Assessment of pre-test probability in Primary Health Care using the International Classification of Primary Care - 2 (ICPC-2)

Avaliação da probabilidade pré-teste em Atenção Primária à Saúde usando a Classificação Internacional de Atenção Primária 2 (CIAP-2)

Evaluación de la probabilidad pre-test en Atención Primaria de la Salud usando la Clasificación Internacional de Atención Primaria-2 (CIAP-2)

Gustavo Diniz Ferreira Gusso. Universidade de São Paulo (USP). gustavo.gusso@usp.br (*Autor correspondente*)

Paulo Lotufo. Universidade de São Paulo (USP). palotufo@hu.usp.br

Isabela Martins Benseñor. Universidade de São Paulo (USP). isabensenor@gmail.com

Abstract

Introduction: The assessment of the patient's reason for encounter using the International Classification of Primary Care (ICPC) is not common in countries without a strong primary health care system. **Objective:** This study aimed to evaluate the main reasons for encounter and to calculate the pre-test probabilities for frequent problems. **Method:** A questionnaire was created to study, in each appointment, the reasons for encounter and the clinical problems (or diagnosis). In total, 26 general practitioners of the Family Health Strategy from the municipality of Florianópolis filled the form after appointments, for four weeks over a year. **Results:** 5,698 encounters were evaluated, with regular distribution among seasons. There were 1,625 reasons for encounter and 1,475 clinical problems per appointment. The 30 most common clinical problems represented 50% of all appointments, covering 13 different chapters of ICPC-2. Patients with fever as symptom had diagnosis of acute upper respiratory infection (37.7%), acute tonsillitis (17.8%) or fever (11%), while patients who received the diagnosis of acute upper respiratory infection had complained of cough (24.2%), fever (22%) or of a throat symptom/complaint (9.8%). **Discussion:** Episode of care is the best methodology to assess pre-test probability longitudinally. However, it was possible to estimate the pre-test probability by using the data of each encounter, as demonstrated in the case of fever and acute upper respiratory infection, in spite of its follow up limitation, as it was based on encounters. **Conclusion:** This study shows that plans for continuing professional development should be focused on common symptoms and diagnosis, in order to improve the clinical reasoning guided by studies of pre-test probabilities. Hence, the ICPC-2 as a classification system is a great contribution to transform any health center in a research center, even those in rural areas of low-income countries.

Resumo

Introdução: A avaliação dos motivos que levam os pacientes às consultas usando a Classificação Internacional de Cuidados Primários 2 (CIAP-2) não é comum em países sem um sistema de atenção primária forte. **Objetivo:** Este estudo teve como objetivo avaliar os principais motivos para as consultas e o cálculo de probabilidades pré-teste para problemas frequentes. **Método:** Foi desenvolvido um questionário utilizando o confronto da razão para o encontro e os problemas clínicos registrados pelos médicos. No total, 26 médicos generalistas da Estratégia Saúde da Família do município de Florianópolis preencheram o formulário, após consultas durante quatro semanas ao longo de um ano. **Resultados:** 5.698 encontros foram avaliados, com distribuição regular entre as estações. Foram encontrados 1.625 razões por encontros e 1.475 problemas clínicos por consultas. Os 30 problemas clínicos mais comuns representaram 50% de todas as consultas e abrangeram 13 diferentes capítulos da CIAP-2. Pacientes com febre como sintoma tiveram diagnóstico de infecção das vias aéreas superiores (37,7%), amigdalite aguda (17,8%) ou febre (11%), enquanto pacientes que receberam o diagnóstico de infecção das vias aéreas superiores queixaram-se de tosse (24,2%), febre (22%) ou sintomas na garganta (9,8%). **Discussão:** Episódio de cuidado é a melhor metodologia para avaliar a probabilidade pré-teste longitudinalmente. Entretanto, foi possível estimar a probabilidade pré-teste avaliando dados por encontros, apesar da sua limitação de seguimento longitudinal. **Conclusão:** Este estudo pode servir como guia para planos de desenvolvimento profissional continuado, com foco nos sintomas comuns e diagnósticos, e auxiliar no raciocínio clínico, que deve ser orientado por estudos de probabilidades pré-teste. Dessa forma, a CIAP-2 enquanto sistema de classificação é uma grande contribuição para transformar qualquer centro de saúde em um centro de pesquisa, mesmo aqueles em áreas rurais de países de baixa renda.

Gusso GDF, Lotufo P, Benseñor IM

Resumen

Introducción: La evaluación de los motivos que conducen a los pacientes a realizar una consulta médica usando la Clasificación Internacional de Atención Primaria-2 (CIAP-2) no es común en los países que carecen de un fuerte sistema de atención primaria de la salud. **Objetivo:** Este estudio tuvo como objetivo evaluar el motivo principal de las consultas y calcular las probabilidades pre-test de problemas frecuentes. **Método:** Se elaboró un cuestionario confrontando la razón de las consultas y los problemas clínicos relatados por los médicos. En total, 26 médicos generales de la Estrategia de Salud Familiar del municipio de Florianópolis llenaron el formulario después de las consultas durante cuatro semanas a lo largo de un año. **Resultados:** Se evaluaron 5.698 encuentros, con distribuición regular entre las estaciones del año. Hubo 1.625 razones para las consultas y 1.475 problemas clínicos por consulta. Los 30 problemas más comunes representaron 50% de todas las consultas y abarcaron 13 capítulos diferentes del CIAP-2. Los pacientes que tenían síntomas de fiebre tuvieron diagnósticos de infección del tracto respiratorio superior (37,7%), amigdalitis aguda (17,8%) o fiebre (11%), mientras que los pacientes que recibieron el diagnóstico de infección del tracto respiratorio superior manifestaron tener tos (24,2%), fiebre (22%) o de síntomas en la garganta (9,8%). **Discusión:** Episodio de cuidados es la mejor metodología para evaluar la probabilidad pre-test longitudinalmente. Sin embargo, fue posible estimar esta probabilidad usando los datos de cada consulta, a pesar de su limitación de seguimiento longitudinal. **Conclusión:** Este estudio puede orientar planes de continuo desarrollo profesional, que se centren en los síntomas comunes y diagnóstico, para ayudar al razonamiento clínico, que debe ser guiado por los estudios de probabilidades pre-test . Por lo tanto, la CIAP-2, como sistema de clasificación, es un gran aporte para transformar cualquier centro de salud en un centro de investigación, incluso los de las zonas rurales de países con bajos ingresos.

Introduction

There is a long tradition in high-income countries of evaluation and research in Primary Health Care (PHC). For instance, in the 1950s the British general practitioners (GPs) started to analyse their daily work[1] and, in 1958, a study conducted by the Research Committee of the College of General Practitioners (which included 11 GPs) concluded that in around 50% of patient visits they could reach a diagnosis. In his classic 1963 article, Crombie describes similar results[2,3]. This trend has inspired family doctors and GPs to better code their work activity and, in the 1970s, those family doctors and general practitioners interested in taxonomy began to develop a classification system designed to be used in PHC. After some pilot studies that started as 'Reason for Encounter Classification' (RFEC), researchers have managed to launch the first version of the International Classification of Primary Care (ICPC-1). Although, Brazil was chosen as a site for piloting the ICPC-1, few studies in Brazil have used ICPC and none has assessed pre-probabilities in Brazilian PHC.

There are basically two modalities for assessing the complex and longitudinal relation between doctors and patients in PHC: the Encounter Modality (EM) and the Episode of Care Modality (ECM). In the EM every consultation is seen as a unique event, whereas in the ECM the "health problem or disease" is followed up "from its first presentation to a health care provider until the completion of the last encounter for the same health problem or disease"[4]. It is not the same as disease or illness episode, since disease and illness may continue to evolve after the last encounter with the health provider. Thus, the ECM as an analytical tool can better assess the continuity and the process of care. Nevertheless, it may be possible to apply the EM if the Reason For Encounter (RFE) is confronted against problems stated by doctors (that is, their diagnosis). Based on this latter methodological approach, this research has applied a quite simple technology (paper-based forms that can also be replicated in low-income areas worldwide), as well as the second version of the International Classification of Primary Care (ICPC-2), published by World Organization of Family Doctors (WONCA), to asses the RFE in Brazilian PHC. More specifically, the objective of this research was to evaluate the RFE of patients visiting the health centres, their diagnosis, the main comorbidities, and the pre-test probabilities for common diseases registered by family doctors in Florianopolis, Brazil.

Methods

Florianópolis is the capital of Santa Catarina, one of the states in the Southern region of Brazil. According to the 2000 National Census, 342,315 people lived there and 96.7% were literate[5]. Florianopolis adopts the Family Health Strategy for organizing its primary health care services, which entails that for an average 3.500 people the local health authority should provide a Family Health Team (FHT) that encompasses: one physician, one nurse, one or two nurse assistants and 6 health community agents.

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In June of 2007 there were 48 health centres and 90 FHTs in Florianópolis, all of them with one generalist or family doctor[6,7]. Some health centres had computerized charts (Electronic Medical Record), and every doctor of the Family Health Strategy (FHS) had to classify each consultation using the ICD-10 choosing up to two codes per encounter, even for those working on paper-based record. This was a local health authority initiative, and it is worth mentioning that it is not required for the country as whole.

The data collection took place from June 21st 2007 to June 20th 2008. All 90 general practitioners or family doctors from the Family Health Strategy of Florianópolis were invited (21 personally and 69 by letter) and 30 agreed to participate: 15 personally and 15 by letter.

This cross-sectional study was designed in an Encounter Modality (EM), because it would be difficult to link encounters to episodes of care in a longitudinal fashion with paper-based forms. By using the EM this research has focused on two main questions: firstly, what are the reasons for encounter in the words of the patient? And secondly, what is the diagnosis (or problems)? This strategy enabled the calculation of pre-test probability for common diseases using the reason for encounter (the Appendix shows the research paper-based form used in the study).

All patients must have been registered in each period of research and, in the case of doctors facing a busy day, at least questions regarding reasons for encounter and problems should be stated. Reasons for encounter must reflect the patient´s words, while the problems must be defined in medical terms (i.e., the doctor should be assertive rather than framing it in terms of hypothesis or 'suspicious case'). It was allowed that a 'diagnostic hypothesis' could be registered in the patient´s official record, but not in the research paper-based form. If it was impossible for the doctor to reach a diagnosis, the recommendation was to repeat the patient's signs or symptoms (as diagnosis) in the research paper-based form. Thus, the reasons for encounter on the left-hand side column had to be related to medically defined problems on the right-hand side column (see Appendix). If there were more than two reasons for encounter related to one problem, the two most important reasons should be selected.

Data collection

Each general practitioner answered the form in a typical week of work during each season (winter, spring, summer and autumn). The research paper-based form had nine questions regarding age, gender, marital status, occupation, type of consultation (booked or not), reasons for encounter (RFE), problems or diagnosis indicated by the doctor, interventions (plans, references and exams) and medication (new, chronic use or both). Each doctor could choose the day for data collection; however, at the end of each season, the information from all weekdays should be available for analysis. For example, Table 1 shows a typical week of work of a doctor: this doctor, in each research season, should choose one period of the working week, either morning or afternoon, for collecting the data. Only Tuesday and Friday afternoons could not be investigated since there were no individual consultations planned for these periods. Following this research schedule example, all seasons and all consulting days would be investigated and could be distributed according to the doctor's availability for the research.

Guidance on how to fill in the form and the ICPC-2 scheme was sent with the research paper-based forms before the first season of research (winter, 2007). This guidance highlighted the two most important methodological aspects of the study:

• To complete the form immediately after each patient visit to avoid loosing any consultation of the chosen period;

• To label the problem (or diagnosis) just if a disease was really present; if it was only suspected case, the doctor should register just the name of the sign or symptom.

The data was analysed through SPSS (Statistical Package for the Social Sciences) for Windows. All International Classification of Primary Care 2nd edition (ICPC-2) alphanumeric codes were transformed in numbers. All ICPC-2 numeric codes were

Table 1. Hypothetic schedule of a family doctor during one typical week of work.

Day	Mon	Tue	Wed	Thu	Fri
Morning	Pregnant	Child	Home care	Same-day consultation	Hypertension/ Diabetic care
Afternoon	Adult	Group activity	Child	Adult	Team meeting

typed in a SPSS version 13.0 spread sheet together with other consultation form items, which resulted in a template. The referrals to specialists and other health professionals were coded following the relation of the Electronic Medical Record (EMR) used in Florianópolis PHC. When more than one exam was marked, the combination was included in SPSS on request (for example: blood plus urine without culture). Each reason for encounter and problem was coded by the main researcher (who is member of the WONCA International Classification Committee), following the established rules for coding[4] using terminologies' tools[8,9].

All forms were transcribed to SPSS 13.0 by a research assistant, including the form numbers (first "variable").

This research was approved by the Ethic Committee of the Hospital das Clínicas of the Medicine Faculty of the University of São Paulo State under protocol number 0180/07 and was part of a doctoral project. The volunteers did not receive any incentive and the authors have no conflict of interest to declare.

Results

The average age of physicians was 33 years (5.7) and 58.3% of the participants had between 6 to 10 years since they have graduated in medicine. From the 30 volunteers who agreed to participate, four have not filled any form. An average of 22.5 sets of completed forms per season has been sent back. All forms were considered, even if they were partially filled (i.e., if the data collection had not encompassed the whole week). An exclusion criterion was adopted, applied to doctors who had not completed at least one form per patient in each research period.

Table 2. Frequent reasons for encounter in the sample (50.4% of all reasons).

	Frequency	Per cent	Cumulative Per cent
Health maintenance/prevention	529	5.7	5.7
Cough	295	3.2	8.9
Medication – request - Cardiovascular	294	3.2	12.1
Fever	278	3.0	15.1
Pregnancy	264	2.8	17.9
Headache	250	2.7	20.6
Hypertension uncomplicated	228	2.5	23.1
Abdominal pain/cramps general	175	1.9	25.0
Medication-request - Psychological	172	1.9	26.8
Results of Exam/Test/Record - General	167	1.8	28.6
Back symptom/complaint	152	1.6	30.3
Vomiting	128	1.4	31.7
Diarrhoea	128	1.4	33.0
Throat symptom/complaint	119	1.3	34.3
Feeling anxious/nervous/tense	108	1.2	35.5
Medical Examination/Partial Health Evaluation - Cardiovascular	104	1.1	36.6
Medication–request - Endocrine	101	1.1	37.7
Skin symptom/complaint - other	100	1.1	38.8
Results of Exam/Test/Record – Endocrine	100	1.1	39.9
Vertigo/dizziness	96	1.0	40.9
Shortness of breath/dyspnoea	95	1.0	41.9
Vaginal discharge	93	1.0	42.9
Low back symptom/complaint	92	1.0	43.9
Pruritus	89	1,0	44.9
Epigastric abdominal pain	88	0,9	45.8
Oral Contraception	88	0,9	46.8
Results of Exam/Test/Record – Cardiovascular	87	0,9	47.7
Leg/thigh symptom/complaint	86	0,9	48.7
Ear pain/earache	81	0,9	49.5
Feeling depressed	80	0,9	50.4

A total of 5,698 forms were completed during one year research period: 1601 (28,1%) – winter; 1585 (27,8%) – spring; 1306 (22,9%) – summer; 1206 (21,2%) – autumn. The distribution of people included in the study was similar to the age-distribution of the population living in Florianópolis, except for adolescents of both sexes and young adult men, who use to be less frequent users of health centres. The most frequent reasons for encounter were prevention, fever and medication request for cardiovascular problems (Table 2) and the most frequent problems (or diagnosis) were hypertension, no disease (when patient came for prevention, for example) and acute upper respiratory infection (Table 3).

Table 3. Frequent problems in the sample (50.4% of all encounters).

	Frequency	Per cent	Cumulative Per cent
Hypertension - uncomplicated	827	9.8	9.8
No disease	464	5.5	15.4
Acute upper respiratory infection	316	3.8	19.1
Pregnancy	293	3.5	22.6
Diabetes - non-insulin dependent	255	3.0	25.6
Depressive disorder	224	2.7	28.3
Contraception – other	139	1.7	30.0
Health maintenance/prevention	128	1.5	31.5
Low back symptom/complaint	116	1.4	32.9
Anxiety disorder/anxiety state	110	1.3	34.2
Hypothyroidism/myxoedema	108	1.3	35.4
Gastroenteritis - presumed infection	105	1.2	36.7
Lipid disorder	99	1.2	37.9
Dermatophytosis	94	1.1	39.0
Acute tonsillitis	93	1.1	40.1
Cystitis/other urinary infection	93	1.1	41.2
Asthma	78	0.9	42.1
Abdominal pain/cramps general	73	0.9	43.0
Dyspepsia/indigestion	73	0.9	43.9
Tobacco abuse	73	0.9	44.7
Obesity	72	0.9	45.6
Muscle pain	69	0.8	46.4
Headache	67	0.8	47.2
Vaginitis/vulvitis NOS	57	0.7	47.9
Medical Examination/Partial Health Evaluation– Pregnancy	56	0.7	48.6
Acute otitis media/myringitis	53	0.6	49.2
Bursitis/tendinitis/synovitis NOS	52	0.6	49.8
Allergic rhinitis	52	0.6	50.4

Table 4. Most frequent problems when reason for encounter was fever.

	Frequency	Per cent
Acute upper respiratory infection	110	37.7
Acute tonsillitis	52	17.8
Fever	32	11.0
Acute otitis media/myringitis	19	6.5
Gastroenteritis -presumed infection	15	5.1
Pneumonia	10	3.4
Respiratory disease -other	7	2.4
Vomiting	4	1.4
Chickenpox	3	1.0
Viral disease -other/NOS	3	1.0

Table 5. Most frequent reasons for encounter when problem was Acute Upper Respiratory Infection.

	Frequency	Per cent
Cough	121	24.2
Fever	110	22.0
Throat symptom/complaint	49	9.8
Sneezing/nasal congestion	39	7.8
Headache	31	6.2
Pain general/multiple sites	18	3.6
Influenza	16	3.2
Pain respiratory system	15	3.0
Acute upper respiratory infection	14	2.8
Ear pain/earache	12	2.4
Sputum/abnormal phlegm	10	2.0

It was not observed great variability according to different seasons. However, cough and asthma were slightly more prevalent in spring and autumn. When the reason for encounter was fever, the most frequent problems (or diagnosis) were acute upper respiratory infection, tonsillitis and fever (Table 4). In the opposite path, the most frequent reasons for encounter associated to the acute upper respiratory infection problem (or diagnosis) were cough, fever and throat symptoms/complaints (Table 5).

The most common referred speciality was ophthalmology, with almost three times more referrals than the second one, which was "emergency". No drug prescription has been provided in just 26,6% of all encounters.

Discussion

Morbidity studies[10-12] have shown that up to 97.5% of consultations detect three or less problems. The present study found that about 30 health problems corresponded to more than 50% of all consultations. These findings are in line with those available from studies in other countries with similar design and methodology[10,12]. This is relevant because policy health makers can use this information for Continuing Professional Development programs, which should be based on these more prevalent reasons for encounters and problems. In the data collected, there were 1,625 reasons for encounters and 1,475 problems per consultation, which are similar to the findings elsewhere[10,11].

Sometimes problems (diagnosis) received the same labels as the reasons for encounter. This seems to be a characteristic of primary care settings studied, as stated by Crombie[2]. In this regard, Weed[13,14] in 1968 suggested that one should state a disease just when there is "evidence" of it. If there is no certainty about what disease it might be, then the correct attitude is to choose a symptom or sign, or even to repeat the term used to characterize the reason for encounter, while waiting for an exam confirmation or for time resolution of the reason for encounter, also called "permitted delay" (or watchful waiting) in family medicine principles[15,16].

Concerning the family doctors' age, available data from the whole country shows that 38.6% of doctors were 30 to 39 years old[17] , which means that this study's volunteers were younger than the doctors' national average. This can be explained by the expansion of the Family Health Strategy in Florianópolis through three public professional selection processes from 2004 to 2008, which attracted young professionals. The main difference, however, was in the qualification of family doctors: 79.1% of volunteers did at least residence medical training in Family and Community Medicine, when compared with the 14.4% national average.

The majority of the problems were comparable with the lists in previous studies[10-13,18]. In this research there was no wrong coding which could be considered as a "ragbag" of rubrics (_99) amongst the frequent problems, such as 'hypertension in child from zero to four years old' or 'male with gynaecologic problems'. The combination of participants with good training reporting the reasons for encounter and the problems and only one coder with experience in ICPC-2 probably have helped the study to reach a good quality of data. This often is not the case when the participant is also responsible for coding (the coder), situation in which wrong coding might be frequent. On the other hand, coding in the work routine enables to gather a great number of encounters, which is important to assess the pre-test probability of most problems.

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The most used components of the ICPC-2 were the component one (signs and symptoms - for reason for encounter) and the component seven (diagnosis and diseases - for problems or diagnosis). Considering hypertension, obesity and tobacco abuse as risk factors, and not as "diseases", from the most frequent problems (representing 50.4% of encounters - Table 3), only in 39.6% a disease was diagnosed.

Concerning patients' referral to other services, this research has found some differences when compared with previous studies. In this sample it was found that in 13.2% of encounters the patient was referred to a specialist, whereas in Takeda et al[18] the referral rate was only 9%. Official data from the Informatics Department of the local health authority (Secretaria Municipal de Saúde de Florianópolis) revealed that, from July 2007 to June 2008, in 8.7% of encounters patients were referred to a specialist. The difference might be explained by some specialists who give professional support to health centres, such as psychiatrists, geriatricians and paediatricians, whose consultations do not need to be registered in the Electronic Medical Record; however, the participants it this research may have registered their consultation in the paper-based form.

Most of the referrals were for ophthalmologist (19.4% of all referrals), reflecting Brazilian politics that forbid optometrists to prescribe corrective lenses. Compared to our data, in Netherlands the "eye surgeon" was just the fourth specialist referred to, representing only 8.2% of all referrals[10].

The amount of prescriptions (at least one medical prescription in 73.4% of all encounters) supports the ritual of modern medicine and the roles which patients and doctors perform. Thus, it seems that for both sides it is not comfortable when neither a referral nor a prescription is done. At least one medication was prescribed (33.8%) even when the reason for encounter was preventive medicine!

This study has some limitations: the first is the difficulty to code some terms and concepts. The development of an optimised thesaurus and a universal standardization of terminology is a great challenge for the WONCA's International Classification Committee, considering all cultural differences and language barriers. The second limitation is the uncertainty whether each doctor states the right problem. The doctors' qualifications in clinical reasoning, a good guidance on how to complete the form (EMR or chart), and enough training for coding would help to reach data of good quality. These limitations, however, do not diminish the importance of this type of research, since this is considered the best methodological approach to establish pre-test probabilities in primary care settings.

Conclusion

This study contributed to the knowledge of reasons for encounter and health problems of Florianopolis' population. The 30 most frequent problems involved 13 different chapters of ICPC-2, with regular distribution amongst them (from 1 to 4 problems per chapter). If each organ or system belonged to one different specialist, it would be necessary to have at least 13 specialists in each health centre. Family medicine/general practice does not cover all medicine fields but it covers the most prevalent and unspecific health problems and reasons for encounters. Studies using this methodology represent a strong tool to guide health authorities to develop strategies for continuing multiprofessional development. No data based on episode mode can be found in the Brazilian context and this is the only study that used reason for encounter and problem-diagnosis in an interrelated way for assessing the pre-test probabilities. Many countries are implementing Electronic Medical Records in health centres but high quality data can also be collected on paper-based records in developing countries. In summary, the ICPC-2 as a classification system is a great contribution to transform any health centre in a research centre, even those in rural areas of low-income countries.

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Appendix. Form to be completed by the volunteer family physician/general practitioner.

1. Age (determine if years or months with y or m): _____	Ques _ _ _ _
2. Gender: (1) male (2) female	Idad _ _ _ Gen _ _ _
3. Civil state: Child/ Adolescent (up to 18 years old) (1) Single (2) Marriage (formally or informally) (3) Separeted/ Divorced (4) Widow (5)	Estciv _ _ _
4. Occupation: Student/ Child/ Adolescent (1) Formal employment (2) Informal employment (3) Unemployed (4) Home worker (5) Temporary work absence(6) Retired/ Pensionist(7)	Ocup _ _ _

5. Nature of consultation:
 A. Schedule consultation:
     Normal child (1)
     Pregnant (2)
     Hypertension/ DM2 control (3)
     Other special program (4)
     Schedule for other reason (5)
     Home visit (7)
 B. Same day consultation(6)
	Natcons _ _ _

6. **Reasons for encounter- RFE** (same patient words):	7. **Problems/ Diagnosis** (diagnosed by FD; it might be same as RFE):	
1.a	**1.**	Motcons1 _ _ _ Motcons2 _ _ _ Motcons3 _ _ _
1.b		
2.a	**2.**	
2.b		Diagn1 _ _ _ _ Diagn2 _ _ _ _ Diagn3 _ _ _ _
3.a	**3.**	
3.b		

8. Plan:
    a. Referred to specialist?
       no (1)   yes (2)   Which? _____
 	
                _____
	Refspe _ _ _

b. Referred to another primary health care provider?
       no (1)   yes (2)   Which? _____
 	
                _____
	Refaphc _ _ _

c. Pathology: no (1)   yes (2)
       Blood (3)   Urine without culture (4)   Faeces (5)
       Culture (6)   Biopsy (7)   Other (8)
	Pato_ _ _
	
	 Imag _ _ _

d. Imaging: no (1)   yes (2)
       X Ray (3)   ECG (4)   Endoscopy (5)   Colonoscopy (6)
       Ultrasound (7) Ecocardiography (8) Tomography (9) RMI(10) Other(11)	

9. Medicine:
       Prescribed drug?
       no (1)
       yes   chronic use (2)
            drug used for a short period before or new drug (3)
            chronic use and new (4)
	Meduse_ _ _