general) or low level detail (specific)

General *specific*

Knowness: how well can you describe the information required

Well known target *unknown target*

Complexity of the problems you try and solve: Complex = many concepts and relationships

Complex *simple*

Type of information required

text *images* *numeric* *multimedia* *unknown*

Number of results required to satisfy your information requirements

1 answer *1-20* *20-50* *50-75* *75-100* *>100*

Expected completeness of the information retrieved

20% *40%* *8-%* *90%* *other.....*

Required completeness of the information required

20% *40%* *8-%* *90%* *other.....*

6b Post test questionnaire Liber

User Name: **Date:**

Multimedia Broker Post-study Questionnaire

4. Query Advice Tool

Questions 3-5 are from the System Usability Scale (SUS) which is the work of John Brooke of Digital Equipment Corporation, who retains copyright.

For each of the statements below, please mark the checkbox which in your opinion most closely matches your degree of agreement with the statement.

1. I thought the advice and assitance was represented in a useful and meaningful way.

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

2. I found the interface tools effective for constructing and refining queries.

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

3. I found the system unnecessarily complex

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

4. I thought the system was easy to use

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

5. I would imagine that most people would learn to use this system

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

User Name: **Date:**

Multimedia Broker Evaluation

User feedback on Query Advice Tool

Questions for discussion

1. The Thesaurus

1. Please give your feedback - what to you think? Is it helpful to be prompted with synomys?

---

2. Results diagnosis

Is the results diagnosis clear and meaningful? Is if clear how to use it?

---

3. Broadening Advice

Is the broadening advice helpful and useful? Is it clear how the advice affects their queries?

---

4. Graphical represenation

Is the graphical representation meaningful and hepful?

6c Post test questionnaire PTRC

User Name: **Date:**

Multimedia Broker Post-study Questionnaire

4. Query Advice Tool

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For each of the statements below, please mark the checkbox which in your opinion most closely matches your degree of agreement with the statement.

1. I thought the advice and assitance was represented in a useful and meaningful way.

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

2. I found the interface tools effective for constructing and refining queries.

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

3. I found the system unnecessarily complex

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

4. I thought the system was easy to use

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

5. I would imagine that most people would learn to use this system

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

6. I thought the system restricted my natural approach to retrieval of information and this made my retrieval less effective

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

7. I thought the system may improve the effectiveness of my retrieval activity

Strongly Disagree [ ], Somewhat Disagree [ ], Neither Agree nor Disagree [ ], Somewhat Agree [ ], Strongly Agree [ ]

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Glossary

Concept	A concept is a component of the query relating to specific domain area. A concept can be articulated using a number of synonym terms.
Term	Terms are used to articulate concepts within queries. A concept may use one or more terms in its articulation.
Strategy	A strategy is a high level plan of action determining the approach taken to retrieval. Strategies can be sub-strategies e.g. sub-goal and formulate a strategy for each goal.
Tactic	A tactic is a lower level operator than a strategy and allows a query to be amended in a specific search situation.
Information need	A information need is a users requirement for information to allow them to satisfy or solve a problem.
Activities	Activities within the search process are the actions the user performs as part of the different search processes.
Process	Processes are higher level operations describing a class of activities.
Search context/ situation	The context of a search are the characteristics of the situation with which the user is faced.
Information indexing policies	These are the classification and information structuring methods used to represent the information within the database.
IR cycle	An IR cycle is composed of the activities, processes, strategies and tactics required to complete one cycle of the generic process model.
Mental model	This relates to the information and expectations a user has about the device based on experience.
Device knowledge	Consists of knowledge relating to the current IR system, knowledge of IR systems in general and strategic IR knowledge.
Domain knowledge	Domain knowledge constitutes how well the user knows the specific domain of the current information need
Gold standard queries	Gold standard queries are the queries developed by a mediation between a domain expert and a device expert determining how to develop the problem
Gold standard solution set	Gold standard solution set constitutes the set of all articles which are relevant to the information need.
Document description	A document representation are the characteristics and information contained within the retrieval system about each article.
Search options	Search options are the possible courses of action in terms of decisions, strategies and activities in any given situation.
Query level evaluation	These are judgements based on the quantity of results retrieved by the query.
Term level evaluation	These are judgements on the quantity of results retrieved by the different components of the query (term or concept)
Article level	These judgements are based on the quality of the articles